

PG&E Power Asset Acquisition Project

San Francisco Planning
Case No. **2023-005370ENV**

State Clearinghouse No. 2023060769

Draft EIR Publication Date:	March 19, 2025
Draft EIR Public Hearing Date:	April 17, 2025
Draft EIR Public Comment Period:	March 19, 2025, to May 19, 2025
Responses to Comments Publication Date:	June 25, 2026
Final EIR Certification Hearing Date:	July 9, 2026

San Francisco Planning

San Francisco Planning

49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103
628.652.7600
www.sfplanning.org

MEMORANDUM

Date:	June 25, 2026
Case No.:	**2023-005370ENV**
Project Title:	**PG&E Power Asset Acquisition Project**
To:	Members of the Planning Commission and Interested Parties
From:	Lisa Gibson, Environmental Review Officer
Re:	Responses to Comments on the Draft Environmental Impact Report for the PG&E Power Asset Acquisition Project

Attached for your review please find a copy of the Responses to Comments document for the draft environmental impact report (EIR) for the above-referenced project. **This document, along with the draft EIR, will be before the planning commission for final EIR certification on July 9, 2026**. The planning commission will receive public testimony on the final EIR certification at the **July 9, 2026** hearing. Please note that the public review period for the draft EIR ended on May 19, 2025; any comments received after that date, including any comments provided orally or in writing at the final EIR certification hearing, may not be responded to in writing.

The planning commission does not conduct a hearing to receive comments on the responses to comments document, and no such hearing is required by the California Environmental Quality Act. Interested parties, however, may always write to commission members or to the president of the commission at commissions.secretary@sfgov.org (preferred) or at the address above and express an opinion on the responses to comments document, or the commission's decision to certify the completion of the final EIR for this project.

Please note that the responses to comments document in addition to the draft EIR is the final EIR. If you have any questions concerning the responses to comments document or the environmental review process, please contact Julie Moore at CPC.PGEPowerAssetsEIR@sfgov.org or at 628.652.7566.

Thank you for your interest in this project and your consideration of this matter.

CONTENTS

Chapters 1 through 6 are the draft environmental impact report (Draft EIR). As the Draft EIR and responses to comments document (RTC document) comprise the Final EIR, this RTC document continues the numbering from the Draft EIR.

Page

Chapter 7. Introduction to Responses to Comments 7-1
7.1 Purpose of the Responses to Comments Document 7-1
7.2 Environmental Review Process 7-2
7.2.1 Notice of Preparation and Public Scoping 7-2
7.2.2 Draft EIR Public Review 7-3
7.2.3 Responses to Comments Document and Final EIR 7-3
7.3 Document Organization 7-4

Chapter 8. Project Description Refinements 8-1
8.1 Summary of Project Description Refinements 8-1
8.1.1 Martin Substation Separation *(Project-Level Review)* 8-2
8.1.2 System Reinforcements Associated with Distribution System Separation *(Program-Level Review)* 8-4
8.1.3 Baylands Staging Area 8-6
8.2 Environmental Impacts of Project Description Refinements 8-8
8.2.1 Noise and Vibration 8-8
8.2.2 Air Quality 8-10
8.2.3 Cultural Resources and Tribal Cultural Resources 8-11
8.2.4 Transportation and Circulation 8-12
8.2.5 Biological Resources 8-13
8.2.6 Hazards and Hazardous Materials 8-14
8.2.7 Other Environmental Topics 8-15
8.3 Overall Conclusion on Potential Environmental Impacts of Project Description Refinements 8-16

Chapter 9. List of Persons Commenting 9-1

Chapter 10. Responses to Comments 10.1-1
10.1 Organization 10.1-1
10.2 Project Description 10.2-1
Comment PD-1: Project Description Generally 10.2-1
Comment PD-2: Level of Detail: Project and Program Analysis 10.2-11
Comment PD-3: Martin Substation Separation 10.2-23
Comment PD-4: New City Substation 10.2-34
Comment PD-5: Staging Areas and Service Yards 10.2-38
Comment PD-6: Other Project Description Comments 10.2-44
10.3 Cumulative Projects 10.3-1
Comment CP-1: Cumulative Projects 10.3-1

Page

Chapter 10. Responses to Comments (continued)

10.4 Noise and Vibration 10.4-1
Comment NO-1: Noise Criteria, Thresholds, and Baseline 10.4-1
Comment NO-2: Construction Noise Analysis 10.4-25
Comment NO-3: Operational Noise Analysis 10.4-30
Comment NO-4: Noise Mitigation Measures 10.4-42
Comment NO-5: Vibration Impacts and Analysis 10.4-48
Comment NO-6: Other Noise Comments 10.4-54
10.5 Air Quality 10.5-1
Comment AQ-1: Health Risk Assessment Methodology 10.5-1
Comment AQ-2: Air Quality Mitigation Measures 10.5-14
Comment AQ-3: Emissions Outside the Air Basin 10.5-18
Comment AQ-4: Cumulative Impact Analysis 10.5-21
Comment AQ-5: Other Air Quality Comments 10.5-23
10.6 Alternatives 10.6-1
Comment AL-1: PG&E Proposed Alternatives 10.6-1
Comment AL-2: Alternative D and Other Build Alternatives 10.6-5
Comment AL-3: Formulation of Objectives and No Project Alternative 10.6-9
Comment AL-4: Other Alternatives Comments 10.6-11
10.7 Aesthetics 10.7-1
Comment AE-1: Aesthetics Impacts 10.7-1
10.8 Cultural Resources 10.8-1
Comment CR-1: Cultural Resources Analysis 10.8-1
Comment CR-2: Historic Resources 10.8-7
Comment CR-3: Archeological and Buried Resources 10.8-19
10.9 Transportation and Circulation 10.9-1
Comment TR-1: Transportation and Circulation Impacts 10.9-1
10.10 Utilities and Service Systems 10.10-1
Comment UT-1: Utilities and Service Systems Impacts 10.10-1
10.11 Biological Resources 10.11-1
Comment BI-1: Special-Status Bumble Bees 10.11-1
Comment BI-2: Other Special-Status Species 10.11-10
Comment BI-3: Sensitive Natural Communities and Nesting Birds 10.11-18
Comment BI-4: Other Biological Resources Comments 10.11-21
10.12 Geology and Soils 10.12-1
Comment GE-1: Geology and Soils Impacts 10.12-1
10.13 Hydrology and Water Quality 10.13-1
Comment HY-1: Hydrology and Water Quality Impacts 10.13-1
10.14 Hazards and Hazardous Materials 10.14-1
Comment HZ-1: Regulatory Compliance and Level of Detail 10.14-1
Comment HZ-2: Construction Soil and Groundwater Management 10.14-7
Comment HZ-3: Indoor Air Quality, Vapor Intrusion, and Worker Exposure 10.14-27
10.15 Analysis Approach 10.15-1
Comment AA-1: CPUC-Specific Environmental Topics 10.15-1
Comment AA-2: Initial Study 10.15-4

Page

Chapter 10. Responses to Comments (continued)
10.16 Other CEQA Considerations 10.16-1
Comment OC-1: Proper Lead Agency 10.16-1
Comment OC-2: Mitigation Deferral 10.16-4
10.17 General Comments 10.17-1
Comment GC-1: Permits and Approvals 10.17-1
Comment GC-2: Public Involvement and Collaboration or Coordination 10.17-3
Comment GC-3: Support, Opposition, and Opinions Related to the Project 10.17-7
Comment GC-4: Scope of CEQA Review 10.17-9
Comment GC-5: Other General Comments 10.17-12

Chapter 11 Draft EIR Revisions 11-1
11.1 Revisions to the Summary Chapter 11-1
11.2 Revisions to Chapter 2, Project Description 11-16
11.3 Revisions to Section 3.1, Overview 11-26
11.4 Revisions to Section 3.2, Noise 11-31
11.5 Revisions to Section 3.3, Air Quality 11-58
11.6 Revisions to Chapter 5, Alternatives 11-71
11.7 Revisions to Chapter 6, EIR Preparation 11-71
11.8 Revisions to Appendix A, Initial Study Section D. Summary of Environmental Effects 11-72
11.9 Revisions to Appendix A, Initial Study Section E.2 Aesthetics 11-72
11.10 Revisions to Appendix A, Initial Study Section E.4 Cultural Resources 11-72
11.11 Revisions to Appendix A, Initial Study Section E.6 Transportation and Circulation 11-83
11.12 Revisions to Appendix A, Initial Study Section E.9 Greenhouse Gas Emissions 11-84
11.13 Revisions to Appendix A, Initial Study Section E.13 Utilities and Service Systems 11-84
11.14 Revisions to Appendix A, Initial Study Section E.14 Public Services 11-85
11.15 Revisions to Appendix A, Initial Study Section E.15 Biological Resources 11-85
11.16 Revisions to Appendix A, Initial Study Section E.16 Geology and Soils 11-88
11.17 Revisions to Appendix A, Initial Study Section E.18 Hazards and Hazardous Materials 11-89

Attachments

Attachment A Draft EIR Comments
Attachment B Noise Analysis Supporting Documentation
Attachment C Biological Resources Supporting Documentation
Attachment D Hazardous Materials Supporting Documentation
Attachment E Air Quality Supporting Documentation

Figures

Revised Figure 2-2 Martin Substation Project Site and Construction Staging Area 8-3, 11-20
Revised Figure 2-8 System Reinforcements 8-5, 11-21
Revised Figure 2-11 New City Substation (Project Variant) at Daly City Yard 8-7, 11-23
Figure 10.5-1 Wind Rose From 2008 Mission Bay Meteorological Data 10.5-11
Figure 10.5-2 Dispersion Modeling Visualization 10.5-12
Revised Figure S-1 Project Areas Overview 11-2
Revised Figure S-2 Martin Substation Project Site and Construction Staging Area 11-3

Page

Figures (continued)

Revised Figure S-3 New City Substation (Project Variant) at Daly City Yard 11-5
Revised Figure 2-1 Project Areas Overview 11-17
Revised Figure 3.1-1 Cumulative Impacts Projects 11-29
Revised Figure 3.2-1 Noise Monitoring Locations 11-32

Tables

Table 2-2 Martin Substation Separation Components 8-4, 11-18
Table 9-1 Agencies, Organizations, and Individuals Commenting on the Draft EIR 9-2
Table 3.2-16a Martin Substation Separation Operational Transformer Noise Levels 10.4-36
Table 3.2-16b New City Substation Operational Transformer Noise Levels 10.4-41
Table 10.5-1 Mass Emissions From Rail Transport in California Air Districts 10.5-20
Table 10.15-1 CPUC-Specific Environmental Topics 10.15-3
Table 3.1-3 Projects Considered in Cumulative Impact Analysis 11-26
Table 3.2-3 Existing Noise Environment in the Vicinity of the Project Areas 11-31
Table 3.2-4 Sensitive Receptors Within 900 Feet of the Project Components 11-33
Table 3.2-14 Summary of Estimated Noise Levels at Sensitive Receptors During Project Construction 11-40
Table 3.2-15 Summary of Construction Noise Levels for the Martin Substation Separation Compared to the Temporary Substantial Increase Over Ambient Noise Threshold 11-42
Table 3.2-16 Exterior Noise at Offsite Sensitive Uses from Construction of the New City Substation (Project Variant) 11-46
Table 3.2-16a Martin Substation Separation Operational Transformer Noise Levels 11-50
Table 3.2-16b New City Substation Operational Transformer Noise Levels 11-54
Table 3.3-7 Unmitigated Construction Emissions for the Project and Project Variant 11-59
Table 3.3-8 Mitigated Construction Emissions for the Proposed Project and Variant 11-61
Table 3.3-10 Martin Substation/Variant - Unmitigated Construction Health Risks at MEI Outside San Francisco 11-62
Table 3.3-11 Martin Substation/Variant - Unmitigated Construction Health Risks at MEI within San Francisco 11-63
Table 3.3-13 Martin Substation/Variant - Mitigated Construction Health Risks at MEI Outside San Francisco 11-64
Table 3.3-14 Martin Substation/Variant - Mitigated Construction Health Risks at MEI within San Francisco 11-65
Table 3.3-16 Martin Substation/Variant - Unmitigated Cumulative Health Risks at MEIs Within San Francisco 11-66
Table 3.3-17 Martin Substation/Variant - Mitigated Cumulative Health Risks at MEIs Within San Francisco 11-68
Table 3.3-18 Martin Substation/Variant - Unmitigated Cumulative Health Risks at MEI Outside San Francisco 11-70

CHAPTER 7
INTRODUCTION TO RESPONSES TO COMMENTS

7.1 Purpose of the Responses to Comments Document

The purpose of this responses to comments document (RTC document) is to present comments received on the draft environmental impact report (Draft EIR) for the proposed PG&E Power Asset Acquisition Project (project), to respond in writing to comments on significant environmental issues, and to refine the Draft EIR as necessary to provide additional clarity. Comments were made in written form during the public comment period from March 19, 2025, to May 19, 2025, and as oral testimony received before the San Francisco Planning Commission (planning commission) at the public hearing on the Draft EIR held on April 17, 2025. A complete transcript of proceedings from the public hearing on the Draft EIR and all written comments are included herein in their entirety (**Attachment A**). A complete list of commenters is provided in Chapter 9, List of Persons Commenting.

Pursuant to the California Environmental Quality Act[1] (CEQA) sections 21091(d)(2)(A) and (B), the San Francisco Planning Department (planning department) has considered the comments received on the Draft EIR, evaluated the issues raised, and prepared written responses that address and describe the disposition of each significant environmental issue that has been raised. CEQA Guidelines section 15088 requires the evaluation of all public comments received on the Draft EIR and the identification of comments that raise significant environmental issues requiring a good faith, reasoned analysis in the written response. As further stated in CEQA Guidelines section 15088(c), the level of detail in response may correspond to the level of detail provided in the comment. Where appropriate, this RTC document also includes EIR text changes made in response to comments.

In accordance with CEQA, the responses to comments focus on clarifying the project description and addressing physical environmental issues associated with the project. Since publication of the Draft EIR, the City and County of San Francisco (City) has clarified or provided additional detail about elements of the project. These changes are described in Chapter 8, Project Description Refinements, along with summaries of their corresponding potential environmental effects. Text revisions to the EIR in response to these refinements are also presented in Chapter 11, Draft EIR Revisions. Where relevant to topics raised in public comments, the responses provide additional clarifying project description information. These clarifications and refinements are provided to enhance the EIR's analysis or conclusions.

"Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project. Economic or social changes alone are not considered a significant effect on the environment. Therefore, this RTC document focuses primarily on responding to comments that relate to physical environmental issues, in compliance with CEQA.[2] However, for informational purposes, this RTC document also provides limited responses to general comments on the Draft EIR that were received during the public review period and that are not related to physical environmental issues.

[1] Public Resources Code sections 21000–21189 (the California Environmental Quality Act, or CEQA).
[2] CEQA Guidelines sections 15382, 15064(c), 15064(d), and 15064(e).

This RTC document does not include any significant new information that would require recirculation of the EIR under CEQA Guidelines section 15088.5. For example, the comments do not identify any new significant environmental impacts, or substantial increases in the severity of previously identified environmental impacts, compared to those analyzed in the Draft EIR. The comments also do not identify feasible project alternatives or mitigation measures that are considerably different from those analyzed in the Draft EIR that would clearly lessen the severity of significant environmental impacts of the project but that the project sponsor has not agreed to study or implement.

The planning department is the lead agency under CEQA, responsible for administering the environmental review of projects within the city. The Draft EIR and this RTC document together constitute the Final EIR for the project in fulfillment of CEQA requirements consistent with CEQA Guidelines section 15132. The Final EIR has been prepared in compliance with CEQA, including the CEQA Guidelines, and the San Francisco Administrative Code, chapter 31. Certification of the Final EIR by the planning commission would mean that the EIR complies with these requirements; certification is not approval of the project. The Final EIR is an informational document for use by (1) governmental agencies (such as the City) and the public to aid in the planning and decision-making process by disclosing the physical environmental effects of the project and identifying possible ways of reducing or avoiding the potentially significant impacts; and (2) the planning commission and other City entities (such as the San Francisco Public Utilities Commission [SFPUC] and the San Francisco Board of Supervisors) where applicable prior to their decision to approve, disapprove, or modify the project. If the City approves the project, CEQA requires that these entities adopt CEQA findings and a mitigation monitoring and reporting program (MMRP or mitigation program) to ensure that mitigation measures identified in the Final EIR are implemented.

7.2 Environmental Review Process

CEQA Guidelines sections 15080 to 15097 set forth the EIR process, which includes multiple phases involving notification and input from responsible agencies and the public. The main steps in this process are described below.

7.2.1 Notice of Preparation and Public Scoping

In accordance with sections 15063 and 15082 of the CEQA Guidelines, on June 28, 2023, the planning department sent a Notice of Preparation (NOP) of an Environmental Impact Report and Notice of Public Scoping Meetings to responsible and federal public agencies and interested parties to begin the formal CEQA scoping process for the project. The planning department also distributed a public notice of the availability of the NOP and notice of public scoping meetings to additional public agencies and interested parties; these notices were posted on the planning department website and placed in the legal classified section of the *San Francisco Examiner* on June 28, 2023, and in the *San Mateo Daily Journal* on July 1, 2023. The 30-day public review period extended from June 28, 2023, to July 28, 2023. The planning department held two in-person public scoping meetings on July 11, 2023 and July 15, 2023, and an online public scoping meeting on July 13, 2023, to describe the project and receive oral comments on the scope of the EIR. The planning department made a video recording of the scoping meeting presentation available for viewing on the planning department's website. Draft EIR Table 1-2 presents a summary of public scoping comments received. The planning department has considered all comments made by the public and agencies during the scoping period in preparing the Draft EIR.

7.2.2 Draft EIR Public Review

The planning department published the Draft EIR, including an initial study, on March 19, 2025. The planning department mailed paper copies of the notice of availability of the Draft EIR and notice of public meeting to relevant federal, state, regional, and local agencies; potentially interested parties; and owners and occupants of property within 300 feet and 50 feet, respectively, of the Martin Substation/Daly City Yard and the distribution express feeder route. The planning department also distributed the notice by email, to recipients who had provided email addresses; published notification of the Draft EIR's availability in two newspapers of general circulation in the project area (the *San Francisco Examiner* and *San Mateo County Journal*); posted the notice at the San Francisco and San Mateo county clerks' offices; and posted 28 notices within and around the project area. More than 4,300 notices were distributed. The planning department posted the Draft EIR on its website at https://sf-planning.org/sfceqadocs and sent hard copies to six public libraries in the project area in addition to others who requested it.

The 45-day public review period for the Draft EIR started on March 19, 2025. The planning department extended the comment period to 60 days to accommodate a request on behalf of PG&E. The comment period ended on May 19, 2025. During the public review period, the planning department conducted a public hearing to receive oral comments on the Draft EIR. The public hearing was held before planning commission on April 17, 2025. During the Draft EIR public review period, the planning department received written and oral comments from six public agencies, three organizations, and 65 individuals. See Chapter 9, List of Persons Commenting, for a complete list of commenters. A transcript of the public hearing and all comment letters are included in Attachment A of this RTC document.

7.2.3 Responses to Comments Document and Final EIR

This RTC document addresses all substantive written and oral comments on the Draft EIR received during the public review period. Under CEQA Guidelines section 15201, public participation is an essential part of the CEQA process, and under CEQA section 21082.1(b), comments submitted in any format must be considered. CEQA Guidelines section 15204(a) states that the focus of public review should be "on the sufficiency of the [Draft EIR] in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated." In addition, "when responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR." CEQA Guidelines section 15088 specifies that the lead agency is required to respond to the comments on the major environmental issues raised in the comments received during the public review period. Therefore, this RTC document is focused on the sufficiency and adequacy of the Draft EIR in disclosing the significance of the physical environmental impacts of the project that was evaluated in the Draft EIR.

The planning department distributed a notice of availability of this RTC document for review to the planning commission, public agencies and commissions, organizations, and individuals who commented on the Draft EIR. In accordance with Administrative Code section 31.15(d), the Final EIR (consisting of this RTC document along with the Draft EIR) also was made available to the general public and to any boards, commissions, and departments that will consider or approve the project. In accordance with CEQA section 21092.5, the planning department published the document and distributed notices at least 10 days prior to the planning commission hearing at which EIR certification will be considered. The planning commission will consider the adequacy of the Final EIR—consisting of the Draft EIR and this RTC document—in complying with the

requirements of CEQA, the CEQA Guidelines, and San Francisco Administrative Code chapter 31. If the planning commission finds that the Final EIR is adequate, accurate, and complete and complies with CEQA requirements, it will certify the Final EIR under CEQA.

If the Final EIR is certified, the SFPUC will then review and consider the Final EIR before deciding whether to approve the project. If the SFPUC decides to approve the project, it will adopt CEQA findings, including adopting or rejecting mitigation measures and alternatives to avoid or reduce significant impacts, and an MMRP. Consistent with CEQA Guidelines section 15097, the MMRP is designed to ensure implementation of the mitigation measures identified in the Final EIR and adopted by decision-makers to mitigate or avoid the project's significant environmental effects. CEQA also requires the adoption of findings prior to approval of a project for which a certified EIR identifies significant environmental effects (Public Resources Code sections 21002, 21002.1, and 21081 and CEQA Guidelines sections 15091 and 15092). If the SFPUC approves a project that would result in significant adverse impacts that cannot be avoided or substantially lessened, the SFPUC must include in the approval record a statement of overriding considerations for those impacts (CEQA Guidelines section 15093(b)). The SFPUC would adopt the MMRP as a condition of project approval.

7.3 Document Organization

Because the Final EIR consists of the Draft EIR together with the RTC document, this RTC document is organized to follow the Draft EIR section numbering. The Draft EIR consists of a summary, Chapters 1 through 6, and Appendices A through K.

This RTC document consists of Chapters 7 through 11 plus supplemental attachments, as follows:

- **Chapter 7, Introduction to Responses to Comments.** This chapter describes the purpose of the RTC document, the environmental review process, and the organization of the EIR.
- **Chapter 8, Project Description Refinements.** This chapter summarizes and analyzes changes to the description of the project, as described in Draft EIR Chapter 2, that the City has initiated since publication of the Draft EIR. The refinements and clarifications consist of minor updates to the project description and the associated environmental analysis previously presented in the Draft EIR. This chapter concludes that these refinements and clarifications to the project would not result in any new environmental impacts not already discussed in the Draft EIR or a substantial increase in the severity of previously identified significant environmental impacts.
- **Chapter 9, List of Persons Commenting.** This chapter lists the public agencies, organizations, and individuals who submitted written comments during the public review period or spoke at the public hearing on the Draft EIR. The table in this chapter indicates whether the comments were submitted in writing (i.e., via letter or email) during the public comment period, or orally at the Draft EIR public hearing. Commenters within each category are listed in alphabetical order. The table also shows a commenter code and the date of each set of comments.
- **Chapter 10, Responses to Comments.** This chapter presents the substantive comments excerpted verbatim from the public hearing transcript and comment letters. The complete transcript, letters, and emails containing the comments are provided in Attachment A of this RTC document. The comments and responses in this chapter are organized by topic and, where appropriate, by subtopic, in the same order as the environmental topics addressed in Draft EIR Chapter 3 and Appendix A (Initial Study). Similar comments on the same topic were received from multiple commenters. These comments are grouped

together, and a single comprehensive response is provided. The responses generally clarify the text in the Draft EIR. In some instances, the responses may result in revisions or additions to the Draft EIR. Text changes are shown as indented text, with deleted material shown as ~~strikethrough~~ text and new text double underlined.

- **Chapter 11, Draft EIR Revisions.** This chapter presents changes and additions to the Draft EIR. The planning department has made changes and revisions to the Draft EIR either in response to comments received on the Draft EIR, to include updated information, or as necessary to clarify statements and conclusions made in the Draft EIR. In all cases, changes are provided to clarify or correct content in the Draft EIR or to add information received after the release of the Draft EIR. These changes do not result in significant new information, including the level of significance of project impacts, nor do they identify any new significant impacts. None of the changes or additions in Chapter 11 substantially affect the conclusions presented in the Draft EIR.
- **Attachment A, Draft EIR Comments.** Attachment A includes full copies of the written comments received on the Draft EIR and the transcript of the public hearing held for the Draft EIR. The attachment also shows, in the margin of each letter or transcript, the bracketing and comment code used to identify each comment and the corresponding response topic code.
- **Attachment B, Noise Analysis Supporting Documentation**
- **Attachment C, Biological Resources Supporting Documentation**
- **Attachment D, Hazardous Materials Supporting Documentation**
- **Attachment E, Air Quality Supporting Documentation**

This page intentionally left blank

CHAPTER 8
PROJECT DESCRIPTION REFINEMENTS

Since publication of the draft environmental impact report (Draft EIR), the City and County of San Francisco (City) has refined the project described in Draft EIR Chapter 2, Project Description. This chapter summarizes these refinements and clarifications and analyzes whether such refinements would result in any new significant environmental impacts not already discussed in the Draft EIR. Draft EIR text refinements are presented in this chapter only where they have been made specifically in Chapter 2, Project Description (deletions are shown in ~~strikethrough~~; new text is double-underlined). Revisions shown in this chapter along with associated text revisions in other portions of the Draft EIR that have been updated as a result of these refinements are presented in Chapter 11, Draft EIR Revisions.

The refinements clarify, expand, or update the information in the Draft EIR. As discussed below, the project description refinements would not cause any new significant impacts that were not already identified in the Draft EIR, nor would they increase the severity of any of the project or project variant's impacts identified in the Draft EIR. Mitigation measures identified in the Draft EIR would continue to be required in order to reduce or avoid significant environmental impacts. No new measures would be required to mitigate the significant impacts identified for the proposed project or project variant in the Draft EIR.

California Environmental Quality Act (CEQA) Guidelines section 15088.5 requires recirculation of an EIR when "significant new information" is added to the EIR after publication of the Draft EIR but before certification. The CEQA Guidelines state that information is "significant" if "the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project proponents have declined to implement." Section 15088.5 further defines "significant new information" that triggers a requirement for recirculation as including, but not limited to, identification of (1) a new significant impact, (2) a substantial increase in the severity of an impact (unless mitigation is adopted to reduce the impact to a less-than-significant level), or (3) a new feasible alternative or mitigation measure that would lessen the environmental impacts of the proposed project but that the project sponsor is unwilling to adopt. CEQA Guidelines section 15088.5(b) states that recirculation is not required if "new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR."

8.1 Summary of Project Description Refinements

The minor refinements to the proposed PG&E Power Asset Acquisition Project ("project") consist of the following:

- Expansion of the Martin Substation project site boundary
- Clarification of system reinforcement locations
- Addition of the Baylands staging area

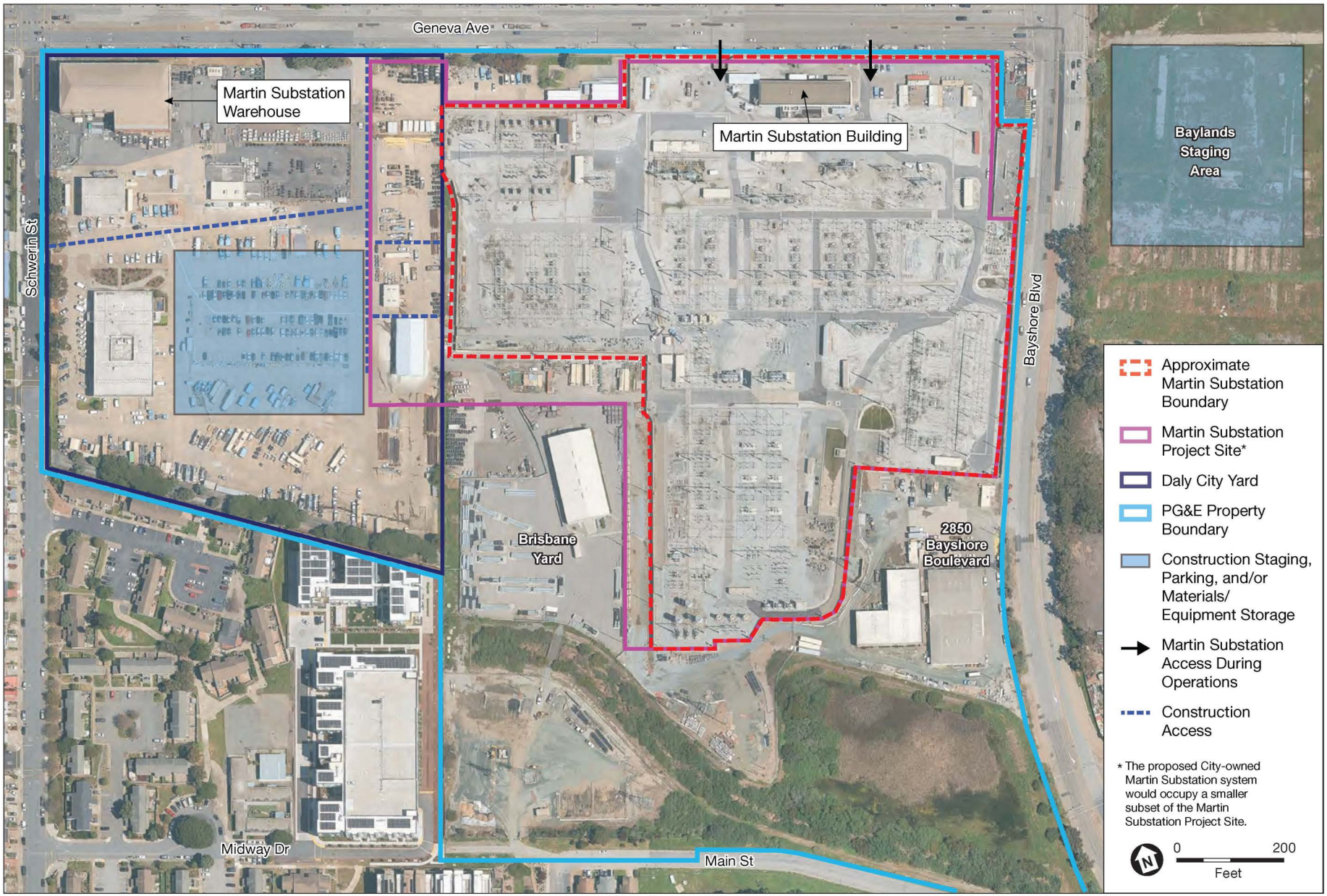
All other aspects of the project remain unchanged, as presented in Draft EIR Chapter 2, Project Description. The environmental effects of the proposed project or project variant, with these refinements incorporated,

are fully addressed by the analyses in this chapter together with those in EIR Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, and EIR Appendix A (Initial Study), as amended in Chapter 11 of this response to comments document.

8.1.1 Martin Substation Separation *(Project-Level Review)*

Draft EIR Figure 2-2 has been modified as shown on the following page to expand the proposed project site boundary to encompass distribution facilities and two additional 230-kilovolt (kV) meters. As shown in the following revisions to the second paragraph on Draft EIR p. 2-10, the size of the expanded Martin Substation project site is similar to what was presented in the Draft EIR; this is due to an error in the Draft EIR text:

> **Figure 2-2** shows the approximate boundaries of the Martin Substation project site where new, City-owned facilities would be located. The Martin Substation project site in Figure 2-2 is larger than the final City-owned substation because it includes areas for construction work and staging. Precise locations of the new equipment would be determined upon detailed design, but the total space needed for the new equipment is anticipated to be accommodated within the approximately ~~975,000~~ 954,000-square-foot (21.9-acre) bounded area shown in pink in Figure 2-2.



SOURCE: SFPUC

PG&E Asset Acquisition Project

Revised Figure 2-2

Martin Substation Project Site and Construction Staging Area

Table 2-2 on Draft EIR page 2-10 has been revised to reflect the installation of two additional revenue meters and a circuit breaker, as follows:

Table 2-2 Martin Substation Separation Components

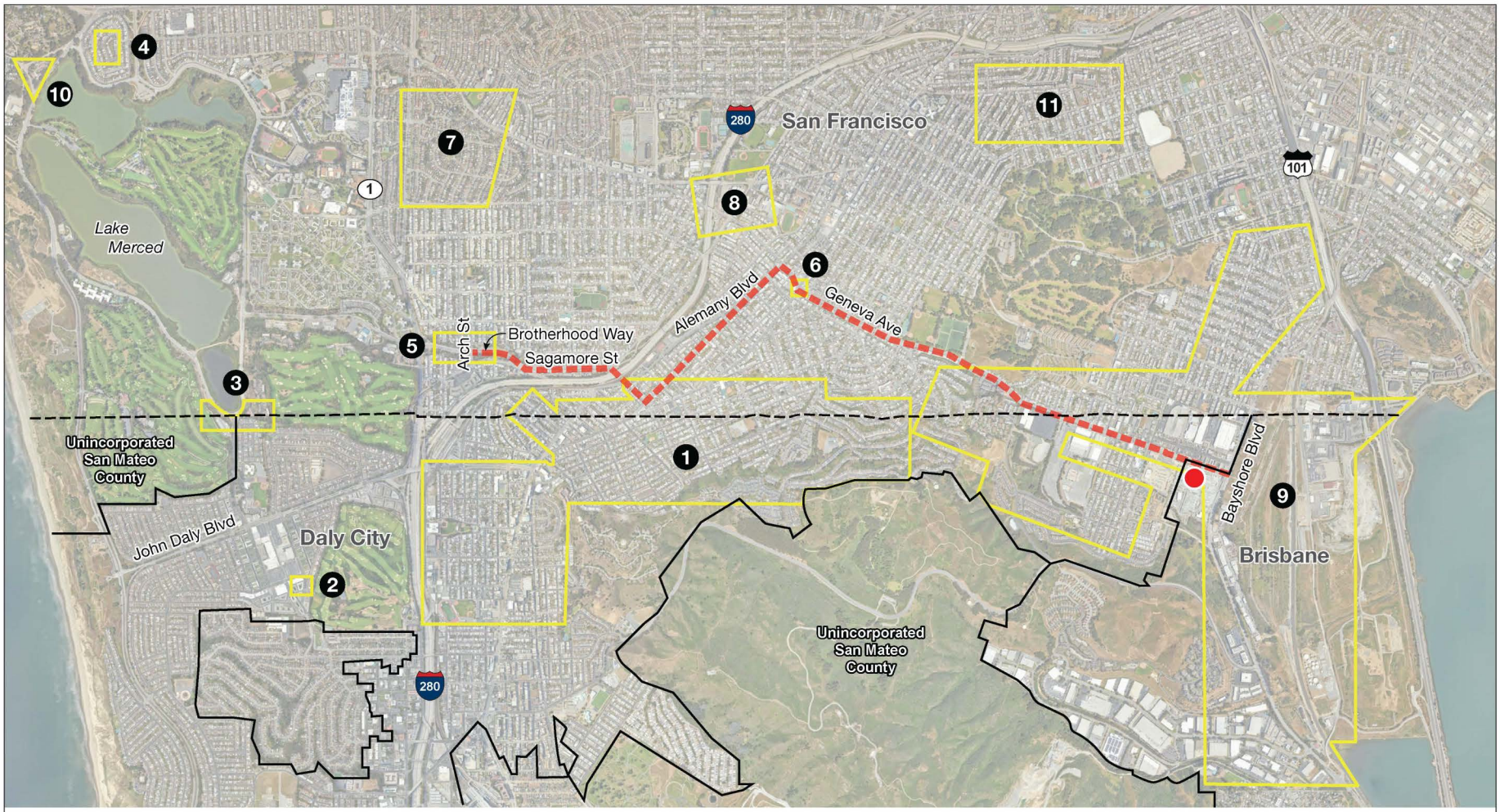
Component[16]	Purpose	Quantity	Excavation for Each Foundation or Trench	
			Maximum Excavation Width and Length (Feet)	Maximum Excavation Depth (Feet)
Transformers (115/12 kV and 115/60 kV)	Reduce voltage to levels safe for grid distribution	3[17]	Width: 44 Length: 44	7
115 kV circuit breakers	Electrical devices designed to automatically open a circuit to prevent damage to components, overheating, and fires	12	Width: 15 Length: 15	7
60 kV circuit breaker	Electrical devices designed to automatically open a circuit to prevent damage to components, overheating, and fires	1	Width: 15 Length: 15	7
115 kV control house	Enclosure to house equipment that requires climate control	1	Width: 40 Length: 70	4
Revenue meter and foundations (~~six~~ eight meters, each meter includes three phases, one foundation per phase)	Meter to measure electricity use	~~18~~ 24	Width: 4 Length 4	6
115 kV and 12 kV underground duct banks with cables	Connect new equipment to City and PG&E's grids	1	Width: 5 Length: 3,500	6
Vaults for cable splicing	Connect new equipment to City and PG&E's grids	9	Width: 11 Length: 19	15
12 kV switchgear buildings[18]	Control, protect, and isolate electrical equipment	2	Width: 20 Length: 50	4
Fence	Separate the two utility systems	1	n/a	n/a

n/a = not applicable

8.1.2 System Reinforcements Associated with Distribution System Separation *(Program-Level Review)*

Draft EIR **Figure 2-8** has been revised to clarify that system reinforcements would avoid San Bruno Mountain State and County Park and areas within or immediately adjacent to the southern portion of Lake Merced, San Francisco Bay, and Brisbane Lagoon. Refer to the revised Figure 2-8 on the following page.

[16] The City would establish independent bus sections on existing equipment in the Martin Substation; however, this would not require construction of new components.
[17] Three transformer foundations are proposed as part of the project. The project would relocate one existing transformer at the Martin Substation to a new foundation and would install two new transformers on new foundations.
[18] A switchgear is composed of electrical disconnect switches, fuses, or circuit breakers. It is used to control, protect, and isolate electrical equipment.



SOURCE: Google Earth Aerial Imagery

Note: System reinforcement areas shown approximate work areas. System reinforcements along the San Francisco Bay shoreline, Brisbane Lagoon, and near Lake Merced would be completed within or near public road right-of-ways or on existing equipment. No work would be conducted in water.

PG&E Asset Acquisition Project

Revised Figure 2-8
System Reinforcements

8.1.3 Baylands Staging Area

Draft EIR Section 2.5.3, Construction Access, Staging, Equipment, and Workforce, has been revised to include the potential use of a portion of the Brisbane Baylands site for construction staging and storage for the project. The first paragraph in Section 2.5.3, on Draft EIR p. 2-41, has been revised as follows:

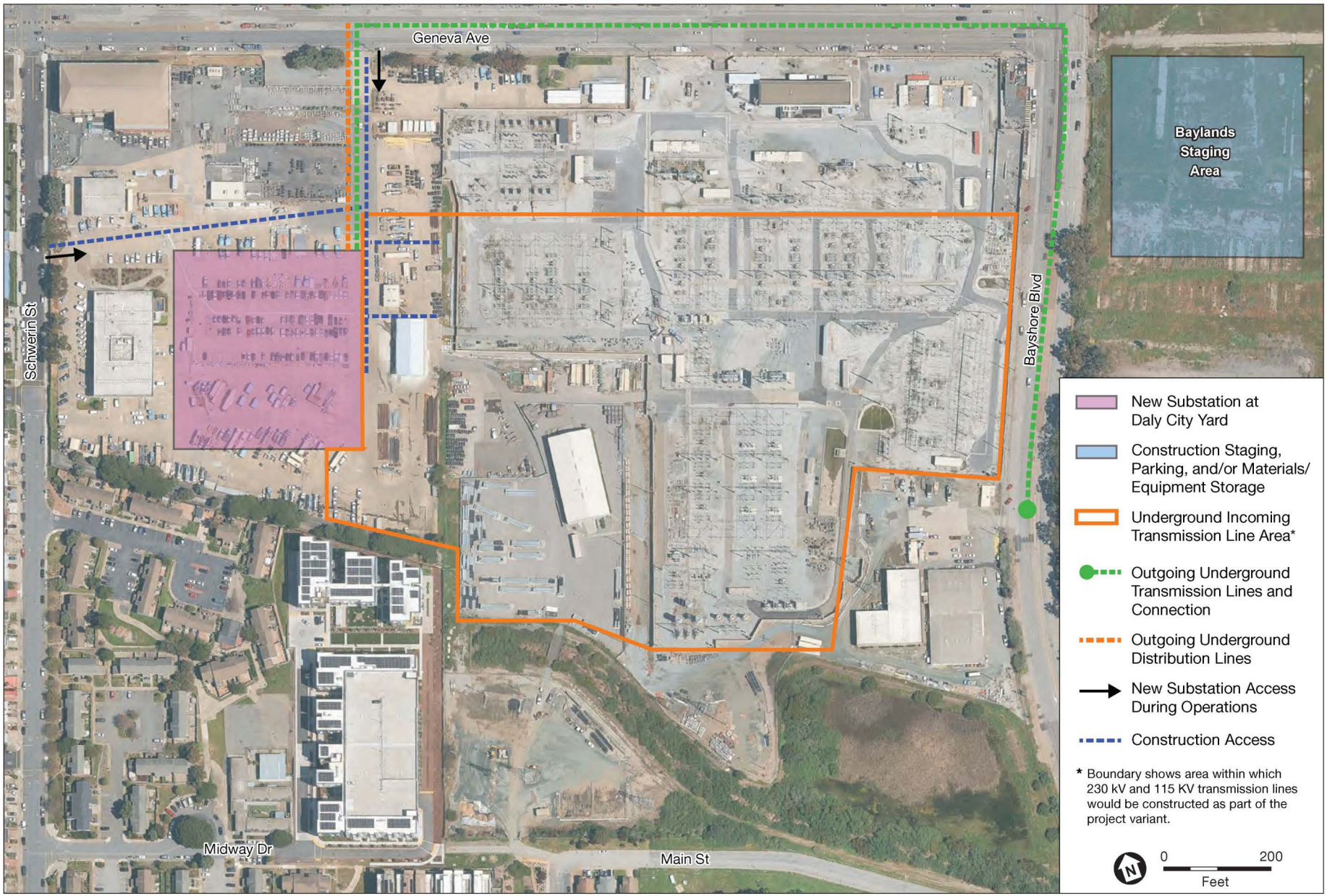
> Due to the limited space at the Martin Substation, the Daly City Yard would serve as the primary staging and laydown area for the project's separation work at the Martin Substation. In addition, an area referred to as the Baylands staging area on the nearby Brisbane Baylands site could be used for temporary City construction staging or temporary PG&E parking and materials/equipment storage relocated from the Daly City Yard, as shown in Figure 2-2, if development associated with the Baylands Specific Plan has not occurred. No excavation would be required during staging activities at the Daly City Yard. Vegetation removal and minor site grading, as well as temporary fencing and temporary lighting, may be needed at the Baylands staging area. At the Baylands staging area, lighting is anticipated to be achieved through a power drop from the existing nearby poles or from battery/solar equipment.~~, and the~~ Either area or both areas would support storage of City construction equipment, materials, and stockpiles, and employee parking. Prior to any work or staging at the Daly City Yard, existing trailers and other PG&E equipment would need to be relocated to other areas of the Daly City Yard, Brisbane Yard, ~~or~~ 2850 Bayshore Boulevard, or the Baylands staging area.[40] Upon completion of project construction, PG&E materials/equipment would be relocated back to the Daly City Yard.

Draft EIR Section 2.7.5.3, Construction Access, Staging, Equipment, and Workforce (specific to the project variant), describing construction of the project variant has also been revised to include potential use of the Baylands staging area. The first paragraph in Section 2.7.5.3, on Draft EIR p. 2-55, has been revised as follows:

> Construction of the project variant would use the same equipment as the project, with the addition of pile drivers for switchgear building construction, as shown in **Table 2-14**. Construction staging would occur within the project variant area or at the Baylands staging area shown in Figure 2-11. Existing PG&E parking and materials/equipment storage within the project variant area at the Daly City Yard would be temporarily relocated elsewhere within the Daly City Yard (shown in Figure 2-2), to Brisbane Yard, 2850 Bayshore Boulevard, or the Baylands staging area. Upon completion of project construction, the temporarily relocated PG&E materials/equipment could either remain at the Daly City Yard, Brisbane Yard, or 2850 Bayshore Boulevard, or be moved to one of the new service yards. The anticipated excavation associated with the new City Substation would be approximately 34,980 cubic yards. Combining that amount with the excavation amounts for the remaining project components, excavation associated with the project variant would total approximately 128,900 cubic yards.[59] The volume of soil associated with the new City Substation would generate approximately 2,600 haul truck trips.[60] Hazardous materials handling for the project variant would follow the procedures described for the project in Section 2.5.4.1, Hazardous Materials Handling, above.

Draft EIR **Figure 2-11** has been revised to show the location of the potential Baylands staging area, as shown on the following page.

[40] Based on review of aerial imagery, it is assumed that sufficient space is available for equipment and vehicle storage in the locations listed.
[59] Under the project variant, the new City Substation would be constructed instead of the Martin Substation separation but all other project components would be the same.
[60] Round trips, assuming 18 cubic yards per dump truck.



SOURCE: ESA, 2023

PG&E Asset Acquisition Project

Revised Figure 2-11
New City Substation (Project Variant) at Daly City Yard

8.2 Environmental Impacts of Project Description Refinements

The project description refinements and clarifications outlined above could result in changes to the assumptions and analyses described in the Draft EIR assessment of environmental impacts of the project or project variant as presented in Draft EIR Chapter 3, Environmental Setting and Impacts, and the initial study (Draft EIR Appendix A), for the following environmental topics: noise and vibration, air quality, cultural resources, tribal cultural resources, transportation and circulation, biological resources, and hazards and hazardous materials. The environmental impacts of the project description refinements for these topics are summarized below. Chapter 11 presents specific text edits to the Draft EIR's impact discussions resulting from these refinements and clarifications.

8.2.1 Noise and Vibration

The expanded Martin Substation project site, shown in revised Figure 2-2, would result in construction equipment operating closer to sensitive receptors located to the north, south, and west of the substation site. In some cases, construction equipment could operate hundreds of feet closer to receptors than assumed for the Draft EIR's work area, resulting in higher potential construction noise levels than identified in Draft EIR Impacts NO-1 and NO-2. Accordingly, the Draft EIR's analysis of potential Martin Substation construction activity noise levels has been revised (see Chapter 11). As shown in Chapter 11, the increase in ambient noise levels at the sensitive receptors to the north (across Geneva Avenue) and south (Midway Village residential complex) would be greater than estimated in the Draft EIR.[1] Specifically, at the nearest sensitive receptors on Geneva Avenue (located 150 feet away from the project site), project construction at the expanded Martin Substation project site is estimated to result in up to an 10.4 dBA increase over existing ambient noise levels (compared to an 8 dBA increase identified in the Draft EIR). At Midway Village, revised construction activities are estimated to result in up to 19 dBA increase over existing noise levels, instead of 14 dBA as identified in the Draft EIR. The implementation of equipment controls and other construction noise controls required by Draft EIR Mitigation Measure M-NO-2 would reduce construction noise levels, but even with this measure construction noise may at times still exceed 10 dBA above the ambient noise level, given the existing low ambient levels at the Midway Village receptors. Midway Village residences would continue to be the most impacted sensitive receptor and continue to be exposed to significant and unavoidable construction noise impacts even with the implementation Mitigation Measure M-NO-2, consistent with previous findings identified in the Draft EIR. At other sensitive receptors, the results of this revised analysis indicate that construction noise levels would increase at residential receptors on the 800 block of Schwerin Street and the 100 block of Main Street but remain less than significant.

The expansion of the Martin Substation project site could also result in the use of vibration-generating construction equipment closer to Midway Village and the Martin Substation warehouse, resulting in higher vibration levels than identified in Draft EIR Impact NO-4; however, as shown in text revisions in Chapter 11, daytime groundborne vibration levels would remain well below applied EIR thresholds and thus remain a less-than-significant impact at these building locations.

The expanded Martin Substation project site could result in transformers operating closer to Midway Village than discussed in Draft EIR Impact NO-3; however, transformers would still be a minimum of 280 feet from the Midway Village property plane south of the Martin Substation area. As shown in Chapter 11, at this

[1] The change to the Martin Substation project site would not result in construction noise levels that exceed the Draft EIR's applied threshold of 90 dBA Leq (residential) and 100 dBA Leq (commercial) at any receptor location.

distance the operation of two transformers in the expanded Martin Substation area would generate a steady-state noise level of 41.4 dBA Leq at the Midway Village property plane. This estimate, which does not assume any shielding of transformer noise by firewalls, would be approximately 9.6 and 3.6 dBA less than the daytime (51 dBA) and nighttime (45 dBA) Leq ambient noise level reported in the Draft EIR (p. 3.2-52) at Midway Village and assumed in the revised EIR analysis. Accordingly, as shown in Chapter 11, Martin Substation transformer noise levels would not increase ambient noise levels above the San Francisco Police Code's standards of 8 dBA at the Midway Village property plane, nor above the daytime or nighttime interior noise standards of 55 dBA and 45 dBA, respectively. Therefore, operational noise from transformers would remain a less than significant impact at Midway Village.

The addition of the potential Baylands staging area would not affect the noise analyses or conclusions of Draft EIR Impacts NO-1, NO-2, or NO-4. The potential Baylands staging area would be located closer to some commercial receptors (on Geneva Avenue and Bayshore Boulevard) but the same distance or farther away from hotel and residential receptors (on Geneva Avenue). The Baylands staging area could be used for temporary construction staging or temporary PG&E parking and materials/equipment storage relocated from the Daly City Yard. As described in the Draft EIR (p. 3.2-30 and 3.2-36), loaders and dump trucks would be the loudest equipment used at the construction staging area, and as shown in Chapter 11 (Revised Table 3.2-14) could produce a noise level of 77 dBA Leq at 50 feet. PG&E parking and materials/equipment storage would involve access by personal vehicles, service vehicles, and delivery trucks, which would generate similar or reduced noise compared to loaders and dump trucks used for construction staging. The use of loaders and dump trucks at the Baylands staging area would occur at least 265 feet from any commercial receptor and at least 350 feet from any hotel/residential receptor, farther away from receptors than the Daly City staging site (150 feet from the nearest residential receptor). At these distances, Baylands staging activities could generate a noise level of 63 dBA Leq at the nearest commercial receptor (265 feet) and 60 dBA Leq at the nearest hotel/residential receptor (350 feet).[2] These noise levels would not exceed City of Brisbane standards for construction noise (86 dBA outside the property plane), would not exceed Federal Transit Administration (FTA) daytime noise criteria for residential or commercial receptors (90 dBA Leq and 100 dBA Leq, respectively), and would not result in more than a 10 dBA increase in ambient noise levels at sensitive receptors in the vicinity of the Baylands staging area on Bayshore Boulevard (66 dBA Leq). For the reasons discussed above, PG&E parking and materials/equipment storage at the Baylands staging area would generate similar or reduced noise levels. In addition, staging activities would not require the use of equipment that would generate groundborne vibrations (e.g., jackhammer, vibratory roller). Thus, the use of the Baylands staging area would not result in potentially significant construction noise or vibration impacts.

The refinements to Draft EIR Figure 2-8 regarding system reinforcements associated with distribution system separation would have no effect on the Draft EIR's noise analysis because this change clarifies but does not alter the location of such activities near residential and commercial receptors modeled in the Draft EIR.

Therefore, with implementation of Draft EIR Mitigation Measure M-NO-2 and revised Mitigation Measure M-NO-3a as shown in Chapter 11, the project description refinements would not result in new or substantially more severe noise and vibration impacts relative to those identified in the Draft EIR.

[2] The use of loaders and trucks at the Baylands staging site is assumed to occur on the interior of the site, at least 50 feet from any property plane, so as not to interfere with security and/or perimeter fencing, vehicle ingress, egress and parking, and construction trailers. The use of equipment at the Baylands site would therefore not exceed 86 dBA at any point outside the Baylands property plane.

With the project description refinements above and revised transformer noise analysis (discussed in Section 10.4 and shown in Chapter 11), the Draft EIR Impact NO-3 conclusion for noise from operations of transformers at Martin Substation would change from less than significant to less than significant with implementation of Mitigation Measure M-NO-3a, as shown in Chapter 11.[3] The Draft EIR Impact NO-2 conclusion for construction noise from Martin Substation separation would remain significant and unavoidable with mitigation.

8.2.2 Air Quality

The expanded work area at the Martin Substation includes the installation of two additional 230 kV meters and one 60 kV breaker at the Martin Substation. An additional 80 cubic yards of material could be excavated and offhauled to construct the meters and breaker. The Draft EIR air quality analysis reflects the excavation and offhaul of 7,930 cubic yards of material for excavation associated with Martin Substation separation. The minor increase in volume of material excavated and offhauled would represent approximately 1 percent of the amount assumed in the Draft EIR for Martin Substation separation and would represent an even lower percentage of the total emissions calculated for the whole project. Therefore, the expanded work area at the Martin Substation would not substantially increase the emissions of the project and does not alter the Draft EIR's conclusions regarding criteria air pollutant emissions or compliance with the clean air plan.

As shown in Draft EIR Appendix F Figure 1 (Modeled Sources for the Martin Substation and Project Variant Components) and Figure 3 (Maximally Exposed Individual [MEI] Locations for the Martin Substation and Variant Components), the project variant modeled work area included the expanded work area at the Martin Substation and the MEIs for the variant were north of Geneva Avenue and at the intersection of Geneva Avenue and Bayshore Boulevard. The expanded work area at the Martin Substation would extend project activity farther from the MEIs. Therefore, the expanded work area at the Martin Substation does not affect the health risk analysis conclusions in the Draft EIR.

If the Baylands staging area is used for project construction staging or for temporary PG&E parking and materials/equipment storage, activity at the Baylands staging area would be similar to what was estimated for the project and, while located approximately 0.25 mile east of the staging area evaluated in the Draft EIR, would be within the same regional air basin. Excavation for fence installation or vegetation removal would be minor. Therefore, criteria air pollutant emissions for the project if construction staging occurred at the Baylands staging area would be similar to those disclosed in the Draft EIR for Martin Substation separation. With implementation of Mitigation Measure M-AQ-2a, criteria air pollutant emissions associated with the Baylands staging area would be less than significant with mitigation, consistent with previous findings in the Draft EIR.

Use of the Baylands staging area would increase the total area of construction emissions but not affect the total emissions from work in the vicinity of the Martin Substation. Therefore, use of the Baylands staging area would disperse the emissions sources over a larger area and reduce the emissions at the MEI. The expanded work area at the Martin Substation does not affect the health risk analysis conclusions in the Draft EIR.

[3] As shown in Chapter 11, the overall conclusion for Martin Substation transformer noise would change from less than significant to less than significant with mitigation (related to noise at the Martin Substation eastern property plane) due to revised transformer noise information used in the impact analysis.

Therefore, the project description refinements would not result in new or substantially more severe air quality impacts compared to those identified in the Draft EIR. The impact conclusions and significance determinations in Draft EIR Section 3.3, Air Quality, would remain the same.

8.2.3 Cultural Resources and Tribal Cultural Resources

The expanded work area at the Martin Substation encompasses two additional buildings that were constructed between 1980 and 2024.[4] Neither building in the expanded work area meets the 45-year minimum threshold for consideration as a potential historic resource. Therefore, the expanded work area at the Martin Substation would not affect additional historic architectural resources beyond those identified in the Draft EIR.

The Baylands staging area is located near the National Register-listed Southern Pacific Railroad Bayshore Roundhouse.[5] While there are historic structures near the Baylands staging area, these structures are located more than 400 feet from the site and would not be subject to vibration or construction impacts as a result of construction staging. Therefore, the Baylands staging area would not affect additional historic resources beyond those identified in the Draft EIR.

All construction activities resulting in ground disturbance, including the expanded work area at the Martin Substation and the Baylands staging area, could adversely affect archeological resources if present. These activities could also encounter human remains. With implementation of Mitigation Measure M-CR-2a (Procedures for Discovery of Archeological Resources for Projects Involving Soil Disturbance), Mitigation Measure M-CR-2b (Archeological Testing Program), Mitigation Measure M-CR-2c (Archeological Monitoring Program), and Mitigation Measure M-CR-2d (Archeological Treatment Program), these impacts would be less than significant. Project refinements, including the expansion of the Martin Substation project site boundary, clarification of system reinforcement locations, and addition of the Baylands staging area, would not cause new significant impacts on archaeological resources with implementation of these mitigation measures.

The expanded work area at the Martin Substation and the Baylands staging area would require ground disturbance in or near areas where previously recorded Native American archeological resources are documented, and ground-disturbing activities therefore could inadvertently encounter archeological resources that could be identified as tribal cultural resources. With implementation of Mitigation Measure M-TCR-1 (Public Interpretation Land Acknowledgement) in addition to Mitigation Measure M-CR-2a (Procedures for Discovery of Archeological Resources for Projects Involving Soil Disturbance), Mitigation Measure M-CR-2b (Archeological Testing Program), Mitigation Measure M-CR-2c (Archeological Monitoring Program), and Mitigation Measure M-CR-2d (Archeological Treatment Program), these impacts would be less than significant. Project refinements, including the expansion of the Martin Substation project site boundary, clarification of system reinforcement locations, and addition of the Baylands staging area would not cause new significant impacts on tribal cultural resources with implementation of these mitigation measures.

Therefore, the project description refinements would not result in new or substantially more severe cultural resources or tribal cultural resources impacts compared to those identified in the Draft EIR. The impact

[4] Construction dates are derived from comparison of aerial photographs taken in 1980, 1982, and 2022 with current imagery available through Google Earth. Aerial photographs were referenced from information HistoricAerials.com. 1980, 1982, and 2022 Aerials, HistoricAerials.com, accessed October 2025, https://www.historicaerials.com/viewer.
[5] National Register of Historic Places Draft Registration Form, Southern Pacific Railroad Bayshore Roundhouse, San Mateo County; listed March 26, 2010.

conclusions and significance determinations in Draft EIR Appendix A Section E.4, Cultural Resources, and Section E.5, Tribal Cultural Resources, would remain the same.

8.2.4 Transportation and Circulation

The only project description revision that would affect the transportation network is potential use of the Baylands staging area during project construction. As discussed in greater detail below, the use of the Baylands staging area for temporary PG&E parking and materials/equipment storage currently located at the Daly City Yard or as a staging location during construction of the Martin Substation separation or the new City Substation (project variant) could result in additional vehicle trips between the Baylands staging area and the existing Martin Substation or Daly City Yard (a distance of approximately 0.25 mile). The expansion of the Martin Substation project boundary and the clarification of system reinforcement locations would not affect the transportation network, as site access and vehicle trips would remain unchanged from the proposed project.

The proposed Baylands staging area would be accessed via an existing gated driveway at the signalized intersection of Bayshore Boulevard/Geneva Avenue (i.e., the east leg of the intersection). Vehicle trips to the Baylands staging area would primarily be via Bayshore Boulevard northbound or southbound. The use of the Baylands staging area would likely require changes to signal timing at the intersection of Bayshore Boulevard/Geneva Avenue to incorporate the eastbound movement out of the Baylands staging area driveway, and perhaps a protected southbound left turn phase onto the site, where an exclusive left turn lane already exists. The intersection has crosswalks and pedestrian countdown signals and any changes to the signal timing would maintain minimum pedestrian clearance intervals across Geneva Avenue and Bayshore Boulevard as required by the City of Brisbane.

The Baylands staging area may be used during construction of the Martin Substation separation component or the new City Substation (project variant) for 1) temporary PG&E parking and materials/equipment storage currently located at the Daly City Yard, including PG&E cars and maintenance trucks, or 2) used as a staging location for City construction activities. The use of the Baylands staging area for either purpose would minimally affect the transportation network, for the following reasons:

- Use of the Baylands staging area for temporary PG&E parking and materials/equipment storage would result in vehicle trips between the existing Daly City Yard/Martin Substation and the Baylands staging area for the Martin Substation separation or the new City Substation. PG&E cars and maintenance vehicles that currently park at the Daly City Yard and that would be relocated to the Baylands staging area during project construction would continue to travel on area roadways, similar to existing conditions, and would not substantially increase vehicle trips on Geneva Avenue or Bayshore Boulevard. Thus, Muni and SamTrans bus routes traveling on Bayshore Boulevard or Geneva Avenue would not be substantially delayed.
- The use of the Baylands staging area for storage of materials and worker parking during construction of the Martin Substation separation or the new City Substation would result in a minimal shift in construction vehicle trips from the existing Martin Substation or Daly City Yard to the Baylands staging area (i.e., a portion of the 10 peak hour construction vehicle trips for the Martin Substation separation component and 16 peak hour construction vehicle trips for the new City Substation that would occur on a daily basis [see Draft EIR Appendix A Table 7, p. 86]). These peak hour construction vehicle trips include construction trucks delivering supplies or picking up debris, as well as construction worker vehicles.

During construction, most deliveries are anticipated to be made directly to the Martin Substation/Daly City Yard site, and therefore, a substantial increase in daily or peak hour vehicles on area roadways including Bayshore Boulevard and Geneva Avenue would not occur given the existing daily and peak hour traffic volumes on these roadways (i.e., between 400 and 990 peak hour vehicles each way compared to the addition of fewer than 10 to 16 project-related vehicles during the peak hour).

- The minimal traffic increase due to vehicles traveling to and from the staging area would not substantially affect the operation of the Muni and SamTrans bus routes traveling on Bayshore Boulevard or Geneva Avenue. Therefore, the use of the Baylands staging area during construction of the Martin Substation separation component or the new City Substation would not substantially delay transit.
- As described on Draft EIR Appendix A pp. 95-96, the project's construction management plan would include measures to maintain safety and accessibility along Geneva Avenue and Bayshore Boulevard during construction for all ways of travel; these measures would address use of the Baylands staging area. The plan would include measures such as circulation and detour plans, advance warning signage, temporary traffic signal changes, truck routes, and maintenance of pedestrian and bicycle access.

Overall, the potential use of the Baylands staging area as a storage and worker parking location for City construction activities during construction of the Martin Substation separation component or the new City Substation, would be temporary (i.e., about 33 months for the Martin Substation separation or 26 months for construction of the new City Substation [project variant]) and would not involve a substantial intense activity that would affect the transportation network. The use of the Baylands staging area for temporary PG&E parking and materials/equipment storage is not expected to extend beyond construction as discussed above; thus, it would not result in substantial changes to vehicle use of area roadways. In addition, the project's construction activities would be conducted in accordance with San Francisco Municipal Transportation Agency (SFMTA) and City of Brisbane requirements. Thus, use of the Baylands staging area either as a storage and worker parking location for City construction activities during construction of the Martin Substation separation or the new City Substation or for temporary PG&E parking and materials/ equipment storage would not create potentially hazardous conditions for people walking, bicycling or driving, or interfere with emergency access or accessibility for people walking and bicycling during construction, or substantially delay transit.

Therefore, the project description refinements would not result in new or substantially more severe transportation-related impacts relative to those identified in the Draft EIR. The impact conclusions and significance determinations in Draft EIR Appendix A Section E.6, Transportation and Circulation, would remain the same.

8.2.5 Biological Resources

Expansion of the Martin Substation separation project site boundary would not extend into undeveloped areas. Work would occur in developed areas where existing PG&E infrastructure and equipment are currently located, and no tree removal or trimming would occur. Thus the expansion of the Martin Substation project site would have no impact on special-status species, riparian habitat, sensitive natural communities, nesting birds, or bat maternity colonies, and would not conflict with relevant adopted plans. The same laws and regulations applicable to Martin Substation separation and described in Draft EIR Impact BI-3 would apply to the expanded project site; with implementation of best management practices and compliance with the construction general stormwater permit, Martin Substation separation would have less-than-significant impacts on Visitacion Creek Marsh.

The Baylands staging area is not within mapped habitat for sensitive resources (e.g., wetlands) or identified as potentially supporting special-status species, and is not within the boundaries of the San Bruno Mountain Habitat Conservation Plan. Due to the presence of vegetation at and around the Baylands staging area, the project would result in similar adverse effects on nesting birds as the project or project variant due to vegetation removal and/or ground disturbance required to establish a staging area at this location. These potential impacts on nesting birds would be reduced to less-than-significant levels with implementation of Mitigation Measure M-BI-4 (Nesting Bird Protection Measures).

Figures showing the system reinforcement areas were refined to clarify that system reinforcements would avoid San Bruno Mountain State and County Park and areas within or immediately adjacent to the southern portion of Lake Merced, San Francisco Bay, and Brisbane Lagoon. This is consistent with the note on Draft EIR Figure 2-8, which states that system reinforcement areas shown are approximate work areas. System reinforcements along the San Francisco Bay shoreline, Brisbane Lagoon, and near Lake Merced would be completed within or near public road right-of-ways or on existing equipment. No work would be conducted in water. The Draft EIR biological resources impact analysis reflected that no in water work would occur for the project; therefore, no refinements to the Draft EIR biological resources analysis are required to reflect the clarified Figure 2-8.

Therefore, the project description refinements would not result in new or substantially more severe biological resources impacts relative to those identified in the Draft EIR. The impact conclusions and significance determinations in Draft EIR Appendix A Section E.15, Biological Resources, would remain the same.

8.2.6 Hazards and Hazardous Materials

The expansion of the Martin Substation project site boundary would expand the area of potential ground disturbance at the Martin Substation site which, as discussed in Draft EIR Appendix A Section E.18, Hazards and Hazardous Materials, is included on a list of hazardous material sites compiled pursuant to Government Code section 65962.5. As a result, construction activities could expose the public to chemicals of concern through inhalation of airborne dust, contact with accumulated dust, and contaminated runoff, potentially resulting in adverse health effects. However, as discussed in Draft EIR Appendix A Section E.18 and in Section 10.14, Hazards and Hazardous Materials, of this document, due to the known contamination and existing land use covenants, construction activities at the Martin Substation would be subject to review and approval from the California Department of Toxic Substances Control based on regulatory requirements of the California Health and Safety Code. While the proposed project description refinements would nominally increase the volume of excavation in contaminated areas, the same regulatory framework as described in Draft EIR Appendix A Section E.18 and in Section 10.14, Hazards and Hazardous Materials, would apply, and potential impacts would remain similar.

Use of the Baylands staging area would not involve substantial ground disturbance, but minor excavation would be required for fence installation and vegetation removal. The Baylands staging area is included on a list of hazardous material sites compiled pursuant to Government Code section 65962.5. Previous environmental investigations have identified elevated levels of lead and arsenic in soil at the Baylands staging area.[6] An approved remedial action plan for the site includes demolition of the existing pavement and excavation and removal of contaminated soil from the site and replacement with clean fill underlain by a

[6] California Water Resources Control Board, Fact Sheet Brisbane Baylands Operable Unit 2 – Cleanup Plan, Bayshore Boulevard South of Geneva Avenue Brisbane, CA, October 2020.

cap. The remedial action plan identifies potential land use covenants that would apply to the site after soil remediation, including restrictions related to excavation into the cap based on a Regional Water Quality Control Board approved soil management plan.[7] Excavation for fence installation would be allowed at the Baylands staging area if it is performed in accordance with relevant plans (e.g., soil management plan and health and safety plan), relevant treatments (e.g., caps) at the site are protected, and the oversight agency is notified in advance and approves the work. Construction would comply with relevant covenants, associated plans, and all applicable local, state, and federal regulations related to hazardous materials.

Therefore, the project description refinements would not result in new or more substantially severe hazards or hazardous materials impacts compared to those identified in the Draft EIR. The impact conclusions and significance determinations in Draft EIR Appendix A, Section E.18, Hazards and Hazardous Materials, would remain the same.

8.2.7 Other Environmental Topics

The project description refinements would have similar environmental effects as the project or project variant for the following topics, as further explained below: land use and planning, aesthetics, population and housing, greenhouse gas emissions, wind, shadow, recreation, utilities and service systems, public services, geology and soils, hydrology and water quality, mineral resources, energy, wildfire, and agriculture and forestry resources.

The nature and locations of the project description refinements would be within the existing Martin Substation site or undeveloped areas at the Brisbane Baylands site and would not divide established communities or conflict with land use plans adopted for the purpose of avoiding or mitigating an environmental effect. The project description refinements would include additional meters at the Martin Substation and temporary staging at the Brisbane Baylands site, but would not include any new components with highly reflective materials such as glass panes that would introduce a new source of glare. The additional meters and temporary construction staging would not be substantially distinguishable from existing urban infrastructure as seen from scenic vistas identified in the Draft EIR, and would not interrupt or diminish views of scenic resources in the area. Therefore, the project description refinements would have less-than-significant aesthetic impacts. The project description refinements do not include housing or employment and therefore would not result in population growth and would have less-than-significant land use and planning and population and housing impacts.

The additional meters at the Martin Substation and temporary power supply for the Baylands staging area (provided by electrical line or solar power) would not generate greenhouse gas emissions at levels that would result in a significant impact on the environment or would conflict with a policy, plan, or regulation adopted for the purpose of reducing greenhouse gas emissions. The project description refinements would have less-than-significant greenhouse gas emissions impacts.

The project description refinements would not include any new structures in or near publicly accessible areas and therefore would not create wind hazards or shadow that would substantially and adversely affect the use and enjoyment of publicly accessible open spaces. The project description refinements would therefore have no impacts with respect to wind or shadow.

[7] Universal Paragon Corporation, Final Feasibility Study/Remedial Action Plan (RS/RAP), Brisbane Baylands Operable Unit 2, Brisbane California, Prepared by Geosyntec Consultants, December 22, 2021.

Work associated with the project description refinements would occur within the same areas as the project or project variant or on existing private property and would not result in substantial unplanned growth; therefore, the project description refinements would not change the Draft EIR's recreation impacts analysis or conclusions.

The project description refinements would require minor additional ground disturbance at the Martin Substation (for meter installation) and the Brisbane Baylands site (for fence installation). Dewatered water handling and excavated material handling would occur consistent with the requirements identified in Draft EIR Chapter 2, Project Description, Section 2.5.4.1 (p. 2-46) and Appendix A Section E.13, Utilities and Service Systems (pp. 141-144) and therefore would have similar less-than-significant utilities and service systems impacts as the project or project variant. The project description refinements would have less-than-significant public services impacts as they would not cause population growth or alter land use such that new or altered governmental facilities would be needed.

The project description refinements would not increase the depth of ground disturbance and would occur in areas with similar paleontological sensitivity as identified in the Draft EIR. Therefore, the project description refinements would have a similar paleontological resources impact as the project or project variant. This impact would be reduced to less-than-significant levels with implementation of the same mitigation identified for the project or project variant. The project description refinements would not result in new or substantially more severe hydrology or water quality impacts because they would be subject to the same construction stormwater control requirements as the project or project variant and would not involve new discharges, affect groundwater supplies, change drainage patterns, or involve new development in a flood or tsunami hazard zone.

The project description refinements would include limited operational energy use (associated with additional meters at the Martin Substation). As with other project components, construction equipment would be diesel powered; it is expected that the quantity of diesel used for construction equipment, as well as worker's vehicles and haul vehicles, would be comparable to the quantity used for other construction projects within San Francisco. Therefore, energy usage would not be unusually large or inefficient, wasteful, or unnecessary, and would represent a less-than-significant impact.

Lands affected by the project description refinements are not used for farming or agricultural activities, are not zoned for agricultural or timber uses, are not suitable for mineral extraction due to development, and are not classified as very high fire hazard severity zones, and therefore the project description refinements would not result in any impacts related to these topics.

8.3 Overall Conclusion on Potential Environmental Impacts of Project Description Refinements

As discussed in greater detail at the beginning of this chapter, CEQA Guidelines section 15088.5 requires recirculation of an EIR when "significant new information" is added to the EIR after publication of the Draft EIR but before certification. CEQA Guidelines section 15088.5 further defines "significant new information" that triggers a requirement for recirculation as including, but not limited to, identification of a new significant impact or a substantial increase in the severity of an impact (unless mitigation is adopted to reduce the impact to a less-than-significant level).

For the reasons presented above, the project refinements would not result in any new significant impacts that were not already identified in the Draft EIR, nor would these refinements substantially increase the severity of any impacts identified in the Draft EIR. The mitigation measures identified in the Draft EIR for the project or project variant would continue to be required to reduce or avoid the significant environmental impacts of the project refinements. No new measures would be required to mitigate impacts identified for the project description revisions presented in this chapter. Because the project refinements would not result in new or substantially more severe significant impacts, no new alternatives need to be analyzed. The findings in Draft EIR Chapter 5, Alternatives, remain valid and are applicable to the project or project variant. Therefore, because the refinements would not result in any new or substantially more severe significant impacts than those identified in the Draft EIR, recirculation of the Draft EIR pursuant to CEQA Guidelines section 15088.5 is not required.

This page intentionally left blank

CHAPTER 9
LIST OF PERSONS COMMENTING

This chapter lists all persons who submitted comments on the draft environmental impact report (Draft EIR). Commenters are grouped according to whether they commented as individuals or represent a public agency or organization. **Table 9-1** lists commenters' names; the corresponding commenter codes used in Chapter 10, Responses to Comments, to denote each set of comments; the comment format; and the comment date. The complete set of written and oral comments received on the Draft EIR is contained in Attachment A, Draft EIR Comments.

In this responses to comments document (RTC document), each commenter who submitted written correspondence or provided oral comment during the San Francisco Planning Commission hearing is assigned a unique commenter code in the following manner:

- Commenters from public agencies are designated by "A-" and the agency's name or acronym thereof.
- Commenters from organizations are designated by "O-" and the organization's name or acronym thereof.
- Commenters who commented as individuals are designated by "I-" and the commenter's last name (or other name if the last name was not provided).

If a commenter provided more than one set of comments, the acronym or name is followed by a hyphen and number indicating the comment set (e.g., -1, -2, -3). Within each category (public agencies, organizations, and individuals), commenters are listed in alphabetical order by code.

Similarly, each individual comment is assigned a unique comment code. Within each comment letter or public hearing testimony, individual comments on separate topics are bracketed and numbered sequentially; these numbers follow the commenter code described above, separated by a period. For example, the first comment from the letter submitted by the City of Brisbane (Brisbane) is designated as A-Brisbane.1, the second comment as A-Brisbane.2, and so on.

In this way, the reader can locate a particular comment in a comment letter or the public hearing testimony by referring to the comment's coded designation. Attachment A includes the bracketing and coding of all substantive comments. These comment codes are used in Chapter 10 to identify which responses apply to which comments.

Table 9-1 Agencies, Organizations, and Individuals Commenting on the Draft EIR

Commenter Code	Name, Title, and Affiliation of Commenter	Format	Date
PUBLIC AGENCIES			
A-Brisbane	John Swiecki, AICP, Community Development Director, City of Brisbane	Letter	May 6, 2025
A-Caltrans	Yunsheng Luo, Branch Chief, Local Development Review, Office of Regional and Community Planning, California Department of Transportation, District 4	Letter	May 5, 2025
A-CDFW	Erin Chappell, Regional Manager, Bay Delta Region, California Department of Fish and Wildlife	Letter	April 30, 2025
A-CPC-1	Theresa Imperial, Commissioner, San Francisco Planning Commission	Planning Commission Hearing Transcript	April 17, 2025
A-CPC-2	Sean McGarry, Commissioner, San Francisco Planning Commission	Planning Commission Hearing Transcript	April 17, 2025
A-CPC-3	Kathrin Moore, Vice President, San Francisco Planning Commission	Planning Commission Hearing Transcript	April 17, 2025
A-CPC-4	Gilbert Williams, Commissioner, San Francisco Planning Commission	Planning Commission Hearing Transcript	April 17, 2025
A-CPUC	Michelle Wilson, Program and Project Supervisor, CEQA and FERC Branch, Energy Division, California Public Utilities Commission	Letter	May 16, 2025
A-DTSC	Tamara Purvis, Associate Environmental Planner, HWMP-Permitting Division-CEQA Unit, Department of Toxic Substances Control	Letter	May 9, 2025
A-LAFCO	Sarah Flamm, Management Analyst, San Mateo Local Agency Formation Commission	Letter	April 29, 2025
ORGANIZATIONS			
O-Baylands	Stephanie Shakofsky, Senior Vice President of Government Affairs, Baylands Development, Inc.	Email	May 2, 2025
O-CUE	Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of the Coalition of California Utility Employees	Letter	May 19, 2025
O-PGE-1	Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of Pacific Gas and Electric Company (PG&E)	Letter	April 2, 2025
O-PGE-2	Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E	Letter	May 19, 2025
INDIVIDUALS			
I-Allen	Jay Allen	Email	May 15, 2025
I-Anderson	Raja Anderson	Email	May 15, 2025
I-Anonymous	Anonymous	Email	April 14, 2025

Table 9-1 Agencies, Organizations, Individuals Commenting on the Draft EIR (Continued)

Commenter Code	Name, Title and Affiliation of Commenter	Format	Date
INDIVIDUALS (CONT.)			
I-Beardsworth	Michael Beardsworth	Email	April 14, 2025
I-Bereznycky	Lev Bereznycky	Email	April 14, 2025
I-Bigos	Marty Bigos	Email	May 15, 2025
I-Chadde	Logan Chadde	Email	April 14, 2025
I-Chang	Michael Chang	Email	May 15, 2025
I-Chen	Kevin Chen	Letter	April 19, 2025
I-Clemens	Sydney Gurewitz Clemens	Email	April 14, 2025
I-Clinton	Bridget Clinton	Email	May 15, 2025
I-Corliss	Donovan Corliss	Email	May 15, 2025
I-Darmawi	Fay Darmawi	Email	April 14, 2025
I-Dunagan	Patrick James Dunagan	Email	April 14, 2025
I-Eichelberger	Don Eichelberger	Email	May 17, 2025
I-Foppe	Paul Foppe	Email	April 14, 2025
I-Freedman	Tera Freedman	Email	April 16, 2025
I-Gaddie	Laurel Gaddie	Email	May 15, 2025
I-Gardner	Cecily Gardner	Email	April 16, 2025
I-Girling	Richard and Valerie Girling	Email	May 15, 2025
I-Grassell	Ryan Grassell	Email	May 16, 2025
I-Gregg	Travis Gregg	Email	May 15, 2025
I-Haas	Claudia B. Haas	Email	April 14, 2025
I-Haber	Nancy Haber	Email	May 18, 2025
I-Hansen	Amy Hansen	Email	May 19, 2025
I-Heisler	Robert Heisler	Email	May 15, 2025
I-Hopkins	Augusta Hopkins	Email	April 17, 2025
I-Hrovat	Frank Hrovat	Email	April 17, 2025
I-Irving	Judy Irving	Email	May 16, 2025
I-Issa	Amin Issa	Email	April 30, 2025
I-Jungreis	Jason Jungreis	Email	March 19, 2025
I-Kaufman-1	Byron Kaufman	Planning Commission Hearing Transcript	April 17, 2025
I-Kaufman-2	Byron Kaufman	Email	April 18, 2025
I-Keller	Kathryn L Keller	Email	May 15, 2025
I-Korda	Sarah Korda	Email	May 15, 2025
I-Korolev	Vitaly Korolev	Email	May 8, 2025
I-Landry-Simard	Jules Landry-Simard	Email	May 15, 2025
I-Lansing	James Lansing	Planning Commission Hearing Transcript	April 17, 2025
I-Lewis	Josh Lewis	Email	April 14, 2025
I-Lin	Victor Lin	Email	May 19, 2025
I-Lofrano	Francine Lofrano	Email	April 14, 2025
I-Maffett	Clay Maffett	Email	May 16, 2025

Table 9-1 Agencies, Organizations, Individuals Commenting on the Draft EIR (Continued)

Commenter Code	Name, Title and Affiliation of Commenter	Format	Date
INDIVIDUALS (CONT.)			
I-Mamaniya	Karan Mamaniya	Email	April 14, 2025
I-Mankiewicz	Sam Mankiewicz	Email	April 6, 2025
I-Martell	Patricia Martell	Email	April 17, 2025
I-Moreshell	Jim Moreshell	Planning Commission Hearing Transcript	April 17, 2025
I-Olexo	Michael Olexo	Email	May 15, 2025
I-Reynolds	Mark Reynolds	Email	May 15, 2025
I-Russo	Rob Russo	Email	May 15, 2025
I-Sage	Sage C.	Email	May 15, 2025
I-Sanders	Barklee Sanders	Email	April 16, 2025
I-Sarang-Walters	Nathan Sarang-Walters	Email	April 14, 2025
I-Shane	Shane	Email	May 15, 2025
I-Sharee-1	Donna Sharee	Email	April 30, 2025
I-Sharee-2	Donna Sharee	Email	May 15, 2025
I-Smith Fong	Elizabeth Smith Fong	Email	April 15, 2025
I-Smithly	Kevin Smithly	Email	April 14, 2025
I-Stanziano	Lisa Stanziano	Email	April 15, 2025
I-Stevens	Gregory Stevens	Email	April 14, 2025
I-Taylor	Michael Taylor	Email	May 16, 2025
I-Teeter	Kenneth Teeter	Email	May 2, 2025
I-Turner	Cole Turner	Email	May 15, 2025
I-Warshell	Jim Warshell	Email	May 15, 2025
I-Watkins	Sarah Watkins	Email	May 15, 2025
I-Weed	Thomas Weed	Email	April 14, 2025
I-Whitney	Will Whitney	Email	May 15, 2025
I-Ye	Tommy Ye	Email	April 16, 2025

CHAPTER 10
RESPONSES TO COMMENTS

10.1 Organization

This chapter presents the substantive[1] comments received on the draft environmental impact report (Draft EIR) and responses to those comments. The comments and responses are organized by subject and are generally in the same order as presented in the Draft EIR, including the initial study (Appendix A). The San Francisco Planning Department (planning department) did not receive comments on all Draft EIR subjects; therefore, the number of subjects listed below and addressed in this responses to comments document (RTC document) is smaller than the number in the Draft EIR.

General comments on the EIR, including comments on the merits of the project, are grouped together toward the end of the chapter. Comments unrelated to a specific Draft EIR section or impact category are also classified as general comments. Comments on specific mitigation measures are included under the comments regarding the relevant impact category of the Draft EIR.

This chapter presents the comments and responses in the following order, and with the following prefixes to the subject and response codes (indicated in square brackets):

10.2 Project Description [PD]
10.3 Cumulative Projects [CP]
10.4 Noise and Vibration [NO]
10.5 Air Quality [AQ]
10.6 Alternatives [AL]
10.7 Aesthetics [AE]
10.8 Cultural Resources [CR]
10.9 Transportation and Circulation [TR]
10.10 Utilities and Service Systems [UT]
10.11 Biological Resources [BI]
10.12 Geology and Soils [GE]
10.13 Hydrology and Water Quality [HY]
10.14 Hazards and Hazardous Materials [HZ]
10.15 Analysis Approach [AA]
10.16 Other CEQA Considerations [OC]
10.17 General Comments [GC]

Within each section under each subject area, similar comments are grouped together and identified using a topic code prefix and sequential numbering for each subtopic. For example, project description [PD] comments are listed as PD-1, PD-2, PD-3, and so on, and the corresponding responses are similarly coded as responses PD-1, PD-2, PD-3, and so on. Each topic code has a corresponding subsection heading that introduces the comment subject. These subsections reproduce the comments and include the commenter's name and the commenter code described in Chapter 9, List of Persons Commenting. Comments containing language that is unique to an individual commenter are presented verbatim.

[1] For the purposes of responses to comments, "substantive" refers to comments that address the adequacy or accuracy of the environmental analysis or raise issues relevant to CEQA compliance. Expository comments are not bracketed, nor are the attachments previously provided on the Mitigated Negative Declaration.

The reader is referred to **Attachment A**, Draft EIR Comments, for the full text and context of each comment letter or email, as well as the public hearing transcript. In that attachment, the bracketing of the substantive comments and the associated comment code and response code are provided in the margin of each comment, allowing the reader to locate the response to an individual comment.

Following each comment or group of comments, a comprehensive response is provided to address issues raised in the comment and to clarify or augment information in the Draft EIR as appropriate. Response numbers correspond to the topic code; for example, the response to Comment PD-1 is presented under Response PD-1. The responses may clarify the Draft EIR text or revise or add text to the EIR. Revisions to the Draft EIR are shown as indented text. New or revised text, including text changes initiated by planning department staff, is <u>double underlined</u>; deleted material is shown in ~~strikethrough~~.

Footnotes included in written comments are numbered as in the original letter or email and thus may be non-consecutive. Footnotes to responses are numbered consecutively.

The responses in Chapter 10 have been developed by the San Francisco Planning Department, in coordination with the San Francisco Public Utilities Commission, as needed to provide technical information regarding the grid separation and various other project details.

10.2 Project Description

The comments and corresponding responses in this section cover topics in Draft EIR Chapter 2, Project Description. The comment topics relate generally to the adequacy and accuracy of the project description and more specifically to details about specific elements of the project. The responses in this section address the comment topics in the following order:

- PD-1: Project Description Generally
- PD-2: Level of Detail: Project and Program Analysis
- PD-3: Martin Substation Separation
- PD-4: New City Substation
- PD-5: Staging Areas and Service Yards
- PD-6: Other Project Description Comments

Comment PD-1: Project Description Generally

This response addresses the following comments, which are quoted below:[1]

A-CDFW.2, A-CPUC.2, A-CPUC.3, A-CPUC.4, A-CPUC.7, O-PGE-2.6, O-PGE-2.16, O-PGE-2.22, O-PGE-2.41, O-PGE-2.44, O-CUE.2, O-CUE.25

This response also addresses Comment O-PGE-2.127, which consists of graphic exhibits and is included in Attachment A, Draft EIR Comments, Letter O-PGE-2, Exhibit B-1.

"COMMENT 2: Impact Uncertainty

Issue: The draft EIR includes a table on Construction Assumptions for the Project (Table 2-10), which summarizes construction duration, necessary equipment, and estimated volume and depth of soil to be excavated for specific Project construction activities, such as "System Reinforcements," which would involve excavation of 35,100 cubic yards of soil to a maximum depth of 15 feet. The draft EIR also includes a figure (Figure 2 of the Biological Resources Technical Memorandum in Appendix H), depicting the "Reinforcement Boundary" within the Project extent, along with mapped sensitive resource habitats. The extent of the Reinforcement Boundary spans areas that provide habitat for sensitive species, such as grasslands and scrub at San Bruno Mountain, aquatic habitat in and adjacent to Lake Merced, and salt marsh wetlands in and adjacent to Brisbane Lagoon. It is unclear whether and to what extent "System Reinforcements" as described in Table 2-10 of the draft EIR would occur within the "Reinforcement Boundary" depicted in Figure 2. Comments 3-6 of this letter are included based on the assumption that System Reinforcements would occur within the mapped Reinforcement Boundary.

[1] Footnotes from quoted comments are indicated by *italicized* text and retain their original footnote number from the comment. Footnotes from response text are not italicized and are numbered in order of appearance in this section.

Recommendation 2: CDFW recommends the EIR include sufficient information to facilitate meaningful review of potentially significant impacts of Project development in habitats with sensitive resources. Specifically, CDFW recommends clarifying the location and extent of impacts of Project activities, specifically System Reinforcements, within sensitive habitat, and including this information in a detailed map, along with details on impact acreage. CDFW also recommends the Lead Agency consider the recommendations provided in Comments 3-6, which address species-specific concerns relating to ground-disturbance and Project construction within the Project Reinforcement Boundary." (Erin Chappell, Regional Manager, Bay Delta Region, California Department of Fish and Wildlife [A-CDFW.2])

"2. In PG&E's December 2017 Proponent's Environmental Assessment submitted to the CPUC for the Egbert Switching Station-Martin Substation Expansion Project Certificate of Public Convenience and Necessity (CPCN) application (A.17-12-021), Figure 2.3-3 (at page 2-7) indicates that the area supplied by the Martin Substation could differ substantially from the area assumed to be supplied by the Martin Substation in the City's EIR. Specifically, a large area assumed to be supplied by the Martin Substation in the City's EIR, appears to be supplied by the Daly City and Serramonte Substations. This discrepancy should be reconciled to ensure that the proposed local distribution separation components, system reinforcement components, and other separation components would not adversely affect the electrical service provided by the Daly City and Serramonte Substations." (Michelle Wilson, Program and Project Supervisor, CEQA and FERC Branch, Energy Division California Public Utilities Commission [A-CPUC.2])

"3. A project-level analysis of impacts of all project components on the reliability and resiliency of the electrical service to areas south of the proposed City's service territory is required, including impacts of the Project on electrical service provided by the Transbay Cable to areas south of the proposed City's service territory (e.g., Daly City, South Bay area etc.)." (Michelle Wilson, Program and Project Supervisor, CEQA and FERC Branch, Energy Division California Public Utilities Commission [A-CPUC.3])

"4. Details on the disposition of any of PG&E's spare transformers to the City are required as well as an impact analysis on reliability and resiliency associated with this disposition." (Michelle Wilson, Program and Project Supervisor, CEQA and FERC Branch, Energy Division California Public Utilities Commission [A-CPUC.4])

"7. The City would need to include details regarding all infrastructure upgrades needed to make PG&E's separated system operational." (Michelle Wilson, Program and Project Supervisor, CEQA and FERC Branch, Energy Division California Public Utilities Commission [A-CPUC.7])

"The DEIR fails to describe the extensive construction required for PG&E to continue to provide safe and reliable service to San Mateo County if the transmission and distribution assets are severed." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.6])

"Moreover, as further explained in Exhibit B, the DEIR fails to acknowledge, let alone analyze, the significant amount of work and construction that will be required of PG&E due to the Project. The DEIR's nearly exclusive focus on CCSF's work under the Project provides only a partial view of the Project's potentially significant impacts. The work that must be performed by PG&E due to the Project must be included in the revised Project analysis as well." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.16])

"Here, as further detailed in the GECo Letter, the DEIR's Project Description omits several Project details and other information necessary to assure an adequate impacts analysis of the Project (*e.g.*, no site plan for Martin Substation work, no consideration of laydown areas for the Project Variant, no identification of locations and massings of above-ground Project components, lack of detailed trench locations, widths, and depths, no maps showing specific streets where overhead and underground line work, pole work, and vault work will be performed, etc.). (*See* Exhibit A, pp. 3–5.) In turn, these omissions cause the DEIR to fail at providing the public and decision-makers with the information necessary to accurately understand the potential environmental impacts of the Project. (*See*, *e.g.*, § II.G, below.)

Furthermore, notably absent from the DEIR is a list of assets that CCSF proposes to condemn from PG&E as part of the Project. In the MND, CCSF provided that "[a] full list of assets proposed for acquisition is presented in Appendix A []. This list may change, depending upon the outcome of negotiations with PG&E. Subsequent changes to the list of assets that the SFPUC would acquire as part of the Project may require further [CEQA] review." (*See* MND, p. 7; *see also* MND, Appendix A.) As mentioned above, three years have elapsed since CCSF determined the MND was an inadequate CEQA document for the Project and an EIR was required, yet CCSF has taken a step backward in describing the Project because without explanation or justification, the DEIR fails to provide any list of targeted assets.

Accordingly, the DEIR does not fulfill its required public accountability function since it does not reasonably disclose what the actual Project will or will not contain so that the public and other agencies can clearly know what CCSF has authorized, meaningfully and completely assess the Project's potential environmental impacts, and fashion mitigation measures that appropriately address those impacts. The Project description needs to be updated to include, at a minimum, the omitted information identified as necessary for an adequate Project description in Exhibit A (GECo Letter) and Exhibit B (PG&E supporting technical memorandum)." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.22])

"The DEIR determines that Impact UT-1 is less than significant based on the assumption that no new facilities are needed. (Initial Study, pp. 135–136.) Even with the noted deficiencies in the DEIR it is apparent that this is factually incorrect. (*See* Exhibit B.) Accordingly, this determination is not supported by substantial evidence." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.41])

"Specifically, the following information essential to conducting an adequate impact analysis has been omitted from the Project Description:

- Lack of Site Plan and Inadequate Description of Martin Substation Work: The DEIR lacks a site plan for the Martin Substation work, preventing accurate assessment of potential aesthetic, hazards and hazardous materials, noise, air quality, and cultural resources impacts. There is no physical description of the proposed new control building and transformers, nor of their locations or work required to install them. The DEIR's technical descriptions of lines and transformers (i.e., in terms of kV, fuse, meters, etc.) but absent physical size and location parameters do not provide necessary information for layperson as well as experts to assess potential impacts. In addition, there are no descriptions or locations for the proposed new control building and switching building at Martin Yard.
- Unspecified Construction Laydown Area for the Project Variant: The DEIR fails to identify the location and extent (e.g., associated activities) of required laydown areas for construction of the Project Variant.
- Undefined Facility Locations: The DEIR fails to identify the actual locations of the proposed facilities—both on the substation sites and for the cable routes. In order to meaningfully assess impacts and significance, a 30% design should be used—which would show the locations and massings of the Project's above-ground facilities at the substations as well as trench locations, widths, and depths for subsurface installations.
- Omission of Jack-and-Bore Pits and Vault Locations: The DEIR fails to identify locations for jack-and-bore pits or vaults. This omission precludes meaningful site-specific impact analyses on historic buildings, noise, and air quality.
- Undefined Corporation/Maintenance Yards: The DEIR discusses the need to secure 150,000 to 200,000 square feet of maintenance and storage facilities to house equipment, trucks, and parking, and to provide offices for workers in an existing building. (DEIR, p. 2-29.) While Table 2-1 indicates that this component would just be modifications to existing yards, the description on page 2-29 indicates otherwise[1]. The DEIR fails to identify where the 150,000 sq. ft. (approximately 3.5 acres) corporation/maintenance yards associated with the Project would be located. Curiously the DEIR had detailed earth moving quantities for new maintenance/storage yards, even though the DEIR fails to identify any site(s) for these yards.
- Failure to Address PG&E's Need to Relocate Its Operations Due to CCSF's Construction Staging Area: The DEIR fails to identify where PG&E will relocate its operations from the PG&E yard area that is displaced by the proposed Project laydown (construction staging) area.
- Failure to Address Required PG&E's System Reinforcements: The DEIR fails to provide discussion of any PG&E work required to restore service, construct and reinforce lines, etc. after the Project is implemented. At a minimum, this work could involve significant trenching.
- Lack of Maps for Meaningful Localized Assessment: The DEIR fails to include maps that show specific streets where above- and under-ground line work, pole work, and vault work will be performed. This prevents a meaningful assessment of potential localized impacts.

[1] *DEIR, p. 2-29 states: The City would secure 150,000 to 200,000 square feet of maintenance and storage facilities to house equipment, trucks, and parking, and to provide offices for workers in an existing building. The City would use one or more City-owned or -controlled properties in the southeastern part of San Francisco, other acquired commercial or industrial properties in the southeastern part of San Francisco, or space at acquired substations.*

- Failure to Identify Excavated Material Storage Locations: The DEIR fails to identify locations where excavated material would be stored prior to off haul, precluding analysis of potential impacts related to, including, but not limited to, dust, erosion, and traffic.
- Pile Driving Methods are Inadequately Described: The DEIR fails to identify the pile driving methods that will be utilized by the Project—and accordingly the noise and vibration impacts from pile driving are not adequately addressed."

(Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.44])

"A. The DEIR Fails to Describe Necessary Construction Activities for PG&E to Make Its Grid Whole

CEQA defines a "project" as "the whole of an action" that may result in either a direct physical environmental change or a reasonably foreseeable indirect change.[60] A legally adequate EIR must provide a complete and accurate project description of the project in order to ensure that all potential environmental impacts – both direct and indirect – are fully identified, evaluated and disclosed.[61] The term "project" encompasses the entire proposed activity that is subject to agency approval, not merely those components undertaken by a single project proponent.[62]

While the DEIR describes the physical activities that CCSF proposes to undertake to physically separate its grid from PG&E's grid, it omits a description and analysis of the foreseeable and necessary actions that PG&E must implement for it to maintain a safe and reliable electric system following separation.[63] These activities are an integral part of the overall project and fall squarely within CEQA's definition of "the whole of an action." By failing to describe or analyze the operational and infrastructure changes required by PG&E, the DEIR impermissibly excludes a foreseeable component of the Project that could result in significant environmental effects.

As a result, the DEIR underrepresents the Project's true scope and fails to disclose the full range and severity of its potentially significant environmental and public health impacts. CEQA requires a comprehensive analysis of the combined activities necessary to achieve the proposed grid separation, including those undertaken by both CCSF and PG&E, to provide decisionmakers and the public with a full understanding of the environmental consequences." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of California Coalition of Utility Employees [O-CUE.2])

"The DEIR fails to account for emissions associated with infrastructure construction activities that PG&E will be required to undertake because of CCSF's proposed acquisition of a portion of PG&E's electric grid. While the DEIR evaluates emission from direct construction and operation of the Project itself, it does not consider that PG&E will be required to undertake substantial construction work to reconfigure and stabilize its remaining system in response to the fragmentation caused by the acquisition. These reconfiguration activities may include rerouting distribution and transmission lines, constructing new substations or switching

[60] *CEQA Guidelines § 15378.*
[61] *City of Santee v. County of San Diego (1989) 214 Cal.App.3d 1438, 1454.*
[62] *CEQA Guidelines § 15378(c); City of Long Beach v. City of Los Angeles (2018) 19 Cal.App.5th 465,477.*
[63] *Clark Comments at pp. 16-17.*

stations, reinforcing adjacent circuits, and performing network rebalancing. Each of these activities can entail extensive construction equipment use, haul truck trips, worker commute emissions, and fugitive dust, all of which contribute to the localized criteria air pollutant emissions and global greenhouse gas emissions. Emissions associated with these additional construction activities must be quantified and included in the air quality impact analysis." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of California Coalition of Utility Employees [O-CUE.25)

_____

RESPONSE PD-1

The comments above address the scope of the project and the adequacy of the project description provided in Draft EIR Chapter 2. As discussed below, the project description provided in Draft EIR Chapter 2 meets the requirements for a project description that are set forth in CEQA Guidelines section 15124 and is otherwise adequate and accurate. To the extent these same comments raise other issues, refer to Response PD-3 regarding work needed for Martin Substation separation and Response PD-4 for work associated with the new City Substation. See also Response PD-5 related to relocating equipment from the Daly City Yard and a new PG&E substation. Response PD-2 discusses the level of project detail necessary for an adequate CEQA impact analysis. The individual comments in letter O-PGE-2 Exhibits A and B are addressed in multiple sections of this RTC document, including in Section 10.4, Noise and Vibration; Section 10.5, Air Quality; Section 10.8, Cultural Resources; Section 10.11, Biological Resources; Section 10.14, Hazards and Hazardous Materials; and Section 10.6, Alternatives.

DRAFT EIR CHAPTER 2'S COMPLIANCE WITH CEQA REQUIREMENTS

CEQA Guidelines section 15124 requires an EIR's project description to contain specified information and cautions that a project description "should not supply extensive detail beyond that needed for evaluation and review of the environmental impact." Consistent with section 15124(a), the Draft EIR includes a regional map as Figure 2-1 and identifies the precise location and boundaries of the project on the detailed maps provided as Figures 2-1, 2-2, 2-7, 2-8, and 2-11. Consistent with section 15124(b), the statement of project objectives provided in Draft EIR Section 2.2 is clearly written and includes the underlying purpose of the project. Consistent with section 15124(c), Draft EIR Chapter 2 provides a "general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities." More specifically, Draft EIR Chapter 2 provides a general description of the project's technical and environmental characteristics, including separation of the Martin Substation (Draft EIR Section 2.4.1), distribution express feeders (Draft EIR Section 2.4.2), local distribution system separation and related system reinforcements (Draft EIR Sections 2.4.3 and 2.4.4), modifications to retain PG&E access to non-electrical facilities (Draft EIR Section 2.4.5), other separation components (Draft EIR Section 2.4.6), construction (including activities and methods, access, and staging) (Draft EIR Section 2.5), and operations and maintenance areas and activities (Draft EIR Section 2.6). The Draft EIR provides enough information about these main features of the project to enable decision makers and the public to understand the full scope of the project. Consistent with CEQA Guidelines section 15124(d), Draft EIR Section 1.2, Purpose of this EIR, provides a statement that briefly describes the intended uses of the EIR, and Section 2.8 identifies the permits and approvals anticipated to be required for the project or project variant from federal, state, and local agencies.

Draft EIR Chapter 2 describes some project components in greater detail than others. This approach is consistent with the decision in *California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227, 269, in which the court upheld an EIR that described one component of a multifaceted project in detail, with a more general description of other components of the project that were to be constructed later. For this project, comments like Comment O-PGE-2.44 correctly suggest that the Draft EIR provides greater detail about some aspects of the project and less detail about others. For example, because less information currently is known about a future location of maintenance and storage yards, Draft EIR Section 2.4.6.2 (p. 2-29) explains that the City would secure 150,000 to 200,000 square feet of maintenance and storage facilities to house equipment, trucks, and parking, and to provide offices for workers in an existing building. To inform the analysis of potential impacts, the project description clearly states related assumptions: "The City would use one or more City-owned or -controlled properties in the southeastern part of San Francisco, other acquired commercial or industrial properties in the southeastern part of San Francisco, or space at acquired substations." On this basis, the Draft EIR provides information sufficient to foster a complete and informative evaluation of the project or project variant's environmental impacts even where a lesser level of detail currently is known. The response to Comment PD-2 provides more information about differing levels of detail provided in the Draft EIR.

CEQA requires an EIR to include and thereafter analyze the impacts of an accurate, stable, and finite project description. The Draft EIR for this project does so. Consistent with CEQA Guidelines section 15378(a), Draft EIR Chapter 2, Project Description, describes the "whole of an action," including all potential work that the SFPUC's experts anticipate could be needed to complete grid separation and maintain system resiliency after separation, and that has a potential to cause an impact on the physical environment. In this way, the project description in Chapter 2 lays the foundation for the City to analyze impacts consistent with CEQA's prohibition against dividing a single large project into a series of smaller projects, which would result in a "piecemeal" environmental review that fails to consider the impacts of the whole undertaking. More specifically, Draft EIR Chapter 2 describes the activities needed to separate the existing distribution system into separate electric grids, including construction, operation, and maintenance activities. Regardless of whether portions of the work could be completed by PG&E in agreement with the SFPUC, the Draft EIR provides decision makers and the public with a complete overview of the work required for the grid separation. In other words, who implements the necessary activities does not affect the description of the work or the impacts of its implementation. Draft EIR Chapter 2 clearly explains (in Section 2.1) that asset acquisition is a foreseeable future activity that would occur if the project or project variant is approved. Comment O-PGE-2.22 correctly notes that the MND previously issued for the project included an appendix listing PG&E assets proposed for acquisition, which is not included in the Draft EIR. Ownership status of the assets does not meaningfully enhance understanding of the project or inform impact analyses. This is consistent with the decision in *Maintain Our Desert Environment v. Town of Apple Valley* (2004) 124 Cal.App.4th 430, in which the court decided that a project description typically need not identify the tenant or end user for a project because CEQA is concerned with the project's environmental impacts, not who uses the project. The Draft EIR describes and analyzes the potential environmental effects of necessary and anticipated actions on a resource-by-resource basis. Comments that focus on ownership do not provide facts, reasonable assumptions predicated upon facts, or expert opinion supported by facts that support a conclusion that the analysis documented in the Draft EIR is either inaccurate or inadequate for purposes of CEQA.

Regarding Comments O-PGE-2.16 and O-PGE-2.41, which state generally that new facilities would be needed and reference commenter's Exhibit B, refer to Responses PD-2 through PD-6, UT-1, and AL-1 for specific responses addressing what commenters believe to be missing from Draft EIR Chapter 2, Project Description.

DRAFT EIR'S DESCRIPTION OF SPECIFIC PROJECT COMPONENTS

Grid Reliability and System Reinforcements. Regarding Comments O-PGE-2.6 and A-CPUC-7, the Draft EIR describes and evaluates impacts of the system reinforcements, which are included in the project to retain existing levels of reliability and resiliency for both the San Francisco and San Mateo County grids during and after system separation. The system reinforcements were added to the project based on PG&E's comments on the preliminary mitigated negative declaration's project description. Draft EIR Section 2.4.4 describes the system reinforcements, and Draft EIR Figure 2-8 (see Chapter 8, Project Description Refinements, for a revised version of Figure 2-8) shows areas where system reinforcements would occur. As shown in Figure 2-8, system reinforcements would occur in San Mateo County locations in addition to San Francisco locations. In the Draft EIR, the City identified all the anticipated work that would be needed to separate the electric grids and maintain the same level of reliability for both grids after the separation, including the system reinforcements. Comment O-PGE-2.6 does not specify other construction work required by the separation that is not included in the EIR. Without additional details, the lead agency does not have sufficient information to provide a more detailed response to the general concern.

Comment A-CPUC.3 states that a project-level analysis is required of all project components on the reliability and resiliency of the electrical service to areas south of the City's proposed service territory. As noted above, the Draft EIR evaluates impacts associated with the system reinforcements, which are included in the project to retain existing levels of reliability and resiliency for both the San Francisco and San Mateo County grids during and after system separation. As discussed in greater detail in Response PD-2, the Draft EIR presents the City's best assessments of the geographic areas and total work required for the project components, including the system reinforcements. This approach results in a conservative estimate of work to avoid understating potential environmental impacts of the system reinforcements (and the project overall). Evaluating the system reinforcements collectively enables disclosure of a reasonable estimate of combined total effects in the EIR. Regarding electrical service provided by the Transbay Cable to areas south of the City's proposed service territory, the Transbay Cable is a 400 MW facility that is interconnected to the transmission system in San Francisco at the Potrero Substation. Neither the proposed project nor the variant would materially affect the operation of the Transbay cable. The comment does not otherwise specify what additional impacts could occur that were not identified in the Draft EIR.

Other Comments on Specific Project Components. Comment O-PGE-2.44 lists information the commenter incorrectly claims is essential to conducting an adequate impact analysis. Comments A-CPUC.2 and A-CPUC.4 also request additional information about specific project components or suggest that additional information about project components is needed to conduct complete impact analysis. The following responses address specific comments on these project components.

Martin Substation Separation. Draft EIR Chapter 2, Project Description, identifies, describes, and provides graphics that depict information sufficient to foster a complete and informative evaluation of the project's environmental impacts, including as they relate to separation of the Martin Substation. Refer to Response AE-1 regarding the Draft EIR aesthetics analysis. Draft EIR Chapter 2, Project Description, Section 2.4.1 describes the control building and transformers at the Martin Substation, and Figure 2-3 shows examples of the aboveground equipment that would be installed. Draft EIR Figure 2-2 shows the location where equipment would be installed for the Martin Substation separation, and Draft EIR Figures 2-11 and 2-12 show locations of the new City Substation (project variant).

CEQA does not require an EIR to include final designs or precise descriptions so long as the information provided is sufficient to assess significant impacts and consider mitigation measures and alternatives. See *Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 35; see also *Sierra Club v. City of Orange* (2008) 163 Cal.App.4th 523, 533. The Draft EIR analyzes the potential for the project, including the Martin Substation separation, to result in significant impacts and considers mitigation measures and alternatives that could address such impacts. See, for example, Draft EIR Section 3.2, Noise and Vibration, which discloses that the Martin Substation separation could result in a potential significant impact related to ambient noise during construction. See also Draft EIR Chapter 5, Alternatives, which identifies and describes Alternative B as having the potential to reduce anticipated significant environmental impacts of the project, including impacts resulting from the Martin Substation separation. Additional analyses of the Martin Substation separation work in the Draft EIR include the following:

- The Draft EIR impact analyses made conservative assumptions about the work at the Martin Substation to identify the largest scope of activity, as described throughout the document. For example, the noise impact analysis included in Draft EIR Section 3.2 assumes that equipment could be located at the edge of the construction activity that is closest to the nearest receptor property line.
- The air quality analysis included in Draft EIR Section 3.3 uses excavation information based on the anticipated number of pieces of equipment and amount of trenching within the site and assumes that emissions would be the same across the site (i.e., the greatest emissions would occur at any edge close to sensitive receptors).
- The hazards and hazardous materials impact analysis included in Draft EIR Appendix A, Section E.18 assumes that all soil excavated at the Martin Substation or Daly City Yard could be contaminated.
- The cultural resources analysis included in Draft EIR Appendix A, Section E.4 assumes that excavation could occur anywhere within the site (except in areas under existing buildings to be retained).

Regarding Comment A-CPUC.4, Martin Substation has four existing 115/12kV distribution transformers. The transformers have adequate installed capacity to serve customers if one transformer had to be removed from service. In addition, the City would acquire additional spare distribution transformers, as needed, to ensure reliable operations of the electric system. Therefore, additional transformers are not required beyond those identified in Chapter 2, Project Description.

Construction Staging. Refer to Response PD-4 regarding construction laydown for the project variant. Refer to Response PD-5 regarding identification of a site for relocating PG&E equipment and parking at the Daly City Yard.

Distribution Express Feeders. Draft EIR Figure 2-1 shows the distribution express feeders route and the geographic areas where underground and aboveground equipment would be installed as part of the local distribution system separation or system reinforcements. Draft EIR Figure 2-5 illustrates the typical duct banks and vaults (underground equipment) that would be installed in these areas. Regarding Comment A-CPUC.2, currently, some San Francisco customers located in southwest San Francisco are served by distribution feeders from PG&E's Daly City Substation. The existing feeders would be disconnected at the border and, as discussed in Draft EIR Section 2.4.2, the proposed distribution express feeders from Martin Substation would supply electricity to the neighborhoods in San Francisco currently served by feeders from Daly City Substation. As discussed in Draft EIR Section 2.4.2, the distribution express feeders would originate

at Martin Substation and connect to the southwest area of San Francisco, which was previously supplied from Daly City Substation.

Local Distribution System Separation, System Reinforcements. Draft EIR Figure 2-6 illustrates typical overhead work that would occur in the local distribution system separation and system reinforcement areas. The Draft EIR describes anticipated system reinforcements and local distribution system separation and discusses the impacts of the anticipated work throughout the document. As discussed above, the Draft EIR includes the total amount of system reinforcement work that the SFPUC anticipates would be needed, regardless of whether the City or PG&E undertakes the system reinforcements or owns the electric grid assets. The Draft EIR describes the system reinforcements work (conservatively including over 4 miles of trenching) and evaluates the environmental effects of the anticipated work. As shown in Chapter 8, Project Description Refinements, Draft EIR Figures 2-1 and 2-8 have been modified to more clearly indicate the areas within which system reinforcements could occur. As shown in Chapter 8, the system reinforcement areas are the same as shown in the Draft EIR except for near the San Francisco Bay shoreline, Brisbane Lagoon, San Bruno Mountain State and County Park, and Lake Merced. In these locations, the system reinforcement areas have been refined. The modified system reinforcement areas are within the areas shown in Biological Resources Technical Memorandum Figure 2. Refer to Section 10.11, Biological Resources, for responses regarding the location and extent of impacts of project activities within sensitive habitat, and responses to Comments A-CDFW.3 through A-CDFW.6.

Operations and Maintenance Service Yards. Draft EIR Section 2.4.6.2 notes that the service yards would be located in southern San Francisco or at acquired substations. The proposed modifications anticipated at service yards were estimated to include limited sidewalks, driveways, curbs/gutters, and utility service work for an existing facility.

Construction Methods. Draft EIR Section 2.5.1.2 describes the locations of the trenchless pits (at large intersections along the distribution express feeders, such as San Jose Avenue), and the noise, air quality, and cultural resources analyses describe the assumptions made regarding the pit locations based on patterns of development near large intersections in southern San Francisco (i.e., would be near residential receptors and potentially historic buildings). Draft EIR Table 2-10 lists “pile driver” among the estimated construction equipment to be used for the distribution express feeders. To clarify the equipment to be used at the trenchless construction pits, the fourth paragraph on Draft EIR page 2-36 is revised as follows:

> Installation of duct banks at large intersections (e.g., San Jose Avenue) could require horizontal directional drilling or jack-and-bore construction methods. Both methods require pits at both the launching and receiving ends of the bore. The pit dimensions would be approximately 40 feet long, 20 feet wide, and 20 feet deep. Shoring of these pits would require installation of sheet piles using a vibratory pile driver. Each pit would be constructed in approximately five working days. At the receiving pit, a minimum rectangular construction access area approximately 100 feet long by 80 feet wide for equipment staging would be required. The actual construction would entail installation of a steel casing pipe under the roadway, followed by insertion of conduits within the steel casing pipe, exposed at both ends of the excavation. The conduits would then be extended in duct bank trenches as described above.

Excavated Materials Storage Locations. The areas shown in Draft EIR Figures 2-2 and 2-11 include the total area needed for construction of the Martin Substation separation or project variant substation, including soil stockpiling if needed. As discussed in Draft EIR Section 2.5.1.2, up to two lanes would be closed for

construction of underground lines. This area would include the space needed for soil stockpiling during underground work. Draft EIR Section 2.5.4.2 describes dust suppression that would be implemented during construction. Draft EIR Section 3.3, Air Quality, discusses potential air quality impacts, including effects of fugitive dust. Draft EIR Appendix A, Section E.17, Hydrology and Water Quality, discusses the potential for erosion to occur due to the project or project variant. Draft EIR Appendix A, Section E.6, Transportation and Circulation, discusses transportation impacts during construction.

Comment PD-2: Level of Detail: Project and Program Analysis

This response addresses the following comments, which are quoted below:

A-CPUC.1, O-CUE.1, O-PGE-2.3, O-PGE-2.15, O-PGE-2.26, O-PGE-2.39, O-PGE-2.43, O-PGE-2.120, I-Freedman.1

"The City's proposed transaction does not qualify for advice letter treatment by the CPUC. Therefore, CPUC must make CEQA findings for the proposed transaction. The City's DEIR is not currently adequate for the CPUC's use for the following reasons:

1. The City's EIR only analyzes the following project components at the program level, whereas the CPUC will require an analysis of these components at the project level:

- Local Distribution System Separation (Section 2.4.3);
- System Reinforcements Associated with Distribution System Separation (Section 2.4.4);
- Other Separation Components (Section 2.4.6)

Specifically, an analysis of these project components is required on a project-level to adequately evaluate impacts on utilities and service systems. Design details will be required for these components including the exact planned disposition of all existing poles, towers, lines, and other equipment (e.g., such as transformers); proposed new poles, towers, lines, and equipment; areas of disturbance; methods of construction; and the proposed timing and schedule for all improvements. These details and power flow analyses will also be required for all proposed changes to PG&E's subtransmission and transmission system as well (all infrastructure >50 kilovolts).[2] As the DEIR noted, power flow analyses will be required for these proposed project components to demonstrate the proposed changes to electrical service both within the City's service territory and outside of the City's service territory. The power flow analyses must consider current and future forecasted load and must evaluate performance under normal system conditions, single contingency conditions, and double contingency conditions for each alternative including the no project, the proposed project, and other project alternatives." (Michelle Wilson, Program and Project Supervisor, CEQA and FERC Branch, Energy Division California Public Utilities Commission [A-CPUC.1])

---

[2] *CPUC considers all infrastructure rated 50 kilovolts or less as "distribution," whereas infrastructure between 50 and 200 kV is considered subtransmission (e.g., power lines) and greater than 200 kV is transmission (e.g., transmission lines) (CPUC General Order 131-E).*

The DEIR analyzes some project components at a "project level" and others at a "program level." For example, the Martin Substation separation, distribution express feeders, modifications to retain PG&E access to non-electrical facilities, and a new City Substation are analyzed at the project level.[42] Whereas, the local distribution system separation, system reinforcements, operations and maintenance service yards, and remaining components are analyzed at the program level.[43]

The DEIR claims that specific locations and equipment for program-level components cannot be determined at this time because "uncertainty remains regarding the exact locations of the distribution system separation, system reinforcements, and other separation components."[44] Specific locations and equipment would be determined based on the location of existing equipment and available facilities, site conditions, and load flow analysis.[45]

Under CEQA, a program EIR is prepared for a series of actions that can be characterized as one large project.[46] Such actions may be related geographically, constitute logical parts in the chain of contemplated actions, or be adopted in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program.[47] A program EIR may also cover individual activities authorized under the same statutory or regulatory framework and involving generally similar environmental effects that can be mitigated through similar means.[48] A program EIR is distinct from a project-level EIR, which addresses a specific project and must include detailed, site-specific analysis.[49] While all EIRs must address the same elements, the degree of specificity required depends on the nature and scope of the activity being analyzed.[50]

Regardless of the EIR type, CEQA mandates that the analysis be sufficiently detailed to enable informed decision-making.[51] Labeling an EIR as a "program EIR" does not lessen the analytical burden.[52] The lead agency must disclose all that it reasonably can, and any claim that further specificity is infeasible must be supported by substantial evidence.[53]

CCSF lacks substantial evidence to support its assertion that it is infeasible to identify and analyze all locations and equipment necessary to provide safe and reliable electric service to customers in San Francisco. First, CCSF had more than 5 years to develop a site-specific separation plan.[54] This extended period undermines any argument that it did not have a reasonable opportunity to identify the necessary infrastructure or conduct the required analysis. CEQA does not excuse delay or lack of effort, it demands proactive and good

---

[42] *DEIR at pp. S-3 to S-4, 2-5 to 2-8.*
[43] *Id. at pp. S-3 to S-4, 2-5 to 2-8.*
[44] *Id. at p. 2-9.*
[45] *DEIR at p. 2-8 to 2-9.*
[46] *CEQA Guidelines § 15168(a).*
[47] *Ibid.*
[48] *Ibid.*
[49] *In re Bay-Delta Programmatic Envt'l Impact Report Coordinated Proceedings (2008) 43 Cal.4th 1143, 1169; Center for Biological Diversity v. Department of Conserv. (2019) 36 Cal.App.5th 210, 230; North Coast Rivers Alliance v. Kawamura (2015) 243 Cal.App.4th 647,664; Town of Atherton v. California High-Speed Rail Auth. (2014) 228 Cal.App.4th 314, 344.*
[50] *CEQA Guidelines § 15146.*
[51] *Cleveland Nat'l Forest Found. v. San Diego Ass'n of Gov'ts (2017) 17 Cal.App.5th 413, 426.*
[52] *Ibid.*
[53] *Id. at p. 440; see generally Center for Biological Diversity v. Department of Conserv. (2019) 36 Cal.App.5th 210, 231.*
[54] *DEIR at p. 1-11 ("The SFPUC submitted a public project application for the project to the planning department on September 19, 2019, initiating the environmental review process.")*

faith environmental review.[55] A failure to analyze environmental impacts after such a prolonged timeframe indicates not infeasibility, but an unwillingness to engage in the level of disclosure CEQA mandates.

Second, CCSF's own prior conduct demonstrates that preparation of a site-specific separation plan is not only feasible, but within its capabilities. For example, in connection with the earlier PMND, CCSF identified proposed distribution and separation work that would occur along the border between San CCSF and San Mateo County, and provided environmental analysis of their impacts.[56] Having previously produced this information in a formal CEQA document, CCSF cannot now credibly argue that the same type of granular analysis is infeasible. The record thus contains affirmative evidence that contradicts CCSF's current position, further weakening any claim of infeasibility.

Third, CEQA does not permit deferral of environmental analysis when the impacts are foreseeable and capable of being evaluated at the time of the EIR.[57] The identification of specific locations and equipment necessary to provide electric service is not speculative. It is an integral and foreseeable part of the project. Courts have repeatedly held, deferring analysis of known impacts to a later date violates CEQA's core purposes of informed decision-making and public participation.[58] CCSF cannot lawfully postpone site-specific review simply because it prefers not to commit to details at this time.

Finally, granting credence to CCSF's infeasibility claim would effectively reward the agency's failure to engage in diligent planning. CEQA does not allow a lead agency to avoid environmental review by delaying project development to the point where it can argue that specifics are unavailable. Agencies are expected to conduct a thorough analysis based on the best available data and must not create infeasibility by their own inaction.[59]

The DEIR must be revised to include a project-level analysis of all components of the Project to ensure that all potentially significant environmental impacts are properly disclosed, thoroughly analyzed, and effectively mitigated, as required by CEQA." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of California Coalition of Utility Employees [O-CUE.1)

"Also, despite taking three years to prepare the DEIR, CCSF has not taken the reasonable step of determining a preferred alignment for the linear components of the Project (*e.g.*, local distribution system separation and system reinforcements). Instead, CCSF improperly treats those necessary construction components at a programmatic level even though they would need to be implemented concurrently with the components of the Project analyzed at a project level. CCSF cannot treat the Project as a multi-phase programmatic action when all components of the Project must be completed and the DEIR assumes will all be commenced concurrently, even if there is some uncertainty on final alignments, prior to the PG&E and CCSF electric systems being separated." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.3])

---

[55] *CEQA Guidelines §§ 15144, 15151; Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal. (1988) 47 Cal.3d 376; California Oak Found. v. Regents of Univ. of Cal. (2010) 188 Cal.App.4th 227, 269; Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova (2007) 40 Cal.4th 412, 428.*
[56] *See generally PMND at p. 6-28.*
[57] *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova (2007) 40 Cal.4th 412, 428.*
[58] *Sierra Club v. County of Fresno (2018) 6 Cal.5th 502, 516.*
[59] *CEQA Guidelines § 15144; Rodeo Citizens Ass'n v. County of Contra Costa (2018) 22 Cal.App.5th 214, 226.*

"The DEIR states that it "evaluate[d] proposed [P]roject activities at a level of detail consistent with the best available information and specificity available at the time of EIR preparation" and that this justifies having analyzed certain Project components at a "project level" and others at a "program level." (DEIR, p. 3.1-3.) Specifically, CCSF suggests that it was justified analyzing the following Project components at a "program level": (1) the local distribution system separation, (2) system reinforcements, (3) operations control center, (4) operations and maintenance service yards, (5) and remaining Project components (collectively, the "Program Level Components"). (*Id*.) But CCSF's alleged concern and its proposed solution is a problem of its own making. The DEIR contains no explanation for why, three years after publication of the MND, there is insufficient information or specificity about these components to perform a project level analysis. And, if, in fact, there is insufficient information, there is no explanation in the DEIR for why CCSF felt compelled to rush issuance of its DEIR rather than waiting to collect sufficient information about these components before issuing the DEIR. In order to allow for a fulsome evaluation of the environmental impacts of these components and of the Project as a whole, CCSF should reissue the DEIR when this information becomes available, in order to allow the DEIR to analyze these integral projects at the project level. CCSF cannot be permitted to take shortcuts when it has control over the alleged obstacles it depends upon to justify the shortcut it proposed to take here.

CEQA Guidelines section 15146(a) provides "[a]n EIR on a construction project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy." (CEQA Guidelines, § 15146(a).) Accordingly, the CEQA guidelines prescribe different types of EIRs, including a project level EIR and a program level EIR. (CEQA Guidelines, §§ 15161, 15168.) The core purpose of a program level EIR is to consolidate the review of multiple interrelated activities that, if addressed in isolation, might obscure cumulative impacts, alternatives, and mitigation, overlook broader policy considerations, or generate duplicative paperwork. (*See* CEQA Guidelines, § 15168(b).) This purpose hinges on the presumption that the program level EIR is capturing a genuinely broad "program," such as in connection with issuance of rules or plans to govern further implementing actions or as logical parts in the chain of contemplated actions. (*See* CEQA Guidelines, § 15168(a); *see Center for Biological Diversity v. Department of Conservation* (2019) 36 Cal.App.5th 210, 230 ["Program EIRs are commonly used in conjunction with the process of tiering."].) This is not the case here. The Program Level Components are essential parts of the Project—components that are part and parcel of the same construction project that is part of CCSF's "approval" of the singular Project. As such, CCSF needed to treat each of them at the project level. In fact, because CCSF appears to be manufacturing an approval trigger for CEQA it is not clear what, if any, subsequent approvals CCSF will undertake to ensure the impacts from the Program Level Components are ultimately sufficiently analyzed at a project level. (CEQA Guidelines, § 15168(c), emphasis added ["[l]ater activities in the program *must* be examined in the light of the program EIR to determine whether an additional environmental document must be prepared"]; DEIR, p. 2-58 [generalized statements of "[a]pproval of the [P]roject" and "[c]ertification of the [DEIR]" for local CCSF actions and approvals].) No component of the Project has any independent utility because each component is required for CCSF to acquire PG&E's system and for separate electric systems to reliably operate thereafter. If CCSF moves forward with the Project, according to the DEIR, each and every component **will** occur during the three-to-five-year construction period that CCSF asserts in the DEIR will begin next year. This is in contrast to an EIR to a specific plan where certain properties lack pending applications and may never develop and are therefore properly considered at a programmatic level.

Moreover, given the proposed Project construction start in 2026, there would be no time to conduct the necessary subsequent CEQA review for the Program Level Components even if there were subsequent approvals. (DEIR, p. 2-40 [Table 2-9].) More to that point, while CEQA permits some degree of flexibility where information is genuinely uncertain, given that the DEIR was three years in the making and the DEIR asserts that Project construction will commence next year, the Program Level Components cannot reasonably be seen as abstract or uncertain undertakings. This is demonstrated in DEIR Table 2-9 where all project components analyzed at a programmatic level are assumed to commence in the **first year of construction** which is now less than a year away according to CCSF's stated schedule. CCSF must already have something more specific in mind.[9] Therefore, CCSF, at a minimum, should have identified the *preferred* alignments and locations for the Program Level Components in the DEIR and analyzed that at a project level.

It appears that the DEIR inappropriately invokes program level review specifically to exclude key components of the single Project from detailed analysis. Stated differently, rather than using the program level review to provide a more integrated environmental analysis (as the CEQA Guidelines intend), the DEIR uses the program level distinction to withhold analysis of integral components of the Project. (*See* Grassetti Environmental Consulting DEIR peer review letter ("GECo Letter"[10] (which is attached hereto as **Exhibit A**), pp. 2–3.) In effect, the DEIR has improperly inverted the purpose of program level review.

As described in PG&E's supporting technical memorandum attached hereto as **Exhibit B**, based on PG&E's understanding that there are approximately 100 distribution separation points (at both the distribution primary and secondary voltage levels) along the border between San Francisco and San Mateo counties, and assuming standard distribution planning processes performed by two distribution planners with 10-15 years of experience, the effort to identify a precise plan would conservatively take the two planners three months to complete. (Exhibit B, p. B-9.) It is unclear why CCSF did not undertake this effort in the three years spent preparing the DEIR, especially given that the construction of the programmatic components will commence concurrently with the project level components of the Project. The DEIR fails in its informational purposes due to this unreasonable lack of detail. Because this is a unified construction project, the DEIR must be revised to analyze all Project components at a project level and recirculated for public review and comment. (*See* CEQA Guidelines § 15146(a) ["[a]n EIR on a construction project will necessarily be more detailed in the specific effects of the project…"].)" (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.15])

"As discussed above, the deficiencies in the DEIR's Project description result in a corresponding deficiency of the environmental analysis throughout the DEIR. (*See Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal.App.4th 1437, 1448; *Sierra Club v. City of Orange* (2008) 163 Cal.App.4th 523, 533 [an accurate, stable, and finite project description is necessary so that the lead agency and the public have enough information to "ascertain the project's environmentally significant effects, assess ways of mitigating them, and consider project alternatives"].) In other words, given the lack of detail in the Project description (discussed above in § II.E), it is unclear, for public participation and decision-making purposes, what the *total* potential

---

[9] *PG&E disagrees that 2026 is a reasonable estimated start of construction since the required approvals to commence construction are still years away and the CPUC valuation proceedings is expected to proceed well into 2026. CCSF's haste to publish the DEIR ahead of CCSF determining its preferred project in the CPUC valuation proceeding has led to an unstable project description as well as non-substantive.*
analysis of critical project components, as described in more detail elsewhere in this letter.

[10] *The GECo Letter was prepared by GECo's principal Richard Grassetti, who has over 40 years of technical experience preparing and reviewing CEQA documents. (See Exhibit A, Attachment A [Grasseti Qualifications].)*

environmental impacts of the Project are because it is not possible to analyze impacts beyond the narrow level of specificity provided in the Project description. This has resulted in imprecise and vague impact assessments, including, but not limited to, the DEIR's noise, vibration, cultural resource, and hazards and hazardous materials analyses, and generic assessments of all trench-route analyses, all site-specific impacts associated with the proposed maintenance and operations yard(s), all impacts associated with the laydown area for the Project Variant, as well as what would be expected to be material impacts at the Martin Substation. (*See* Exhibit A, inclusive of the appended technical studies and reports, for specific deficiencies.) CEQA's principle purposes—(1) of avoiding or reducing environmental damage when feasible and (2) of informed disclosure to the public and informed decision-making by CCSF—demands more. (CEQA Guidelines, § 15002(a).)" (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.26])

"The DEIR's failure to clearly identify all of the Project facilities and construction work makes the DEIR inadequate in its assessment of the Project's potential impacts to biological resources." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.39])

"Notwithstanding this guidance, the DEIR assesses only the Martin Substation, Distribution Express Feeders, and Modifications to Retain PG&E Access at a "Project" level, and relegates the Local Distribution System Separation, System Reinforcements associated with Separation of the Distribution System, operations control center, operations and maintenance yard service yards, materials and equipment storage areas, and telecom equipment to "Program" level review. This approach is flawed. These components of the Project are not "logical parts in a chain of contemplated actions," but rather integral and essential components of a single contemplated action—the acquisition of applicable PG&E facilities, and the separation, construction, and operation of associated facilities necessary to achieve CCSF's stated goals of owning and maintaining an electrical power system separate from PG&E. Simply stated, there is no "chain of contemplated actions"; rather, there is just a single action, all of the components of which are essential to its functioning. Given the proposed Project construction start in 2026 and completion in 2028 (see DEIR Table 2-9), there would be no time for further phased CEQA review of the components omitted from Project level review (for example the 150,000 sq. ft. operations and maintenance yard), making it clear that these components are intended as a single cohesive action.

Given the above, and as further detailed under Project Description Issues section below, the program/project approach used in the DEIR effectively results in impermissible segmentation or piecemealing of the proposed project's CEQA review. CEQA defines a project as "the whole of an action, which has a potential for resulting in ... a physical change in the environment." (Guidelines Section 15378(a).) CEQA piecemealing refers to breaking a large project into smaller components to avoid thorough environmental review and potentially reduce the apparent impact of the project. This practice is prohibited under CEQA, as it can obscure the full environmental consequences of a development by reviewing smaller, seemingly insignificant parts separately rather than analyzing the whole project. In using the program/project distinction, the DEIR arbitrarily omits any detail of necessary components of the Project based on this improper distinction, thereby effectively piecemealing the project with respect to CEQA review.

The program/project distinction, and the associated piecemealing of the project for CEQA review, results in a failure to actually identify, describe, and analyze the potential impacts of essential parts of the Project (and

in turn the entire Project). In other words, the DEIR uses the improper program/project distinction to avoid identifying and describing not just the Project components, but also the Project's impacts. While CEQA permits limited project segmentation if the components are not essential to the project's operation and have independent utility, that is not the case here. Each of the components analyzed at a Program level (with descriptions and analyses deferred to some future review) are essential to the overall Project's operation and in that regard do not have independent utility. Thus, the DEIR's improper program/project distinction and the resultant impermissible deferral of the review of Program level components at a Project level to some future, undefined phase (or potentially exemption of never-fully described or analyzed components of the Project from CEQA review entirely) is done in violation of CEQA.

To remedy this deficiency, the DEIR must be revised to treat all components of the Project at a Project level of review." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.43])

"10. The DEIR Unjustifiably Omits a Project Level Distribution Separation Plan.

In the CPUC proceeding on valuation, PG&E long ago produced to CCSF the distribution models that would have allowed CCSF to evaluate specific physical points of separation along the border. (As an illustration, see the Figure below from an August 2024 CCSF presentation in a CPUC workshop). However, CCSF's DEIR fails to provide a detailed identification or evaluation of the Project's distribution system separation—instead analyzing this component of the Project at a program level.

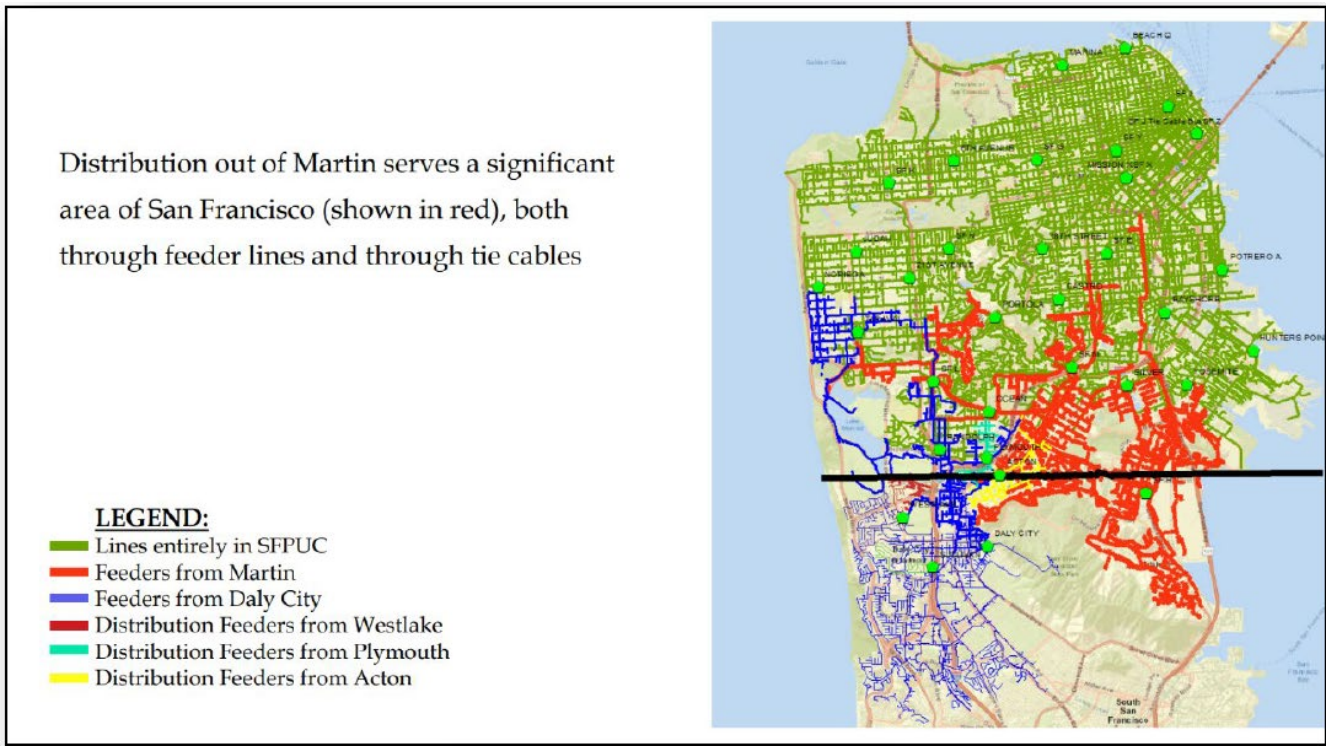


Figure 1. Slide 18 from CCSF August 2024 Workshop Presentation

Because the DEIR fails to include sufficient details on proposed separation points, neither PG&E nor the public can adequately evaluate the Project. Moreover, PG&E cannot evaluate or anticipate its own work

scope required to maintain or restore service to its customers after separation of the assets. Given CCSF's possession of the necessary information and the time it has spent preparing its DEIR, the DEIR should have identified project-level details for the distribution separation scope. The distribution separations were summarized in PG&E's March 7, 2022 comments on CCSF's Mitigated Negative Declaration (and which were again submitted on July 27, 2023 as comment on the Notice of Preparation for the DEIR). As discussed below, it was certainly feasible for CCSF to undertake this analysis and include it within the DEIR at this time. CCSF should amend the DEIR to include this critical information so that it, and the consequential environmental impacts, can be adequately evaluated by the public and decisionmakers.

Based on PG&E's understanding that there are approximately 100 electric distribution points that will need to be severed (at both the distribution primary and secondary voltage levels) along the border between San Francisco and San Mateo counties, and assuming standard distribution planning processes performed by two PG&E distribution planners with 10-15 years of experience, the effort to identify a precise plan would conservatively take two planners three months to complete. This three-month period is broken down as follows:

Breakdown of Tasks

1. Identification of Separation Points (1 week)

Separation points are locations where the distribution circuit crosses the CCSF and San Mateo County boundary. Each location must be modified to create a physical and electrical separation between the post-separation CCSF and PG&E distributions systems. This task involves a desktop analysis performed using a combination of satellite imagery, distribution inventory maps, and GIS viewers loaded with the separation boundary. The output of this task is a set of separation points for which scope will be developed during the following two tasks.

2. Field Investigation of Separation Points (1 week)

After the separation points have been identified, a field investigation of each point is conducted to identify any field conditions that will influence the separation scope. Pictures are often taken to support future scope development. Field conditions that can impact separation scope include actual physical location of poles, conductors, guys (i.e., guy-wire or guy lines), and other equipment that may need to be moved; available space for additional equipment; and existing or required rights-of-way or easements.

3. Determination of Separation Scope (2 weeks)

A method of physical separation is identified for each separation point. For overhead separation points, the scope may be as simple as removing a span of conductor. However, underground separation points may require installation of additional underground structures. Ultimately, the scope at each separation point will be driven by the specifics of the existing circuitry, construction and design standards, and the field location. This task is a desktop analysis, and the output of this task is a high-level scope of work for each separation point.

4. Development of Scope to Serve Stranded Customers (1 month)

Separating the existing PG&E system into two physically and electrically separate systems along the CCSF boundary will result in some customers being stranded, of left without a continuous path of

service from a distribution substation. As a result, a construction scope must be identified to ensure each stranded customer maintains electric service post-separation through a new service. All future CCSF customers will need to be served via a CCSF-owned substation; likewise, all existing and future PG&E customers will need to be served via a PG&E-owned substation. CCSF has indicated in past presentations that it intends to convert all 4kV distribution circuits to 12kV, which can require extensive construction, none of which is discussed or addressed in the DEIR. CCSF's communicated intention indicates that some analysis has been performed to inform the development of project-level details. This task is a desktop analysis involving load flow analysis using distribution analysis software. The output of this task is a set of project scopes that are required to maintain service to all customers post-separation.

5. Development of Scope to Restore Service Levels (1 month)

The last task focuses on retaining or restoring reliable service for all customers post separation. The existing PG&E distribution system is designed with a network of switches, reclosers, and back ties that, along with its Fault Location, Isolation, and Service Restoration (FLISR) system, reduce the impact of outages and provide flexibility to operators. This task is a desktop analysis involving load flow and reliability analysis using distribution analysis software. The output of this task is a set of project scopes that restore the reliability of electric service for impacted customers.

There is no justification for the DEIR's assessment of the local distribution system separation Project component at a program level when it was clearly feasible and appropriate for CCSF to assess this at a project level. The DEIR should be revised to include a project level analysis (at least for a preferred route) and to address the anticipated work necessary to restore service after lines are severed." ((Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.120])

_____

"1.3 Not complete "whole of the action"

When a program EIR is completed, additional environmental review may be warranted in the future as project details are developed. The additional environmental review would analyze any impacts particular to a specific activity or project site that were not known and, therefore, could not have been evaluated as part of the earlier EIR.

- The impact needs to be part of the Draft EIR before it can be approved." (Tera Freedman [I-Freedman.1])

_____

RESPONSE PD-2

The comments above request that the EIR include additional project detail or question whether the level of detail in the project description is sufficient to identify potentially significant environmental impacts. Refer also to **Response PD-1** regarding assertions related to the EIR's proper evaluation of the "whole of the action" and avoidance of piecemealing and **Response PD-6** regarding the construction schedule evaluated for the project.

As indicated in the Draft EIR (page 2-9 *et seq*), the EIR evaluates proposed system separation activities based on the best available information, but uncertainty remains regarding the exact locations of the local distribution system separation, system reinforcements, and other separation components. Consequently, while some project components are described and evaluated at a project level of detail, other components are evaluated at a program level of detail. This distinction is clearly indicated throughout the Draft EIR. Those "program-level" components could be implemented in many ways and combinations of ways. Consequently, the Draft EIR presents the City's best assessments of the geographic areas and total work required for the project components, including those for which less detail is known. In the absence of specific information, the Draft EIR makes reasonable conservative assumptions to characterize potential impacts of the local distribution system separation, system reinforcements, and other separation components, thereby avoiding understating potential impacts. The Draft EIR also identifies the information that would be used to ultimately determine precise locations and equipment that would be installed (refer to Section 2.4 in Draft EIR Chapter 2). Although the City has made a good-faith effort at considering potential significant impacts on the environment that could result from implementation of the project or project variant, including its project-level and program-level components, the Draft EIR (e.g., page 1-3) acknowledges that additional environmental review may be warranted in the future as project details are developed, and that such review would analyze any impacts particular to a specific activity or project site that were not known and, therefore, could not have been evaluated as part of the earlier EIR.

The City's decision to prepare an EIR that evaluates components at both a project and program level of detail reflects CEQA guidance regarding the timing of preparing an EIR and determining the appropriate level of analysis. EIRs should be prepared as early as feasible in the planning process to enable environmental considerations to influence design yet late enough to provide meaningful information for the evaluation of environmental impacts.[3] CEQA affords substantial discretion to determine the level of analysis appropriate for a particular project or action, as CEQA allows for the preparation of multiple types of EIRs. The level of detail in an EIR is driven by the nature of the proposed action, regardless of the type of EIR. An EIR should "be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences."[4] At the same time, the level of detail in an EIR should "correspond" to the "degree of specificity involved in the underlying activity which is described in the EIR."[5] As discussed in CEQA Guidelines section 15168, a programmatic analysis is appropriate for a project that will involve a series of actions that are (1) related geographically, (2) logical parts in a chain of contemplated actions, (3) connected as part of a continuing program, or (4) carried out under the same authorizing statute or regulatory authority, with similar environmental impacts that can be mitigated in similar ways.

Use of program-level analyses supports informed decision-making when uncertainties regarding a project's implementation cannot be resolved at the time that CEQA review is initiated (i.e., to support the first discretionary action taken by the proper lead agency). Programmatic analysis allows earlier and more comprehensive evaluation of a project, even though the implementation of some components may depend upon factors that have not been fully designed. The evaluation of program-level components provides a foundation of analysis to ensure that the collective impacts of these proposed components, as well as their cumulative impacts, are adequately characterized, and that any subsequent impact analyses that may be needed adequately delineate impacts and apply mitigation.

[3] CEQA Guidelines Section 15004(b).
[4] CEQA Guidelines section 15151.
[5] CEQA Guidelines section 15146.

The comments listed above from PG&E assert that the EIR should have included more specific information on program-level components, and that the SFPUC could have developed this information and included it in the EIR. While responsible agencies may require additional project information to approve permits or other subsequent approvals, a broad statement that "project-level analysis is required" is not consistent with CEQA as discussed above.

As noted in the Draft EIR, the SFPUC used information provided by PG&E to develop the system reinforcement areas. The types of separation activities and geographic areas where work would occur are identified in the Draft EIR and the foreseeable impacts of these activities are estimated in the Draft EIR. The SFPUC has provided reasonable estimates of the total anticipated work and the Draft EIR analyses and discloses reasonable worst-case estimates of the impacts of project activities. For example, the analysis evaluates trenching and subsurface work for the local distribution system separation and system reinforcements at roadway rights-of-way closest to adjacent buildings to characterize the highest potential for disturbance to built resources. The Draft EIR air quality impact analysis characterizes emissions from construction of multiple components concurrently within 1,000 feet of sensitive receptors to conservatively capture overlapping emissions and exposures, although the likelihood of such a constructions scenario is low. The Draft EIR air quality impact analysis also estimates emissions based on construction starting as early as 2026 to reflect the highest reasonably foreseeable emissions (a later construction start date would result in lower emissions due to lower emission factors for construction equipment and vehicles as cleaner fleets phase in under increasingly stringent regulatory requirements). Service yard noise was evaluated using maximum reasonably foreseeable equipment and vehicle activity, and assuming activities would occur adjacent to sensitive (residential) receptors which, although unlikely, represents a worst-case operational condition. As indicated above, the Draft EIR presents the City's best assessments of the approximate locations and total work required for the project components, including those for which less detail is known. The purpose of evaluating the local distribution system separation and system reinforcements collectively is to evaluate the combined potential effects. The combined analysis of individual separation activities for the local distribution system separation or system reinforcements appropriately discloses the impacts of the whole of the action and avoids understating potential impacts.

Comment A-CPUC.1 states that the exact planned disposition of all existing poles, towers, lines, and other equipment; proposed new poles, towers, lines, and equipment; areas of disturbance; methods of construction; and proposed timing and schedule are needed to adequately evaluate the impacts on utilities and service systems of the local distribution system separation, system reinforcements, and other separation components. However, the comment does not identify physical environmental effects related to utilities and service systems that would occur beyond what has already been identified in the Draft EIR. The Draft EIR evaluates potential environmental impacts of the project as described in Draft EIR Chapter 2, Project Description. Draft EIR Section 2.4 discusses the types of activities related to poles and lines associated with the project. Draft EIR Chapter 2 also identifies the areas of potential ground disturbance (Figures 2-7 and 2-8), methods of construction (Section 2.5.1, Construction Activities, listed by project component), and proposed timing and schedule required to implement the project components (Table 2-9, Project Construction Schedule) listed by the comment.

Comment A-CPUC.1 also states that power flow analyses would be required for their review of the local distribution system separation. This is consistent with content in the Draft EIR, which states on page S-4 that specific locations and equipment included in the local distribution system separation would be determined based on the location of existing feeders, site conditions, and load flow analysis. Comment O-CUE.1 correctly notes that the MND previously issued for the project included an appendix listing PG&E assets proposed for

acquisition, which is not included in the Draft EIR. As discussed in greater detail in Response PD-1, ownership status of the assets does not meaningfully enhance understanding of the project or inform impact analyses.

Comment O-PGE-2.15 questions the rationale for the Draft EIR's program-level review and refers to pages 2-3 of the associated attachment (included as Comment O-PGE-2.43). The EIR includes evaluation of all project components; none are excluded. The figures included in the Draft EIR outline the areas where the local distribution system separation and system reinforcements could occur, and Draft EIR Tables 2-4, 2-5, and 2-6 identify the types of activities that are anticipated to occur in the specified areas. The geographic areas where local distribution system separation and system reinforcements would occur are known based on existing available information about current PG&E electric service to San Francisco and San Mateo County. The descriptions of the project and project variant are provided in multiple forms (narrative, tabular, and graphical) throughout Chapter 2 to clearly describe the details and to facilitate reader comprehension. Where design detail may be preliminary or limited for certain facilities or construction or operation activities, the scope of the impact analysis accounts for this and makes reasonable assumptions predicated on fact.

Several comments question whether the City would "ensure the impacts from the Program Level Components are ultimately sufficiently analyzed," state that there would not be time to conduct the necessary subsequent CEQA review for such components before the project is constructed, and ask what subsequent approvals the City would undertake for the project. As discussed in **Response PD-6**, the Draft EIR provided a three-year construction schedule that was conservatively estimated to start in 2026; assuming a more compressed construction schedule starting in the earliest possible year results in the highest potential emissions estimates from construction equipment. As noted on Draft EIR page 2-40, construction could occur later than 2026 depending on the approval process. Although the City has not yet determined the precise sequence of project approvals in the future, any associated refinements of the project would not alter the City's obligation or commitment to comply with CEQA requirements for determining whether additional environmental review is warranted as details for program-level components become available.

As discussed above, the Draft EIR makes conservative assumptions to characterize the potential impacts of the local distribution system separation, system reinforcements, and other separation components. While some comments above contend that some analysis is withheld, a review of the Draft EIR impact analyses shows each component is evaluated in all sections. For specific responses to comments on EIR analysis topics, refer to other sections of this document (for example, Section 10.4, Noise and Vibration). The City has completed an evaluation of all project components. As discussed in **Response PD-1**, the Draft EIR evaluates impacts associated with all grid separation activities, regardless of whether the City or PG&E owns the electric grid assets, to fully characterize potential impacts of the project.

In conclusion, Chapter 2 provides sufficient detail regarding the project to inform the scope of the impact analyses to appropriately evaluate impacts and for decision makers to understand the project being evaluated. A greater level of detail for the project description is not necessary for the lead agency, decision makers, or the public to reasonably consider and understand the environmental impacts of the project or the project variant. Any future refinements to the project as project design progresses would be compared to what was proposed and analyzed in the EIR. If final project designs are not consistent with the project analyzed in the EIR and have the potential for additional impacts, subsequent CEQA screening consistent with the CEQA Guidelines could be required. CEQA's subsequent review requirements exist precisely because project design may change as more detailed design and field studies become available after project approval.

_____

Comment PD-3: Martin Substation Separation

This response addresses the following comments, which are quoted below:

O-PGE-2.5, O-PGE-2.20, O-PGE-2.111, O-PGE-2.112, O-PGE-2.114, O-PGE-2.115, O-PGE-2.117, O-PGE-2.121

This response also addresses Comment O-PGE-2.125, which consists of graphic exhibits and is included in Attachment A, Draft EIR Comments, Letter O-PGE-2, Exhibit B-1.

_____

"The DEIR fails to provide essential design information related to the Martin Substation separation to demonstrate that this component of the Project is feasible given the severe space limitations within the substation." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.5])

_____

"As further detailed in the PG&E supporting technical memorandum attached hereto as Exhibit B, the Project description fails to disclose and analyze all of the work, and its footprint, necessary to separate the Martin Substation. As explained in Exhibit B, there is inadequate space within the substation to include additional new facilities and infrastructure associated with the Project that would be needed to have a CCSF-controlled facility adjacent to a PG&E facility. There is also no proposal in the DEIR on whether or how PG&E would access the 60kV facility necessary to serve its San Mateo County customers or if PG&E would need to construct a second 60 kV system. The result of these deficiencies and errors in the Project Description is that the DEIR underestimates the area that would be needed to properly sever the substation and then restore service. This results in an under disclosure of air impacts, noise impacts, and hazard impacts because work would need to occur in a larger area than disclosed." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.20])

_____

"2. Space Constraints Make the Project's Martin Substation Separation Infeasible.

A major component of the Project is the Martin Substation Separation, which entails reconfiguring and partitioning PG&E's existing Martin Substation into two interconnected substations and associated utility systems—one serving CCSF and one serving PG&E's remaining customers in San Mateo County. (See, e.g., DEIR, page 2-6.) The DEIR, however, fails to adequately account for the significant space constraints and other limiting conditions at the Martin Substation listed below. Once these conditions are accounted for, it becomes clear that there is simply not enough space at the Martin Substation for PG&E's existing equipment, the new equipment that CCSF would need to install, the required clearances for the equipment, and the walls and fences necessary to separate PG&E's portion of the substation from CCSF's portion. For this reason, the Project's proposed Martin Substation Separation is infeasible. Additional detail regarding feasibility issues related to the Project are included in the PG&E presentation materials previously provided to CCSF through CPUC workshop proceedings attached as Exhibit B-1 to this memorandum (with its original confidential footer removed).

• **Challenges Associated with New 230kV Breakers and Required Clearances:** The Project requires the installation of at least two 230kV breakers, among other things, which require a minimum amount of space that is not available at the Martin Substation. The substation is highly congested with existing equipment, leaving no available space to install new 230kV breakers with the required clearances and physical separation necessary for this equipment. (See Figure below.)

Clearances, or spacing around electrical equipment, are necessary to account for safety and maintenance needs and other technical operational considerations. The Institute of Electrical and Electronics Engineers (IEEE), which publishes widely used industry standards, requires a minimum of 15 feet of clearance for 230kV energized equipment. (IEEE standard 1427.) PG&E determines additional design clearance requirements for each individual substation based on site-specific substation layout configurations and operational considerations. Under these clearance requirements, and allowing additional space for required disconnect switches and riser structures, the total space required for a 230kV breaker at Martin Substation is 100 feet wide and 50 feet long.

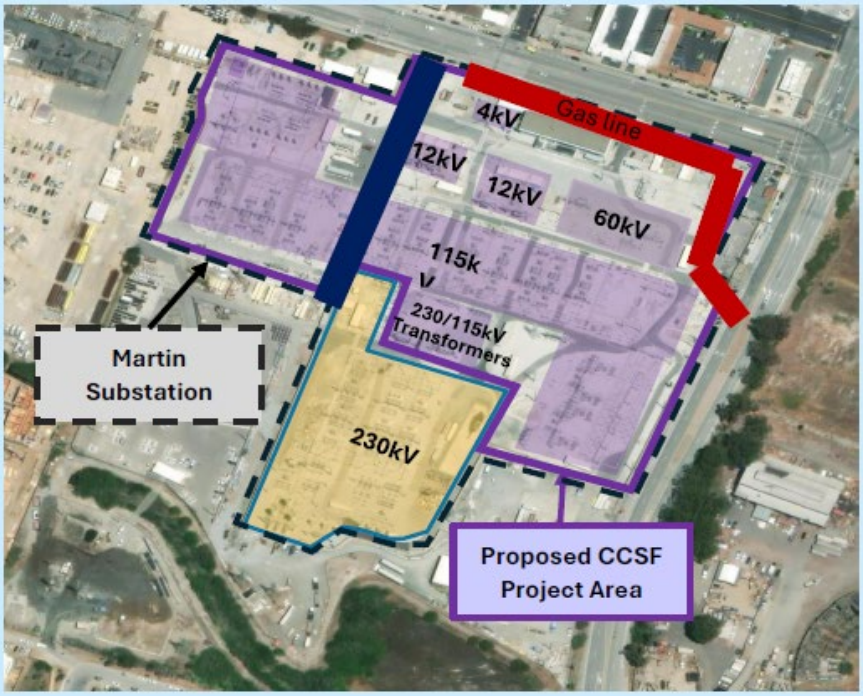
The diagram below depicts certain key categories of electrical equipment within the Martin Substation, which any additional equipment would need to fit around with adequate clearances. Simply put, there is not even one available 100-foot-by-50-foot open space within the substation, much less the two such spaces that would be needed for the two required 230kV breakers.

Fig. 1: Inadequate Space for Physical & Electrical Separation

Area of Martin

Project Area of ~561,245 ft^2
Currently Occupied by:

- 230kV/115kV Transformers
- 115kV bus structures line exits and breakers and control buildings
- 115kV Capacitor Banks
- 60kV Bus work, transformer, and control building
- 12kV bus work transformers and control building
- 4kV Bus work and control building
- Other buildings and control cable trenches
- Access roads
- Perimeter Wall and clearance
- 40 ft wide Clearance for Water and gas lines



• **Challenges Associated with Project's Perimeter Wall, Access Road, and Electrical Clearances:** The Project requires an internal perimeter wall or walls to be installed around the portions of the Martin Substation site that would be separately owned and operated after CCSF's taking. It is unclear from the DEIR where such wall(s) would be needed/located, but it is obvious that one would be needed between the 230kV section to be retained by PG&E and the portions to the north taken by CCSF. There is not sufficient space for that required wall in light of clearances, access, and necessary new equipment.

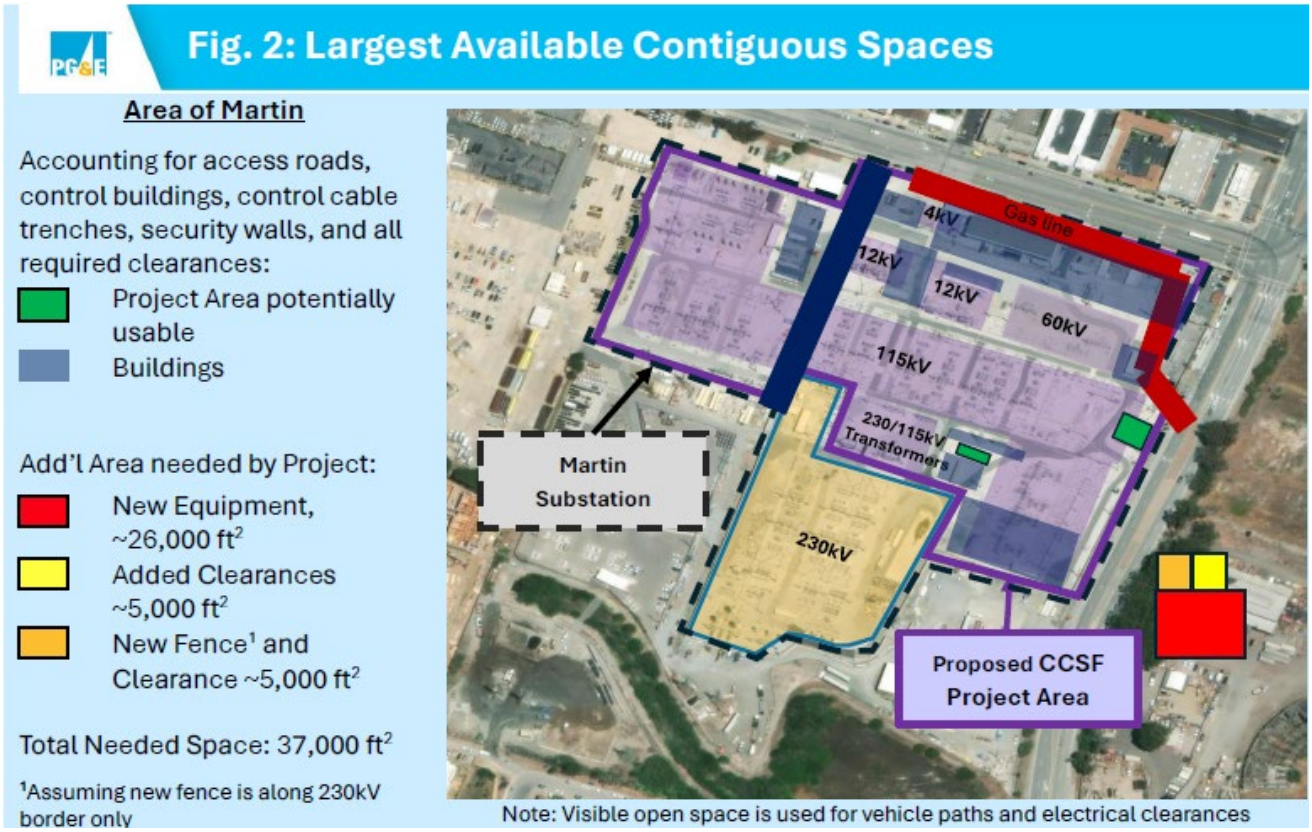
Significant electrical clearances are required for such a wall or walls. The National Electric Safety Code (NESC) requires at least 15.5 feet between 230kV equipment and a perimeter wall, and at least 13 feet between 115kV equipment and a perimeter wall. (NESC Rule 234.) Installation of such wall(s) in accordance with the required clearances would place the wall(s) in or across existing access roads and/or in spaces where electrical equipment already exists or will be required. (See Figure above; see also Attachment A, pages 10–14.)

Building a wall across existing access roads within the Martin Substation would impair both routine and emergency operations within the substation. Cutting off the access roads would prevent necessary maintenance and construction vehicles from moving around the substation. Compromising the substation's existing access roads would also impair the use of emergency equipment such as mobile transformers. For example, in the event of failure of one of the substation's 115kV/12kV banks, an emergency 45MVA 115kV/12kV mobile transformer, which is a 92-foot-long tractor and mobile substation, would need to be installed on the access road immediately adjacent to the failed substation bank. Turning radiuses within the substation for this equipment need to be maintained where applicable and require preservation of existing access roads.

In addition, the DEIR proposes dividing other parts of the substation, such as the 115 kV banks, in unspecified manners and locations. These divisions would require further barriers to be built between the portions to be taken by CCSF and the portions to be retained by PG&E. It is highly likely that there will be insufficient space for such barriers.

• **Challenges Associated with Additional Required Equipment and Clearances Not Described in DEIR:** The Project's proposed separation will require installation of additional electric assets at the Martin Substation beyond those described in the DEIR, such as meters, disconnects, and circuit breakers at the new boundary between PG&E and CCSF facilities. (See, e.g., Attachment A, page 15.) Further, PG&E telecom and protection circuits are commingled across the footprint of the existing substation and in existing cable trenches. To maintain reliable and safe operations and to comply with the applicable rules from the North American Electric Reliability Corporation (NERC), PG&E and CCSF would not be permitted to commingle assets. (NERC CIP-002.)

Though not acknowledged by the DEIR, the Project would require complete physical and electrical separation of PG&E's substation assets and CCSF's substation assets, including but not limited to equipment, control building, protection, automation, and telecommunication infrastructure. Further, all circuits (i.e., station service, protection and control, SCADA, etc.) must be separated into newly constructed, separately owned and maintained cable trenches. As shown in the Figures herein and throughout Attachment A, there is insufficient space at the Martin Substation for the new equipment, clearances required for new proposed facilities, and a new perimeter wall/fence.



• **Challenges Relating to Shunt Reactors and Relay-and-Control Building:** The close proximity of shunt reactors for PG&E's Embarcadero 230kV cable to Martin's 115kV yard and the relay-and-control building pose significant additional space constraints. (See Attachment A, page 14.) New trenches required by the Project to separate protection and control circuits and station power would require approximately 30 feet of space, but only 12 feet is available. (*Id*.) This further demonstrates that the significant space constraints at the Martin Substation make it infeasible to accommodate the Project as contemplated by the DEIR.

• **Challenges Associated with Buried Utilities:** Space constraints at Martin Substation also exist below ground. Not only are there significant underground electrical transmission lines, but there are also buried natural gas transmission and water lines, as well as cable trenches and a ground grid lying beneath the Project's proposed taking area. (See Figures above; see also Attachment A, page 17 [buried natural gas and underground water lines], page 16 [discussion of cable trenches], and page 7 [underground electrical transmission lines].) The PG&E gas line is a critical, high-priority subsurface installation requiring extreme care to ensure integrity, safety, and accessibility. Hand digging is required within 2 feet of the gas line. Additionally, the San Francisco Water Company's 44-inch water line crosses the property, further constraining construction activities at the site. The presence of these critical underground lines, not considered by the DEIR, further complicates the space constraints at the Martin Substation, making the Project even more infeasible, and also would require significant additional work not discussed in the DEIR.

In sum, the DEIR needs to be revised to account for the above space constraints at the Martin Substation to provide a realistic assessment of the Project's feasibility and potential impacts arising from each of these constraints." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.111])

"3. The DEIR's Plans for the 60kV Assets at Martin Substation May Cause Service Impacts and Necessitate Additional Construction.

The DEIR indicates that CCSF will take the 60kV assets at Martin Substation. (DEIR pages 2-9–2-13.) However, PG&E's 60kV assets at the Martin Substation exclusively serve PG&E customers in San Mateo County and should not be owned by CCSF as proposed by the Project. If CCSF nonetheless takes the 60kV assets, that taking could negatively impact PG&E's remaining customer service and operational reliability. CCSF's taking of PG&E's 60kV assets would necessitate extensive new construction to re-establish service to PG&E's impacted customers. (See Attachment A, page 19.) This effort will include the need for PG&E to construct new primary line extensions, separation of secondaries, reconductoring, and deployment of distribution automation technology. Given the complexity of this work, the work would also cause multiple planned customer outages. None of this is addressed by the DEIR.

Moreover, even if CCSF amends its planned Project such that it does *not* take the 60kV assets, its planned separation with respect to the 60kV assets remains problematic and infeasible. If the Martin Substation is separated pursuant to the Project but PG&E retains the existing 60kV system, that 60kV system will be located on the portion of the substation that would be owned by CCSF. Such a comingling of assets is impermissible. For PG&E to own and operate the 60kV assets, it would need to fence and provide secure pedestrian and vehicle access to the 60kV system, and there is simply insufficient space to do so. Instead, PG&E would need to construct a new 60kV facility to reestablish service for its customers. The DEIR should discuss the anticipated direct and indirect impacts associated with such construction." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.112])

———————————————

"The DEIR is also deficient because it fails to sufficiently describe the Project's treatment of the following:

- **Division of 115kV Banks:** The DEIR does not explain which 115 kV banks would be PG&E's and which would be CCSF's upon separation, or how that section of the Martin substation would be reconfigured to split these duct banks between PG&E and CCSF.
- **230kV/115kV Transformer:** The DEIR includes ambiguous language regarding CCSF's intent to take Martin Substation's 230kV/115kV transformers. Taking these transformers would require installation of two 230kV breakers, but there is insufficient space available at the substation (as described above) to install new breakers. Clear and precise definitions of the infrastructure to be taken as part of the Project are needed for an adequate Project description, to understand the environmental impacts of the Project, and to determine whether the Project is technically feasible.
- **Undisclosed Footprint and Location:** The DEIR does not disclose the anticipated footprint or location of CCSF's planned taking at Martin Substation as part of the Project; in other words, the DEIR does not clarify what parts of the Project Area would be taken by CCSF and what parts retained by PG&E. This missing detail makes it impossible to adequately assess the Project's feasibility, impact on existing infrastructure, and potential environmental impacts.
- **Outage Risks:** The DEIR does not address planned system reconfigurations anticipated to be required to perform the complex work of separating the PG&E assets, reconfiguring the substation and then restoring service to PG&E customers and new CCSF customers. Based on the minimal information in the DEIR, there is a likelihood of reliability risk to San Francisco and San Mateo

customers for multiple years as these reconfigurations decrease the redundancy for the duration of the performed work increasing likelihood of customer outages. The specific outages required for this work are unknown without a detailed configuration plan from CCSF and would be an output of the SIS and Facility Studies discussed above. Had CCSF provided the required plan, PG&E could better assess the required outages that would flow from a separation of Martin Substation.

- **Backup Generation:** The DEIR does not address the potential need for temporary generation to support outages, which will likely have environmental impacts.

The DEIR and Project description should be revised to more accurately describe the Project and account for these deficiencies." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.114])

_____

"5. The DEIR Must Provide Answers to Critical Open Questions.

Relatedly, for CCSF's decision-makers and the public to adequately analyze whether the Project is feasible, as well as the potential environmental impacts of the Project, CCSF must provide substantially more information about its Project plans within Martin Substation. At the very least, CCSF should answer the following questions in a recirculated DEIR.

1. With respect to the 12 new 115kV circuit breakers referenced at page 2-12 of the DEIR:
    a. Describe and diagram the exact anticipated locations of those circuit breakers.
    b. Describe for each whether it would be on the portion of the site to be taken by CCSF or the portion to be owned by PG&E at the time of the taking.
    c. Describe the anticipated sizes and associated clearances for those circuit breakers.
2. With respect to the 6 new revenue meters referenced at page 2-12 of the DEIR:
    a. Describe and diagram the exact anticipated locations of those meters.
    b. Describe for each whether it would be on the portion of the site to be taken by CCSF or the portion to be owned by PG&E at the time of the taking.
    c. Describe the anticipated above-ground sizes of those meters and associated structures, and describe the anticipated clearances around those facilities.
3. With respect to the two new switchgear buildings referenced at page 2-12 of the DEIR, describe and diagram the exact anticipated locations of those buildings.
4. With respect to the new control house referenced at page 2-12 of the DEIR, describe and diagram the exact anticipated locations of that building.
5. With respect to the DEIR Figure 2-2, page 2-11:
    a. Provide a detailed diagram and description of what parts of the Martin Substation Project area would be located in the areas that CCSF proposes to take in connection with the Project;
    b. Provide a detailed description of what assets at the Martin Substation Project area CCSF proposes to take, and what assets would not be taken;

c. Provide a detailed diagram of where all fencing would be located within the Martin Substation Project area, with sufficient detail to be able to ascertain the locations of all such fencing to within five feet.

6. With respect to the DEIR Figure 2-2, page 2-11, what is the significance of having the 230/115kV transformers within the project area, including but not limited to a statement as to whether they would be part of CCSF's proposed taking?
7. With respect to the DEIR Figure 2-3 (page 2-14), describe the voltage level(s) of the depicted equipment, and describe how that relates to (a) the voltages at Martin Substation and (b) the amounts of space taken up by, and/or clearances required by, equipment that is located at Martin or would be located at Martin following CCSF's proposed taking.
8. With respect to the DEIR page 1-4, describe the route of the 60kV line referenced and what purpose or customers CCSF believes that it serves in San Francisco.
9. With respect to the DEIR, Figure 1-1 (page 1-5), provide the names of the two 115kV lines exiting the Martin substation in that figure.
10. With respect to the DEIR Figure 2-4 (page 2-15), provide the voltage level(s) being depicted.
11. With respect to the DEIR, at page 2-31, what transformers are being relocated (i.e., from where), and where are they being relocated to?
12. With respect to the DEIR's reference to the Daly City Yard (aka Martin Service Center Yard), describe in detail CCSF's contemplated taking and use of that area, including how much and what portions would be taken and the length of time that it would be taken." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.115])

"The DEIR project description mentions the relocation of CCSF equipment (e.g., DEIR, page S-3), albeit with inadequate specificity as to locations, but does not address the required relocation of PG&E equipment, such as the 115kV structures and lines, control buildings, and wiring as a component of the Project. This relocation work may require trenching inside the Martin Substation as well as construction of temporary access facilities and construction laydown yards that are separate from CCSF's designated laydown yard identified in the DEIR. The DEIR and Project description should be revised to include PG&E's required work within the Martin Substation as well as an identification of a construction laydown area for PG&E. In addition, the DEIR should be revised to acknowledge and analyze the impacts of those additions, such as increased required off-haul of contaminated soils, increased noise, and increased air quality impacts." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.117])

"As the above sections illustrate, a common theme in the DEIR—across the Project, Project Variant, and Project Alternatives—is the failure to capture the totality of work the Project requires of PG&E. Additional PG&E work is missing from the scope and schedule for each of these items. This includes, among other things, the required installation of new facilities and reconfiguration of equipment. Missing information is detailed in the following table.

[Project] PG&E Work Excluded from DEIR. The Project description mentions relocation of CCSF equipment but does not include relocation of PG&E equipment, including 115kV structures and lines, control buildings and wiring, communications buildings, and wiring. This work may require trenching inside the substation and constructing temporary access facilities and construction laydown yards separate from CCSF's designated laydown yard. The identified CCSF construction laydown yard discussion does not include consideration for PG&E to find and replace the area that will be inaccessible for the duration of the Project." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.121])

RESPONSE PD-3

Commenters question whether the Martin Substation separation is feasible and identify potential space constraints and other detailed questions regarding the approach to separating Martin Substation. The comments also suggest additional work beyond the amount identified in the Draft EIR would be needed to complete the separation, that service outages could occur during separation work, and that the additional work and service outages could have additional impacts beyond those identified in the Draft EIR.

As described in Response PD-1, the Draft EIR addresses the whole of the action and all the work necessary to separate the Martin Substation. Draft EIR Table 2-2 (as revised in Chapter 8) identifies the components associated with the proposed Martin Substation separation. Since publication of the Draft EIR, minor refinements to the proposed separation have been made, as described in Section 8.1. Specifically, the boundary of the proposed separation has expanded farther west to provide flexibility for placement of new distribution facilities at the Martin Substation and encompass the 230 kV yard for the installation of two additional revenue meters. The following responses provided detailed information describing the proposed Martin Substation separation approach. The responses have been developed by the San Francisco Planning Department, in coordination with the San Francisco Public Utilities Commission as needed to provide technical information regarding the grid separation at Martin Substation. As discussed below, the Martin Substation separation as described in Draft EIR Chapter 2, Project Description, with modifications identified in Chapter 8, Project Description Refinements, is feasible and includes all work necessary to separate the Martin Substation.

As shown in Draft EIR Table 2-2, Martin Substation separation includes the following components: transformers, circuit breakers, a control house, revenue meters, foundations, underground duct banks with cables, vaults for cable splicing, switchgear buildings, and a fence. The comments identify challenges associated with clearances required around equipment and the space available at Martin Substation, as well as aspects of the individual components included in the Martin Substation separation. The following responses address specific comments regarding space needs or other specific aspects of Martin Substation separation. For the reasons discussed below, additional detailed design and location information for work within Martin Substation is not necessary to assess project impacts and would be determined at a later date. No additional equipment beyond that identified in the Draft EIR would be needed to complete Martin Substation separation, and the Martin Substation separation area shown on revised Figure 2-2 would encompass the full area where project separation work would occur.

ELECTRICAL AND OTHER CLEARANCES

The existing Martin Substation perimeter is enclosed by a security wall. Under the proposed project, this exterior wall would remain in place and continue to provide security for the property for both utilities to

meet all applicable security requirements. The parties would need to coordinate regarding administrative controls, access, and operation. While the commenters state an internal wall would be required for the project, the existing exterior wall would meet the necessary security requirements and therefore the Draft EIR included a fence to separate the City and PG&E assets within Martin Substation (refer to Draft EIR Table 2-2).

Conceptually, an up to 4- to 8-foot-tall interior fence would be installed within the partitioned Martin Substation project site to mark the separation of the two utility systems. This new fence would mark the ownership change and generally encompass the portion of Martin Substation to be acquired by the City (this would include the two 230/115 kV transformers, the central 115 kV bus section, the four 115/12 kV transformers, and the 12 KV distribution buses). The area acquired by the City would also include the area that is currently occupied by the 115/60kV transformer and 60kV equipment. The 115kV/60kV transformer and 60kV equipment would be relocated to another portion of the Martin Substation and would remain PG&E-owned. The fence would utilize nonconductive, dielectric material and include gates and removable fence sections as needed for access. The nonconductive fencing would be placed to maintain clearance and working space requirements in accordance with applicable codes and safety standards.

The fence would not block existing roads or access in the substation for routine PG&E operations and maintenance work or for emergency equipment use (such as use of the mobile replacement transformers identified in the comments). PG&E expressed concerns about access with additional internal fencing installed for use of a 115/12kV mobile replacement transformer. This concern is not relevant for PG&E since the City would acquire the four 115/12 kV transformers at Martin Substation.

As described on page 2-10 of the EIR, "[p]recise locations of the new equipment would be determined upon detailed design, but the total space needed for the new equipment is anticipated to be accommodated within the 975,000-square-foot bounded area shown in pink in Figure 2-2" (this boundary has been updated since publication of the EIR, as shown in Section 8.1). Draft EIR page 2-12 provides descriptions of the circuit breakers, revenue meters, switchgear buildings and control house. Draft EIR Table 2-2 provides information on the excavation dimensions. The circuit breakers would be 8 feet high on concrete pads, the revenue meters would be installed in-line with the substation bus, each switchgear building would be 20 feet wide by 50 feet long by 12 feet tall, and the control building would be 30 feet wide by 60 feet long by 20 feet high.

There are five existing transmission control buildings at Martin Substation. For the proposed project, PG&E would retain the 230kV control building, two 115kV control buildings, and 230kV shunt reactors. The City would acquire two existing 115kV control buildings and construct a new 115kV control building. The appropriate work would be implemented to ensure separate and adequate station power, battery, and charger equipment are in place for the City. The new control house is identified in the Draft EIR to allow for reliable and independent operation of the PG&E and City substations.

The proposed project would provide adequate physical and electrical separation and clearance between the two utilities. The proposed project would use existing substation transmission and distribution facilities and thus would meet all necessary space and clearance requirements. Where feasible new trenches would be utilized to separate PG&E and City electrical, control, and telecommunications cables. The new trenches would be installed within a 12-foot corridor. The City is aware that buried natural gas transmission and water lines are located at Martin Substation. The City would comply with all relevant requirements associated with excavation around natural gas lines. The estimated excavation amount associated with the proposed project is conservative and would not differ due to the presence of other underground lines.

60KV FACILITIES, TRANSFORMER, AND LINE

The 60kV facilities at Martin Substation only serve PG&E customers in San Mateo County. Therefore, the proposed project would relocate the existing 115/60 kV transformer and associated 60kV equipment at Martin Substation to PG&E's east bus section in the southeast section of the substation. A 60kV breaker would be installed connecting the 115/60kV transformer to the 60kV line exiting the substation. The 115/60kV transformer and 60kV breaker would be owned by PG&E. Access would be provided through existing gates and roads within the substation. The previous location of the 60kV facilities would be acquired by the City.

DIVISION OF 115/12 KV TRANSFORMER BANKS

Regarding PG&E's comment on the division of "115 kV banks" or 115/12 kV transformers, Draft EIR page 5-11 states that as part of the proposed project, the City would acquire specified equipment at Martin Substation including the 230/115 kV transformers, part of the 115 kV bus, and the 115/12 kV transformers. The Draft EIR further states two new 115/12 kV transformers would be built at the Martin Substation for PG&E distribution to San Mateo County.

Draft EIR pages 2-10 and 2-12 states that "[t]hree transformer foundations are proposed as part of the proposed project. The project would relocate one existing transformer [115/60 kV] at the Martin Substation to a new foundation and would install two new transformers [115/12 kV] on new foundations". Page 3.2-48 of the Draft EIR further explains that "[t]he exact location of new transformers on the Martin Substation site is currently unknown." Detailed design including new transformer locations would be determined and completed at a later date.

New duct banks from the new PG&E 115/12 kV transformers would be built to connect new feeders to the existing PG&E feeders at Geneva Avenue. The City would acquire the existing 12kV feeders and duct bank at Martin Substation that serve San Francisco customers and construct new feeders to replace existing feeders from Daly City substation serving San Francisco customers.

230 KV CIRCUIT BREAKERS

The existing 230kV facilities at Martin Substation currently meet all North American Electric Reliability Corporation (NERC) and applicable operational and protection requirements and this project proposes that these components would remain configured as is with changes to ownership only. The commenters state that two 230 kV circuit breakers would be required for the project, and that additional space would be needed to provide clearance around the two new breakers. The SFPUC disagrees that additional 230 kV circuit breakers would be required for the proposed project. The existing 230kV equipment would continue to be owned by PG&E and provide protection requirements and relay coordination connecting City-acquired 230/115 kV transformers. The proposed project would alter the ownership of the 230/115kV transformer but no major material or physical change would be needed. With the use of the existing equipment in place at Martin Substation, the space and clearance limitations described by PG&E are not an issue. As is typical of utility facilities between two parties, operating agreements, clearance coordination and cooperation between the City and PG&E would be required for the continued reliable operation of the substation after acquisition by the City. The project would include fencing as needed (as discussed above) to provide separation demarcation between the two utility systems.

115 KV CIRCUIT BREAKERS

Draft EIR Table 2-2 and text on page 2-12 states that 12 circuit breakers would be installed. The proposed project would use existing 115 kV breakers and positions to install and establish 12 circuit breakers for City and PG&E 115 kV facilities at Martin Substation.

Martin Substation has three 115 kV bus sections, eastern, central and western sections. For the proposed project, the City would acquire the central Martin Substation 115 kV bus section, two 230/115 kV transformers, four 115/12 kV transformers and the six 115 kV underground cables from Martin Substation to San Francisco. Five transmission lines and three transformers would be relocated or connected to a different position at the three bus sections.

Detailed design would be completed to determine the wiring, construction sequence and schedule to relocate the above-mentioned transformers and underground cables between the central, eastern, and western bus sections, the latter two collectively referenced here as the outer bus sections. Conceptually, as described in Draft EIR Table 2-8 and Figure 2-9, the relocation would be completed in steps by: (1) first establishing a 115 kV breaker position on the central 115 kV bus by using one of the vacant positions; (2) relocating a City-owned 115kV line from the eastern section to the newly established breaker position in step 1, freeing up a 115kV breaker position in the eastern section; and (3) relocating and reconnecting the PGE-owned 115/60kV transformer to the vacated eastern 115 kV bus section from the previous step. The City would continue with a similar relocation and reconnection process until all the transformer and transmission line reconnections have been made to the appropriate bus sections. In this way, no bus expansion is needed.

A sequential approach to reconnecting the various transmissions lines for the City or PG&E in steps would enable the implementation of the proposed separation without creating undue reliability risk or resulting in unplanned outages. PG&E has employed this approach when upgrading its Martin Substation 115 kV Bus in 2010. The use of vacant positions and relocating lines would not result in expansion of the existing bus. Thus, additional space or clearance area would not be required for the project.

CONTROL HOUSE

For the proposed project, Draft EIR page 2-12 indicates that a control house would be constructed as a pre-engineered or fabricated concrete or metal building at Martin Substation. The dimensions of the structure would be approximately 30 feet wide by 60 feet long by 20 feet high. Page 37 of Draft EIR Appendix A (Initial Study) further explains that the size, shape, and location of new above ground infrastructure, including the new control house and switchgear buildings, would be compatible with the industrial nature of the Martin Substation. In addition, with implementation of Mitigation Measure M-CR-1a, the control house and switchgear buildings would be separated from the Martin Substation building by at least 20 feet and be set back from Geneva Avenue by a minimum of 30 feet. This arrangement would limit visibility of the control house and switchgear buildings as seen from public right-of-way. Public views of the control house and switchgear buildings would also be partially or completely blocked by the existing security wall along Geneva Avenue.

REVENUE METERS AND FOUNDATIONS

Revenue meters would be placed at interconnection points between the City and PG&E's electrical systems; this would include the 230/115kV transformers, the Martin-Embarcadero 230kV lines, and the bus tie

breakers between the central and the eastern and western bus sections. Specific meter capacity, ratings, and locations would be determined once detailed design is completed.

DUCT BANKS/SHARED CABLE TRENCHES

The conceptual layout for the proposed project assumes some new cable trenching (refer to Draft EIR Table 2-2) that would reduce the extent to which PG&E and City telecommunication and protection circuits would be placed in a common trench. PG&E expressed concerns that NERC standards would not permit comingling of PG&E and City assets citing NERC CIP-002. The project does not propose comingling. It is anticipated that there would be some collocation of telecommunication and protection circuit trenches. NERC standard CIP-002-5.1a requires identifying and categorizing cyberassets (including communications cables and related equipment) but does not specifically prohibit collocation of cyber assets owned by separate parties in a common trench. As is typical of collocated utility facilities operated by two parties, operating agreements, clearance coordination and cooperation between the City and PG&E would be required as needed for collocated facilities. During more advanced design, the City would review in detail which City and PG&E facilities would be collocated to ensure reliability of telecommunications and protection circuits in shared trenches.

SWITCHGEAR BUILDINGS

For the proposed project, page 2-12 of the Draft EIR states that two 12 kV switchgear buildings would be installed at Martin Substation. The dimensions of the structures would be approximately 20 feet wide by 50 feet long by 12 feet high. Page 2-33 of the Draft EIR describes the construction activities in connecting the switchgears to the two new 115/12 kV distribution transformers. Page 37 of the Initial Study included as Appendix A in the Draft EIR further explains that the size, shape, and location of new above ground infrastructure, including the new control house and switchgear buildings, would be compatible with the industrial nature of the Martin Substation. With implementation of Mitigation Measure M-CR-1a, the control house and switchgear buildings would be separated from the Martin Substation building by at least 20 feet and to be set back from Geneva Avenue by a minimum of 30 feet. This arrangement would limit visibility of the control house and switchgear buildings as seen from the public right-of-way. Public views of the control house and switchgear buildings would also be partially or completely blocked by the existing security wall along Geneva Avenue.

Comment PD-4: New City Substation

This response addresses the following comments, which are quoted below:

O-CUE.3, O-PGE-2.8, O-PGE-2.19, O-PGE-2.122, O-PGE-2.124

"The DEIR does not accurately describe the proposed City Substation. CCSF intends to use sulfur hexafluoride (SF6) gas as the insulation medium for the new substation.[66] Although SF6 is commonly used in electric transmission and distribution equipment, it has extremely high global warming potential. Over a

[66] *DEIR at p. 2-51; id., appen. A, Initial Study at p. 123.*

100-year period, SF6 is 22,800 times more effective at trapping infrared radiation than an equivalent amount of carbon dioxide.[67]

The DEIR relies on an outdated version of the applicable regulations.[68] In 2021, the California Air Resources Board amended its regulations to phase out the acquisition of SF6 gas-insulated equipment, significantly altering the legal and regulatory landscape governing its use.[69] The DEIR's reliance on superseded regulations undermines the adequacy of its project description and environmental analysis.

CEQA requires that an EIR reflect a "good faith effort at full disclosure" and be prepared with "the best information reasonably available" at the time of publication.[70] An agency cannot rely on outdated or superseded information when more current, credible, and authoritative data is available. By failing to incorporate these regulatory updates, the DEIR does not accurately assess the Project's compliance obligations or environmental impacts. This omission is not merely a technical defect but fundamentally impairs the EIR's ability to inform decisionmakers and the public about the Project's feasibility, risks, and alternatives, particularly with respect to air quality and greenhouse gas emissions.

2. *The Construction Staging and Laydown Areas Are Not Identified for the Project Variant*

The DEIR states that the Daly City Yard would serve as the primary staging and laydown area for separation work at the Martin Substation.[71] However, it does not identify a staging and laydown area for the new City Substation.

The establishment and operation of a construction staging and laydown area can present a range of potentially significant environmental impacts depending upon the location. Site preparation, including vegetation removal and grading, can disturb soil and increase erosion, resulting in sediment-laden runoff that may adversely affect nearby water bodies. Air quality impacts may arise from the operation of diesel-powered equipment and the generation of fugitive dust, potentially contributing to regional nonattainment conditions under applicable air district thresholds. Noise from staging activities can disturb surrounding residential areas and sensitive wildlife habitats, particularly if operations occur during early morning or nighttime hours.

The DEIR states that existing materials and equipment in the Daly City Yard must be relocated to accommodate construction of the new City Substation,[72] yet it fails to specify the types of materials or equipment involved. Moreover, the DEIR assumes that the Daly City Yard, Brisbane Yard, or 2850 Bayshore Boulevard have adequate capacity to store these materials and equipment during separation work at the Martin Substation,[73] but it does not assess whether these areas can accommodate the existing inventory or support necessary construction staging and laydown operations for the new City Substation.

---

[67] *California Air Resources Board, Proposed Amendments to the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear: Resolution 20-28 (Sept. 24, 2020) p. 2, available at https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2020/sf6/finalres2028.pdf.*
[68] *DIER [sic], appen. A, Initial Study at p. 123, fn. 158.*
[69] *17 Cal. Code Regs. § 95350 et seq.*
[70] *CEQA Guidelines §§ 15144, 15151.*
[71] *DEIR at pp. S-7, 2-41.*
[72] *Id. at pp. S-8, 2-53 to 2-54.*
[73] *Id. at p. 2-41.*

These omissions impede a meaningful evaluation of potential environmental impacts associated with relocation and laydown activities, including possible soil disturbance, hazardous material handling, or localized increases in noise and air emissions. As such, the DEIR fails to provide a full and accurate project description under CEQA, rendering its analysis legally deficient." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of California Coalition of Utility Employees [O-CUE.3])

"The DEIR fails to account for the construction staging area needed to support the proposed Variant." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.8])

"The DEIR's Project description is also inadequate because the Project Variant as described would be unlawful. The DEIR states that the New City Substation would use sulfur hexaflouride gas (SF6) as the insulating medium. (DEIR, p. 2-51.) The DEIR states that SF6 has two to three times the insulating ability of air, "allowing of a compact footprint for the new City Substation." (*Id*.) What the DEIR buries in the attached Initial Study is that SF6 is the most potent greenhouse gas that exists on Earth with an airborne lifespan of a millennium. (*See* Initial Study, p. 123 ["SF6 gas has 23,900 times the global warming potential of CO2"]; **Exhibit C** [United States Environmental Protection Agency "Sulfur Hexafluoride (SF6) Basics"].) This means "a relatively small amount of SF6 can have a significant impact on global climate change." (Exhibit C.)

Because SF6 equipment is known to leak this potent greenhouse gas, PG&E has already begun voluntarily phasing out its use of SF6 in its existing facilities. The State of California has also now adopted regulations mandating that no new SF6 equipment with up to 145 kV capacity be permitted after January 1, 2025, and no new SF6 equipment with up to 245 kV capacity be permitted after January 1, 2027. (17 C.C.R. § 95352.) The proposed New City Substation would include both 115 kV and 230 kV equipment (DEIR, p. 2-51), thus, the construction of the Variant would be unlawful. As explained in Exhibit B, the footprint of the Variant using the industry-preferred substitute technology would require an approximately 25% increased footprint. (Exhibit B, p. B-16.) That is a material change that must be considered and analyzed in a revised DEIR.

Thus, the DEIR must be revised to include a Project description and range of feasible alternatives (Alternative D also proposes SF6 technology) that are not facially unlawful. (CEQA Guidelines, § 15364, emphasis added ["'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, *legal*, social, and technological factors"].) As such, the Project description should remove the Variant. CCSF must decide whether its preferred Project involves the separation of the Martin Substation or a new substation. If a new substation is the preferred Project, a legal insulation technology should be proposed and the proposed facility should include a feasible footprint that also takes into account the required laydown area for construction. This will allow CCSF to appropriately analyze and disclose the potential environmental impacts of the Project. If the DEIR is not revised and recirculated, it will not serve as an adequate informational document to inform the public and the decision-makers of the potential environmental impacts that could result if a New City Substation project on the Martin Service Yard or Alternative D is approved. (*San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.App.4th at 734.)" (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.19])

"[Variant] [PG&E Work Excluded from DEIR]. The proposed New City Substation would require a 230kV line from the Martin 230kV portion of the Martin Substation. Currently the Martin Substation does not have a 230kV bay available for this and would need to be expanded to accommodate a 230kV connection from the Martin Substation to the New City Substation. This work would also require a construction laydown yard for PG&E. The laydown yard would be in addition to CCSF's planned construction laydown yard, which is not specified for the Project Variant. The identified CCSF New City Substation does not include consideration for PG&E to find and replace the area that will be inaccessible and unusable due to the Variant.

Further, the Variant proposes to utilize an SF6 Gas Insulated Switchgear (GIS) substation, which it is anticipated will be prohibited by law by the time of construction of the Variant. A non-SF6 clean air/vacuum alternative will be approximately 25-percent larger in size than the SF6 GIS. As such, the DEIR underestimates the true footprint of the Variant. This needs to be fully described and addressed in a revised DEIR. Further, this increased footprint could have downstream effects on PG&E's work. In addition, GIS has a more negative impact on greenhouse gas levels than the alternatives. Indeed, PG&E and the state of California are in the process of phasing out SF6 GIS precisely because of these climate concerns." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.122])

"[Alternative D] [PG&E Work Excluded from DEIR] The proposed New City Substation would require a new 230kV line from the 230kV portion of the Martin Substation. Currently the Martin Substation does not have a 230kV bay available for this. As a result, the substation would need to be expanded to accommodate a 230kV connection from the Martin Substation to the New City Substation. Currently there is no available space in the 230kV yard for adding a new line connection. The DEIR should be supplemented to account for this requirement.

This work would also require a construction laydown yard for PG&E in addition to what CCSF plans to use for a construction laydown yard, which is not specified for Alternative D or addressed in the DEIR." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.124])

RESPONSE PD-4

The commenters question the accuracy of the gas-insulated substation (project variant) description because the description includes the use of sulfur hexafluoride (SF6) in electric equipment and does not explicitly identify a construction staging area. Commenters reference California Air Resources Board regulations regarding the use of SF6 in electric equipment and state that the Draft EIR should include current regulations. The regulations referenced (California Code of Regulations title 17, sections 95350 et seq.) list phase-out dates for use of SF6 gas-insulated switchgear in section 95352. Table 2 in section 95352 lists phase-out dates for equipment with voltage capacity greater than 38 kV, such as the proposed gas-insulated equipment discussed in the Draft EIR. For equipment less than 145 kV and with a short circuit current rating of more than or equal to 63 kA, the phase-out date is January 1, 2028. For equipment with voltage capacity between 145 and 245 kV with a short circuit current rating of more than or equal to 63kA, the phase-out date is January 1, 2031. While construction of SF6 gas-insulated equipment could be completed before the phase-out dates specified in the regulations, if construction occurs after the relevant phase-out date, other commercially available non-SF6 gas-insulated equipment would be used at the new City Substation (project

variant). Multiple non-SF6 gas alternatives are available, including mixes of nitrogen and oxygen and certain fluorinated gases.[6] Use of gas alternatives would not alter the size of the new City Substation (project variant) overall footprint; the polygon shown in Draft EIR Figure 2-12 would accommodate SF6 gas alternative facilities as well as construction staging.

The number of compartments for gas storage would be the same as identified in the Draft EIR and the basic components of the new City Substation shown in Draft EIR Figure 2-12 would not change. CEQA requires an EIR to identify and focus on the significant effects of the proposed project on the environment.[7] As discussed in Response PD-1, Draft EIR Chapter 2, Project Description, describes all components of the City's proposed project consistent with requirements of CEQA.[8] It would be speculative to evaluate impacts of a different type of substation than that proposed by the project sponsor in Chapter 2. As noted in CEQA section 21082.2, the determination of whether a project may have a significant effect on the environment should be based on substantial evidence in light of the whole record, and speculation is not considered substantial evidence. Therefore, as revised in Chapter 11, Draft EIR Revisions, the Draft EIR's consideration of gas-insulated equipment is reasonable and the Draft EIR serves as an adequate informational document to inform the public and the decision-makers of the potential environmental impacts of the project or project variant.

Regarding comments that state the EIR does not account for a construction staging area or work within the Martin Substation needed to support the new City Substation (project variant), the area shown in Draft EIR Figure 2-11 for the new City Substation (project variant) includes construction staging to support the new City substation. As also shown in Draft EIR Figure 2-11, new underground transmission lines would be constructed to connect the new substation to the PG&E Martin Substation to maintain interconnection with PG&E. Response AL-2 discusses construction staging and other information regarding Alternative D.

Comment PD-5: Staging Areas and Service Yards

This response addresses the following comments, which are quoted below:

O-PGE-2.4, O-PGE-2.9, O-PGE-2.21, O-PGE-2.30, O-PGE-2.61, O-PGE-2.118

"The DEIR fails to analyze the impacts to electric system reliability and safety resulting from the Project's impacts to PG&E's critical service yard facility." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.4])

"The DEIR does not disclose that the Project or Variant will render the Martin Service Center temporarily or permanently unusable to support numerous PG&E lines of business in CCSF and San Mateo County. The potential for environmental impacts related to the relocation of the Martin Service Center operations are

[6] U.S. Environmental Protection Agency, Moving Toward SF6-Free High Voltage Circuit Breakers: Considerations for Adopting Vacuum Breaker and Fluorinated Gas Alternative Technologies. 430-R-20-007, undated.
[7] CEQA Guidelines section 15126.2(a).
[8] CEQA Guidelines section 15124(a)-(d).

therefore not disclosed or considered." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.9])

"An additional fault of the Project description, as further detailed in Exhibit B, is that there is no description of how or where PG&E would relocate its operations at the Martin Service Center (referred to as the Daly City Yard in the DEIR) which will be a necessary first step before any construction at the Martin Substation could occur. The Martin Service Center supports operations, maintenance, and various project work for more than 10 different PG&E lines of business serving CCSF and San Mateo County customers as far south as San Mateo Substation. These include electric distribution, transmission and substation construction and maintenance; gas construction and maintenance; fleet services, and materials services. PG&E's Martin Service Center location is of high importance because it is geographically positioned to support PG&E service territory to the north and south and is freeway accessible for rapid emergency and maintenance responses. It also provides adequate access for large vehicles with heavy loads and wide turning requirements. In order to allow PG&E to provide adequate maintenance and emergency responses it is necessary to co-locate office, maintenance shop, emergency response storage, and outdoor storage/staging at the site.

Even if CCSF acquires PG&E's electric service as part of the Project, PG&E will still need to provide service coverage to San Francisco for gas and other services. PG&E is unaware of any light industrial property located near the border of CCSF and San Mateo County with the size or location needed to bridge the disruption that would be caused by the Project. This is especially true because over $100 million dollars of construction projects are already planned to utilize the Martin Service Center and Substation, and this work will soon occupy any presently excess space needed for construction laydown areas and new facilities as part of CCSF's project.

Such impacts would at least be doubled for the Variant because CCSF would need to permanently take a portion of the Martin Service Center and temporarily take an additional portion of the Martin Service Center for a construction laydown area. But despite these significant challenges triggered by the Project, the DEIR is silent on the need for such a laydown area for both the Variant and Alternative D. CCSF should immediately retain a broker to determine whether any adequate space is available to host or relocate the Martin Service Center operations on the timeline needed for the Project, and should revise the DEIR to include the specific properties that CCSF deems adequate to relocate PG&E operations as part of the Project so that PG&E can analyze whether those locations would be sufficient or risk service disruptions and impacts to PG&E's ability to respond to emergencies such as earthquakes." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.21])

"The DEIR needs to identify whether additional generator(s) would be required at PG&E's relocation site for substation activities displaced by the Project (whether temporarily under the Project or permanently under the Project Variant)." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.30])

"The DEIR needs to identify whether additional generator(s) would be required at PG&E's relocation site for substation activities displaced by the project (whether temporarily under the Project or permanently under the Project Variant). This information should be carried forward to the DEIR's air quality and noise analyses." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.61])

"8. The DEIR Fails to Fully Capture the Impacts of CCSF's Proposed Construction Laydown Yard at the Martin Service Center.

The DEIR's plan for CCSF to stage a construction laydown yard at the Martin Service Center (MSC) will require PG&E to find and replace that area for its operations. Under the Project as well as the Project Variant, PG&E will need to relocate its operations at the MSC (either permanently or over an extended period) because it will become inaccessible and unusable for the duration of the Project's construction (which, as discussed above, would likely take much longer than the time period CCSF has conveyed in the DEIR).

MSC is currently used by PG&E to support operations, maintenance, and various project work for gas, electric, and other lines of business serving CCSF and San Mateo County as far south as the San Mateo Substation. The MSC, which occupies a total of approximately 14 acres, includes:

- A service center building, which provides approximately 120,000 square feet of office space for Operations/Maintenance (O/M) workers, management, and administrative support staff supporting gas, electric, and other lines of business;
- Fleet service facilities;
- Exterior space for employee parking, O/M equipment parking, O/M materials storage, various projects staging/storage, compressed natural gas (CNG) filling, and (future) electric vehicle charging stations; and
- Adjacent storage yard includes electric and gas storage, warehousing, general storage buildings, and emergency response (earthquake preparedness) storage.

The MSC is uniquely positioned to accommodate the above uses for PG&E. It is optimally located to house and serve multiple lines of business (e.g., gas service and electric service) both north and south on the peninsula, and it is near the freeway to allow for faster customer service. MSC is accessible to, and has internal maneuverability space for, large equipment, bulk materials, and large vehicles with heavy loads and wide turning requirements. It also allows office operations, maintenance operations, emergency response storage, and outdoor storage/staging, among other important operations, to be co-located; dispersal of those services would significantly complicate logistics and increase drive times, resulting in a reduction in routine service times and emergency response.

Relocating these functions would not be simple or straightforward, and would involve significant work as well as additional vehicle traffic. To the contrary, there are several barriers to finding a suitable replacement for MSC operations, none of which are address in the DEIR:

- Existing PG&E facilities lack space for absorbing the multiple components of MSC separately or in aggregate. PG&E's Harrison Service Center in San Francisco already exceeds capacity, does not have

equivalent access, and is distant from service territory in San Mateo. The nearest PG&E service center to the south in San Carlos already exceeds capacity and is located 18 miles away.

- Almost no suitable light-industrial properties exist in geographic locations that serve PG&E's gas and electric customers currently supported by the MSC. For example, PG&E has looked for years to find suitable space to expand its San Francisco Hoedown Yard and has been unsuccessful. Local zoning restrictions on light-industrial uses generally prohibit establishment of an equivalent multi-purpose facility with exterior storage space.
- Local entitlement processes are challenging and time consuming.

The DEIR fails to address any of this. Temporary or permanent relocation of MSC functions is not identified as essential Project component and therefore not analyzed at any level. But the relocation of PG&E's MSC facilities, either temporarily or permanently, *is* a necessary Project component under the DEIR. Therefore, the DEIR must provide details on how and where PG&E will relocate its critical MSC operations temporarily, for the duration of the Project's construction (under the Project) or permanently (under the Project Variant), and assess the relevant environmental impacts.

In addressing these considerations, several aspects of the DEIR will likely change. For example:

- Currently, the DEIR identifies less than significant impact for relocation of electric power utilities in relation to Impact UT-1, claiming: "Overall, the project or project variant would not affect electric power supply and therefore would not require or result in the relocation or construction of new or expanded electric power facilities other than the facilities proposed as part of the project." (Initial Study, pages 135 – 136.) The analysis will likely change, however, after accounting for a temporary or permanent relocation of PG&E's MSC facilities.
- The Project Variant does not account for a staging area for construction of a substation at the MSC. Upon properly accounting for a staging area, the required space for the Variant would require at least double the space identified, with one area for the proposed new substation and a second area for staging.
- The DEIR's schedule does not accurately reflect the time required to temporarily or permanently relocate the MSC, including the time needed to plan, permit, acquire an alternative site. Starting construction on the Project in 2026 is neither realistic nor feasible.

In sum, the DEIR must identify a feasible relocation site for the displaced PG&E MSC operations and analyze the environmental impacts of that relocation as part of the Project, consistent with the California Environmental Quality Act's (CEQA) requirements to assess the whole of the action. Moreover, if an updated DEIR cannot adequately identify a suitable relocation space, the Project and Project Variant may both be infeasible." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.118])

RESPONSE PD-5

The commenters state that the EIR should describe where PG&E would relocate the PG&E equipment and operations in Daly City Yard either temporarily (during Martin Substation separation) or permanently (if the new City Substation [project variant] is built at Daly City Yard). The comments refer to the Daly City Yard as the Martin Service Center or MSC. The comments state that the site supports electric distribution,

transmission, and substation construction and maintenance; gas construction and maintenance; fleet services; and materials services. The comments state that relocation of PG&E's activities from Daly City Yard to another location should be included as part of the project and evaluated in the EIR, that additional staging would be needed for construction of the new City Substation, and that the EIR impact analysis will need to change based on this information. This response discusses the amount of staging area required for the project and project variant, the locations of staging areas for project and project variant construction, and the locations of PG&E equipment storage and parking after construction is complete. For the reasons described below, the EIR as refined in Chapter 8 evaluates impacts of sufficiently sized construction and long-term staging for the City and PG&E and no further refinements are required. The text in Comment O-PGE-2.118 regarding starting construction in 2026 is addressed in Response PD-6.

STAGING AREAS REQUIRED FOR PROPOSED PROJECT AND PROJECT VARIANT

Draft EIR Figure 2-2 shows the work and staging areas for the proposed project. The project site would be located on the Martin Substation, and the staging area would be located within Daly City Yard (shown as a blue square). The staging area would encompass approximately 88,500 square feet and would be used for approximately 33 months as shown in Table 2-9 of the EIR. The staging area is anticipated to accommodate materials and equipment laydown needs of the proposed project.

Draft EIR Figure 2-11 shows the new City Substation (project variant) at Daly City Yard (pink square). The project variant boundary is inclusive of both staging activities and permanent new facilities. The square footage of this polygon is approximately 133,500. No boundary changes to the Daly City Yard staging area are necessary for the project variant footprint because there would be sufficient space in those areas to accommodate anticipated layout, staging activities and new facilities.[9] (See Response PD-4 for more information regarding the project variant footprint). As currently proposed, the largest proposed component footprint on the Daly City Yard would be approximately 22 percent of the overall Daly City Yard site (approximately 133,500 square feet of the 613,900 square feet). The new City Substation (project variant) location avoids affecting the existing service center building, natural gas fueling, and fleet services facilities.

The Draft EIR discusses construction activities for the Martin Substation separation in Section 2.5.1.1. Draft EIR Table 2-8 lists the steps involved in the Martin Substation separation.

CONSTRUCTION STAGING FOR PROPOSED PROJECT OR PROJECT VARIANT

The Draft EIR acknowledges that, during construction of the project, PG&E would not be able to use a portion of the Daly City Yard for parking and equipment staging. The Draft EIR indicated that equipment would need to be relocated from the Daly City Yard and identifies potential locations where similar space may be available. Page 2-41 of the Draft EIR states: "Prior to any work or staging at the Daly City Yard, existing trailers and other PG&E equipment would need to be relocated to other areas of the Daly City Yard, Brisbane Yard, or 2850 Bayshore Boulevard.[40]" Footnote 40 states that "[b]ased on review of aerial imagery, it is assumed that sufficient space is available for equipment and vehicle storage in the locations listed." In addition, as discussed in Chapter 8, Project Description Refinements, the City has added a staging area for the project and project variant at the Brisbane Baylands site adjacent to the Martin Substation. The Baylands staging area would be used either as the construction staging for Martin Substation separation or to temporarily stage PG&E equipment and parking that is displaced from the Daly City Yard during construction. The Baylands staging area is larger than the Daly City Yard staging area identified for the proposed project and is

[9] The boundary of Alternative D is also sufficient for construction and staging activities of a new substation.

approximately the same size as the new City Substation footprint, and thus would be sufficiently sized to accommodate staging activities of the proposed project. Although not needed, the Baylands staging area could also be used during construction of the project variant, to reduce the overall footprint of the substation construction area within the Daly City Yard.

If the Baylands staging area were to be used for the relocation of PG&E material, equipment, and operations when portions of the Daly City Yard are occupied during construction of the proposed project, the site would be sufficient to accommodate materials and equipment currently housed at the Daly City Yard that would be displaced by the proposed project and project variant given it is comparable in size to the project variant. Therefore, the Baylands staging area would address PG&E's concern regarding the lack of space "for absorbing the multiple components of MSC separately or in aggregate."

The activities that would be displaced by either construction staging or substation construction at the Daly City Yard are not anticipated to include any power service functions. The area is used for equipment/materials staging and parking. The new City Substation (project variant) location avoids affecting the existing service center building, natural gas fueling, and fleet services facilities Therefore, generators are not anticipated to be needed at the Baylands staging area.

Whether the Baylands staging area is used for project staging, temporary storage of PG&E materials and equipment, or temporary PG&E parking, fencing and lighting would be needed for security purposes. The relocation of PG&E assets to the Bayland staging area would require electrical service to the area, which is anticipated to be achieved through a power drop from the existing nearby poles or from battery / solar equipment. Thus, diesel generators are not anticipated. A 24-hour guard may be needed as well. This refinement has been included in Chapter 8, Project Description Refinements. As discussed in Chapter 8, the use of the Baylands staging area for parking and equipment storage during construction would not result in any new or substantially more severe environmental impacts than identified in the Draft EIR, including impacts related to transportation and circulation.

PG&E EQUIPMENT STORAGE AND PARKING FOLLOWING CONSTRUCTION

If the proposed project or project variant were to proceed, PG&E's electrical assets in San Francisco would transfer to the City, and there would be a commensurate reduction in PG&E's materials, equipment and operations related to its electrical service.

Under the proposed project, there would not be any further disruption to PG&E operations because PG&E's materials, equipment, and operations would be relocated back to the Daly City Yard when construction is complete. If the project variant were implemented, the reduction in PG&E-owned electrical assets would be anticipated to free up space at PG&E's existing Harrison Street Yard to accommodate relocated materials, equipment, and operations from the Daly City Yard. Given the space needs of the project variant would be as proposed and not expand as suggested by PG&E, there would also be remaining space at the Daly City Yard to accommodate existing materials, equipment, and operations displaced by the project variant. Also, the space could be reconfigured so that PG&E's operations at the Daly City Yard could use a smaller footprint than the existing operations.

The Draft EIR indicated that equipment would need to be relocated from the Daly City Yard and identifies potential locations where similar space may be available. Page 2-41 of the EIR states: "Prior to any work or staging at the Daly City Yard, existing trailers and other PG&E equipment would need to be relocated to other

areas of the Daly City Yard, Brisbane Yard, or 2850 Bayshore Boulevard.[40]" Footnote 40 states that "[b]ased on review of aerial imagery, it is assumed that sufficient space is available for equipment and vehicle storage in the locations listed." If capacity at the Daly City Yard, Brisbane Yard, 2850 Bayshore Boulevard, or Harrison Street Yard remains insufficient, then PG&E materials, equipment, and operations could be accommodated in the 150,000 to 200,000 square feet of operations and maintenance service yards and materials and equipment storage space evaluated in the Draft EIR. This would address PG&E's concern regarding the lack of "suitable light-industrial properties in the geographical locations that serve PG&E's gas and electric customers currently supported by the MSC."

Comment PD-6: Other Project Description Comments

This response addresses the following comments, which are quoted below:

O-PGE-2.2, O-PGE-2.13, O-PGE-2.18, O-PGE-2.84, O-PGE-2.110, O-PGE-2.116, O-PGE-2.119

This response also addresses Comments O-PGE-2.126 and O-PGE-2.128, which consist of graphic exhibits and are included in Attachment A, Draft EIR Comments, Letter O-PGE-2, Exhibit B-1.

"A review of the DEIR provides the impression that CCSF's environmental review team has not been adequately informed (or informed at all) by CCSF staff involved in CPUC proceedings as to the likely scope of the Project. Despite the fact that the CPUC proceedings involve the exact same underlying acquisition and separation as the Project, there are significant discrepancies in CCSF's approach in the CPUC proceedings and in the DEIR. For example, the DEIR's Project description focuses on the separation work at the Martin Substation that would be necessary to divide PG&E's existing substation facilities there. However, the DEIR's proposed separation plan for PG&E's Martin Substation is not the same approach that CCSF proposed in the testimony it filed on April 10, 2023 in support of the Petition for Valuation CCSF filed at the CPUC in July 2021.[3] Nor is the approach in the DEIR consistent with the proposal that CCSF is currently putting forth as its most likely approach at the CPUC in its valuation proceeding. Instead, CCSF in ongoing CPUC proceedings proposes that PG&E construct a new substation to implement the effective separation of the two electric systems. This alternative is found nowhere in the DEIR, let alone the Project description. The Project description also includes a "Variant" that would require construction of a new CCSF substation located on the parcel where PG&E's Martin Service Center currently resides. The sizing of the Variant relies on a gas insulated switchgear ("GIS") technology that is now unlawful for new equipment due to its impacts on climate change. The DEIR must be revised to account for the environmental impacts of a Variant and alternatives sized using lawful technology, which will require a larger footprint." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.2])

"This concern extends to the proposal CCSF is currently supporting at the CPUC where PG&E constructs a new substation to implement the separation of the two electric systems. This proposal is not analyzed in the

[3] *See CPUC Docket No. P.21-07-012.*

EIR and as such the CPUC would not be able to rely on the DEIR for its approval of the Project if that is the selected course of action. In short, this is another reason why CCSF was legally required (notwithstanding its comments otherwise) to integrate the CPUC-specific environmental concerns into the DEIR." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.13])

"However, despite the importance of the project description, the DEIR simultaneously takes a rather expansive and amorphous view of the Project on the one hand in terms of presenting the Project as one of two options (i.e., variants) and a very limited and narrow view of the Project on the other hand in terms of failing to describe the "whole of the action." As discussed below, each of these flaws independently causes the DEIR to violate CEQA's requirement that the project description be "accurate, stable and finite."

1. Unstable Project Description Due to the New City Substation Project Variant

The DEIR's inclusion of the New City Substation as a "project variant" renders the Project description unstable—in violation of CEQA. The cases of *stopthemillenium*, *South of Market Community Action Network v. City and County of San Francisco* (2019) 33 Cal.App.5th 321 ("*SOMCAN*"), and *Washoe Meadows Community v. Department of Parks & Recreation* (2017) 17 Cal.App.5th 277 ("*Washoe Meadows*") affirm this to be the case. In *stopthemillenium* and *Washoe Meadows* the courts found the EIRs deficient where no specific project was identified—only illustrative development scenarios that established a maximum environmental impact (in the case of *stopthemillenium*) or different alternatives from which a project would later be selected (in the case of *Washoe Meadows*). (*stopthemillenium* at p. 18–19; *Washoe Meadows* at p. 288–289.) The lack of a defined project failed CEQA's mandate for an "accurate, stable, and finite" project description. (*Id*.) By contrast, in *SOMCAN*, the court upheld a project description with multiple options because the variations analyzed were minor in difference (as both options were on the same site and had similar footprints, but simply shifted allocation of residential and office components) and, as such, the presentation of the project as multiple options could not cause confusion. (*SOMCAN* at pp. 332–334.) In fact, the court found the "project description here enhanced, rather than obscured, the information available to the public." (*Id*., at p. 334.)

Here the DEIR's Project description more closely mirrors that of the amorphous, distinct, and noncommittal project descriptions in *stopthemillenium and Washoe Meadows*. The DEIR presents two materially distinct variants (for a single component of the Project)—the Martin Substation Separation and the New City Substation Project Variant—as interchangeable "Project" and "Project Variant" options. (*See* DEIR, pp. S-3, S-8, 2-6, 2-9–13, 2-49–56.) However, the DEIR fails to clearly identify which of these two constitute the proposed Project. (*See*, *e.g.*, DEIR, p. 2-57 ["[t]he permits and approvals anticipated to be required for the project or project variant …"].) The Project and Project Variant have different footprints (which could differ the relation to sensitive receptors), different features (unlawful SF6 gas-insulated switchgear buildings for the Project Variant and an outdoor, air insulated system for the Project) that would significantly impact both construction and operations, and different transmission and distribution lines (including the extents of excavation for such lines—3,500 feet for the Project and 9,000 feet for the Project Variant). (DEIR pp. 2-9–13, 2-49–56, 5-22.) The material differences between the two here certainly skew the analogy away from the project description upheld in *SOMCAN* where the variations were minor in nature.

The ambiguity in the DEIR's presentation of both the Project and the Project Variant is compounded by the DEIR's failure to explain why the New City Substation is considered a variant rather than a formal alternative, despite its similarities to another "New City Substation" alternative—Alternative D: New Brisbane Baylands

Substation. (DEIR, pp. 5-22–23; *see also* DEIR, pp. 5-31–32 [Alternative D achieves all of the same Project objectives as the Project Variant].) The overall result is a Project description that violates CEQA's mandate for an "accurate, stable, and finite" project description—and confuses the scope of review. Because the DEIR does not "adequately apprise all interested parties of the true scope of the project for intelligent weighing of the environmental consequences of the project" the DEIR is inadequate as a matter of law. (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 734.)" (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.18])

"No Explanation for Distinction between Alternative and Project Variant: The DEIR fails to explain why the Baylands Substation is considered an Alternative but the City Substation is considered a Project Variant. This inconsistency results in an inconsistency of level of description and analysis between two similar types of options (see below), which can confuse the public and decision-makers." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.84])

"As a threshold matter, the described Project and Alternatives do not correspond to the project that CCSF seems to be pursuing in the California Public Utilities Commission (CPUC) valuation proceeding CCSF initiated in July 2021 for a determination of the "just compensation" that CCSF would owe for its proposed taking of PG&E's assets. The most noteworthy discrepancy (among many) between the Project and alternatives in the DEIR and the proposal in the CPUC proceeding is the need for PG&E to build a new substation.

The CPUC staff has hosted workshops between CCSF and PG&E, a large part of which have focused on attempting to identify and refine the particular taking scenario that CCSF will select— especially with respect to PG&E's Martin Substation. In the most recent CPUC staff workshop, in January 2025, CCSF presented its leading scenarios for separation, which would involve CCSF taking the entirety of the Martin Substation and PG&E constructing a completely new substation. CCSF presentation materials noted that there were several different types of new substations that PG&E might need to build depending on the scope of CCSF's taking at Martin and its plan for separation. The size of the new substation, and its possible locations, would be determined by the scope and details of CCSF's acquisition.

The DEIR does not include as a Project component or as an Alternative CCSF taking the entirety of Martin and PG&E constructing a new substation. If this taking remains CCSF's preference, as PG&E believes it to be, the DEIR must be amended to include this situation as the Project or an Alternative. Even if not CCSF's preference, because CCSF considers this approach potentially feasible (as demonstrated by its active promulgation in the CPUC proceeding), the DEIR must be amended to include this situation as the Project or an Alternative." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.110])

"The DEIR's three-year construction timeline (see DEIR page S-7) is unrealistic, as it fails to account for critical factors that will significantly extend the Project timeline. The DEIR overlooks the infeasibility of some of the Project's proposals due to the existing configuration of the Martin Substation, long lead times for equipment, complex construction sequencing required because of the aforementioned space constraints, and the need

for clearances required for safety (examples of which are listed on Attachment A, page 18). Further, the DEIR construction timeline does not include sufficient time to analyze the environmental impacts of the trenching work within and outside the Martin Substation. This trenching work is required for the separation, protection, and communication re-wiring efforts. Because of the extent of the trenching work, more outages and a longer construction schedule would likely be required.

In PG&E's assessment, a 10-year construction timeline is more likely. (See Attachment A, page 18.) A detailed, feasible, and accurate construction timeline is essential to mitigate disruptions, ensure compliance with environmental regulations, and assess the Project's potential environmental impacts. An unrealistic construction timeline fails to disclose to the public and decision-makers the actual scope of the Project." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.116])

"While section 2.8.3 of the DEIR identifies more than 14 permits and approvals anticipated for CCSF to execute the proposed Project, Variant, and alternatives, this is not an exhaustive list. Other potential permits and approvals are buried in various mitigation measures proposed in the DEIR, such as deferred pre-construction surveys, impact analyses, and potential agency consultations (e.g., Mitigation Measure M-BI-1c: Special-Status Butterfly Protection Measures). The DEIR should be updated to contain these additional permits. Moreover, it seems infeasible that these deferred surveys, agency consultations, and any resulting permits or approvals would be concluded prior to the anticipated construction start date in 2026.

Further, section 2.8.3 of the DEIR does not identify or acknowledge critical permits and approvals required for PG&E to execute a complex scope of work that is missing from the DEIR but required by the Project. A glaring omission is PG&E's need for a Permit to Construct (PTC) from the CPUC in accordance with General Order 131-E. The CPUC's *Transmission Project Review (TPR) Data FACT SHEET* (August 2024) reports the average time for permitting to be 30 months following submittal of the application. Preparation of the application cannot begin without designs and construction plans sufficient to inform the environmental analysis. The *FACT SHEET* reports the average preapplication phase to be 36 months. Thus, the CPUC estimates that permitting of typical projects has averaged 5.5 years. The PG&E Egbert Substation Project in San Francisco took roughly 7 years to plan and permit. The DEIR unrealistically identifies a construction start date in 2026, less than 8 months away.

Many other environmental permits and approvals anticipated to support the complex PG&E scope of work precipitated by the Project are long-lead processes (e.g., Coastal Development Permits) that would typically leverage existing CEQA documentation. Because the DEIR fails to include or address the PG&E scope of work as part of the Project, the DEIR would not likely be adequate to support issuance of necessary PG&E permits from other agencies. For example, the DEIR clearly does not meet the requirements identified in CPUC's *Guidelines for Energy Project Applications Requiring CEQA compliance: Pre-filing and Proponent's Environment Assessment* (November 2019). As a result, PG&E would need to prepare a separate CEQA document to comply with GO 131-E, as discussed above.

Several non-environmental permits, approvals, and land rights would be required following the conclusion of the PTC CEQA process. As identified in the DEIR, the Federal Energy Regulatory Commission (FERC) may be required to approve interconnection of a new or expanded substation, and the CPUC would be required to approve the transfer of utility assets. Neither of these approvals can reasonably be expected to be complete in time for a 2026 start of construction. Also not factored into the DEIR schedule are the modifications of

existing land rights or the acquisition of new land rights that might be required to support the PG&E scope of work caused by the Project. This process would not commence until the FERC and CPUC approvals processes are complete and could take considerable time, depending on the extent and nature of the rights needed." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.119])

_____

RESPONSE PD-6

The comments above question the consistency of the Draft EIR project description with ongoing CPUC valuation proceedings, the Draft EIR's inclusion of a project variant, and the anticipated construction schedule. To the extent these same comments address the "whole of the action," refer to Response PD-1.

NEW SUBSTATION AND CPUC PROCEEDINGS

Multiple comments express uncertainty regarding whether the Draft EIR evaluates a new PG&E substation, and state that such a substation should be included in the Draft EIR due to ongoing CPUC valuation proceedings.

The commenters' assertion that the Draft EIR should reflect the CPUC valuation proceedings is not correct. The CEQA process and valuation proceedings are distinct processes. The purpose of the valuation proceeding referred to by the commenters is to value those PG&E assets the City seeks to acquire. The valuation proceeding is an economic and administrative activity that involves an assessment of monetary value and does not necessarily result in a change to the physical environment. Valuation does not constitute a "project" under CEQA because it is not an activity that may cause a direct or reasonably foreseeable indirect physical change in the environment (Public Resources Code Section 21065; CEQA Guidelines Section 15378). To the contrary, a valuation is an informational step that may or may not precede a physical project. CEQA is clear that an economic or social change, by itself, is not considered a "significant effect on the environment" for purposes of the statute (CEQA Guidelines Section 15064[e], 15131, 15382). Furthermore, neither the City's provision of a separation plan for the purposes of valuation nor a CPUC decision fixing just compensation constitute a project approval, i.e., a commitment to "a definite course of action" with respect to the potential acquisition of PG&E assets.

The Draft EIR evaluates construction of a new substation as a project variant (instead of the Martin Substation separation). A different new substation in another location is also evaluated as an alternative. Impacts of new substations in both locations are addressed in the Draft EIR. As discussed in greater detail below (under "Inclusion of Project Variant"), the Draft EIR discusses construction of a new substation in Section 2.7, New City Substation (Project Variant), of Chapter 2, Project Description, and evaluates the new City Substation on a resource-by-resource basis in the impact discussions. Comment O-PGE-2.2 also states that the "variant" substation relies on technology that is unlawful and that a new substation would require a larger footprint than evaluated in the Draft EIR. As discussed in Response PD-4, while the technology is currently legal and is expected to remain so at least until 2031, if construction occurs after the relevant phase-out date, other commercially available non-SF6 gas-insulated equipment would be used at the new City Substation (project variant).

In addition, although valuation proceedings are ongoing, the City does not anticipate substantial changes to the project due to the valuation such that the EIR does not address impacts. However, should the project that is ultimately approved differ from the project analyzed in the Draft EIR and Final EIR, CEQA includes

procedures applicable should a project change after EIR certification or after lead agency approval. As noted in CEQA Guidelines section 15162, no subsequent EIR shall be prepared for a project unless there are substantial changes to the project or to the circumstances under which the project is undertaken that result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects, or if new information that could not have been known at the time of EIR preparation shows that the project would have new or more severe significant effects and the project proponents decline to adopt mitigation measures or alternatives from the EIR that would reduce the effects. If a substation or other components of the project were to change relative to the project as currently described in Chapter 2 of the Draft EIR, then the lead agency would consider whether the change would trigger a need for additional subsequent CEQA screening before proceeding.

Refer to Response AA-1, CPUC-Specific Environmental Topics, regarding integration of CPUC-specific environmental concerns in the Draft EIR.

INCLUSION OF PROJECT VARIANT

The project description provided in Draft EIR Chapter 2 is accurate, stable, and finite. Inclusion of an option (i.e., the project variant) as part of the CEQA project does not change this fact. Draft EIR Chapter 2 provides far more than an "illustrative scenario" for a "potential development program" such as the description the court found wanting in *Stopthemillenniumhollywood.com v. City of Los Angeles* (2019) 39 Cal.App.5th 1. Instead, Draft EIR Chapter 2 describes relevant details of the project and project variant with particularity, disclosing when details sufficient to allow for project-level analysis are available and when less detail (resulting in a program-level analysis) currently is known. See, for example, Draft EIR Section 2.7, which describes the components of the project variant separate from the components of the proposed project, including gas-insulated switchgear buildings, transformers, new transmission and distribution lines, and other improvements. See also Figure 2-12, which provides a conceptual rendering of the new City Substation (project variant).

As discussed in the Draft EIR, the proposed project includes the City's acquisition of PG&E-owned electrical transmission and distribution assets located in San Francisco and San Mateo counties that are needed to provide electric service to customers within San Francisco, along with other transactions and physical changes necessary for the City to own, operate, and maintain the electricity grid in San Francisco. Draft EIR Table 2-1 presents the proposed project components, which include the Martin Substation separation, distribution express feeders, local distribution system separation, system reinforcements, modifications to retain PG&E access to non-electrical facilities, an operations control center, operations and maintenance service yards, and telecommunications equipment.

Unlike the five very different projects described in the EIR at issue in Washoe Meadows Community v. Department of Parks & Recreation (2017) 17 Cal.App.5th 277 and more closely akin to the two "schemes" approved of in the South of Market Community Action Network v. City and County of San Francisco (2019) 33 Cal.App.5th 321 decision, the project variant described in Draft EIR Chapter 2 is very similar to the primary project: it differs in only one respect. As described in Section 2.7, the project variant consists of a new, gas-insulated substation (the new City Substation) that would be constructed at PG&E's adjacent Daly City Yard instead of the work described in Section 2.4.1, Martin Substation Separation. The variant substation would be the same type of land use as the Martin Substation, be located adjacent to the Martin Substation, and require most of the same construction equipment as the Martin Substation. The variant substation would serve the same purpose as the proposed Martin Substation separation (step down voltage to distribute

electricity). The potential substitution of the new City Substation for the Martin Substation Separation is parsed more particularly on Draft EIR page 2-49, to allow greater precision in analysis. There, the Draft EIR explains that the components of the project variant would be the same as those of the proposed project except that (1) the variant would include construction of the new City Substation instead of the separation work at the existing Martin Substation, (2) the distribution express feeders would originate from the new City Substation, and (3) the variant would also include installation of new incoming transmission lines from the Martin Substation to the new City Substation and outgoing distribution and transmission lines from the new City Substation to the existing distribution and transmission system. The Draft EIR also clearly identifies the proposed project, including the same proposed land use type at a specific defined location. Further, as shown in Draft EIR Table 5-4, the impacts of the project and project variant, and associated mitigation measures required for each, are substantially similar. As noted by the Court in the *Washoe Meadows* decision, "there may be situations in which the presentation of a small number of closely related alternatives would not present an undue burden on members of the public wishing to participate in the CEQA process." The two very similar approaches to the implementation actions that could follow the City's acquisition of PG&E's assets in the project area is one of those situations. Therefore, the project description provided in Draft EIR Chapter 2 is consistent with CEQA requirements.

Further distinguishing Chapter 2's project description from the disputed one in *Stopthemillenniumhollywood.com*, the Draft EIR's description establishes a stable basis for the EIR to provide far more detailed impacts analysis than *Stopthemillenniumhollywood.com*'s "set of environmental impact limits." Instead, the Draft EIR analyzes impacts of the project and its option (the project variant) on a resource-by-resource basis at a greater level of detail than provided for alternatives. The new City Substation is considered as a project variant instead of an alternative because the Daly City Yard is a developed site and an industrial land use associated with the electric utility and is closer to the Martin Substation equipment that would need to be connected to the new substation.

Consistent with CEQA case law, the Draft EIR also evaluates impacts of each scheme independently and discloses the maximum scope of the project.[10] The Martin Substation separation (part of the proposed project) and the new City Substation (project variant) are explicitly evaluated under each impact topic in the Draft EIR. The impact analyses identify whether the project or project variant would result in greater impacts for each topic. Mitigation measures state whether they apply to the new City Substation (project variant).

While the Draft EIR evaluates some components at program level, the Draft EIR presents one set of activities that would occur in the specified locations for each component. For example, for the system reinforcements Draft EIR Table 2-6 lists the activities and associated estimated quantities of work within the areas shown in Draft EIR Figure 2-8 and listed in Draft EIR Table 2-7. While each individual activity would represent a small amount of work, the Draft EIR provides both the overall quantities and quantities within each system reinforcement area to ensure that the total effects are evaluated. These are not illustrative development scenarios; the Draft EIR presents this information as the proposed project. Draft EIR Table 5-2 summarizes components of the proposed project, project variant, and alternatives side by side to clearly distinguish each.

CONSTRUCTION SCHEDULE

The commenters state that the construction timeline shown in the Draft EIR should be longer and start later to account for construction sequencing at the Martin Substation, lead times for securing equipment, and

[10] See, for example, *South of Mkt. Community Action Network v City & County of San Francisco* (2019) 33 Cal.App.5th 321, 332.

approval of a Permit to Construct from the CPUC. Refer to Response AA-1 for a response regarding the requirements identified in the CPUC's *Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments*. For the reasons discussed below, no change has been made in response to these comments.

Draft EIR page 2-40 shows the anticipated construction schedule. As stated on page 2-40, project construction would occur over approximately three years, with an estimated construction period of 2026 to 2028, although construction could occur later depending on the entitlement process. The Draft EIR states that the date of construction start shown (2026) was an estimate. As indicated in footnote 37 on draft EIR page 2-40, if work on multiple components proceeds concurrently, construction would take about three years to complete, but if some project components are delayed, work could take up to five years. Assuming a more compressed construction schedule starting in the earliest possible year results in the highest potential emissions estimates from construction equipment and assumes that all components are constructed concurrently; consequently, to identify the maximum scope of the project and potential impacts, the earliest possible construction start date was assumed. The significance of other impacts (such as noise) would not change should construction be staggered and/or take five years instead of three years to complete.

While commenters (for example, in Comment O-PGE-2.116) state that an up to 10-year construction schedule seems more likely, it appears the commenters count both the amount of time required to secure project approvals and actual construction activity as "construction" (for example, commenters' "Attachment A, page 18" lists permits and approvals the commenters anticipate are needed for the project, which are nearly identical to the list provided in Draft EIR Section 2.8). This usage of the term "construction" is inconsistent with the definition of "construction" used in the Draft EIR. The Draft EIR considers "construction" to be the period when actual physical changes to the environment begin after project approvals have been secured. No changes to the physical environment would occur prior to project approvals. Other slides in commenter's Attachment A (e.g., page 16) state that the "estimate of 1.5 to 3 years for execution is unrealistic," but, as noted above, the Draft EIR estimates the construction schedule would be from three to five years.

The basic goals of CEQA, as summarized by the former Office of Planning and Research and based on California Public Resources Code sections 15002, are to (a) avoid, reduce, and prevent environmental damage by requiring alternatives or mitigation measures; and (b) provide information to decision makers and the public regarding the environmental effects of proposed or approved activities. A lead agency's CEQA compliance must occur prior to project approval. What qualifies as "approval" is defined broadly under CEQA to mean an agency's commitment to a definite course of action regarding a project.[11] An approval occurs when the lead agency has committed itself to the project as a whole or to any particular project features so as to effectively preclude any alternatives or mitigation measures, including the no project alternative.

Given this definition of "approval," as discussed in the CEQA Guidelines, choosing the precise time for CEQA compliance involves a balancing of competing factors. EIRs should be prepared as early as feasible in the planning process to enable environmental considerations to influence project program and design and yet late enough to provide meaningful information for environmental assessment.[12] As stated in CEQA Guidelines Section 15004(b)(1), "[w]ith public projects, at the earliest feasible time, project sponsors shall incorporate environmental considerations into project conceptualization, design, and planning. CEQA compliance should be completed prior to acquisition of a site for a public project."

[11] CEQA Guidelines Section 15352(a).
[12] CEQA Guidelines Section 15004(b).

Therefore, to be consistent with CEQA, review of a project's potential environmental impacts often begins before highly detailed project information is available. As discussed in greater detail in Response PD-2, the level of detail required for CEQA analysis should be sufficient to allow decision makers to intelligently take account of environmental consequences of a project.

The commenters argue that the start date of construction could be later than 2026, which is consistent with statements made in the Draft EIR on page 2-40. However, to identify the maximum scope and impacts of the project, the Draft EIR analysis assumes a start date of 2026. The commenters argue that construction could take longer than three years, which is also consistent with statements made in the Draft EIR on page 2-40. As discussed in greater detail in Response PD-3, the Draft EIR project description (Chapter 2) as supplemented by information provided in Chapter 8 identifies all of the work necessary to separate the Martin Substation, and therefore the associated construction schedule reflects the actual scope of the project. The comments on the Draft EIR do not identify additional environmental impacts that could occur or be worsened by a later construction start date or a longer construction duration. The Draft EIR has been prepared prior to project approval, consistent with requirements of CEQA.

_____

10.3 Cumulative Projects

The comment and corresponding response in this section cover cumulative project issues in the Draft EIR.

- CP-1: Cumulative Projects

Comment CP-1: Cumulative Projects

This response addresses the following comment, which is quoted below:

A-Brisbane.7

"Cumulative Analysis: The description of the California High Speed Rail (HSR) project does not reflect the agreement between HSR and the City of Brisbane of August 31, 2024. This agreement is detailed on the City of Brisbane's website here: https://www.brisbaneca.org/city-attorney/page/california-high-speed-rail-authority-and-city-brisbane-reach-settlement. Additionally, Chapters 3, 7 and 8 of the Draft EIR for the Baylands Specific Plan addresses the modified HSR project in detail." (John Swiecki, AICP, Community Development Director, City of Brisbane [A-Brisbane.7])

RESPONSE CP-1

The description of Project 6, the California High Speed Rail Project, in Draft EIR Table 3.1-3, Projects Considered in Cumulative Impact Analysis, is revised to reflect the August 31, 2024, agreement between the California High-Speed Rail Authority and the City of Brisbane as follows:

> The California High Speed Rail project includes a section of high-speed rail connecting San Francisco to San Jose. Four tracks of the high-speed rail would pass through east Brisbane at the Baylands site, allowing 22 trains to operate daily at speeds up to 110 miles per hour. One of the three Light Maintenance Facilities (LMFs) located along the system to provide regular maintenance and operations for high-speed trains also would be located in east Brisbane. LMFs are where trains are inspected, cleaned, serviced, and stored, providing a service point for any trains in need of emergency repair services. LMFs will also supply trains and crews to the local terminal station at the start of the day. The LMF in Brisbane would be approximately ~~110~~ 45 acres along the rail line. Track modifications associated with the East Brisbane LMF would require relocating the Bayshore Caltrain Station, demolishing and relocating the Tunnel Avenue overpass, widening the bridge crossing Guadalupe Valley Creek in Brisbane, relocating the Brisbane Fire Station and Brisbane Corporation Yard, and other roadway modifications within the Baylands property.~~, and relocation control point Geneva.~~

The reduced size of the LMF on the Baylands site would result in less construction than was considered for the California High Speed Rail Project in the Draft EIR cumulative impact analyses, but otherwise the California High Speed Rail Project would remain similar to the description in the Draft EIR. Therefore, the

California High Speed Rail Project modifications would not result in new or more severe significant cumulative impacts than were identified in the Draft EIR.

10.4 Noise and Vibration

The comments and corresponding responses in this section cover topics in Draft EIR Section 3.2, Noise and Vibration.

- NO-1: Noise Criteria, Thresholds, and Baseline
- NO-2: Construction Noise Analysis
- NO-3: Operational Noise Analysis
- NO-4: Noise Mitigation Measures
- NO-5: Vibration Impacts and Analysis
- NO-6: Other Noise Comments

Comment NO-1: Noise Criteria, Thresholds, and Baseline

This response addresses the following comments, which are quoted below:[1]

A-Brisbane.4, O-CUE.15, O-CUE.20, O-CUE.27, O-CUE.28b, O-CUE.28d, O-CUE.32, O-PGE-2.34, O-PGE-2.65, O-PGE-2.66, O-PGE-2.69, O-PGE-2.92, O-PGE-2.93, O-PGE-2.94

"Commercial sensitive receptors are excluded at or under construction noise levels of 100 dBA. The City notes that the 7 Mile House, a valued Brisbane restaurant with outdoor dining areas, directly abuts the Martin Substation site and a 100 dBA threshold may not be appropriate to adequately analyze impacts to commercial sensitive receptors." (John Swiecki, AICP, Community Development Director, City of Brisbane [A-Brisbane.4])

"A. Baseline Noise Conditions Are Inconsistent with Regulatory Standards

An EIR must disclose the existing setting in a manner that enables a clear evaluation of potential impacts.[149] The DEIR fails to provide an adequate baseline for ambient noise conditions because it relies on average noise levels (Leq) rather than the regulatory-defined metrics that govern noise impacts in San Francisco.[150] Specifically, San Francisco Police Code § 2901 defines ambient noise thresholds in terms of L90 or L99 metrics, which represent the noise level exceeded 90% or 99% of the time, respectively.[151] These metrics are designed to capture background or residual noise environment, excluding transient or atypical noise events.

[1] Footnotes from quoted comments are indicated by *italicized* text and retain their original footnote number from the comment. Footnotes from response text are not italicized and are numbered in order of appearance in this section.
[149] *CEQA Guidelines § 15125; Neighbors for Smart Rail v. Exposition Metro Line Constr. Auth. (2013) 57 Cal.4th 439, 447.*
[150] *Jue Comments at p. 2.*
[151] *Ibid.*

By using Leq as the principal descriptor of existing ambient conditions, the DEIR does not provide a baseline that is consistent with regulatory standards. Leq incorporates all sound energy over a given time and is heavily influenced by intermittent or short-duration noise events.[152] As a result, it can substantially overstate the typical background noise environment.[153] This makes it impossible to accurately assess whether future Project-generated noise will exceed established ambient-based thresholds defined in terms of L90 or L99, thereby precluding a meaningful comparison between baseline conditions and project noise levels.[154] The DEIR must be revised to incorporate L90 or L99 measurements in its baseline noise characterization and ensure that impact assessments and threshold comparisons are conducted using those same metrics. This correction is essential for the analysis to be legally defensible, technically accurate, and informative to the public and decisionmakers." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of the Coalition of California Utility Employees [O-CUE.15])

"*2. Use of Improper Baselines Precludes Meaningful Evaluation of Mitigation Measures M-NO-3a and M-NO-3b*

As discussed in Section IX.A., the DEIR fails to use an appropriate baseline for evaluating noise impacts.[199] Because the ambient noise measurements do not adhere to the definitions set for the in the applicable noise ordinance, the effectiveness of associated mitigation measures cannot be meaningfully assessed.[200] This flaw undermines the validity of the impact analysis and the determination of whether the Mitigation Measure M-NO-3a, which addresses operational noise from stationary sources,[201] and Mitigation Measure M-NO-3b, which addresses operational noise from service yards, will reduce impacts to a less than significant level.[202] As a result, the conclusion that these mitigation measures are sufficient to reduce impacts to less than significant is not supported by substantial evidence.

To comply with CEQA, the DEIR must be revised to establish the proper baseline in accordance with the applicable local noise ordinance. Only with a valid baseline can the effectiveness of the proposed mitigation measures be properly evaluated. Absent such revisions, the DEIR fails to provide an accurate, complete, and good-faith effort at disclosure as required by CEQA." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of the Coalition of California Utility Employees [O-CUE.20])

"**1. Baseline noise levels were not clearly established in the PMND, and some issues remain in the DEIR:**

The DEIR uses the term "ambient consistent with general environmental analysis practices, referencing average noise levels (Leq). However, this usage conflicts with the specific definition provided in the San Francisco Police Code (SFPC), which defines "ambient" as the "lowest sound level repeating itself during a minimum 10-minute period". In acoustical terms this is usually interpreted as the L_{90} or L_{99} metric – i.e., the noise level exceeded 90% or 99% of the time, respectively. The DEIR provides the L_{90} for only four of the five long-term measurement locations in DEIR Table 3.2-3, and it provides no L90 data for the twenty-two short-

[152] *Ibid.*
[153] *Ibid.*
[154] *Ibid.*
[199] *Id. at pp. 1-2.*
[200] *Id. at pp. 1-2, 5.*
[201] *DEIR at p. 3.2-49.*
[202] *Id. at p. 3.2-51.*

term measurements. This omission is significant because it prevents meaningful comparison between existing ambient noise levels as defined by the SFPC and project-generated noise.

Furthermore, the difference between Leq and L_{90} is significant. The Leq is a single number that represents the equivalent amount of time-varying sound that occurs over a given time. The Leq is directly affected by loud noises and frequently occurring intermittent noises such as cars passing by. The L_{90} is usually considered the background noise level over a given time, and it is usually controlled by continuous noise such as air-conditioners, distant freeway traffic, or other constant sources. FPC compliance considers how a (new) noise source compares to the background ambient (L_{90}), not the equivalent level (Leq).

SEC.2901.DEFINITIONS.

(a) "Ambient" means the lowest sound level repeating itself during minimum ten-minute period as measured with type 1, precision sound level meter, using slow response and "A" weighting. The minimum sound level shall be determined with the noise source at issue silent, and in the same location as the measurement of the noise level of the source or sources at issue. However, for purposes of this chapter, in no case shall the ambient be considered or determined to be less than: (1) Thirty-five dBA for interior residential noise, and (2) Forty-five dBA in all other locations. If a significant portion of the ambient is produced by one or more individual identifiable sources of noise that contribute cumulatively to the sound level and may be operating continuously during the minimum ten-minute measurement period, determination of the ambient shall be accomplished with these separate identifiable noise sources silent or otherwise removed or subtracted from the measured ambient sound level.

2. Significance criteria were improperly established in the PMND and the issues have not been addressed in the DEIR:

As noted above, without documentation of the SFPC "ambient", the allowable noise limits are inaccurate for operational noise analyses in San Francisco." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.27])

"Operations Control Center: Since it will be located within the City of San Francisco, the noise analysis must show compliance with a noise limit 8 dBA above the "ambient" (L90)." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of the Coalition of California Utility Employees [O-CUE.28b])

"HVAC: HVAC noise must be compared to the proper "ambient" noise limit (L90).

Service Yard: Service yard noise must be compared to "ambient" (L90) as appropriate for the time of days those activities would occur." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of the Coalition of California Utility Employees [O-CUE.28d])

"Impact NO-3: Noise Impacts for Operations

Mitigation Measure M-NO-3a (Operational Noise Analysis and Attenuation for Stationary Noise Sources)

Since the noise limit is lower (or not yet determined) based on the discussion above regarding SFPC ambient (L90) and sound source assumptions for the transformers and backup generators, the DEIR analysis must be revised to evaluate whether additional mitigation is required to reduce potential noise impacts to a less than significant level.

> **Mitigation Measure M-NO-3a:** additional mitigation, such as site-specific noise barrier heights, may need to be identified when the baseline conditions are correctly identified. The mitigation measure must include noise limits for the equipment which are feasible to procure.

Mitigation Measure M-NO-3b: Operational Noise Analysis and Attenuation for Service Yards

Since the noise limit is lower (or not yet determined) based on the discussion above regarding SFPC ambient (L90), the DEIR analysis must be revised to evaluate whether additional mitigation is required to reduce potential noise impacts to a less than significant level. Sleep disturbance is widely recognized as a significant and unacceptable environmental impact. Noise can disturb sleep by making it more difficult to fall asleep, by waking someone after they are asleep, or by altering their sleep stage, e.g., reducing the amount of rapid eye movement (REM) sleep. Additionally, nighttime noise exposure has also been linked to increased blood pressure, increased heart rate, increase in body movements, and other physiological effects. Not surprisingly, people whose sleep is disturbed by noise often experience secondary effects such as cognitive decline, increased fatigue, depressed mood, and decreased work performance.

> **Mitigation Measure M-NO-3b:** additional mitigation, such as site-specific noise barrier height, may need to be identified when baseline conditions are correctly identified. The mitigation measure must include noise limits for the equipment that operates in the yards which are feasible to procure." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.32])

"The DEIR's noise analysis is deficient, among other reasons, because:

- The DEIR's Noise Setting section exhibits a basic misunderstanding of acoustical concepts, contains erroneous/redundant information, and is incomplete. The DEIR's selected noise significance criteria are not protective of public health, as follows:
    - While it is appropriate that the analysis, methodologies, and impacts standards of the Federal Transit Administration (FTA; *Transit Noise and Vibration Impact Assessment Manual* 2018) be mentioned in the DEIR Setting and used in the DEIR's analysis, the DEIR improperly uses the FTA's *General Assessment* noise criteria for evaluating project construction noise impacts, rather than the more appropriate *Detailed Assessment* criteria. The FTA recommends the latter as *"warranted when many noise-sensitive sites are adjacent to a construction project or where contractors are faced with stringent local ordinances or heightened public concerns expressed in early outreach efforts,"* which clearly applies to the Project.

- The DEIR's selection of the *General Assessment* construction noise criteria (i.e., 90 decibels for residential receptors) provides a lower level of protection than the *Detailed Assessment* criteria. This selection is unprotective of the environment and permits an additional 10 decibels of noise exposure before a significant impact determination can be made—thus, understating the Project's true noise impacts.
- The DEIR's choice of the 90 decibel threshold for construction noise also puts it into potential conflict with the US Environmental Protection Agency (EPA) recommendations (i.e., *Noise Levels Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*), which are cited in the DEIR Setting. An exposure to noise at 90 decibels over one hour is equivalent to a 76 decibel exposure over 24 hours, which would exceed the EPA's recommended 70 decibel limit over 24 hours intended to ensure protection against the potential for hearing loss.
- The 90 DB threshold is the Police Department's threshold for taking action. This threshold it is not indicative of potential CEQA noise impacts. For example, the FTA Manual also includes significance criteria for incremental construction and operational motor vehicle traffic (i.e., FTA Manual, Figure 4.3 and Figure 4.4, *Increase in Cumulative Noise Levels Allowed by Criteria*), but these are not included in the DEIR, and their existence is not even mentioned. Rather, the DEIR cites erroneous fixed 3-5 decibel increments as defining significant noise increases from any baseline level instead of endorsing the FTA's position that *"people already exposed to high levels of noise should be expected to tolerate only a small increase in the amount of noise in their community"*.

  Note that the City of Los Angeles has nighttime noise thresholds based on sleep protection. These are: *The nighttime thresholds are focused on sleep disturbance and address this via two standards: a maximum absolute sound level of between 55 to 70 dBA Leq, as well as a maximum increase over ambient noise levels of 5 dBA Leq. These absolute sound level limits occur on a sliding scale from 55 to 70 dBA Leq to be sensitive to residential areas, including hillside areas, to ensure minimal impact on sleep and health, with a more stringent noise limit and lower exterior noise levels for sensitive uses within older buildings (with single-glazed windows) than for new buildings (with double-paned windows). Both the daytime and nighttime thresholds are protective of public health and based on substantial evidence.*[18]

  The DEIR should use similar nighttime noise thresholds rather than arbitrary Police Code thresholds. Los Angeles also has adopted an 80-dBA threshold for daytime construction noise, again based on being protective of the environment, and not an arbitrary Police Code.
- The DEIR uses an operational noise criteria of a 8 dBA increase (see p. 3.2-27). But the actual criteria per Table 3.2-12 is "For single-family residential, noise levels shall not be more than 10 dBA above ambient **for a cumulative period of more than 10 minutes per hour"** [emphasis added]. This is a lower threshold than a continuous 8 dBA threshold. And neither threshold is protective of the environment because noise impacts are significant far below a doubling of loudness, which is an arbitrary level unrelated to actual impacts.
- The noise impacts of pile drivers and other impact tools where they are proposed to be used should not be arbitrarily exempted from the noise significance criteria, and be evaluated under the same San Francisco Police Code standards as other construction equipment. The Police

[18] *https://planning.lacity.gov/odocument/e36cc04c-bfcd-44e6-a020-5806d61146dc/Updated_CEQA_Thresholds_Fact_Sheet.pdf.*

Code's exemption of pile driving is not relevant to CEQA, which evaluates impacts to the physical environment, and not just code compliance (*see Berkeley Keep Jets Over the Bay v. Board of Port Commissioners*).

- The most egregious example of the DEIR's non-protective noise thresholds is with respect to the Bayshore Elementary School, which would be subject to noise increases from the existing 72 dBA to a total noise level of 80 dBA, for weeks or months during construction (see Table 3.2-16, p. 3.2-46). At these levels, education and students would be significantly impacted.

- Noise mitigation measures are inadequate, as follows:
  - The DEIR imposes no mitigation for extreme noise levels because of erroneous significance thresholds. Noise significance thresholds are variously set at 100, 90, 86, 80, 65, 76, 45, and other quasi-random decibel levels (see Table 3.2-12), with no analysis or supporting documentation to show which levels are actually protective of human health. The need for mitigation should be reconsidered based on the revised set of quantitative significance criteria included in the Setting and new information on construction activities introduced by additions/revisions to the Project Description." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.34])

- "The DEIR's Noise Setting section exhibits a basic misunderstanding of acoustical concepts, contains erroneous/redundant information, and is incomplete. The DEIR's selected noise significance criteria are not protective of public health, as follows:
  - The DEIR's listing of major sources in "Existing Noise Sources" section does not include San Francisco International Airport – one of the largest airports in the US, located a few miles south/east of the project site, and having its major aircraft departure route passing over/near Daly City and southwest San Francisco (which include portions of the project site and sensitive receptors affected by project and cumulative noise sources). The airport should be listed in the DEIR and its contribution to significant project-level or cumulative noise impacts refuted or confirmed in the analysis.
  - While it is appropriate that the analysis, methodologies, and impacts standards of the Federal Transit Administration (FTA; *Transit Noise and Vibration Impact Assessment Manual* 2018) be mentioned in the DEIR Setting and used in the DEIR's analysis, the DEIR improperly uses the FTA's *General Assessment* noise criteria for evaluating project construction noise impacts, rather than the more appropriate *Detailed Assessment* criteria. The FTA recommends the latter as *"warranted when many noise-sensitive sites are adjacent to a construction project or where contractors are faced with stringent local ordinances or heightened public concerns expressed in early outreach efforts,"* which clearly applies to the Project.
  - The DEIR's selection of the *General Assessment* construction noise criteria (i.e., 90 decibels for residential receptors) provides a lower level of protection than the *Detailed Assessment* criteria. This selection is unprotective of the environment and permits an additional 10 decibels of noise exposure before a significant impact determination can be made—thus, understating the Project's true noise impacts.
  - The DEIR's choice of the 90-decibel threshold for construction noise also puts it into potential conflict with the US Environmental Protection Agency (EPA) recommendations (i.e., *Noise Levels*

Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety), which are cited in the DEIR Setting. An exposure to noise at 90 decibels over one hour is equivalent to a 76-decibel exposure over 24 hours, which would exceed the EPA's recommended 70 decibel limit over 24 hours intended to ensure protection against the potential for hearing loss.

- The 90 DB threshold is the Police Department's threshold for taking action against particularly noisy events. This threshold is not indicative of potential CEQA noise impacts. For example, the FTA Manual also includes significance criteria for incremental construction and operational motor vehicle traffic (i.e., FTA Manual, Figure 4.3 and Figure 4.4, *Increase in Cumulative Noise Levels Allowed by Criteria*), but these are not included in the DEIR, and their existence is not even mentioned. Rather, the DEIR cites erroneous fixed 3-5 decibel increments as defining significant noise increases from any baseline level instead of endorsing the FTA's position that *"people already exposed to high levels of noise should be expected to tolerate only a small increase in the amount of noise in their community."*
- Note that the City of Los Angeles has nighttime noise thresholds based on sleep protection. These are: *The nighttime thresholds are focused on sleep disturbance and address this via two standards: a maximum absolute sound level of between 55 to 70 dBA Leq, as well as a maximum increase over ambient noise levels of 5 dBA Leq. These absolute sound level limits occur on a sliding scale from 55 to 70 dBA Leq to be sensitive to residential areas, including hillside areas, to ensure minimal impact on sleep and health, with a more stringent noise limit and lower exterior noise levels for sensitive uses within older buildings (with single-glazed windows) than for new buildings (with double-paned windows). Both the daytime and nighttime thresholds are protective of public health and based on substantial evidence*.[2]

  The DEIR should use similar nighttime noise thresholds rather than arbitrary Police Code thresholds. Los Angeles also has adopted an 80-dBA threshold for daytime construction noise, again based on being protective of the environment, and not an arbitrary Police Code aimed at worst-case events.
- The DEIR uses an operational noise criteria of a 8 dBA increase (see p. 3.2-27). But the actual criteria per Table 3.2-12 is "For single-family residential, noise levels shall not be more than 10 dBA above ambient **for a cumulative period of more than 10 minutes per hour"** [emphasis added]. This is a lower threshold than a continuous 8 dBA threshold. And neither threshold is protective of the environment because noise impacts are significant far below a doubling of loudness, which is an arbitrary level unrelated to actual impacts.
- For Construction Roadway Noise, the DEIR uses thresholds of 3 to 5 dBA. However, the DEIR uses a considerably higher 8-10 dBA threshold for other construction activities. This inconsistency needs to be explained.
- The DEIR (at page 3.2-25), states that, "To assess nighttime construction noise impacts, the analysis quantitatively evaluates whether construction would generate interior noise levels of 45 dBA or more at sensitive receptor locations. As discussed above, interior noise levels of 45 dBA or lower are generally necessary to prevent sleep disturbance. If estimated interior noise levels meet or exceed 45 dBA." Yet the DEIR uses no such criteria in determining impacts. Instead, it uses only the 10- and 8 dBA thresholds in the Police Code.

[2] *https://planning.lacity.gov/odocument/e36cc04c-bfcd-44e6-a0205806d61146dc/Updated_CEQA_Thresholds_Fact_Sheet.pdf.*

- The DEIR's Regulatory Background (Section 3.2.3) contains detailed text (nine pages of it) of Federal, State and Local noise control policies and quantitative standards. This text is then pasted without substantial summary into two tables (i.e., Table 3.2-11 *Ordinances Applicable to the Project or Project Variant* and Table 3.2-12 *Noise and Vibration Analysis Quantitative Criteria*) in the DEIR's Impacts and Mitigation Measures section. This is repetitive and confusing. The first table should be eliminated since its information has already been stated in the Setting and the second table should be modified to include and apply to all sensitive receptors only the most protective of the standards from among all the Federal, State and Local regulations (which has already been partially done in the DEIR; Table 3.2-12 already notes that*: "The analysis applies the same quantitative criteria as in San Francisco because Daly City and San Mateo County municipal codes do not include quantitative criteria*").
- The noise impacts of pile drivers and other impact tools where they are proposed to be used should not be arbitrarily exempted from the noise significance criteria, and be evaluated under the same San Francisco Police Code standards as other construction equipment. The Police Code's exemption of pile driving is not relevant to CEQA, which evaluates impacts to the physical environment, and not just code compliance (see Berkeley Keep Jets Over the Bay v. Board of Port Commissioners, 2001 decision).
- Exposure of numerous residences on Geneva Avenue to high construction noise levels is indicated on Table 3.2-15, yet this impact is considered less than significant due to the arbitrary 10-dBA noise increase threshold.
- The most egregious example of the DEIR's non-protective noise thresholds is with respect to the Bayshore Elementary School, which would be subject to noise increases from the existing 72 dBA to a total noise level of 80 dBA, for weeks or months during construction (see Table 3.2-16, p. 3.2-46). At these levels, education and students would be significantly impacted." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.65])

_____

- "The DEIR's Noise Impact analysis is based on erroneous and incomplete information on Federal, State and local noise regulation/standards and on incomplete project description data that together or separately underestimates noise impacts, as follows:
  - Noise impacts are not correctly characterized due to erroneous, incomplete and contradictory regulations and significance criteria, as discussed above." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.66])

_____

- "Noise mitigation measures are inadequate, as follows:
  - The DEIR imposes no mitigation for extreme noise levels because of erroneous significance thresholds. Noise significance thresholds are variously set at 100, 90, 86, 80, 65, 76, 45, and other quasi-random decibel levels (see Table 3.2-12), with no analysis or supporting documentation to show which levels are actually protective of human health. The need for mitigation should be reconsidered based on the revised set of quantitative significance criteria included in the Setting and new information on construction activities introduced by additions/revisions to the Project Description." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.69])

_____

"1. The DEIR's inclusion of Federal Transit Administration (FTA) significance criteria for noise impacts is appropriate, but the particular choice of construction noise criteria is erroneous, and FTA operational criteria have been left out entirely.

In Section 3.2.3.1, Page 3.2-12, the DEIR states:

> *"While the Transit Noise and Vibration Impact Assessment Manual of the Federal Transit Administration (FTA) is developed for determining significant noise and vibration impacts for transit projects and is not a regulation, it is one of the few federal sources that suggest both a methodology and criteria for assessing construction noise impacts. The FTA noise impact criteria used to assess construction impacts are identified in Table 3.2-6"*

Table 3.2-6 [from the DEIR] Federal Transit Administration (FTA) Construction Noise Impact Criteria

	Leq (1-hour)	
Land Use	***Day***	***Night***
Residential	90	80
Commercial	100	100
Industrial	100	100

What the DEIR does not state is that the FTA specifies two categories of construction noise assessment where the methodology and significance standards vary depending on project circumstances.

In Section 7.1, Page 177 of the FTA Manual:

- *"A general assessment of construction noise is warranted for projects in an early assessment stage when the equipment roster and schedule are undefined and only a rough estimate of construction noise levels is practical.*
- *"A detailed analysis of construction noise is warranted when many noise-sensitive sites are adjacent to a construction project or where contractors are faced with stringent local ordinances or heightened public concerns expressed in early outreach efforts".*

Then on Page 179 of the FTA Manual:

> ***"Option A: General Assessment** – Compare the combined Leq equipment (1-hour)for the two noisiest pieces of equipment for each phase of construction determined in Section 7.1, Step 3 to the criteria below. Then, identify locations where the level exceeds the criteria.*
>
> ***Table 7-2 General Assessment Construction Noise Criteria [of the FTA Manual]"***

	Leq (1-hour)	
Land Use	***Day***	***Night***
Residential	90	80
Commercial	100	100
Industrial	100	100

> ***"Option B: Detailed Analysis*** *– Compare the combine Leq equipment (8-hour) for all equipment for each phase of construction determined in Section 7.1, Step 3 to the criteria below. Then, identify locations where the level exceeds the criteria.*
>
> ***"Table 7-3 Detailed Assessment Construction Noise Criteria [of the FTA Manual]"***

	Leq (8-hour)		***Ldn (30 day)***
Land Use	***Day***	***Night***	
Residential	80	70	75
Commercial	85	85	80
Industrial	90	90	85

The DEIR wrongly uses the FTA's "General Assessment" noise criteria for evaluating project construction noise impacts, rather than the more appropriate Detailed Assessment criteria. The FTA recommends the latter as:

> *" … warranted when many noise-sensitive sites are adjacent to a construction project or where contractors are faced with stringent local ordinances or heightened public concerns expressed in early outreach efforts"*

This is clearly more applicable to the specific Project characteristics than the General Analysis methodology.

The EIR's erroneous choice of the General Assessment construction noise criteria (i.e., 90 decibels for residential receptors) assures a lesser level of protection than the "Detailed Analysis" criteria would, by allowing 10 decibels more noise exposure before the DEIR could make a significance call.

The EIR's choice of the 90-decibel threshold for construction noise also puts it into potential conflict with the US Environmental Protection Agency (EPA) recommendations (i.e., Noise Levels Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety).

From DEIR page 3.2-12:

> *"U.S. EPA found that to prevent hearing loss over the lifetime of a receptor, the yearly average Leq should not exceed 70 dBA"*
>
> [***Note: an exposure to noise at 90 decibels over one hour is equivalent to a 76-decibel exposure over 24 hours***]
>
> ***A. The FTA Manual also includes analytical methodology and noise exposure standards for operational noise sources, which the DEIR does not mention or use in the Project impact analysis.***

On Page 25 of the FTA Manual:

> *"FTA criteria for [operational] noise impact] … are based on well-documented research on human response to community noise and represent a reasonable balance between community benefit and project costs … this table [Table 4-6 of the FTA Manual included below] shows that as the existing noise*

exposure increases from 45 dBA to 75 dBA, the allowed project noise exposure increases from 51 dBA to 65 dBA. However, the allowed increase in the cumulative noise level decreases from 7 dB to 0 dB (rounded to the nearest whole decibel). The justification for this is that people already exposed to high levels of noise should be expected to tolerate only a small increase in the amount of noise in their community. In contrast, if the existing noise levels are quite low, it is reasonable to allow a greater change in the community noise for the equivalent difference in annoyance [FTA page 30]."

Rather than include these variable noise impact criteria from the FTA Manual, the DEIR cites erroneous fixed 1-3-5-10 decibel increments as defining significant noise increases from any baseline level. Thus, differing with the FTA's position that *"people already exposed to high levels of noise should be expected to tolerate only a small increase in the amount of noise in their community"*."

Table 4-6 Noise Impact Criteria: Effect on Cumulative Noise Exposure Ldn or Leq(1hr) in dBA rounded to nearest whole decibel

Existing Noise Exposure	*Allowable Project Noise Exposure Before Moderate Impact*	*Allowable Combined Total Noise Exposure*	*Allowable Noise Exposure Increase Before Moderate Impact*
45	51	52	7
50	53	55	5
55	55	58	3
60	57	62	2
65	60	66	1
70	64	71	1
75	65	75	0

(Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.92])

———————————————

"2. The DEIR mischaracterizes the checklist items from Appendix G of the CEQA Guidelines as "significance criteria" and also ignores the presence of San Francisco International Airport (SFO) in its Impact analysis (which the 3rd checklist item requires).

The DEIR on page 3.2-20 includes the following environmental checklist items for noise and vibration supposedly taken verbatim from Appendix G of the CEQA Guidelines

"For a project located within the vicinity of a private airstrip or an airport land use plan area, or where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, cause an increase of 1.5 dB or greater in aircraft noise, in noise-sensitive areas exposed to 65 CNEL or greater, as compared to existing baseline conditions".

The DEIR makes the following statement on page 3.2-21:

"The project is not within the vicinity of a private airstrip or airport land use plan area, or within two miles of a public airport. Therefore, the topic of long-term exposure of people residing or working in the area

to excessive airport-related noise levels is not applicable to the project or project variant and is not discussed further in this EIR."

The Project site vicinity includes Daly City, Brisbane and portions of unincorporated San Mateo County, which ***are included in the Airport Land Use Plan*** (ALUP) for SFO. And the DEIR's listing of major sources in "Existing Noise Sources" section (on page 3.2-6) ***does not include SFO*** – one of the largest airports in the US and located a few miles south/east of the Project site. The major aircraft departure route passing over/near Daly City and southwest San Francisco (which include portions of the project site and sensitive receptors affected by Project noise sources); it should be listed in the EIR as a major local noise source and its contribution to significant project-level or cumulative noise impacts refuted or confirmed in the analysis.

Also, the third checklist item contains text specifying 1.5 dB as the CEQA Appendix G's official incremental aircraft noise impact standard. It is not. The original checklist item makes no such quantitative definition. This standard has been added by the San Francisco Planning Department and is not a reasonably protective-case criterion that would guarantee that potentially significant aircraft noise impacts would not occur." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.93])

_____

"3. The DEIR Setting is padded with unnecessary regulatory detail and fails to distil/focus the material to give simple significance criteria protective of all sensitive receptors in all jurisdictions from Project noise and vibration impacts.

It is common practice for CEQA noise and vibration analyses to be done acknowledging the public health research of the US Environmental Protection Agency (EPA) and World Health Organization (WHO) using the impact screening methodology/models of the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) with significance criteria based on EPA/WHO recommendations or taken from City/County General Plan noise control policies or Noise Ordinance restrictions. ***However, this EIR does not correctly utilize these screening criteria.***

The EIR's Regulatory Background (Section 3.2.3) contains detailed text (nine pages) of federal, state and local noise control policies and quantitative standards. This text is then pasted without substantial summary into two tables (i.e., Table 3.2-11 Ordinances Applicable to the Project or Project Variant and Table 3.2-12 Noise and Vibration Analysis Quantitative Criteria) in the EIR's Impacts and Mitigation Measures section. This is repetitive and confusing. Much of the Regulatory Background text should be moved into an expanded Table 3.2-11; while the multi-jurisdictional quantitative standards in Table 3.2.12 should be distilled down to include the most protective standards from all jurisdictions applicable to all sensitive receptors.

Applying significance criteria according to the jurisdiction of the sensitive receptors seems to benefit the Project sponsor rather than offering equal protection to the local residents. Applying the most protective adopted standards to all receptors is required to achieve CEQA's stated objectives of "...freedom from excessive noise." (CEQA Section 21001(b)).

We have annotated DEIR Table 3.2-12 (included below) for recommended changes to the listing of noise and vibration significance criteria to be applied to all Project receptors.

Table 3.2-12 Noise and Vibration Analysis Quantitative Criteria (from DEIR)

	QUANTITATIVE CRITERIA APPLIED IN SAN FRANCISCO
Daytime Construction Noise No Project equipment will exceed 80 dBA at 100 feet according to DEIR table. Use FTA "Detailed Analysis" standards. The >10 dBA increment is not an FTA standard. It is acceptable to use in areas where background levels are <60 dBA. But when > 65 dBA, 1-3 dBA would be more protective (e.g., Bayshore Elementary School)	~~• Noise levels greater than 80 dBA at 100 feet from single equipment per the San Francisco noise ordinance~~ • Combined noise levels greater than ~~90 dBA~~ 80 dBA for residential and other noise-sensitive uses and ~~100 dBA~~ 90 dBA for commercial and industrial land uses, using FTA combined equipment approach • Combined noise levels greater than 10 dBA above ambient at residential and other noise-sensitive uses, ~~using FTA combined equipment approach~~
Nighttime Construction Noise	• >45 dBA indoor noise levels at night, per recommendations of World Health Organization. • San Francisco Police Code section 2908 prohibits nighttime construction (between 8 p.m. and 7 a.m.) that generates noise exceeding the ambient noise level by 5 dBA at the nearest property line unless a special permit has been issued by the City and County of San Francisco.
Construction Roadway Noise Use FTA "sliding scale" as incremental significance standards.	~~• 3 dBA or greater increase when sensitive receptors are located in noise-degraded environments~~ • ~~5 dBA or greater increase for commercial/industrial receptors, unless existing noise level exceeds 70 dBA~~
Operational Stationary Noise The > 8 dBA increment is not based on any research findings on noise disruptions. The 45/55 levels are based in EPA recommendations, but may be difficult to satisfy in SF's urban environment.	~~• >8 dBA increase at any point outside of the property plane~~ • >45 dBA at interior of nearest noise-sensitive receptor at night per San Francisco Noise ordinance • >55 dBA at interior of nearest noise-sensitive receptor during the day per San Francisco Noise ordinance
Operational Roadway Noise Use FTA "sliding scale" as incremental significance standards.	~~• 3 dBA or greater increase when sensitive receptors are located in noise-degraded environments~~ • ~~5 dBA or greater increase for commercial/industrial receptors, unless existing noise level exceeds 70 dBA~~
Construction Vibration FTA also has damage criteria.	• Building damage criteria per Caltrans criteria presented in Table 3.2-8 • FTA criteria for vibration annoyance presented in Table 3.2-7
	QUANTITATIVE CRITERIA APPLIED IN DALY CITY AND UNINCORPORATED SAN MATEO COUNTY
Apply the most restrictive standard by comparing those from all jurisdictions.	The analysis applies the same quantitative criteria as in San Francisco because Daly City and San Mateo County municipal codes do not include quantitative criteria

	QUANTITATIVE CRITERIA APPLIED IN BRISBANE
Construction Noise No Project construction equipment exceeds the stated limit. Use FTA "Detailed Analysis" standards. The > 10 dBA increment is not an FTA standard.	• Construction noise is allowed as long as construction meets at least one of the following criteria: ○ ~~No individual piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 25 feet from the source thereof.~~ ○ The noise level at any point outside of the property plane of the project shall not exceed 86 dBA. • Combined noise levels greater than ~~90 dBA~~ 80 dBA for residential uses and other noise sensitive uses and 90 dBA ~~100 dBA~~ for commercial and industrial land uses, using FTA combined equipment approach • Combined noise levels greater than 10 dBA above ambient at residential and other noise-sensitive uses~~, using FTA combined equipment approach~~
Operational Noise These are applicable only to stationary noise sources, but none are introduced by the Project. State that in the DEIR text and do not include in the table. Use FTA "sliding scale" for all operational sources in the project area.	~~• For single-family residential, noise levels shall not be more than 10 dBA above ambient for a cumulative period of more than 10 minutes per hour or more than 20 dBA above ambient for more than 3 minutes per hour.~~ ~~• For multi-family residential, noise levels shall not be more than 10 dBA above ambient 3 feet from any wall, floor, or ceiling in any dwelling unit for more than 20 dBA above ambient for more than 3 minutes per hour.~~ ~~• For commercial and industrial uses, noise levels shall not be more than 10 dBA above ambient for a cumulative period of more than 10 minutes per hour or more than 20 dBA above ambient for more than 3 minutes per hour~~

Some specific examples of the problems associated with the use of erroneous, unprotective noise significance thresholds include:

- Exposure of numerous residences on Geneva Avenue (3100 Block) to high construction noise levels is indicated on Table 3.2-15, yet this impact is considered less than significant due to the universal 10-dBA incremental threshold. The existing background exceeds 65 dBA (according to measurements taken). This is already a level where communication through relaxed speech is difficult. A more protective standard (i.e., 1-3 dBA) is called for here (following the lead of FTA standards for incremental operational noise impact). This impact should be declared significant and unavoidable.
- Perhaps the most egregious example of the DEIR's non-protective noise thresholds is with respect to the Bayshore Elementary School, which would be subject to noise increases from the existing 72 dBA to a total noise level of 80 dBA for weeks or months during construction (see Table 3.2-16, p. 3.2-46). Long-term noise intrusions at this level could substantially interfere with education at this school." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.94])

RESPONSE NO-1

Several comments assert that the Draft EIR should use different metrics and thresholds of significance to describe baseline environmental noise conditions and evaluate potential project noise impacts. As described in more detail below, the Draft EIR's evaluation of potential noise impacts uses standard environmental noise metrics and criteria that are relevant to the specific construction and operational noise sources associated with the proposed project. In addition, the Draft EIR clearly discloses and describes the basis for the significance thresholds used to evaluate the project and project variant's potential construction and operational noise impacts (see Draft EIR Sections 3.2.4.1 and 3.2.4.2, pp. 3.2-20 to 3.2-29). As summarized in Draft EIR Tables 3.2-11 and 3.2-12, the Draft EIR applies different metrics and thresholds depending on the activity evaluated (e.g., construction or operation), the type of source evaluated (e.g., mobile or stationary), and the jurisdiction where the activity takes place. The Draft EIR's noise metrics and thresholds, therefore, are not incorrect, erroneous, or inadequate. The following responses discuss specific suggestions and remarks submitted on the criteria and thresholds used in the Draft EIR.

NOISE SETTING AND DEFINITION OF AMBIENT NOISE LEVELS

Four comments (O-CUE.15, O-CUE.20, O-CUE.27 and O.CUE-32) assert the Draft EIR does not provide adequate baseline information to support the evaluation of potential project impacts and mitigation measures because the Draft EIR used energy-averaged noise levels (Leq)to define ambient noise conditions instead of time percentile noise levels, such as the L90 (the noise level exceeded 90 percent of the time). The commenter is correct that the Draft EIR partially relied on the Leq metric to define ambient noise conditions, and that the use of an L90 metric would define a lower ambient noise level than the Leq metric; however, this fact alone does not render the Draft EIR's setting and evaluation of potential impacts and mitigation measures inadequate, for the following reasons:

- The City has revised the Draft EIR Section 3.2.3.3 (Local Regulatory Framework) to reflect changes made by the Board of Supervisors of the City and County of San Francisco to the Police Code's definition of ambient noise. In July 2025 the Board of Supervisors adopted Ordinance 118-25, which revised the definition of "ambient" in San Francisco Police Code section 2901 to the following "the LA_{eq} . . . produced during a minimum ten-minute period". Thus, the San Francisco Police Code no longer defines ambient conditions using the L90 and instead uses the Leq to define ambient conditions. As shown in Chapter 11, the City has revised the Draft EIR to be consistent with the updated Police Code's definition of ambient noise.
- As described in Draft EIR Tables 3.2-11 and 3.2-12, the San Francisco Police Code only expresses standards in terms of an "increase above ambient" metric for nighttime construction activities and daytime and nighttime stationary equipment operations; ambient conditions are not relevant to the evaluation of daytime construction activities because Police Code Section 2907 limits noise from individual pieces of construction equipment to 80 dBA at 100 feet. Thus, even if it were still relevant, the use of an L90 standard would not affect the Draft EIR's daytime construction noise impact analysis for compliance with the San Francisco Noise Ordinance under Draft EIR Impact NO-1.
- The Leq metric is directly relevant to the Draft EIR's evaluation of whether the project or project variant could result in a substantial temporary increase in ambient noise levels from construction pursuant to the FTA's general assessment criteria (Draft EIR Impact NO-2). The FTA's general assessment criteria use the Leq metric to evaluate temporary increases in construction noise (see also discussion of the Draft EIR's use of the FTA's general assessment criteria on pp. 10.4-17 et. seq.).

- As shown in Chapter 11, the City has refined the evaluation of potential stationary source noise from the Martin Substation and new City Substation (project variant) under Draft EIR Impact NO-3 to reflect more detailed transformer noise information (as discussed in Response NO-3) and to use the Leq metric to define ambient conditions consistent with the current San Francisco Police Code requirements. The results of this updated analysis indicate transformers at Martin Substation and the new City Substation could result in operational noise levels that exceed applied thresholds. It is noted that the revised analysis of transformer noise levels is based on the assumptions that are likely to overestimate transformer noies levels, such as the constant use of transformer cooling fans. It is also noted that, in locations where Martin Substation transformers could be located in or affect receptors in both Brisbane and Daly City (e.g., north and south of the boundary between Martin Substation and Daly City Yard), the analysis applies the most stringent code standard from the San Francisco Police Code (Section 2909(b)) and Brisbane Municipal Code (Sections 8.20.030 and 8.28.040) to evaluate exterior transformer noise levels. The Police Code's +8 dbA increase above the existing ambient noise level at any point outside the property plane is considered more stringent than the Brisbane Municipal Code, which limits commercial and ndustrial zoning districts from generating a noise level more than 10 dBA above the local ambient to any receiver for a cumulative period of more than 10 minutes in any hour, more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA above the local ambient for any amount of time (i.e., the Brisbane code standard is not exceeded until noise levels increase by 10 dBA, whereas the San Francisco Police Code standard is exceeded when noise levels increase by 8 dBA or more). As discussed in greater detail in Response NO-3, with implementation of Mitigation Measures M-NO-3a and M-NO-3b, project or project variant impacts from stationary equipment noise at the Martin Substation, the new City Substation, and the operations control center would be less than significant with mitigation.
- In addition to exterior noise performance standards, the Draft EIR mitigation measures also establish an interior noise performance standard (45 dBA Leq) that is protective against sleep disturbance and independent of the definition of ambient noise used by the Draft EIR.

As described above, the Draft EIR's criteria and thresholds of significance, as revised, accurately describe the noise setting in which the project or project variant would be undertaken and adequately evaluate potential noise impacts. Commenters have not provided any substantial evidence to indicate that the Draft EIR's use of the Leq metric to define ambient conditions and evaluate potential noise impacts has not adequately identified and evaluated potential noise impacts.

AIRPORT NOISE SETTING INFORMATION

Two comments (O-PGE-2.65 and O-PGE-2.93) note that the Draft EIR lacks setting information and impact analysis related to San Francisco International Airport (SFO). The commenters are correct that Draft EIR Section 3.2, Noise and Vibration, contains limited information on SFO. This is because the nearest part of any airport runway is located more than 5 miles south of the Martin Substation (Draft EIR Appendix E, p. 28) and at least 3.8 miles south of the closest system reinforcements boundary shown in Draft EIR Figure 2-1. While it is generally true that certain departure and arrival routes result in airplane travel over and near communities where the proposed project or project variant would be located, such as Daly City and San Francisco, it is also true that none of the proposed project components are located in a noise-impacted or other SFO-related compatibility zone that requires or is relevant to the disclosure of the project or project variant's

potential noise effects.[2] In addition, any contribution that aircraft overflight makes to noise levels in the project area was captured by the ambient noise monitoring conducted for the Draft EIR. Thus, SFO operations were inherently factored into the analysis of potential construction impacts presented in Draft EIR Impact NO-2. Furthermore, the Draft EIR contains limited information on SFO operations because the proposed project or project variant would not affect airport operations in any way. An EIR should contain summarized relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public, and should focus on significant effects on the environment.[3] CEQA also requires that the description of the environmental setting be no longer than is necessary to provide an understanding of the significant effects of the proposed project and its alternatives.[4] As described in the Draft EIR, the project area does not include SFO (p. 2-3), and the project or project variant do not include residential development or any type of development in or near any SFO noise contour zone and thus would not expose people to excessive airport-related noise levels (p. 3.2-21). Finally, the Draft EIR (p. 3.2-20) is clear that the criteria for determining the significance of noise impacts "are consistent with Appendix G of the CEQA Guidelines, as modified by the San Francisco Planning Department." Thus, the Draft EIR already discloses that Appendix G significance criteria have been modified by the San Francisco Planning Department. No revision is necessary.

DRAFT EIR'S USE OF FTA'S TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT MANUAL FOR GUIDANCE IN SELECTING CONSTRUCTION AND OPERATIONAL NOISE SIGNIFICANCE CRITERIA

Four comments (O-PGE-2.34, O-PGE-2.65, O-PGE-2.66, and O-PGE-2.92) express general support for the Draft EIR's use of the FTA's Transit Noise and Vibration Impact Assessment Manual to evaluate potential construction noise impacts but assert that the Draft EIR should use the FTA's "Detailed Analysis" methodology instead of the FTA's "General Assessment" methodology to be protective of human health and the environment for various reasons. The commenter correctly identifies that FTA guidance includes two different methodologies for quantifying construction noise impacts. The General Assessment method is recommended for projects in an early stage of assessment when equipment rosters and schedules are undefined and only a rough estimate of construction noise levels is practical. In contrast, the Detailed Analysis method is recommended when equipment rosters and noise levels are certified or known, many noise-sensitive sites are adjacent to a construction project, where stringent local ordinances are in effect, or where heightened public concerns are expressed in early outreach efforts. The commenter is also correct that the FTA's general assessment criteria (e.g., 90 dBA Leq for daytime residential uses) are 10 dBA higher than the detailed assessment criteria (e.g., 80 dBA Leq for daytime residential uses); however, these facts alone do not mean the Draft EIR improperly or wrongly applied FTA guidance, for the following reasons:

- The comments do not disclose that the FTA's guidance manual (p. 179, original emphasis included) states as follows: "No standardized criteria have been developed for assessing construction noise impacts. Consequently, criteria must be developed on a project-specific basis unless local ordinances apply . . . Project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. While it is not the purpose of this manual to specify

[2] City/County Association of Governments of San Mateo County (2012). Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport, Exhibit IV-6, Noise Compatibility Zones - Detail. November 2012. Available online: https://ccag.ca.gov/wp-content/uploads/2014/10/Consolidated_CCAG_ALUCP_November-20121.pdf.
[3] CEQA Guidelines Sections 15147, 15143.
[4] CEQA Guidelines Section 15125(a)(1).

standardized criteria for construction noise impact, the following guidelines can be considered reasonable criteria for assessment. If these criteria are exceeded, there may be adverse community reaction." The FTA's guidance, therefore, is not mandatory, and the selection of any particular assessment methodology is based on project-specific criteria. In the case of the proposed project and project variant, the Draft EIR is clear (e.g., pp. S-3 and 2-5) that some analyses are conducted at a "project level" and others at a "program level." Because there is insufficient information regarding construction equipment usage to conduct a detailed assessment pursuant to the FTA's Detailed Assessment methodology, the Draft EIR relies on the General Assessment method to analyze related impacts. For example, while typical construction schedules and equipment types can be assumed, the actual, specific equipment roster and daily usage are not known at this time. Given this lack of detailed information, the Draft EIR appropriately applies the FTA's General Assessment methodology and there is no need for the Draft EIR to present information on the FTA's Detailed Analysis methodology. This EIR acknowledges a choice among methods and has made clear the reasons for choosing one over the other; therefore, commenters' stated preference for use of a different method does not identify an inadequacy or inaccuracy in the analysis.

- The comments do not disclose that the general assessment criteria are expressed on a one-hour basis (i.e., Leq(1-hr)) whereas the detailed assessment criteria are expressed on an eight-hour basis (Leq(8-hr)). Thus, the detailed, eight-hour assessment criteria are not necessarily more health-protective than the higher, one-hour assessment criteria, and the FTA's guidance document does not specifically state or indicate that one construction noise methodology is, in fact, more health-protective than the other. Thus, even if the detailed assessment criteria were appropriate for use (see above), the commenter does not provide substantial evidence as defined by CEQA Guidelines Section 15384 (facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts) to support the assertion that their use would be more health-protective than the general assessment criteria.
- The Draft EIR explains why different construction criteria and thresholds are applied depending on the activity evaluated (e.g., construction or operation), the type of source evaluated (e.g., mobile or stationary), and the jurisdiction where the activity takes place. Specifically, Draft EIR Impact NO-1 addresses whether the project or project variant could generate a substantial temporary increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance. In some cases, the local standards (e.g., the City of Brisbane's 86 dBA property plane standard, the City and County of San Francisco's daytime 80 dBA equipment standard at 100 feet) are more restrictive than FTA's general assessment and/or detailed assessment criteria, which apply at actual receptor locations. Thus, the Draft EIR has applied local noise ordinance standards that, in some cases, are lower than the general assessment criterion for residential land uses (90 dBA Leq) that is the focus of the comments.
- Draft EIR Impact NO-2, which evaluates the magnitude of the project or project variant's potential construction noise impacts, is independent of applicable local standards and applies both the FTA's static general assessment criterion (e.g., 90 dBA Leq for daytime residential uses) and a variable +10 dBA increase above ambient noise criterion to the evaluation of construction noise levels. As shown in Draft EIR Table 3.2-3 (pp. 3.2-8 to 3.2-10), daytime ambient noise levels at 22 of 27 locations were less than 69.6 dBA Leq, meaning that Impact NO-2 evaluates potential construction noise impacts using a threshold of 79.6 dBA in most locations (i.e., 0.4 dBA lower than the FTA's detailed assessment criteria for residential land uses of 80 dBA Leq). The daytime ambient noise levels measured at the remaining five locations were 72.4 dBA Leq or less, resulting in an Impact NO-2

construction noise threshold of 82.4 dBA. This threshold is similar to the FTA's detailed assessment criterion for residential land uses (80 dBA Leq) and more than 7 dBA lower than the general assessment criterion for residential land uses (90 dBA Leq) that is the focus of the comments. Therefore, the methodology and analysis in Draft EIR Impact NO-2 already apply a similar threshold of significance of 80 dBA Leq as that suggested by the commenters.

- The commenter's assertions that the Draft EIR's use of a 90 dBA Leq is not health-protective because it is above U.S. EPA's 70 dBA Leq noise exposure guideline is incorrect. The Draft EIR (p. 3.2-12) clearly states that (emphasis added) "U.S. EPA found that to prevent hearing loss *over the lifetime of a receptor*, the yearly average L_{eq} should not exceed 70 dBA, and the L_{dn} should not exceed 55 dBA in outdoor activity areas, or 45 dBA indoors to prevent interference and annoyance." Thus, the U.S. EPA guidance reflects permanent exposure to an annual average noise level over a lifetime (assumed to be 40 years) and is not appropriate for temporary exposure to construction noise. In addition, the U.S. EPA guidance is based on annual average exposure to a specific frequency (4,000 Hertz) that is most damaging to the ear, and is not appropriate to use for the evaluation of temporary construction activities that have a broad range of frequencies.
- With regard to the health-protective nature of the EIR's thresholds for evaluating construction noise, it is noted that San Francisco Police Code section 2900(c) expressly declares that it is the policy of San Francisco to protect public health by prohibiting unwanted, excessive, and avoidable noise. Similarly, Brisbane Municipal Code section 9.28.010 declares that it is Brisbane policy to protect the peace and health of its citizens from excessive, unnecessary, and unreasonable noises. Thus, the local standards adopted by San Francisco and Brisbane are explicitly identified as being health protective.
- The commenter's assertions that the "90 dB threshold is the Police Department's threshold for taking action" and that "this threshold is not indicative of potential CEQA noise impacts" are unclear because, as described in the Draft EIR (pp. 3.2-15 and 3.2-17), the San Francisco Police Code does not establish a 90 dB standard for enforcement. San Francisco Noise Ordinance section 2907(a) limits construction noise from individual pieces of equipment to 80 dBA at 100 feet from the noise source. In addition, as explained above, Draft EIR Impact NO-1 addresses whether the project or project variant could generate a substantial temporary increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, including the San Francisco Police Code, while Draft EIR Impact NO-2 evaluates the magnitude of the project or project variant's potential construction noise impacts independent of applicable local standards. Thus, the Draft EIR's CEQA thresholds are only intended to evaluate the significance of the project or project variant's potential construction noise impacts; they are not a threshold for San Francisco Police Department action, which would be subject to actual enforcement procedures at the time an actual complaint or violation is submitted to the San Francisco Police Department.

Three comments (O-PGE-65, O-PGE-92, and O-PGE-2.94) note that the Draft EIR does not include a discussion of FTA guidance for construction and operational motor vehicle traffic, including guidance contained in Table 4-6 and Figures 4-3 and 4-4 of FTA's Transit Noise and Vibration Impact Assessment Manual, which include a "sliding scale" for allowable noise increases that is dependent on existing noise levels. These general remarks are noted; however, without additional details, the City does not have enough information to provide a more detailed response for purposes of CEQA. Nonetheless, in general, the commenters are correct that Table 4-6, Figure 4-3, and Figure 4-4 from FTA's Transit Noise and Vibration Impact Assessment Manual are not included in the Draft EIR. The Draft EIR does not refer to these FTA analytical methods and guidance for mobile and other operational noise sources because, unlike its guidance for construction

equipment that is used in the development of most types of projects, FTA's operational noise guidance is specific to transit projects. Neither the project nor the project variant is a transit project. As indicated by FTA (Transit Noise and Vibration Impact Assessment Manual p. 28), Figures 4-3 and 4-4 apply to "projects where changes are proposed to an existing transit system." Furthermore, with regard to Table 4-6, the FTA manual (p. 31) states that "...Table 4-6 was developed for illustrative purposes and the official criteria are included in Figure 4-3 and Figure 4-4." Since the project or project variant would not involve changes to an existing transit system, this FTA guidance is not relevant to the project or project variant and does not need to be described in the EIR.

For the reasons described above, the Draft EIR's use of FTA's General Assessment methodology is supported and appropriate for the project or project variant, and the use of this methodology, as well as other methods and metrics, provides a fact-based analysis of the project or project variant's potential construction and operational noise impacts that is sufficient to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences of the proposed project and project variant.

USE OF CITY OF LOS ANGELES CODE FOR CONSTRUCTION NOISE SIGNIFICANCE CRITERIA

Two comments (O-PGE-2.34 and O-PGE-2.65) suggest that the Draft EIR should have used the City of Los Angeles' noise thresholds to evaluate construction noise impacts. These remarks are noted; however, City of Los Angeles standards do not apply in San Francisco, and the comments do not provide any substantial evidence for, or example of, why these thresholds are appropriate for use in the Draft EIR or, more importantly, why the nighttime construction noise threshold employed by the Draft EIR is erroneous. The determination of whether a project may have a significant effect on the environment calls for careful judgment, and an ironclad definition of what constitutes a significant effect is not always possible;[5] however, the Draft EIR (pp. 3.2-20 to 3.2-24) includes a detailed discussion of the thresholds of significance used in the noise impact analysis, including how they are used to determine the significance of the project's construction noise impacts.[6]

The Draft EIR relies on two nighttime construction noise thresholds: (1) a 45 dBA interior noise level from World Health Organization recommendations, and (2) the generation of noise more than 5 dBA above ambient noise levels, from San Francisco per Police Code section 2908 (p. 3.2-23). It is noted that the latter threshold is consistent with the City of Los Angeles thresholds identified by the commenter. The commenter's assertions that the Draft EIR should have used City of Los Angeles nighttime noise thresholds instead of San Francisco Police Code thresholds are unsubstantiated. First, San Francisco Police Code section 2900 expressly declares that, among other intents and purposes, it is the "policy of San Francisco to prohibit unwanted, excessive, and avoidable noise." Thus, the San Francisco Police Code standards are not arbitrary. Rather, they serve specific purposes. Second, the commenter does not explain why the City of Los Angeles' standards would be more appropriate than the two nighttime thresholds employed by the Draft EIR.

The commenter's statements that the City of Los Angeles has adopted an 80 dBA threshold for daytime construction noise are acknowledged but they do not support a conclusion that the Draft EIR is inadequate or inaccurate. The Draft EIR employs a significance threshold for daytime construction noise that is less than 79.6 dBA at most locations, and no more than 82.0 dBA in all locations, when using the 10 dBA above

[5] CEQA Guidelines Section 15064(b)(1).
[6] CEQA Guidelines Section 15064(b)(2).

ambient criteria. CEQA acknowledges that thresholds may vary based on setting or other factors (CEQA Guidelines section 15064(b)(1), "An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.") The City acknowledges that the commenter may prefer thresholds of significance that have been adopted by other agencies in other parts of the state over the City's more commonly selected and local thresholds of significance. This difference of opinion does not render the Draft EIR inadequate or inaccurate.

CONSTRUCTION SIGNIFICANCE CRITERION FOR COMMERCIAL RESTAURANT RECEPTORS

One comment (A-Brisbane.4) asserts that the use of a 100 dBA threshold may not be appropriate for analyzing impacts on a specific noise-sensitive commercial receptor (the 7 Mile House, a restaurant with outdoor seating), but does not provide any substantial evidence supporting a determination that the City's threshold is not appropriate. Without additional facts, or suggestions or recommendations for a more appropriate threshold, the City does not have enough information to provide a more detailed response. Nonetheless, the City provides the following general response:

- The Draft EIR (p. 3.2-6) defines sensitive receptors as land uses that are more sensitive to ambient noise levels, such as, but not limited to, residences, schools, hotels. The Draft EIR also identifies existing noise-sensitive receptors within 900 feet of project components (pp. 3.2-10 and 3.2-11). The 7 Mile House is not a noise sensitive receptor for purposes of CEQA. The Draft EIR (pp. 3.2-10 to 3.2-11) does not specifically identify the 7-Mile House restaurant as "noise-sensitive" because restaurants typically involve activities and operations that generate noise, and a low ambient noise level is not considered important for operation. For example, the outdoor dining area at the 7-Mile House fronts Bayshore Boulevard and is exposed to noise levels of about 70 Ldn based on ambient noise monitoring on Geneva Avenue (LT-1, Draft EIR p. 3.2-8, Table 3.2). In addition, while neither the Brisbane General Plan nor the Brisbane Municipal Code defines noise-sensitive receptors or land uses, the EIR's characterization of the restaurant as a commercial land use is consistent with FTA's general assessment guidance applied by the Draft EIR to evaluate, in part, the project's potential construction impacts.
- Noise levels at the 7-Mile House would not exceed applicable thresholds of significance. The Draft EIR does not solely rely on a 100 dBA threshold to evaluate the significance of potential construction noise impacts in Brisbane, including at the 7-Mile House. As described in the Draft EIR (p. 3.2-24, Table 3.2-12, and pp. 3.2-30 to 3.2-31), potential daytime construction noise impacts in Brisbane were evaluated using multiple thresholds, including thresholds based on the Brisbane Municipal Code (86 dBA outside the property plane), the San Francisco Police Code (80 dBA at 100 feet from equipment), and the FTA's general assessment guidance (100 dBA). The Draft EIR concludes that construction noise would not exceed any applicable construction noise threshold at the 7-Mile House.

CONSTRUCTION NOISE SIGNIFICANCE CRITERIA FOR BAYSHORE ELEMENTARY SCHOOL

Three comments (O-PGE-2.34, O-PGE-2.65, and O-PGE-2.94) claim that the Draft EIR indicates that potential construction activities could increase noise levels at the school from 72 dBA to 80 dBA for weeks or months and thus affect education and students. These comments accurately summarize the information in the Draft EIR. For example, the Draft EIR (p. 3.2-10, Table 3.2-4) specifically identifies Bayshore Elementary School as a noise-sensitive land use that is located at least 300 feet from project construction activity, and indicates that the measured daytime ambient noise level in the vicinity of the school was assumed to be 72 dBA Leq. The Draft EIR (pp. 3.2-24 and 3.2-45) also discloses that heavy equipment use at the Martin Substation and new

City Substation (project variant) would be most likely to affect the school, and estimates (p. 3.2-46, Table 3.2-16) that, in the reasonable worst case, site excavation and preparation activities could increase the ambient noise level by 8 dBA, from 72 dBA Leq to 80 dBA Leq, while all other potential construction activities would increase ambient noise levels by no more than 2 dBA. However, the comments mischaracterize the threshold of significance relied upon as "non-protective." The comments do not provide any substantial evidence demonstrating that the noise threshold applied by the Draft EIR to evaluate noise levels at Bayshore Elementary School is inadequate, nor do they recommend a different specific threshold for use by the EIR. As explained above, Impact NO-2 evaluates the potential for construction noise to either (1) exceed the FTA's daytime general assessment criterion of 90 dBA Leq, or (2) result in noise levels that are 10 dBA above ambient conditions at sensitive receptor locations, which in the case of Bayshore Elementary School equates to an 82 dBA Leq threshold. These thresholds are exterior thresholds, and the Draft EIR's estimates of potential construction noise levels are based on the distance between the nearest edge of the construction activity and the nearest edge of the school's eastern property line, which abuts athletic fields, an outdoor seating area, and ingress/egress facilities. Potential interior classroom and instructional areas would be located a minimum of 50 feet farther west, and in some cases as much as 120 feet farther west, which would provide additional noise reduction due to distance (1 to 3 decibels) and exterior-to-interior wall attenuation (minimum 20 dB). This additional distance and wall attenuation are anticipated to provide a minimum 21 to 23 dBA of noise attenuation and result in interior noise levels that are less than 60 dBA. Thus, actual noise levels inside classroom facilities would be much lower than the exterior estimates identified in the Draft EIR. Furthermore, even if a lower threshold were used, such as FTA's detailed assessment noise criterion of 80 dBA Leq as suggested elsewhere by the commenter, it would not change the Draft EIR's conclusions that construction noise levels at Bayshore Elementary School would not exceed the EIR's thresholds of significance (i.e., less than significant, although Impacts NO-1 and NO-2 would remain significant and unavoidable at other receptor locations). It is also noted that Mitigation Measure M-NO-2 requires the preparation of a Construction Noise Control Plan to reduce noise levels from Martin Substation or new City Substation construction activities at the Midway Village residential area, such as the use of quieter construction equipment and installation of barriers, that could also serve to lower both exterior and interior construction noise levels at Bayshore Elementary School. As stated in the Draft EIR, construction would occur at the Daly City Yard or Martin Substation for up to 33 months.

CONSTRUCTION SIGNIFICANCE CRITERIA FOR GENEVA AVENUE RESIDENCES

Two comments (O-PGE-2.65 and O-PGE-2.94) state that numerous residences on Geneva Avenue would be exposed to high construction noise levels that the Draft EIR determines would be less than significant due to the 10-dBA noise increase threshold used by the Draft EIR. Draft EIR Table 3.2-15 (p. 3.2-39) shows that the proposed project could increase daytime noise levels from 66 dBA Leq to up to 74 dBA Leq at residences on Geneva Avenue, which would not be considered a significant impact because the levels do not exceed the 10 dBA above ambient criteria. As described in more detail above, the Draft EIR's analytical methodologies are supported and appropriate for the project, and the metrics and thresholds of significance relied upon in the Draft EIR to evaluate potential noise impacts are consistent with the requirements of CEQA.

SIGNIFICANCE CRITERIA FOR PILE DRIVING

Two comments (O-PGE-2.34 and O-PGE-2.65) claim that the Draft EIR "arbitrarily exempts" pile drivers and other impact tools from noise significance thresholds, that the San Francisco Police Code's exemption of pile drivers is not relevant to CEQA, and that pile drivers and impact tools should be subject to the same San Francisco Police Code standards as other construction equipment. These comments do not accurately

portray the contents of the Draft EIR. First, as explained above, Draft EIR Impact NO-1 addresses whether the project or project variant could generate a substantial temporary increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, including the San Francisco Police Code, while Draft EIR Impact NO-2 evaluates the magnitude of the project's potential construction noise impacts independent of applicable local standards. As noted in the Draft EIR under Impact NO-1 (p. 3.2-32), "As shown in Table 3.2-13, vibratory pile drivers generate a noise level of 101 dBA at a distance of 50 feet. This activity would occur in San Francisco. Impact equipment, which includes both vibratory and impact pile drivers, as defined in the San Francisco Police Code, are exempt from section 2907 of the San Francisco Police Code." Thus, pile driving activities cannot generate noise levels above a standard that does not exist. However, the potential impacts from pile driving are fully evaluated under Impact NO-2 (Draft EIR pp. 3.2-35 to 3.2-48). As shown in Draft EIR Table 3.2-16 (p. 3.2-46), pile driving activities could result in noise levels that are more than 10 dBA above ambient conditions during construction of the new City Substation (project variant). Mitigation Measure NO-2 would reduce, but not avoid, this potentially significant impact. In addition, Draft EIR Impact NO-2 indicates that pile driving during trenchless construction activities for distribution express feeders (discussed on p. 3.2-42 et. seq.) would not result in a potentially significant impact that requires mitigation. Thus, for the reasons described above, the Draft EIR has not exempted pile driving activities from evaluation. Rather, the Draft EIR has adequately evaluated the physical environmental impacts associated with pile driving activities.

NIGHTTIME CONSTRUCTION NOISE CRITERIA

One comment (O-PGE-2.65) asserts that the Draft EIR only uses the San Francisco Police Code to evaluate nighttime noise impacts. This is incorrect. As described in more detail above, Draft EIR Impact NO-1 addresses whether the project could generate a substantial temporary increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, including the San Francisco Police Code, while Draft EIR Impact NO-2 evaluates the magnitude of the project's potential construction noise impacts independent of applicable local standards, using a 45 dBA interior noise threshold to evaluate noise impacts. Thus, the Draft EIR does not solely rely on the San Francisco Police Code to evaluate potential nighttime noise impacts. Regardless, the Draft EIR's analytical methodologies are supported and appropriate for the project, and the metrics and thresholds of significance relied upon in the Draft EIR to evaluate potential noise impacts are consistent with the requirements of CEQA.

GENERAL COMMENTS REGARDING CONSTRUCTION NOISE SIGNIFICANCE CRITERIA AND MITIGATION

Two comments (O-PGE-2.34 and O-PGE-2.69) state that the Draft EIR imposes no mitigation measures for "extreme noise levels because of erroneous thresholds" and should be revised with new mitigation measures based on revised criteria and other new information. With regard to these remarks:

- The comments do not define what constitutes an "extreme" noise level, although common definitions include "of a character or kind farthest removed from the ordinary or average" or "utmost or exceedingly great in degree." Table 3.2-1 in the Draft EIR identifies activities that would achieve noise levels up to 110 dBA, which would be considered very loud noise events, including a jet flying overhead or a loud rock concert. The proposed project's activities would not reach those noise levels for any construction or operational activities. The Draft EIR's estimated potential construction noise levels are based on standard reference information and typical equipment characteristics (see for example, Draft EIR pp. 3.2-24 to 3.2-26), and the loudest activities are estimated to occur during driving

of sheet piles (up to 104 dBA Leq at 15 feet), site excavation and preparation (up to 88 dBA Leq at nearest sensitive receptor), and other activities typical of utility and industrial development projects (see Draft EIR Table 3.2-13 on p. 3.2-31 and revised Draft EIR Tables 3.2-15 and 3.2-16 in Chapter 11) There is nothing extreme about the range in potential construction noise levels presented in the Draft EIR, and the setting in which the project would be undertaken is not exceptionally quiet nor unique in a manner that would make typical construction noise levels extreme.

- As described in more detail above, the metrics and thresholds used by the Draft EIR to evaluate the project's potential construction noise impacts are not erroneous, nor do they avoid the imposition of mitigation measures – see, for example, Draft EIR Mitigation Measures M-NO-1 and M-NO-2, which require actions to control and reduce construction noise levels associated with certain activities.
- As described in more detail above, the Draft EIR clearly discloses and describes the basis for the significance thresholds used to evaluate the project's potential construction and operational noise impacts and applies different metrics and thresholds of significance to different sources and activities. The reference to different numeric standards reflects the project's range in construction activity, time periods, and locations, and whether the standard is fixed or dependent on the ambient noise environment. The Draft EIR's noise thresholds, therefore, are not random. Furthermore, the Draft EIR's thresholds reflect that some land uses are more sensitive to noise than others and thus sets lower thresholds for the more sensitive residential uses than less sensitive commercial and industrial uses. Similarly, the Draft EIR sets lower thresholds for nighttime activities than daytime activities because most receptors are more sensitive to increases in noise during the nighttime period. Thus, the Draft EIR's thresholds are protective of noise-sensitive receptors.

OPERATIONAL NOISE THRESHOLDS

Two comments (O-PGE-2.34 and O-PGE-2.65) claim that Draft EIR page 3.2-27 establishes "an operational noise criteria of a 8 dBA increase," and that this threshold is incorrect. These comments are mistaken. Draft EIR page 3.2-27 correctly explains that San Francisco Police Code section 2909(b) establishes an ambient +8 dBA property plane standard for commercial and industrial properties, and that section 2909(d) establishes interior daytime (55 dBA) and nighttime (45 dBA) noise level standards. These standards are applicable to the proposed Martin Substation, New City Substation, and operations control center because these facilities could have stationary equipment located in San Francisco or Daly City. The commenter's reference to Table 3.2-12 is correct; however, as noted in this table, the single-family residential 10 dBA above ambient threshold for a cumulative period of more than 10 minutes only applies to operational noise impacts in the City of Brisbane. As a point of clarification, as discussed in Response NO-3 and shown in Chapter 11, the Draft EIR has been clarified to evaluate exterior and interior noise from the operation of Martin Substation transformers using both the San Francisco Police Code and the Brisbane Municipal Code standards. Thus, the EIR, as revised, did and continues to apply the correct threshold to its evaluation of operational noise impacts.

OTHER GENERAL COMMENTS REGARDING SIGNIFICANCE THRESHOLDS

Two comments (O-PGE-2.65 and O-PGE-2.94) express the opinion that the Draft EIR's regulatory setting information "contains detailed text," is "pasted without substantial summary into two tables [Tables 3.2-11 and 3.2-12] … in the [Draft EIR's] Impacts and Mitigation Measures section," and is "repetitive and confusing." As a point of clarification, Draft EIR Section 3.2.3 summarizes noise control regulations that are relevant to the project, while Draft EIR Sections 3.2.4.1 and 3.2.4.2 disclose and provide the basis for the selection of certain specific criteria as impact significance thresholds for use in CEQA analysis. The comments also

suggest that the Draft EIR should be modified to apply the most protective standards to all sensitive receptors, regardless of the jurisdiction in which various project components would occur. As explained in more detail above, the Draft EIR's thresholds are protective of noise-sensitive receptors, substantiated and appropriate for the project, and support the fact-based analysis of the project's potential construction noise impacts given the local context in which different parts of the project would occur. While the commenter may disagree with the conclusions of the Draft EIR, the comments do not provide any substantial evidence as defined by CEQA Guidelines Section 15384 (facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts) supporting the assertion that the Draft EIR's regulatory setting or impact analyses are erroneous or inadequate in any way that compromises the EIR as an informational document.

BASIS FOR DIFFERENT CONSTRUCTION AND OPERATIONAL SIGNIFICANCE CRITERIA

One comment (O-PGE-2.65) states that the "inconsistency" between the Draft EIR's construction roadway noise threshold and the higher threshold for other construction activities needs to be explained. As described in more detail above, the Draft EIR clearly discloses and describes the basis for the significance thresholds used to evaluate the project's potential construction and operational noise impacts and applies different metrics and thresholds to different sources and activities. The operation of heavy equipment in a specific area has different noise emission characteristics from the intermittent passage of vehicles on a road that already carries vehicle traffic, and the application of a uniform standard for both of these sources is not consistent with FTA guidance, local code requirements, or commonly accepted methodologies used to evaluate noise impacts under CEQA.

For the reasons described above, the Draft EIR's noise impact analysis understands and correctly characterizes acoustic concepts, presents accurate information in a manner that is intended to inform agency decision makers and the public about the project's potential environmental effects (including the project's noise impacts) and that is consistent with CEQA.

Comment NO-2: Construction Noise Analysis

This response addresses the following comments, which are quoted below:

O-CUE.18, O-CUE.31, O-PGE-2.67, O-PGE-2.68, O-PGE-2.71, O-PGE-2.95, O-PGE-2.96

"D. Noise Impacts from Trenchless Construction Activities Are Not Adequately Analyzed

The DEIR fails to provide an adequate analysis of noise impacts associated with trenchless construction methods. This omission renders the environmental analysis legally deficient under CEQA, which requires that an EIR contains sufficient detail to allow for informed public review and decision-making.[177]

The DEIR does not disclose or analyze the anticipated depth of the launch pit, a key factor that directly influences the propagation of construction noise.[178] The depth of the launch pit affects both the degree of acoustic shielding provided by the surrounding soil and the exposure of sensitive receptors to above-ground

[177] *CEQA Guidelines § 15151.*
[178] *Jue Comments at p. 5.*

equipment, such as auger drills.[179] Without this information, the DEIR cannot accurately assess the extent to which trenchless construction will generate significant noise impacts.

Equally problematic is the DEIR's apparent assumption that all surrounding sensitive receptors are one-story in height.[180] Nearby residential structures include two-story homes or apartments, with second story living spaces and bedrooms that are likely to be above the level of trenchless construction equipment. Vertical proximity increases the potential for noise exposure and diminishes the effectiveness of intervening barriers or topography.[181] The DEIR's failure to acknowledge this condition results in an underestimation of potential noise impacts, particularly for residents occupying the upper floors who are more likely to experience direct line-of-sight exposure to elevated noise sources.[182]

If the launch pit is 10 feet below ground level, Ms. Jue estimates that nearby residences may experience approximately 15 dBA of noise reduction.[183] However, if a nearby residence is two stories or taller, the effective shielding would be reduced to 10 dBA, at most, because the elevated height would limit the barriers effectiveness.[184] As a result, multi-story buildings within 15 feet of the launch pit could experience noise levels of 74 dBA, resulting in a potentially significant impact.[185]

By failing to specify the launch pit depth and account for the multi-story nature of nearby residences, the DEIR does not provide a complete or accurate assessment of potential noise impacts from trenchless construction activities. To remedy this deficiency, the DEIR must be revised to disclose the anticipated dimensions and depth of the launch and receiving pits, analyze how these dimensions affect the emission and attenuation of construction-related noise, account for the presence of two-story residences and evaluate noise impacts to upper-floor occupants, and identify and implement feasible mitigation measures, such as enhanced barriers, enclosures, or restrictions on operating hours and equipment types.[186] Without these corrections, the DEIR's conclusions regarding trenchless construction noise impacts are not supported by substantial evidence and fail to comply with CEQA." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.18])

"The DEIR claims that the launch pit will reduce noise from the augur drill which "would be shielded within the bottom of the launch pit" by 15 dBA, citing a reference for an earthen berm. However, this comparison is not technically appropriate. An earthen berm is effective when it provides horizontal shield for a receiver at a similar height as the source, while a launch pit is only effective when the edge of the pit blocks line of sight from the source and its reflections within the pit to nearby a receivers – receiver at second floors and higher would receive little or no shielding, and these are materially different in acoustic performance. Moreover, the DEIR does not specify the depth of the launch pit. Assuming the augur drill is located at a depth of 10 feet and at the bottom of the pit, nearby residences located 15 feet away may experience approximately 15 dBA of noise reduction based on point source barrier geometry (e.g., Maekawa). However, if the nearby residences are two stories or taller, the effective shielding would be significantly reduced to at most a 10 dBA

[179] *Ibid.*
[180] *Ibid.*
[181] *Ibid.*
[182] *Ibid.*
[183] *Ibid.*
[184] *Ibid.*
[185] *Ibid.*
[186] *Ibid.*

reduction because the elevated height limits the barrier's effectiveness. If there are multi-story buildings in the vicinity of the proposed launch pits, noise levels could reach 74 dBA.

Mitigation Measure M-NO-1 should require noise control, such as enhanced barriers, enclosures, or restrictions on operating hours, for the augur drill in the launch pit to reduce potentially significant noise impacts." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.31])

- "The potential for noise impacts remains undetermined because of lack of a site plan for the Martin Substation, lack of storage/maintenance yard location and plans, lack of locations for subsurface work (i.e. vaults, tranches, foundation work, and jack-and-bore pits), lack of alignment for the distribution and hardening components, and other information not included in the Project Description." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.67])

- "Noise of pile driving are impermissibly omitted from the analysis in the DEIR." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.68])

- "The project's cumulative noise contribution is assumed to be less than significant even though the DEIR for an adjacent project identified significant cumulative impacts and the project could contribute substantially to those impacts, depending on construction schedules." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.71])

"4. The DEIR Noise Impact analysis is based on incomplete project description data that, together with the erroneous application of noise criteria discussed above, results in the DEIR underestimating potentially significant noise impacts

The potential for noise impacts remains undetermined because of lack of adequate Project Description information:

- Noise impacts near the Martin Substation cannot be accurately estimated because of lack of a site plan
- Noise impacts from storage and maintenance yards cannot be determined because of lack of storage/maintenance yard location and plans
- Noise impacts from subsurface work cannot be accurately assessed because of lack of locations for subsurface work (i.e. vaults, tranches, foundation work, and jack-and-bore pits)." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.95])

"5. Other Omissions in Noise and Vibration Analyses

In addition, the DEIR does not address the noise of pile driving and back-up beepers. The noise impacts of pile drivers and other impact tools where they are proposed to be used should not be arbitrarily exempted from the noise significance criteria, and be evaluated under the same San Francisco Police Code standards as other construction equipment. The Police Code's exemption of pile driving is not relevant to CEQA, which evaluates impacts by their effects on the physical environment, not just by code compliance (i.e., Berkeley Keep Jets Over the Bay v. Board of Port Commissioners, 2001 decision). (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.96])

_____

RESPONSE NO-2

Several comments assert that the Draft EIR should include additional information and must be updated to adequately evaluate the project's potential construction noise impacts. As described in more detail below, the Draft EIR included sufficient information to adequately evaluate and disclose the project's potential construction noise impacts.[7] The Draft EIR's construction noise analysis, therefore, meets the requirements of CEQA. The following responses discuss specific suggestions submitted on the Draft EIR construction noise analysis:

TRENCHLESS CONSTRUCTION

Two comments (O-CUE.18 and O-CUE.31) questioned whether the Draft EIR adequately analyzed potential noise impacts from trenchless construction activities because it did not disclose or analyze the anticipated depth of the launch pit and whether two-story residential structures would be located near the launch pits. While it is possible that two-story residences could be located in the vicinity of trenchless construction pits, depending on the final location of the pits, this fact does not render the Draft EIR's analysis of potential trenchless construction activity noise levels inadequate because, as explained in the Draft EIR (p. 2-36), "The [launch] pit dimensions would be approximately 40 feet long, 20 feet wide, and 20 feet deep." Thus, the commenter is mistaken that the Draft EIR does not disclose the depth of the launch pit. In fact, the depth identified in the Draft EIR is twice the depth assumed by the comments (10 feet). For these reasons, the Draft EIR appropriately applies 15 dBA of shielding attenuation for this activity. Therefore, the shielding and attenuation estimates provided in the Draft EIR are accurate, and the Draft EIR's evaluation of potential trenchless construction noise levels is adequate.

PROJECT INFORMATION LEVEL OF DETAIL

Two comments (O-PGE-2.67 and O-PGE-2.95) question the Draft EIR's evaluation of potential noise impacts because a site plan is not provided for certain project components, including the Martin Substation, storage/maintenance yards, subsurface work, and local distribution system separation and system reinforcement components. While these comments are correct that specific, detailed site plans are not included in the Draft EIR for these components, they do not provide any substantial evidence as defined by CEQA Guidelines Section 15384 (facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts)

[7] CEQA Guidelines Section 15151.

for why the Draft EIR's evaluation of the potential noise impacts from these components is undetermined or inadequate. Moreover:

- The Draft EIR does provide detailed information about the identified components. Regarding Martin Substation components and the approximate boundaries of the substation, refer to Draft EIR pp. 2-9 to 2-17, including Table 2-2 and Figures 2-2 to 2-5. Regarding the operations and maintenance service yards and materials and equipment storage needs, refer to Draft EIR pp. 2-29 and 2-30. Regarding distribution express feeders components and alignments, refer to Draft EIR pp. 2-13 and 2-17. Regarding local distribution system separation components, refer to Draft EIR pp. 2-17 to 2-27, including Tables 2-4 to 2-6 and Figures 2-6 and 2-7.
- The Draft EIR also provides construction information appropriate to the level of detail available given the preliminary and programmatic nature of some project components (Draft EIR Section 2.5, pp. 2-30 to 2-47).
- The Draft EIR's evaluation of potential noise impacts is, in general, based on reasonable worst-case assumptions. For example, Draft EIR Table 3.2-14 (p. 3.2-36), Table 3.2-15 (p. 3.2-39), and Table 3.2-16 (p. 3.2-46) all indicate that construction noise level estimates are based on distances "measured from the nearest edge of the construction activity to the nearest sensitive receptor property line." Actual construction would be spread throughout the site and would not be at the nearest edge during all construction activites, therefore the construction noise levels are conservatively estimated. In addition, the Draft EIR's evaluation of potential nighttime construction noise states (Draft EIR p. 3.2-32, emphasis added), "The operation of generators would result in nighttime noise levels of up to 88 dBA L_{eq} *at a worst-case distance of 15 feet from the work area to the nearest property boundary, which for conservative analysis purposes is assumed to be a residential use.*"

For the reasons described above, the Draft EIR provides a complete, good-faith, fact-based analysis of potential construction noise impacts associated with all project components, including those noted specifically by the commenter. Refer also to Response PD-2 regarding the level of project description detail available for the Draft EIR impact analysis.

PILE DRIVING AND BACKUP ALARMS

Two comments (O-PGE-2.68 and O-PGE-2.96) assert that the Draft EIR omits pile driving and backup alarms from analysis. This is incorrect. As explained in more detail in Response NO-1, the potential impacts from pile driving are evaluated under Impact NO-2 (Draft EIR pp. 3.2-35 to 3.2-48). As shown in Draft EIR Tables 3.2-14 and 3.2-16, pile driving activities could result in noise levels that are more than 10 dBA above ambient conditions and/or more than FTA general assessment criteria (90 dBA Leq for residential receptors and 100 dBA Leq for commercial receptors) during construction of the new City Substation (project variant). Mitigation Measure NO-2 would reduce, but not avoid, this potentially significant impact. In addition, Draft EIR Impact NO-2 indicates that pile driving during trenchless construction activities for distribution express feeders would not result in a potentially significant impact that requires mitigation. In addition, the occasional use of backup alarms is typical at construction sites, but only required for equipment with an obstructed rear view. In such cases the equipment must have an alarm that is 10 dBA above ambient noise levels, or a spotter must be used. The use of backup alarms is thus intermittent and occurs during the course of overall construction activities. Moreover, when backing up, the equipment is typically not operating at full load. The Draft EIR's analysis of potential construction noise impacts was conducted using the FTA's General Assessment methodology (see Response NO-1), which is based on maximum noise levels from the two

loudest pieces of equipment; these maximum noise levels are typically more than 10 dBA above average equipment noise levels (see Draft EIR Table 3.2-13, Table 3.2-14, and Table 3.2-15). Thus, the limited use of backup alarms would be consistent with the construction noise levels assumed by the Draft EIR and would not substantially change the Draft EIR's estimated construction noise levels or impact conclusion, and the commenter has provided no substantial evidence as defined by CEQA Guidelines section 15384 (facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts) to suggest otherwise. For these reasons, the EIR has not omitted or incorrectly considered the potential effects of pile driving and backup alarm noise from evaluation.

CUMULATIVE CONSTRUCTION NOISE

One comment (O-PGE-2.71) states that the Draft EIR concludes the project would not have a cumulatively considerable contribution to construction noise impacts. This is incorrect. To clarify, Draft EIR Impact C-NO-1 (pp. 3.2-62 to 3.2-63) includes a detailed evaluation of potential construction noise impacts and concluded that the construction of the Martin Substation or new City Substation (project variant) could combine with construction activities from other projects occurring within 900 feet of these areas to result in a cumulatively considerable contribution to a significant and unavoidable daytime and nighttime cumulative construction equipment noise impact even with the incorporation of Mitigation Measure M-NO-2. In addition, the Draft EIR analysis concluded that the construction of the distribution express feeders, local distribution separation system, system reinforcements, operations control center, and modifications to retain PG&E access at Potrero Substation would not result in a cumulatively considerable contribution to noise levels because these construction activities would be brief in duration and not represent a substantial contribution to changed noise levels. The commenter also asserts the project could contribute to cumulative noise impacts because an adjacent project identified significant cumulative impacts and the project could combine with this impact, depending on construction schedules. However, the commenter does not specify the cumulative project and therefore a more detailed response cannot be provided. As discussed above, the Draft EIR includes a detailed analysis of the project's potential cumulative construction noise impacts and concludes that only certain activities would result in a significant and unavoidable cumulative construction noise impact. This comment does not provide any specific information that is inconsistent with the Draft EIR. Without additional details, the City does not have enough information to provide a more detailed response.

Comment NO-3: Operational Noise Analysis

This response addresses the following comments, which are quoted below:

O-CUE.16, O-CUE.28a

"B. The Operational Noise Analysis Severely Underestimates Transformer Sound Levels Due to Misapplication of Sound Data

The DEIR significantly underestimates operational noise levels from the proposed transformer installations due to critical misapplication of National Electrical Manufacturer Association (NEMA) data.[155] Specifically, the DEIR reports that each of the six transformers at the new City Substation transformers would generate

[155] *Id. at pp. 2-3.*

55 dBA at six feet and cumulatively generate 63 dBA at the same distance.[156] However, these values are derived from NEMA reference sound level data, which are not equivalent to either sound pressure levels or sound power levels.[157]

NEMA standards provide reference sound levels for transformers to facilitate comparisons across equipment types – not as direct measures of environmental noise exposure.[158] These reference levels must be converted to sound pressure levels by applying appropriate acoustic equations that account for the radiating surface area of the transformer enclosure and the distance from the source.[159] The DEIR fails to perform this necessary conversion, resulting in a fundamentally flawed analysis.[160]

When NEMA reference levels are correctly translated, accounting for typical radiating surface area of a pad-mounted transformer, the estimated reference sound pressure level at six feet is approximately 78 dBA – not 55 dBA as stated in the DEIR.[161] At 50 feet, the corrected cumulative sound level from six units would be approximately 60 dBA.[162] This is materially higher than what the DEIR claims and could substantially alter the conclusions regarding noise exposure at nearby sensitive receptors.

The mischaracterization of source noise results in a flawed impact assessment. By underreporting transformer noise by more than 20 dBA at six feet, the DEIR risks masking potentially significant impacts that may require mitigation or design changes. To remedy this deficiency, the DEIR must be revised to apply the correct acoustic conversion methodology, using the actual surface area of the transformer enclosure to convert sound power data into sound pressure levels. The revised analysis must then reevaluate whether the resulting noise levels exceed applicable thresholds and consider feasible mitigation measures where appropriate." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of the Coalition of California Utility Employees [O-CUE.16])

"3. Operational noise analysis in the PMND had errors which have not been addressed in the DEIR:

Transformer noise: The DEIR relies on NEMA sound level data for transformer noise estimation; however, the analysis misapplies or incompletely applies NEMA TP 80050-2013 (R2024), formerly NEMA TR-1-2013. Importantly, the sound levels referenced in this standard do not directly represent either sound pressure levels (SPL) nor sound power levels (PWL). Rather they are reference sound levels that must converted into SPL or PWL using the radiating surface area of the transformer enclosure, which the DEIR fails to consider.[1] Although Table 2-2 of the Project Description lists the voltage settings for the new transformers, the specific basic insultation level (BIL), power rating (MVA) and surface area dimensions (sq. ft. or sq m.) of the transformers are not provided. These three values are required to determine the pressure noise level using the NEMA methodology. According to publicly available data from a Daelim transformer manufacturer, the

[156] *DEIR, Appen. E at p. 59.*
[157] *Jue Comments at p. 2.*
[158] *Ibid.*
[159] *Ibid.*
[160] *Ibid.*
[161] *Id. at pp. 2-3.*
[162] *Ibid.*
[1] *Methods to calculate for far-field use are described in Ver and Beranek, "Noise and Vibration Control Engineering," and in the help notes for the Strutt Acoustics software, https://strutt.arup.com/help/Empirical/LMTransformer.htm*

power rating for a 230kV step down transformer may range from 10MVA to 25MVA, with a BIL of up to 900.[2] While the DEIR does not provide physical dimensions, images from the same source suggest that each vertical face of the transformer should be 50 to 100 sq ft., providing a total radiating surface area of approximately 300 square feet. Using these parameters, a transformer rated at 25,000 kVA would have a reference sound level of approximately 77 dBA. Applying standard acoustic propagation formulas, this corresponds to a SPL of 78 dBA at 6 feet distance, and 60 dBA at 50 feet distance. For comparison, the FTA document cited in the DEIR analysis indicates that transit substations – which are similar in impact and scale – can generate a sound level of 63 dBA at 50 feet distance.[3] When extrapolated to a 6 feet distance, this equates to approximately 81 dBA. These two independent estimates both significantly exceed the DEIR's stated transformer noise level of 55 dBA at 6 feet, indicating that the DEIR underestimates potential transformer noise emissions." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of the Coalition of California Utility Employees [O-CUE.28a])

"Backup Generators: Backup generators should be compared to daytime noise limits during testing. Other projects with backup generators within the City of San Francisco are subject to this limit, such as AT&T 430 Bush/555 Pine Street, 1455 Van Ness, and Seacliff No. 2 Pump Station."

(Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of the Coalition of California Utility Employees [O-CUE.28c])

RESPONSE NO-3

Comments suggest that the Draft EIR underestimated potential transformer noise levels and question whether it correctly evaluated stationary source noise levels associated with backup generators at the operations control center and operations and maintenance service yards. As explained in more detail below, the City has revisited and revised the analysis of potential transformer noise levels using manufacturer's data. Based on the revised transformer analysis, the project would not result in a substantially more severe or new significant impact than that already identified for Impact NO-3. Separately, also as explained in more detail below, the Draft EIR correctly evaluated non-transformer stationary source noise levels. The detailed response is as follows:

TRANSFORMER NOISE LEVELS

Two comments (O.CUE.16 and O.CUE-28a) assert that the Draft EIR misapplied reference transformer noise data obtained from the National Electrical Manufacturer Association (NEMA) and thus underestimated potential transformer noise levels. The comments are, in general, correct. The Draft EIR assumed that each individual transformer that could be installed at the Martin Substation and new City Substation (project variant) would produce a noise level up to 55 dBA at 6 feet, referencing NEMA Standard TR 1-2013, revised in 2019, Transformers, Step Voltage Regulators and Reactors, as the basis for this assumption. In response to these comments, the City conducted additional review of the NEMA standard and determined that the 55 dBA reference was specific to no load conditions at 0.3 meters, as measured at the manufacturing facility,

[2] *https://www.daelimtransformer.com/220kv-transformer.html*
[3] *Table 4-24, FTA 2018*

and (consistent with the suggestion in the comments) does not account for cooling fans or the actual radiating surface area of the transformers, which in the case of the proposed project would be approximately 100 square meters (Draft EIR p. 2-12). Thus, the Draft EIR's 55 dBA transformer noise level assumption resulted in an unintentional under-reporting of anticipated transformer operating conditions. Accordingly, as shown below, the EIR's analysis of potential transformer noise levels has been revised to use updated transformer sound pressure data measured in accordance with the Institute of Electrical and Electronics Engineers (IEEE) Guide for Audible Sound of Liquid-Immersed Power Transformers, Standard C57.136-2023. The data are manufacturer-guaranteed and are based on recent installation of similarly sized transformers that did not include any specific noise insulation design features. These estimates do not include any shielding or attenuation of noise by barriers or intervening structures. The estimates also assume 24-hour, year-round operation of cooling fans when in actuality such fans are anticipated to operate for several hours a day during part of the year only. Finally, because the revised Martin Substation area also now includes parts of Daly City, the City has reviewed and applied the most stringent exterior noise standard from the San Francisco Police Code and Brisbane Municipal Code to the revised transformer analysis, as described in Chapter 11.

The results of the revised analysis indicate Martin Substation transformer noise levels could exceed the applied exterior noise standard from City of Brisbane Municipal Code of 10 dBA above existing ambient noise levels at the property plane along the Bayshore Boulevard, while new City Substation transformer noise levels could exceed the applied exterior noise standard at the southern property plane near the Midway Village residential development. With the implementation of Mitigation Measure M-NO-3a (Operational Noise Analysis and Attenuation for Stationary Noise Sources) as revised, which requires setbacks, barriers, and/or other transformer noise control features to ensure compliance with San Francisco Police Code Section 2909(b) and Brisbane Municipal Code Section 8.28.030, the impact of operational transformer noise at the Martin Substation would be less than significant with mitigation.

In response to comments, on Draft EIR page 3.2-48 and 3.2-49, the discussion of operational noise impacts for Martin Substation Separation is revised as follows:

> Two new transformers installed as part of the Martin Substation separation would emit noise during operation. In addition, one existing transformer at the substation would be relocated within the substation footprint. Transformer noise consists of two components: a pure-tone or "hum" noise and noise from cooling fans.[76] The California General Plan Guidelines[77] contains a table of recommended adjustments to standards for land use noise compatibility. For noisy urban residential communities near relatively busy roads or industrial areas, such as Geneva Avenue, a -5 dBA correction is recommended (i.e., when evaluating whether a noise source would increase ambient noise levels, reduce the estimated noise of the new source by 5 dBA), while for sources with a "pure tone character," a +5 dBA correction is recommended. Because these two conditions cancel out each adjustment, no adjustment is warranted to analyze the transformer noise associated with the project to determine compliance with the relevant noise criteria. Based on the type of transformers proposed, each transformer could generate a noise level up to ~~55~~77 dBA at 3.3 feet (1 meter), or approximately 72 dBA at 6 feet;[78] when combined, two transformers would generate noise levels of

[76] Substation transformers would include cooling fans that would operate approximately five hours each day between May 1 and October 31.
[77] Governor's Office of Planning and Research, State of California 2017 General Plan Guidelines, Appendix D: Noise Element Guidelines, Page 375, 2017. This document is available online at: http://opr.ca.gov/docs/OPR_Appendix_D_final.pdf.Accessed October 6, 2024.
[78] ~~National Electrical Manufacturers Association. 2019. NEMA Standards Publication TR 1-2013 (R2019) Transformers, Step Voltage Regulators and Reactors.~~ Institute of Electrical and Electronics Engineers (IEEE) Guide for Audible Sound of Liquid-Immersed Power Transformers, Standard C57.136-2023, and SFPUC.

~~58~~ approximately 75 dBA at 6 feet.[79] Although transformer noise levels could vary by time of day and season, these noise levels are assumed to be worst-case equivalent noise levels (Leq) for transformer operations. The existing transformer that would be relocated within the substation footprint would be moved to a different area and would not substantially combine with noise levels from the two newly installed transformers.

All sensitive receptors within 900 feet of Martin Substation are located in Daly City; however, ~~. As stated in Table 3.2-12, the City of Daly City does not have quantitative operational noise standards. Because~~ the new or modified stationary sources at Martin Substation would exist within either Brisbane or Daly City.~~,~~ As stated in Section 3.2.4.1, this ~~the~~ analysis ~~applies the City of Brisbane~~ evaluates Martin Substation transformer noise levels against either the standards of the San Francisco Police Code or the City of Brisbane Municipal Code (see Table 3.2-12) except in cases where equipment could be in both Brisbane and Daly City, (e.g., north and south of the boundary between Martin Substation and Daly City Yard), in which case the this analysis evaluates Martin Substation transformer noise levels against the more stringent standard, as follows:

- At the northern property plane, southern property plane, and Daly City Yard western property plane, Martin Substation stationary source equipment shall meet the exterior noise standards of section 2909(b) of the San Francisco Police Code (i.e., an 8 dBA increase above the ambient Leq noise level at the property plane for noise from commercial or industrial uses; and interior noise limits of 55 dBA and 45 dBA for daytime and nighttime hours inside any sleeping or living room in a nearby dwelling unit on a residential property assuming windows open, respectively).
- At the eastern property plane, Martin Substation stationary source equipment shall meet the exterior noise standard of Section 8.28.040 of the Brisbane Municipal Code (i.e., no more than a 10 dBA increase above ambient noise for more than 10 minutes per hour, no more than a 20 dBA increase above ambient for more than 3 minutes per hour, and not more than a 30 dBA increase above ambient at any point).

With regards to exterior standards along the northern property plane, the San Francisco Police Code standard (no more than +8 dbA increase above the existing ambient noise level at any point outside the property plane, as defined using the Leq metric), is more ~~The most~~ stringent than ~~restriction of~~ the Brisbane Municipal Code, which prohibits noise produced by any machine, animal or device or any combination of same, in any commercial or industrial zoning district from generating a noise level more than 10 dBA above the local ambient to any receiver for a cumulative period of more than 10 minutes in any hour, more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA above the local ambient for any amount of time (i.e., the Brisbane code standard is not in effect until noise levels increase by 10 dBA, whereas the Police Code standard is in effect when noise levels increase by 8 dBA or more). Therefore, stationary operational activities that meet the exterior San Francisco Police Code standard would also meet the exterior Brisbane standard.

With regard to interior noise levels, as noted in Section 3.2.4.2, the City of Brisbane does not maintain interior noise standards for commercial and industrial noise sources, but does establish interior noise standards for multi-family dwelling units. Thus, this analysis evaluates Martin Substation transformer noise levels against the allowable level of interior noise by both the standards of the

[79] OMNI calculator, sound pressure distance attenuation calculator. Available at: https://www.omnicalculator.com/physics/distance-attenuation.

San Francisco Police Code Section 2909(d) and the City of Brisbane's residential zoning district standards (see Table 3.2-12).

Exterior Noise

The exact location of new transformers on the Martin Substation site is currently unknown; however, newly installed transformers would be no closer than 40 feet from the substation's northern property line (Geneva Avenue), 280 feet from the substation's southern property plane (Midway Village), 6 feet from the substation's eastern property plane (near 7 Mile House Restaurant/Bayshore Boulevard), and 585 feet from the Daly City Yard's western property plane (Schwerin Street)~~, but for the purposes of this noise analysis it is assumed to be no closer than 6 feet to the property line at Geneva Avenue~~ (refer to revised Figure 2-2). These distances assume transformers are set back 40 feet from the northern property line to avoid an existing utility line easement, but operate at the southern, eastern, and western edges of the Martin Substation area with only a minimum six-foot setback from the substation boundary. ~~The ambient L90 noise level recorded at the northern property line (LT-2) was 48 dBA.~~ The existing daytime and nighttime ambient noise levels (dBA Leq) at these locations, the estimated noise level that would be produced by the new Martin Substation transformers, and the resulting total combined existing plus transformer noise levels at the property plane locations are summarized in **Table 3.2-16a**.

As shown in Table 3.2-16a, the potential operation of transformers at the Martin Substation would not increase ambient noise levels above applied standards at the northern, southern, or western property planes during daytime or nighttime conditions. In addition, the new transformers would not increase ambient noise levels above applied standards at the eastern property plane during daytime conditions; however, the operation of transformers could increase ambient noise levels by 11 dBA during nighttime conditions at the eastern property plane, which is considered a potentially significant impact.

~~Assuming the two proposed transformers would operate at 58 dBA at a distance of 6 feet, the transformer noise level at receptors at a distance of 6 feet from the closest property line of Martin Substation to the north would be 58 dBA. Therefore, transformer noise from the project would not exceed 10 dBA over the ambient noise level at the closest property line.~~ It is noted that the above estimates assume continuous use of transformer cooling fans, even when supplemental cooling may not be required (e.g., late night and early morning periods, wintertime). Realistically, the use of cooling fans should only be required when both electricity demand and ambient temperatures are high, which is anticipated to be approximately 5 hours a day during afternoon and early evening periods from approximately May 1 to October 31. Thus, actual transformer noise levels are anticipated to be lower than estimated in Table 3.2-16a. Regardless, with implementation of **Mitigation Measure M-NO-3a (Operational Noise Analysis and Attenuation for Stationary Noise Sources)**, which requires setbacks, barriers, and/or other transformer noise control features to ensure compliance with San Francisco Police Code Section 2909(b) and Brisbane Municipal Code Section 8.28.030, the impact of operational transformer noise at the Martin Substation would be ***less than significant with mitigation***. For example, while each transformer would be up to 20 feet tall, it is anticipated that transformers would be located behind 25-foot-tall, 16-inch-thick fire walls (refer to Draft EIR Chapter 2, Project Description, page 2-12) that would shield the transformers and serve to

Table 3.2-16a Martin Substation Separation Operational Transformer Noise Levels

Property Plane and Representative Noise Environment	Transformer Distance to Property Plane (feet)[a]	Martin Substation Total New Transformer Noise Level (dBA Leq)[b]	Existing Ambient Noise Level (dBA Leq)[c]	Existing Plus Project Noise Level (dBA Leq)	Total Change in Ambient Noise Level (dBA Leq)	Applicable Standard (dBA Leq)[d]	Standard Exceeded?
North – Geneva Avenue (LT-1)	40	58.3	66.0 (daytime)/ 64.0 (nighttime)	66.7 (daytime)/ 65.0 (nighttime)	+0.7 (daytime)/ +1.0 (nighttime)	+8 above ambient	No
North – Geneva Avenue (LT-2)	40	58.3	72.0 (daytime)/ 65.0 (nighttime)	72.2 (daytime)/ 65.8 (nighttime)	+0.2 (daytime)/ +0.8 (nighttime)	+8 above ambient	No
South – Midway Village (LT-5)	280	41.4	51.0 (daytime)/ 45.0 (nighttime)	51.5 (daytime)/ 46.6 (nighttime)	+0.5 (daytime)/ +1.6 (nighttime)	+8 above ambient	No
East – Bayshore Boulevard (LT-1)	6	74.8	66.0 (daytime)/ 64.0 (nighttime)	75.4 (daytime)/ 75.2 (nighttime)	+9.4 (daytime)/ **+11.2 (nighttime)**	+10 above ambient[e]	No (daytime)/ **Yes (nighttime)**
West – Schwerin Street (LT-3)	585	35.0	72.0 (daytime)/ 65.0 (nighttime)	72.0 (daytime)/ 65.0 (nighttime)	0.0	+8 above ambient	No

SOURCES: Technical Noise Memorandum Updates (Attachment B)

NOTES:

a. Transformers would be set back at least 40 feet from the northern property plane due to an existing natural gas easement. All other transformers were assumed to have a six-foot setback from the substation boundary.
b. Total transformer noise is for two transformers.
c. The representative noise environment is based on the closest LT monitoring data listed in Table 3.2-3. The nighttime ambient Leq noise level for Midway Village and the southern Daly City Yard property line (LT-5) is based on measurements at LT-4 as explained in Table 3.2-3.
d. Refer to Table 3.2-12. The +8 dBA Leq standard is from SF Police Code Section 2909(b). The +10 dBA Leq standard is from Brisbane Municipal Code Section 8.28.030. This standard is applied for a cumulative 10 minute period in any hour.
e. The Brisbane Municipal Code also sets +20 dBA and +30 dBA above ambient standards that would not be exceeded by the project.

block the direct transmission of noise from the transformers to the property plane and sensitive receptors located beyond the property plane. However, the impact analysis does not assume that such walls are part of the project but that they would be implemented as mitigation. These walls are estimated to provide a minimum 15 dBA reduction in transformer noise levels immediately outside the fire wall, a minimum of 10 dBA of attenuation at distances up to 100 feet outside the fire wall, and between 7 to 9 dBA of attenuation at distances between 100 and 300 feet outside the fire wall.[80a] To be compliant with relevant noise standards, the mitigation measures would need to reduce the transformer noise levels by at least 1 dBA. Therefore, a combination of setbacks, barriers, and other control measures required by Mitigation Measure M-NO-3a would be sufficient to reduce transformer noise to levels that comply with the San Francisco Police Code's exterior noise standard.

Interior Noise

With respect to the daytime and nighttime interior noise thresholds for operational noise, unshielded transformer noise is estimated to attenuate to 41.3 dBA L_{eq} at the closest Midway Village residential building exterior, located 285 feet from potential transformers, and to 46.6 dBA L_{eq} at the nearest residential building exterior on Geneva Avenue, located 155 feet from potential transformers. Given that buildings attenuate noise by at least 15 dBA with windows open, interior transformer noise would be reduced to approximately 26 dBA inside Midway Village dwelling units and approximately 32 dBA inside Geneva Avenue dwelling units. Thus, the project ~~also~~ would not result in an interior noise level at the nearest residence in excess of the San Francisco Police Code's (Section 2909(d)) daytime (55 dBA) or nighttime (45 dBA) standards. The project also would not result in an interior noise level at the nearest residence in excess of the applied standards of Brisbane Municipal Code Section 8.28.030, because, even in the worst case, the interior noise level of (32 dBA) would be less than the minimum interior ambient noise level of 35 dBA used in the Brisbane code to evaluate compliance with its noise standards. The operational noise impact of the Martin Substation separation would, therefore, be ***less than significant***.

Footnote 78 on Draft EIR page 3.2-48 has been revised to read:

[78] ~~National Electrical Manufacturers Association. 2019. NEMA Standards Publication TR 1-2013 (R2019) Transformers, Step Voltage Regulators and Reactors.~~ Institute of Electrical and Electronics Engineers (IEEE) Guide for Audible Sound of Liquid-Immersed Power Transformers, Standard C57.136-2023, and SFPUC.

Footnote 80a has been added between Draft EIR pages 3.2-48 and 3.2-49:

[80a] In general, a noise barrier limits the direct transmission of sound waves through the barrier and requires soundwaves to travel over the barrier to reach a receptor. The longer a diffracted sound wave must travel to go over the barrier and reach a receptor (as compared to the path of direct transmission through the barrier) the more effective the barrier is. As a barrier gets farther away from a source or a receptor, diffraction diminishes and barrier effectiveness decreases. The specific reduction realized at property planes and sensitive receptor locations would depend on the distance between the fire wall and property plane, the distance between the fire wall and receptor location, and the elevation of the receptor with respect to the transformer and fire wall.

[80a] In general, a noise barrier limits the direct transmission of sound waves through the barrier and requires soundwaves to travel over the barrier to reach a receptor. The longer a diffracted sound wave must travel to go over the barrier and reach a receptor (as compared to the path of direct transmission through the barrier) the more effective the barrier is. As a barrier gets farther away from a source or a receptor, diffraction diminishes and barrier effectiveness decreases. The specific reduction realized at property planes and sensitive receptor locations would depend on the distance between the fire wall and property plane, the distance between the fire wall and receptor location, and the elevation of the receptor with respect to the transformer and fire wall.

Mitigation Measure M-NO-3a starting on Draft EIR page 3.2-49 has been revised as follows:

Mitigation Measure M-NO-3a: Operational Noise Analysis and Attenuation for Stationary Noise Sources

This measure applies to: Stationary Noise Sources at Martin Substation, New City Substation (Project Variant) and the Operations Control Center

Prior to construction at the Martin Substation, new City Substation (project variant) and operations control center, the SFPUC shall submit documentation to the Environmental Review Officer (ERO) or the ERO's designee, demonstrating with reasonable certainty that the proposed approach to the installation, replacement, or renovation of ~~HVAC~~ stationary source equipment meets the noise levels ~~limits specified in~~as follows:

- Martin Substation: At the northern property plane, southern property plane, and Daly City Yard western property plane, stationary source equipment shall meet the exterior noise standards of section 2909(b) of the San Francisco Police Code (i.e., an 8 dBA increase above the ambient Leq noise level at the property plane for noise from commercial or industrial uses~~; and interior noise limits of 55 dBA and 45 dBA for daytime and nighttime hours inside any sleeping or living room in a nearby dwelling unit on a residential property assuming windows open, respectively)~~. At the eastern property plane, stationary source equipment shall meet the exterior noise standard of Section 8.28.040 of the Brisbane Municipal Code (i.e., no more than a 10 dBA increase above ambient noise for more than 10 minutes per hour, no more than a 20 dBA increase above ambient for more than 3 minutes per hour, and not more than a 30 dBA increase above ambient at any point).
- New City Substation: At the Daly City Yard's northern, southern, and western property planes, stationary source equipment shall meet the exterior and interior noise standards of section 2909(b) of the San Francisco Police Code. At the Martin Substation eastern property plane, stationary source equipment shall meet the exterior standard of Brisbane Municipal Code Section 8.28.040.
- Operations Control Center: At all operation control center property planes, stationary source equipment shall meet the exterior and interior noise standards of section 2909(b) and 2909(d), respectively, of the San Francisco Police Code.

Acoustical treatments required to meet the San Francisco Police Code and/or the Brisbane Municipal Code requirements may include but are not limited to:

- Enclosing noise-generating mechanical equipment;
- Installing relatively quiet models of air handlers, exhaust fans, and other mechanical equipment;
- Using mufflers or silencers on equipment exhaust fans;
- Optimizing transformer design with low-noise core materials or custom-designed transformer enclosures;
- Orienting or shielding equipment to protect noise sensitive receptors (residences, hospitals, convalescent homes, schools, churches, hotels and motels, and sensitive wildlife habitat) to the greatest extent feasible;

- Increasing the distance between noise-generating equipment and noise-sensitive receptors; and/or
- Placing barriers around the equipment to reduce noise.

Significance after Mitigation: Less than significant.

On Draft EIR page 3.2-51 and 3.2-52, the discussion of operational noise impacts for the new City Substation (Project Variant) has been revised as follows:

New City Substation (Project Variant)

Proposed above-ground components at the new City Substation, which would be located at Daly City Yard, include two switchgear buildings, four 115 kV and two 230 kV transformers, and new transmission and distribution lines. Of the proposed equipment, only the six new transformers would emit noise during operations. Based on the type of transformers proposed, each transformer could generate noise levels up to ~~55~~77 dBA at 1 meter (3.3 feet), or 72 dBA at 6 feet.[84] When combined, six transformers would generate noise levels of ~~63~~80 dBA at 6 feet. As explained previously, although transformer noise levels could vary, this analysis assumes transformer noise levels are worst-case equivalent noise levels (Leq).

All receptors within 900 feet of the Daly City Yard are located in Daly City. As explained in section 3.2.4.2, ~~B~~because the City of Daly City does not have quantitative operational noise standards, the City and County of San Francisco's thresholds are applied for assessing impacts of the operational noise from stationary sources within Daly City. San Francisco Police Code section 2909(b) generally prohibits fixed mechanical equipment noise and music in excess of 8 dBA above the ambient noise level from commercial or industrial sources. San Francisco Police Code section 2909 (d) restricts interior noise to 45 dBA between 10 p.m. and 7 a.m. and 55 dBA between 7 a.m. and 10 p.m. These are the absolute maximum allowable levels of interior noise produced by any combination of mechanical device(s) under one ownership or use originating from outside the dwelling unit.

Exterior Noise

~~The proposed footprint of the new City Substation would be approximately 200 feet from the closest property line of the Daly City Yard to the south. The ambient L90 noise level measured near the southern Daly City Yard property line (LT-5) was 41dBA. At this distance transformer noise at the southern property line would be reduced to 30 dBA. The transformer noise would increase the existing ambient noise level by less than 1 dB during operations. Therefore, transformer noise from the new City Substation (project variant) would not exceed 8 dBA over the ambient noise level at the closest property plane.~~

The exact location of new transformers at the new City Substation is currently unknown; however, newly installed transformers would be no closer than 365 feet from the Daly City Yard's northern property line (Geneva Avenue), 95 feet from the yard's southern property plane (Midway Village), more than 1,200 feet from the eastern property plane on Bayshore Boulevard, and 245 feet from the yard's western property plane (Schwerin Street; refer to revised Figure 2-2). These distances assume

[84] National Electrical Manufacturers Association. 2019. NEMA Standards Publication TR 1-2013 (R2019) Transformers, Step Voltage Regulators and Reactors.

transformers operate with only a minimum six-foot setback from the substation area boundary. The existing daytime and nighttime ambient noise levels (dBA Leq) at these locations, the estimated noise level that would be produced by the new City Substation transformers, and the resulting total combined existing plus transformer noise levels at the property plane locations are summarized in **Table 3.2-16b**.

As shown in Table 3.2-16b, the potential operation of transformers at the new City Substation would not increase ambient noise levels at the northern, eastern, or western property planes by more than 8 dBA during daytime or nighttime conditions. In addition, the new transformers would not increase ambient noise levels by more than 8 dBA at the southern property plane during daytime conditions; however, the operation of transformers could increase ambient noise levels by 11 dBA during nighttime conditions at the southern property plane, which is considered a potentially significant impact.

It is noted that the above estimates assume continuous use of transformer cooling fans, even when supplemental cooling may not be required (e.g., late night and early morning periods, wintertime). Realistically, the use of cooling fans should only be required when both electricity demand and ambient temperatures are high, which is anticipated to be approximately 5 hours a day during afternoon and early evening periods from approximately May 1 to October 31. Thus, actual transformer noise levels are anticipated to be lower than estimated in Table 3.2-16b.

With implementation of **Mitigation Measure M-NO-3a (Operational Noise Analysis and Attenuation for Stationary Noise Sources)**, which requires setbacks, barriers, and/or other transformer noise control features to ensure compliance with San Francisco Police Code section 2909, the impact of operational transformer noise at the new City Substation would be ***less than significant with mitigation.*** For example, while each transformer would be up to 20 feet tall, transformers are anticipated to be located behind 25-foot-tall, 16-inch-thick fire walls that would shield the transformers and serve to block the direct transmission of noise from the transformers to the property plane and sensitive receptors located beyond the property plane. However, the impact analysis does not assume that such walls are part of the project but that they would be implemented as mitigation. These walls are estimated to provide a minimum 15 dBA reduction in transformer noise levels immediately outside the fire wall, a minimum of 10 dBA of attenuation at distances up to 100 feet outside the fire wall, and between 7 to 9 dBA of attenuation at distances between 100 and 300 feet outside the fire wall. To be compliant with relevant noise standards, the mitigation measures would need to reduce the transformer noise levels by at least 3 dBA. Therefore, as discussed above for the Martin Substation, a combination of setbacks, barriers, and other control measures required by Mitigation Measure M-NO-3a would be sufficient to reduce transformer noise to levels that comply with the San Francisco Police Code's exterior noise standard.

Interior Noise

~~Exterior t~~ Transformer noise of ~~30~~ 56 dBA Leq at the southern property plane 95 feet away ~~also~~ would be substantially the same at the nearest building façade located 100 feet away. New City substation transformer noise levels would not result in an interior noise level at the nearest residence in excess of the San Francisco Police Code's 55 dBA daytime and 45 dBA nighttime interior noise criteria because buildings would attenuate noise by at least 15 dBA with windows open. Therefore, the operational interior noise impact of the new City Substation would be ***less than significant***.

Table 3.2-16b New City Substation Operational Transformer Noise Levels

Property Plane and Representative Noise Environment	Transformer Distance to Property Plane (feet)[a]	New City Substation Total New Transformer Noise Level (dBA Leq)[b]	Existing Ambient Noise Level (dBA Leq)[c]	Existing Plus Project Noise Level (dBA Leq)	Total Change in Ambient Noise Level (dBA Leq)	Applicable Standard (dBA Leq)[d]	Standard Exceeded?
North – Geneva Avenue (LT-1)	365	43.9	66.0 (daytime)/ 64.0 (nighttime)	66.0(daytime)/ 64.0 (nighttime)	0.0	+8 above ambient	No
North – Geneva Avenue (LT-2)	365	43.9	72.0 (daytime)/ 65.0 (nighttime)	72.0 (daytime)/ 65.0 (nighttime)	0.0	+8 above ambient	No
South – Midway Village (LT-5)	95	55.6	51.0 (daytime)/ 45.0 (nighttime)	56.9 (daytime)/ 56.0 (nighttime)	+5.9 (daytime)/ **+11.0 (nighttime)**	+8 above ambient	No (daytime)/ **Yes (nighttime)**
East – Bayshore Boulevard (LT-1)	1,200	33.6	66.0 (daytime)/ 64.0 (nighttime)	66.0 (daytime)/ 64.0 (nighttime)	0.0	+8 above ambient	No
West – Schwerin Street (LT-3)	245	47.4	72.0 (daytime)/ 65.0 (nighttime)	72.0 (daytime)/ 65.1 (nighttime)	0.0 (daytime) + 0.1 (nighttime)	+8 above ambient	No

SOURCES: Technical Noise Memorandum Updates (Attachment B)

NOTES:

a. Transformers were assumed to have a minimum six-foot setback from the substation boundary.
b. Total transformer noise is for six transformers.
c. The representative noise environment is based on the closest LT monitoring data listed in Table 3.2-3. The nighttime ambient Leq noise level for Midway Village and the southern Daly City Yard property line (LT-5) is based on measurements at LT-4 as explained in Table 3.2-3.
d. Refer to Table 3.2-12. The +8 dBA Leq standard is from SF Police Code Section 2909(b).

OTHER STATIONARY SOURCE NOISE LEVELS

One comment (O-CUE.28c) identifies several projects as a basis for comparing backup generators to San Francisco Police Code requirements but does not provide any specific explanation for why these projects are representative of or relevant to the proposed project, nor does the commenter provide any substantial evidence indicating that backup generators would not comply with the San Francisco Police Code. As described in the Draft EIR (p. 3.2-49), the limited testing of backup generators (50 hours per year, or less than 5 hours per month) would render the temporary increase in noise from such testing a less-than-significant impact.

For the reasons described above, the EIR has adequately evaluated potential stationary source noise levels associated with the project and project variant.

Comment NO-4: Noise Mitigation Measures

This response addresses the following comments, which are quoted below:

O-CUE.19, O-CUE.30, O-PGE-2.35, O-PGE-2.70, O-PGE-2.97

"E. Noise Mitigation Measures Are Inadequate

Under CEQA, an EIR must disclose and evaluate feasible mitigation measures that would minimize the project's significant environmental impacts.[187] As a general rule, it is inappropriate for an EIR to defer formulation of mitigation measures to a future date.[188] While CEQA does allow agencies to establish performance standards in lieu of fully specified mitigation measures, this is permissible only when it is impractical or infeasible to provide detailed measures at the time of EIR certification.[189] In such cases, the lead agency must: (1) clearly commit to implementing the mitigation; (2) adopt enforceable performance standards; and (3) identify the types of actions that could feasibly achieve those standards.[190] Any future mitigation actions identified in the EIR must be described in sufficient detail to demonstrate their potential feasibility and effectiveness.[191]

1. *Mitigation Measure M-NO-1 Is Vague and Unenforceable*

The DEIR concludes that impacts associated with potential nighttime generator operation during construction of the distribution express feeder is potentially significant.[192] To reduce this impact, the DEIR identified Mitigation Measure M-NO-1, which requires that the dewatering of trenchless excavation pits to be designed to meet a performance standard of no more than 5 dBA above ambient levels by implementing quiet generators and/or acoustical enclosures.[193] While the inclusion of a performance standard represents an attempt to define acceptable noise levels, the measure remains vague and unenforceable for several reasons.

---

[187] *Pub. Res. Code §§ 21061, 21100(b)(3); CEQA Guidelines § 15126.4.*
[188] *CEQA Guidelines § 15126.4(a)(1)(B).*
[189] *Ibid.*
[190] *Ibid.; Save Our Capitol! v. Department of Gen. Servs. (2023) 87 Cal.App.5th 655, 687-88; East Oakland Stadium Alliance v. City of Oakland (2023) 89 Cal.App.5th 1226, 1255.*
[191] *East Oakland Stadium Alliance v. City of Oakland (2023) 89 Cal.App.5th 1226, 1258-59, 75.*
[192] *DEIR at p. 3.2-33.*
[193] *Ibid.*

First, the terms “quiet” generator and “acoustical enclosure” are not clearly defined.[194] The use of qualitative descriptors alongside a performance threshold introduces ambiguity when the mitigation measure does not specify what equipment qualifies as acceptable. For instance, it is unclear whether any generator that meets the performance standard qualifies as “quiet,” or if the measure requires the selection of generators that are inherently lower in noise output, even before mitigation measures are applied (e.g., sound enclosures, shielding, etc.).[195]

Second, while the 5 dBA threshold provides a measurable standard, the DEIR does not explain how compliance will be verified. There is no discussion of measurement methodology, monitoring procedures, or enforcement mechanisms.[196] Without such implementation details, there is no assurance that generator-related noise will be effectively controlled, particularly in sensitive receptor areas where even a 5 dBA increase may be perceived as intrusive.[197]

To comply with CEQA, the mitigation measure must be revised to eliminate vague terminology, provide a clear definition of acceptable generator equipment (including allowable noise ratings at specific distances) and acoustic enclosures, and outline a robust monitoring and enforcement plan. At a minimum, the measure should require pre-construction ambient noise surveys, on-site verification of generator noise emissions, and corrective actions if measured noise levels exceed the 5 dBA threshold.” [198] (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.19])

“Impacts NO-1 and NO-2: Noise Impacts from Construction

Mitigation Measure M-NO-1: Construction Noise Control for Generator Operations

The DEIR assumes that the construction generators would produce 87 dBA at 25 feet (Table 3.2-13). To mitigate this impact, the DEIR identifies M-NO-1, which requires the use of “quiet” generators or acoustical enclosures that ensure no more than 5 dBA above ambient levels during nighttime operation. The DEIR fails to define what constitutes a “quiet” generator or provide evidence demonstrating that quiet generators could meet the identified performance threshold.

Honda manufactures many models of portable generators. Their EB5000X provides 5000 watts and produces 65 dBA under full rated load at a distance of 23 feet.[4] Which is more than 20 dBA quieter than the unit used in the analysis. Scaled to a reasonable worst-case distance, the Honda EB5000X would generate 69 dBA at 15 feet which would be less than the 76 dBA ambient-based noise limit used by the DEIR for the Trenchless Construction (p. 3.2-33). Thus, based on the Honda information, EB5000X (5000 watts) or similar “quiet” generators could meet the 76 dBA noise limit for a single unit in operation. However, the noise inside the residence would be 54 dBA assuming open windows, or 44 dBA assuming closed windows; the “quiet” generators would potentially exceed the 45 dBA interior noise limit during nighttime hours depending on the generator size and noise level.

---

[194] *Jue Comments at p. 4.*
[195] *Ibid.*
[196] *Ibid.*
[197] *Ibid.*
[198] *Ibid.*
[4] *Sound Level Comparison chart at https://powerequipment.honda.com/generators*

M-NO-1 also does not explain how compliance will be verified. The DEIR does not discuss how noise impacts will be measured, what monitoring procedures will be implemented, or enforcement actions that will be taken if noise thresholds are exceeded. Without these details, there is no assurance that generator-related noise will be effectively controlled.

Finally, M-NO-1 also does not clearly define "acoustical enclosure." Typically, enclosures refer to 3 to 6-material (such as plywood) that achieve 1.5 pound per square foot or better. However, a temporary sound curtain or a sound tent can be installed around the pit to provide additional shielding, especially during nighttime hours. With a minimum of 1.5 PSF sound barrier material (e.g., limp mass barrier), this curtain/tent could reduce the noise by at least 5 dBA, and possibly more, depending on the site-specific circumstances. Clear sound blocking materials are available if they are needed to provide some visibility for drivers compared to opaque materials.

Mitigation Measure M-NO-1 should require the use of "quiet" generators, provide a clear definition of acceptable generator equipment (including allowable noise ratings at specific distances) and acoustical enclosures, and outline a robust monitoring and enforcement plan. The measure should also require pre-construction ambient noise surveys, on-site verification of generator noise, and corrective actions if measured noise levels exceed the performance standard. Acoustic enclosures may be needed as additional measures on a site-specific basis." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.30])

- "The DEIR fails to consider potentially feasible mitigation measures for work near sensitive receptors, including residences and schools. This may include use of line power rather than generators for dewatering.
- The Noise Control Plan is not included in the DEIR but deferred to post approval, which is improper deferral given the lack of clear performance standards for measuring and ensuring the effectiveness of the Noise Control Plan. More specifically, Noise Control Plan components outlined in the DEIR are vague and some of the measures to be included are caveated "if feasible." The DEIR includes no calculations showing the effectiveness of the measures. Further, the Plan's goal is to achieve noise below 90-100 dBA and a 10 dBA average increase. As detailed above, those noise levels are not protective of the environment or human health." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.35])

- "The DEIR fails to consider potentially feasible mitigation measures for work near sensitive receptors, including residences and schools. This may include use of line power rather than generators for dewatering.
- The Noise Control Plan is not included in the DEIR but deferred to post approval, which is improper deferral given the lack of clear performance standards for measuring and ensuring the effectiveness of the Noise Control Plan. More specifically, the Noise Control Plan components outlined in the DEIR are vague and some of the measures to be included are caveated "if feasible." The DEIR includes no calculations showing the effectiveness of the measures. Further, the Plan's goal is to achieve noise below 90-100 dBA and a 10 dBA average increase. As detailed above, those noise levels are not

protective of the environment or human health." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.70])

_____

"**6. Inadequate Mitigation Measures**

The DEIR fails to consider all potentially feasible mitigation measures for work near sensitive receptor, including residences and schools. These may include:

- The use of line power rather than diesel-powered generators or compressors.
- For noise impacts to schools, a mitigation that may reduce the severity of impact would be coordination of construction activities between the Project contractor and school authorities on a daily or weekly basis so that educational and outdoor activities could move to lesser effected indoor or outdoor parts of the school site during the more disruptive noise-producing construction phases." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.97])

_____

RESPONSE NO-4

Comments assert that Draft EIR Mitigation Measures M-NO-1 and M-NO-2 include vague, unenforceable, and deferred mitigation requirements. The City disagrees. As described in more detail below, the Draft EIR mitigation measures establish enforceable performance standards and identifiable actions that would be implemented, monitored, and verified. Draft EIR Mitigation Measures M-NO-1 and M-NO-2 are adequate. The following responses discuss specific input submitted on the Draft EIR construction noise mitigation measures.

MITIGATION MEASURE M-NO-1

Two comments (O-CUE.19 and O-CUE.30) accurately summarize the Draft EIR Impact NO-1 and Impact NO-2 finding that the use of generators during the daytime and nighttime could result in potentially significant noise impacts. Specifically, the Draft EIR assumed that the use of generators at trenchless construction pits could produce a noise level of 88 dBA Leq at 15 feet. The comments also correctly identify that Mitigation Measure M-NO-1 establishes a clear and unambiguous performance standard for generator operations by requiring that the use of generators does not create noise exceeding the ambient noise level by 5 dBA at the nearest property plane by using "quiet" generators and/or providing acoustical enclosures for the generators. However, as discussed below, the comments incorrectly suggest that Mitigation Measure M-NO-1 is "vague and unenforceable."

- While it is true that Mitigation Measure M-NO-1 does not expressly define "quiet generator" or "acoustical enclosure," these terms are not meant to convey unique or special meanings. Rather, they are meant to convey general definitions of common understanding given the context of their use. In the context of an EIR noise analysis, a quiet generator is a generator with a lower noise level than a comparably sized generator (in terms of power output). There are many common examples of this. For example, Honda manufactures both "EU Series Super Quiet Generators" and "Economy EG Generators," with the quiet generators recognizable by model name and due to their closed frame design. Similarly, a common definition for "enclosure" is to use a fence, wall, or other material to partially or fully enclose an area. In the context of an EIR noise analysis, an enclosure could be a fence, wall, or other barrier that partially or totally separates a piece of equipment from receptors to

reduce impacts caused by equipment noise. Thus, the Draft EIR does not need to provide specific definitions for these generally descriptive terms.

- Mitigation Measure M-NO-1 is unambiguous. It establishes a clear performance standard for generators and then provides flexibility and options for how to meet this standard. The significance determination for Draft EIR Impact NO-1 assumed reasonable worst-case conditions (the operation of a generator within 15 feet of a residential land use). To better align the mitigation obligation with the actual level of impact, Mitigation Measure M-NO-1 requires documentation of the actual site conditions and the implementation of one or more measures to meet the specified performance standard based on actual factors such as the specific power requirements of the generators (and associated noise emission levels), the distance between the generator and property plane, and the ambient noise level in the area where the generators would operate. It is possible that the selection of a generator with lower noise levels would meet the performance standard without the need for an enclosure. It is also possible that the selection of a generator with higher noise levels would meet the performance standard if an enclosure is installed. Finally, it is possible that the use of both a quiet model generator and an enclosure may be required to meet the performance standards. Thus, while Mitigation Measure M-NO-1 provides options for how the performance standard may be met, the performance standard itself is not ambiguous.
- CEQA requires that mitigation measures be fully enforceable through permit conditions, agreements, or other legally binding instruments.[8] Further, in order to ensure that mitigation measures identified in an EIR are implemented, the public agency must adopt a program for monitoring or reporting on the measures to mitigate or avoid significant environmental effects.[9] Mitigation Measure M-NO-1 requires the SFPUC to submit documentation to the Environmental Review Officer (ERO) or designee demonstrating the specific generator construction noise control measures included in the project for compliance with generator noise control requirements.

For the reasons described above, Mitigation Measure M-NO-1 incorporates feasible requirements to minimize construction noise levels that are enforceable and proportional to the project's identified construction noise impact. It also establishes an enforceable performance standard that could be achieved, as necessary, by one or more actions that would be monitored and enforced in accordance with the project Mitigation Monitoring and Reporting Program. Thus, Mitigation Measure M-NO-1 satisfies the requirements of CEQA.

MITIGATION MEASURE M-NO-2

Comments O-PGE-2.35 and O-PGE-2.70 question whether the noise control plan required by Mitigation Measure M-NO-2 includes clear performance standards and is designed to achieve noise levels that are protective of the environment or human health. Mitigation Measure M-NO-2 establishes two clear performance standards that require construction activities to cause a noise level that is no greater than (1) 90 dBA one-hour Leq or (2) 10 dBA above the ambient noise level at sensitive receptor locations. Mitigation Measure M-NO-2 provides a clear list of measures and actions that would control and verify construction noise levels, including monitoring of construction activities to ensure performance standards are met. In addition, the mitigation language defines and provides clear steps required in the event a specific control option is determined to be infeasible due to logistical, geotechnical, structural, or other factors. Furthermore, the development and implementation of the noise control plan is to be included in contract specifications, and

[8] CEQA Guidelines Section 15126.4(a)(2)
[9] CEQA Guidelines Section 15097(a).

the plan itself must be submitted to the Environmental Review Officer for approval. Thus, Mitigation Measure M-NO-2 does not improperly defer mitigation and complies with CEQA Guidelines section 15126.4(a)(1)(B) by requiring the plan to be submitted and approved prior to construction, setting quantitative noise limits (e.g., 90 dBA 1-hour Leq and 10 dBA above ambient noise level at noise-sensitive receptors), requiring monitoring and corrective actions, and including detailed implementation procedures. No revisions to Mitigation Measure M-NO-2 are required or have been made in response to these comments. Refer to Response NO-1 for responses to comments on the health-protective nature of the thresholds used in the Draft EIR to evaluate construction activity noise levels.

RECOMMENDED ADDITIONAL CONSTRUCTION NOISE MITIGATION MEASURES

Three comments (O-PGE-2.35, O-PGE-2.70, and O-PGE-2.97) suggested additional mitigation measures for work near sensitive residential and school receptors, such as the use of line power instead of generators, and coordination with school authorities on construction activities.

Mitigation Measure M-NO-1 (Construction Noise Control for Generator Operations) applies specifically to generators. By definition, generators are equipment used to generate power (electricity) when other sources of power are not available, and as indicated in the Draft EIR it is anticipated generators could be required for portions of project or project variant construction. The use of line power would eliminate the need for generators, but could not mitigate the potential noise impacts of generators should generators be used. Therefore, Mitigation Measure M-NO-1 is a feasible measure to reduce the noise impacts of generator use and is adequate under CEQA.[10] No changes have been made to Mitigation Measure M-NO-1 in response to these comments.

CEQA does not require analysis of every imaginable mitigation measure, but EIRs should include measures that are feasible, practical, and effective.[11] Mitigation Measure M-NO-2 includes the following feasible measures that specifically address compressor noise:

- Use construction equipment with lower noise emission ratings whenever possible, particularly for air compressors;
- Locate stationary noise sources (such as compressors) as far from nearby noise sensitive receptors as possible, and muffle such noise sources;
- Avoid placing stationary noise-generating equipment (e.g., generators, compressors) within noise-sensitive buffer areas (as determined by the acoustical engineer) immediately adjacent to neighbors

Use of equipment with lower noise emission ratings could achieve a similar result as using electrical line power, and any of the measures listed above would reduce compressor noise. Therefore, Mitigation Measure M-NO-2 is a feasible measure to reduce the noise impacts of compressor use and is adequate under CEQA.[12]

[10] CEQA Guidelines Section 15126.4(a)(1).
[11] *Gilroy Citizens for Responsible Planning v City of Gilroy* (2006) 140 Cal.App.4th 911, 935; *San Franciscans for Reasonable Growth v City & County of San Francisco* (1989) 209 Cal.App.3d 1502, 1519. *Napa Citizens for Honest Gov't v Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 365; *Concerned Citizens of S. Cent. L.A. v Los Angeles Unified Sch. Dist.* (1994) 24 Cal.App.4th 826, 841.
[12] CEQA Guidelines Section 15126.4(a)(1).

However, to ensure Mitigation Measure M-NO-2 includes all potentially feasible measures, the following bullet has been added to Draft EIR Mitigation Measure M-NO-2 as the new third bullet on Draft EIR page 3.2-38:

- Where access to alternative sources of power are available, portable diesel engines shall be prohibited.

As shown on Draft EIR p. 3.2-46 (Table 3.2-16), project or project variant construction would not result in significant noise impacts at Bayshore Elementary School (generally resulting in an increase of less than 2 dBA Leq over ambient except during pile driving), although construction would result in significant impacts at Midway Village. Bayshore Elementary School is approximately 300 feet from the project variant construction site. Mitigation Measure M-NO-2 requires notification of neighboring sensitive receptors within 300 feet of the project construction area at least 30 days in advance of high-intensity noise-generating activities. Mitigation Measure M-NO-2 also requires noise monitoring during high-intensity construction activities and implementation of additional noise control measures if necessary. For pile-driving within 600 feet of noise sensitive receptors, "quiet" pile driving technology must be used, and if such technology cannot be used, additional mufflers and a sound-attenuating shroud must be used on driven impact piles. These measures would minimize the significant noise impacts of the project or project variant. The use of noise control measures for pile driving within 600 feet of any noise sensitive receptor would provide a noise reduction benefit at multiple sensitive receptor locations, even locations where construction noise levels were found to be less than significant. Thus, when implemented, M-NO-2 would not only reduce construction noise levels at impacted receptors such as Midway Village, but at all nearby receptors, including Bayshore Elementary School.

For the reasons described above, Mitigation Measure M-NO-1 and M-NO-2 are not inadequate, vague, or unenforceable, nor do they constitute deferred mitigation under CEQA.

Comment NO-5: Vibration Impacts and Analysis

This response addresses the following comments, which are quoted below:

O-CUE.17, O-CUE.21, O-CUE.29, O-CUE.33, O-PGE-2.36, O-PGE-2.72

"C. Vibration Impacts from Pile Driving Activities Are Not Adequately Analyzed

The DEIR fails to adequately analyze the potential impacts of pile driving activities associated with construction of the new City Substation by neglecting to consider site-specific soil and subsurface conditions and failing to provide a reference peak particle velocity (PPV).[163] These omissions render the analysis of vibration and structural impacts incomplete and legally deficient under CEQA.

The severity of noise and vibration impacts from pile driving is highly dependent on geotechnical factors such as soil type, groundwater depth, and the presence of bedrock or other subsurface materials.[164] However, the DEIR provides only a generalized discussion of pile driving impacts and applies uniform assumptions without demonstrating that these assumptions are appropriate given the site's actual

[163] *Id. at pp. 3-4.*
[164] *Id. at p. 3.*

geotechnical conditions.[165] The absence of any substantive analysis of how the subsurface conditions may affect vibration impacts undermines the credibility of the DEIR's conclusions.[166] Without this information, the DEIR cannot accurately evaluate whether vibration levels will exceed significance thresholds or whether mitigation measures are sufficient to avoid or minimize impacts.

In addition, the DEIR fails to provide a reference PPV for evaluating pile driving impacts.[167] Applying the Federal Transit Administration's standard reference level of 1.158 in/sec at 25 feet, the Project's estimated vibration levels reach approximately 0.489/sec PPV.[168] This value is just below the California Department of Transportation's damage threshold of 0.5 in/sec PPV for modern industrial and commercial buildings.[169] The resulting buffer – equating to a margin of 2 feet – indicates a narrow safety threshold.[170] Such a minimal margin raises concerns about the potential for structural damage, particularly given uncertainties in site conditions and modeling assumptions.[171]

Moreover, although the DEIR states that the closest on-site structure to pile driving activities is approximately 70 feet,[172] it does not prohibit future positioning of the new City Substation or other project components closer to the existing buildings.[173] As currently written, nothing would prevent pile driving from occurring within 25 feet of existing structures.[174] This lack of a firm setback allowance or design constraint introduces the potential for significant vibration impacts that the DEIR has neither disclosed nor mitigated.

To comply with CEQA, the DEIR must be revised to include a site-specific geotechnical analysis that evaluates how the on-site soil and subsurface conditions will influence the nature and extent of pile driving impacts.[175] This analysis must inform the determination of significance and the development of effective mitigation measures.[176]" (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.17])

"3. *Mitigation Measure M-NO-4a Is Inadequate Without Requiring Consultation with a Geotechnical Engineer*

Mitigation Measure M-NO-4a requires the establishment of vibration limits not to be exceeded within a certain distance of buildings and/or structures, monitor vibration levels during construction, and repair any vibration-related damage to its pre-construction condition.[203] The measure is deficient because it fails to require consultation with a qualified geotechnical engineer to assess and implement protective measures for

[165] *Ibid.*
[166] *Ibid.*
[167] *Id. at pp. 3-4.*
[168] *Id. at p. 3.*
[169] *Id. at p. 4.*
[170] *Ibid.*
[171] *Ibid.*
[172] *DEIR at p. 3.2-61.*
[173] *Jue Comments at p. 3.*
[174] *Ibid.*
[175] *Ibid.*
[176] *Ibid.*
[203] *Id. at p. 3.2-55.*

buildings located within 25 feet of pile driving activities.[204] This omission renders the mitigation measure incomplete and potentially ineffective under CEQA.

As discussed in Section IX.C., pile driving can generate groundborne vibration levels that may cause cosmetic or structural damage to nearby buildings.[205] The severity of vibration impacts is highly site-specific and dependent on factors including the soil and subsurface conditions and proximity to sensitive structures.[206] Although the DEIR states the closest on-site structure to pile driving activities is approximately 70 feet,[207] it does not prohibit future positioning of the new City Substation or other project components closer to the existing buildings.[208] As currently written, nothing in the DEIR or the project description would prevent pile driving from occurring within 25 feet of existing structures.[209]

Despite this potential, M-NO-4a lacks a mandatory requirement for a geotechnical evaluation where buildings are located within 25 feet of vibration-generating activities.[210] Standard set back distances or general vibration limitations may not adequately address localized conditions that could increase the risk of structural damage.[211] Without professional input, the mitigation strategy lacks the site-specific responsiveness necessary to ensure effectiveness.[212]" (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.21])

"4. Vibration analysis was inaccurate in the PMND; the DEIR corrected some deficiencies, but fails to account for soil and subsurface conditions in its vibration analysis: The calculations in Table 3.2-17 and Table 3.2-18 appear to use Caltrans recommended value of n=1.1 to determine the rate of change for vibration sources as a function of distance. While this assumption is typically conservative for distances greater than the reference distance of 25 feet, it may not be sufficiently protective in areas where pile driving would occur within 25 feet of existing structures. In such cases, more site-specific information regarding soil and subsurface conditions is needed to determine whether a higher propagation rate exponent (e.g., n=1.5) would be appropriate to account for potentially greater transmissivity to avoid structural damage. The DEIR does not prohibit future positioning of the new City Substation or other project components closer to existing on-site buildings. Therefore, nothing would prevent pile driving from occurring within 25 feet of existing structures.

Page 3.2-55 of the DEIR acknowledges that impact pile driving would be needed for new City Substation Variant, but it does not provide a reference peak particle velocity (PPV) in the DEIR or in Appendix E (Noise and Vibration Technical Memorandum and Noise Methods and Memorandum). The DEIR cites both Caltrans and FTA reference sources: Caltrans (section 7.1.1) provides a PPV of 0.65 in/sec at 25 feet, while the FTA provides an upper range value of 1.518 in/sec at 25 feet (FTA Table 7-4). The DEIR indicates that the nearest structure is a modern industrial/commercial building located 70 feet from the source. Using the Caltrans reference level, predicted vibration would be 0.209 in/sec PPV, (Appendix E p. 57); using the FTA upper-range

---

[204] *Jue Comments at p. 3.*
[205] *Ibid.*
[206] *Ibid.*
[207] *DEIR at p. 3.2-61.*
[208] *Jue Comments at p. 3.*
[209] *Ibid.*
[210] *Id. at pp. 5-6.*
[211] *Ibid.*
[212] *Ibid.*

value, predicated vibration increases to approximately 0.489 in/sec PPV, which is just below the Caltrans criterion of 0.5 in/sec PPV for modern industrial/commercial buildings. The analysis indicates a buffer of only two feet between the projected vibration level and the damage criterion, suggesting that the margin of safety is minimal. The DEIR does not address this narrow margin, nor does it assess whether site-specific soil conditions warrant a more conservative propagation rate or whether the higher FTA reference should be used given uncertainty in the equipment-specific vibration characteristics." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.29])

"Impact NO-4: Vibration Impacts from Construction

Mitigation Measure M-NO-4a (Protection of Adjacent Buildings/Structures and Vibration Monitoring During Construction)

As noted above, information regarding soil and subsurface conditions is necessary to determine potential vibration impacts and protections measures given that there is no condition prohibiting pile driving activities from occurring within 25 feet of existing onsite buildings.

> **Mitigation Measure M-NO-4a** must include consultation with a geotechnical engineer to ensure that appropriate actions are taken for protection measures where buildings are within 25 feet from pile driving activities.

The New City Substation Project Variant would include impact pile driving. The DEIR identified the closest building at 70 feet from the pile driving,[5] but the buffer distance to avoid impacts using the FTA vibration sources is 60 feet.[6]

> **Mitigation Measure M-NO-4a** must include language to verify the appropriate impact pile driving vibration level and update the buffer distance shown on page 3.2-55 in the Vibration Management and Monitoring Plan to confirm whether protection measures would be needed near the New City Substation." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.33])

- "Vibration impacts to both structures and residents are impossible to determine because of the DEIR fails to provide of a Martin Substation site plan and lack of specifics regarding jack-and-bore and vault pit locations, as well as the location of storage and maintenance yard(s)." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.36, O-PGE-2.72])

---

[5] *DEIR at p. 3.2-61.*
[6] *DEIR at p. 3.2-55.*

RESPONSE NO-5

Several comments question the adequacy of the Draft EIR's analysis of pile driving impacts from new City Substation construction activities; however, none of the comments provide any substantial evidence to indicate that the Draft EIR's analysis is erroneous. The following responses discuss specific input submitted on the Draft EIR vibration impacts and analysis.

PILE DRIVING VIBRATION ANALYSIS APPROACH

Two comments (O-CUE.17 and O-CUE.29) note that vibration impacts from pile driving depend on geotechnical factors such as soil type and groundwater depth. This does not constitute new information. The Draft EIR (pp. 3.2-4 and 3.2-5) states, "Ground-borne vibration generally attenuates rapidly with distance from the source of the vibration. This attenuation is a complex function of how energy is imparted into the ground as well as the subsurface soil and/or rock conditions through which the vibration is traveling. Variations in geology can result in different vibration levels, with denser soils generally resulting in more rapid attenuation over a given distance." Because the Draft EIR expressly considers the range of factors that can affect a vibration impact analysis, no change has been made in response to these comments.

Two comments (O-CUE.17 and O-CUE.29) claim the assumptions used by the Draft EIR to evaluate pile driving impacts are not appropriate because they are not based on site-specific subsurface conditions. While the commenter is correct that the Draft EIR does not evaluate potential vibration levels from new City Substation construction activities based on site-specific geotechnical factors, this is because site-specific data were not available. In the absence of such data, and consistent with CEQA requirements that EIRs be prepared as early as feasible in the planning process to enable environmental considerations to influence design yet late enough to provide meaningful information for the evaluation of environmental impacts,[13] the Draft EIR (p. 3.2-26) clearly discloses the methodology used to evaluate the project's potential construction vibration impacts based on guidance contained in the FTA's Transit Noise and Vibration Assessment Manual and Caltrans' Transportation and Construction Vibration Guidance Manual. These documents provide fact-based methods and assumptions for evaluating vibration impacts, and the City is correct to rely on them. The commenter has not provided any substantial evidence as defined by CEQA Guidelines Section 15384 (facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts), such as relating to soil types, groundwater depth, or other factors to support a conclusion that the site conditions differ substantially from the conditions assumed by the Draft EIR. It is noted that the Draft EIR's assumed ground attenuation rate (1.1) results in the highest estimate of potential new City Substation construction vibration levels compared to the other reference attenuation rates (1.3, 1.4, 1.5) identified by Caltrans and the FTA (see Draft EIR Appendix E, p. 32), and therefore, provides a conservative analysis of vibration impacts. Furthermore, Mitigation Measure M-NO-4a establishes conservative buffer distances for the use of vibration-generating equipment (e.g., unless pile driving can be avoided within 60 feet of buildings, a distance at which peak particle velocity would be substantially below thresholds, additional site-specific measures apply); requires a pre-construction survey of buildings that could be potentially affected by vibration-generating equipment to be conducted by a licensed engineer or acoustical consultant; and requires preparation of a Vibration Management and Monitoring Plan that establishes the maximum allowable vibration level for vibration-generating activities that could affect adjacent buildings, based on existing conditions including

[13] CEQA Guidelines Section 15004(b).

soil conditions. Thus, Mitigation Measure M-NO-4a includes requirements to consider the actual site conditions at the time construction commences.

VIBRATION ANALYSIS REFERENCE LEVELS

Two comments (O-CUE.17 and O-CUE.29) incorrectly claim the Draft EIR does not provide the reference peak particle velocity (PPV) data used to evaluate potential construction vibration levels. In fact, it does. Draft EIR Table 3.2-18 (p. 3.2-58) identifies the reference vibration level (0.644 inches/second PPV at 25 feet) used in the Draft EIR to evaluate all pile driving impacts. This reference value for typical pile driving activities is consistent with FTA and Caltrans recommendations. The two comments present their own analysis, which indicates that vibration impacts could be close to, but less than, the Draft EIR's significance thresholds used to evaluate damage to modern industrial and commercial buildings (0.5 inches/second PPV). The comments' own analysis indicates that the project's vibration levels would not exceed the Draft EIR's significance threshold.

VIBRATION EFFECTS ON BUILDINGS

Two comments (O-CUE.17 and O-CUE.29) claim the Draft EIR would allow pile driving activities at the new City Substation to occur less than 70 feet from a building. This is incorrect. As shown in Figure 2-11, the closest building to the new City Substation area is located 70 feet from the boundary of the substation area. Thus, pile driving at the new City Substation would occur no closer than 70 feet from any building. Draft EIR Mitigation Measure M-NO-4a listed the buffer distance for new City Substation activities as 60 feet because that is the distance at which vibration impacts are predicted to occur. CEQA requires an EIR to identify and focus on the significant effects of the proposed project on the environment.[14] In evaluating the significance of the environmental effect of a project, the lead agency shall consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes which may be caused by the project.[15] An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable.[16] It would be speculative and inconsistent with the Draft EIR project description to assume that project variant construction activity including pile driving would occur within 25 feet of a building.

Two comments (O-CUE.21 and O-CUE.33) claim Mitigation Measure M-NO-4a should require consultation with a qualified geotechnical engineer and should prohibit pile driving activities at the new City Substation from occurring within 25 feet of a building. To clarify, Mitigation Measure M-NO-4a requires a pre-construction survey of buildings that could be potentially affected by pile driving to be conducted by a licensed engineer or acoustical consultant, maximum allowable vibration levels to be estimated by a qualified acoustical consultant in coordination with a qualified historic preservation professional, vibration monitoring and actions to stop work if allowable vibration levels are exceeded, and full reporting to the City's Environmental Review Officer. Thus, Mitigation Measure M-NO-4a already includes requirements to coordinate and consult with appropriate professionals.

[14] CEQA Guidelines Section 15126.2(a).
[15] CEQA Guidelines Section 15064(d).
[16] CEQA Guidelines Section 15064(d)(1).

PROJECT INFORMATION LEVEL OF DETAIL

Two comments (O.PGE-2.36 and O.PGE-2.72) claim the Draft EIR's evaluation of potential construction vibration impacts is inadequate because it lacks specific details on the location of vibration-generating activities. These comments correctly observe that specific, detailed site plans are not included in the Draft EIR for all components; however, the Draft EIR's evaluation of potential vibration impacts is, in general, based on reasonable worst-case assumptions. For example, the estimated vibration levels in Draft EIR Table 3.2-17 (p. 3.2-54) are based on the shortest distance between equipment and an affected structure, and the buffer distances identified in Mitigation Measure M-NO-4a are based on the closest possible distance between equipment operation and potential structures, which in some cases is less than 10 feet. Therefore, the Draft EIR identifies both the minimum distances necessary to avoid impacts and measures that would be implemented if such minimum buffers cannot feasibly be provided. As explained in Response PD-1, CEQA's standards for the adequacy of a project description do not require detailed site plans.[17] Draft EIR Chapter 2, Project Description, identifies, describes, and provides graphics that depict information sufficient to foster a complete and informative evaluation of the project's environmental impacts, including as they relate to separation of the Martin Substation, construction of the distribution express feeders (including information about trenchless construction), and the operations and maintenance service yards. The comments do not provide any substantial evidence as defined by CEQA Guidelines Section 15384 (facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts) indicating that the Draft EIR's evaluation of the potential construction vibration impacts from these components is undetermined or inadequate. Refer also to Response PD-2 regarding the level of project description detail available for the Draft EIR impact analysis.

For the reasons described above, the Draft EIR adequately analyzed and mitigated potential significant vibration impacts, including from construction activities.

Comment NO-6: Other Noise Comments

This response addresses the following comment, which is quoted below:

A-Brisbane.5

"ii. Page 3.2-19: Various corrections are required to the DEIR's description of City of Brisbane regulations under Brisbane Municipal Code Chapter 8.28. The corrected statements are included below:

a) "There are no performance standards or limits <u>related to noise</u> that are applied to construction work performed within the public right-of-way under an encroachment permit."

b) "Brisbane Municipal Code section 8.28.030 <u>and section 8.28.040 establish</u> exterior noise standards shown in Table 3.2-10."

c) "Noise levels may not be more than 10 dBA above the existing ambient noise level for a cumulative period of more than 10 minutes in a given hour, or more than 20 dBA above the ambient level for more than 3

[17] CEQA Guidelines Section 15124.

minutes per hour, or more than 30 dBA above the local ambient for any amount of time for single-family and multi-family residential zoning districts."

d) "Section 8.28.040 establishes that noise levels may not be more than 10 dBA above the existing ambient level for a cumulative period of more than 10 minutes in a given hour, and may not be more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA for any period of time for commercial and industrial zoning districts."

e) Table 3.2-11: Update table to add BMC Section 8.28.040 under "Municipal Code" for "Operation" noise sources, which are subject to both Section 8.28.030 and 8.23.040 of the BMC. These operational standards are accurately captured in the preceding Table 3.2-10." (John Swiecki, AICP, Community Development Director, City of Brisbane [A-Brisbane.5])

RESPONSE NO-6

One comment (A-Brisbane.5) suggests edits to the Draft EIR's discussion of the Brisbane Municipal Code (Draft EIR p. 3.2-19 and Table 3.2-11). As shown below, the Draft EIR has been revised to include the suggested corrections, which do not alter the analysis or conclusions of the Draft EIR.

On Draft EIR pages 3.2-19, in response to comments, the discussion of the Brisbane Municipal Code is revised as follows:

> Section 8.28.060 of the Brisbane Municipal Code establishes noise exposure limits for hours for site construction. The Brisbane Municipal Code restricts construction hours between 7 a.m. and 7 p.m. Monday through Friday, and 9 a.m. to 7 p.m. on weekends and holidays ~~for development projects~~. The Public Works Director/ City Engineer for the City of Brisbane states that t~~T~~here are no performance standards or limits related to noise applied to construction work performed within the right-of-way under an encroachment permit.[42] Otherwise, construction, alteration, or repair activities are allowed if authorized by a valid city permit by meeting at least one of the following noise limitations:
>
> A. No individual piece of equipment shall produce a noise level exceeding eighty-three (83) dBA at a distance of twenty-five (25) feet from the source thereof. If the device or other source is housed within a structure on the property, the measurement shall be made outside the structure, but at a distance as close to the equipment or source as possible.
> B. The noise level at any point outside of the property plane of the project shall not exceed eighty-six (86) dBA.
>
> Brisbane Municipal Code section 8.28.030 establishes exterior and interior noise standards for single- and multi-family residential zoning districts, respectively, shown in **Table 3.2-10**. For single-family residential land uses, exterior ~~N~~noise levels may not be more than 10 dBA above the existing ambient noise level at any receiver for a cumulative period of more than 10 minutes in a given hour, ~~or~~ more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA above the local ambient for any amount of time. ~~for single-family and multi-family residential zoning districts.~~ For multi-family residential land uses, noise levels may not be more than 10 dBA above the

local ambient three feet from any wall, floor, or ceiling inside any dwelling unit on the same property, except within the dwelling unit in which the noise source or sources are located, to any receiver for a cumulative period of more than ten minutes in any hour, more than 20 dBA above the local ambient for a cumulative period of more than three minutes in any hour, or more than 30 dBA above the local ambient at any time. It is noted that, as defined by Brisbane Code Section 8.28.020 (A), the local ambient noise level for exterior and interior noise standards shall not be determined to be less than 45 dBA and 35 dBA, respectively.

Brisbane Municipal Code Section 8.28.040 establishes that noise levels may not be more than 10 dBA above the existing ambient level for a cumulative period of more than 10 minutes in a given hour, ~~and may not be~~ more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA for any period of time for commercial and industrial zoning districts.

On Draft EIR pages 3.2-22, Table 3.2-11, Noise Ordinances Applicable to the Project or Project Variant, the information related to the City of Brisbane is revised as follows:

Jurisdiction	Noise Source	Municipal Code	Requirement Summary
Brisbane	Construction	Section 8.28.060. Exceptions allowed via Section 8.28.080	Except where work is performed within the right-of-way under an encroachment permit (which is exempt), construction work must meet at least one of the following noise limitations: A. No individual piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 25 feet from the source B. The noise level at any point outside of the property plane of the project shall not exceed 86 dBA
	Nighttime Construction	Section 8.28.060. Exceptions allowed via Section 8.28.080	Prohibits construction between 7 p.m. and 7 a.m. Monday through Friday and 7 p.m. and 9 a.m. on weekends and holidays.
	Operation	Section 8.28.030 and 8.28.040. Exceptions allowed via Section 8.28.080	~~Prohibits n~~Noise produced by any machine or device located in a commercial or industrial district ~~that results~~ shall not generate a noise level that exceeds the local ambient at any exterior receiver by more than 10 dBA for 10 minutes or more, more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA above the local ambient for any amount of time. ~~in a single-family residential zoning district.~~ Noise produced by any machine or device located in a commercial or industrial district shall not generate an interior noise level in residential dwelling units, as measured three feet from any wall, floor, or ceiling inside that dwelling unit, that exceeds the local ambient by more than 10 dBA for 10 minutes or more, more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA for any amount of time.

10.5 Air Quality

The comments and corresponding responses in this section cover topics in Draft EIR Section 3.3, Air Quality.

- AQ-1: Health Risk Assessment Methodology
- AQ-2: Air Quality Mitigation Measures
- AQ-3: Emissions Outside the Air Basin
- AQ-4: Cumulative Impact Analysis
- AQ-5: Other Air Quality Comments

Comment AQ-1: Health Risk Assessment Methodology

This response addresses the following comments, which are quoted below:[1]

O-CUE.7, O-CUE.13, O-CUE.22, O-PGE-2.7, O-PGE-2.17, O-PGE-2.28, O-PGE-2.32, O-PGE-2.56, O-PGE-2.63

"An EIR cannot be certified for any project involving the construction of a facility within one-quarter mile of a school that might reasonably be anticipated to emit hazardous air emissions that may pose a health or safety hazard to persons who would attend or would be employed at the school unless the lead agency has consulted with the school district having jurisdiction regarding the potential impact and the school district has been given written notification of the project not less than 30 days prior to the EIR's certification.[86] The statute defines "hazardous air emissions" to include emissions of toxic air contaminant identified by the California Air Resources Board (CARB) or the local air district, which include benzene, cadmium, arsenic, nickel, and lead.[87] These requirements apply to both construction-related and operational emissions.

The DEIR acknowledges the historic presence of contaminated soil and groundwater at the Project site, including total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), cyanide, and metals (including arsenic, cadmium, chromium, lead, nickel, and mercury).[88] It also identifies 33 schools within a quarter mile of the Project areas, including Bayshore Elementary, which is located only 80 feet from the Daly City Yard.[89]

The health risk assessment (HRA) prepared in support of the air quality analysis cannot be used to support the conclusion that impacts from soil and groundwater contamination are less than significant. While the health risk assessment evaluates emissions from construction equipment and truck transport of contaminated soil,[90] it does not assess the potential risks associated with exposure to volatile emissions

---

[1] Footnotes from quoted comments are indicated by *italicized* text and retain their original footnote number from the comment. Footnotes from response text are not italicized and are numbered in order of appearance in this section.
[86] *Pub. Res. Code § 21151.4(a).*
[87] *Id. § 21151.4(b)(2).*
[88] *DEIR, appen. A, Initial Study at pp. 222-26.*
[89] *DEIR, appen. E at p. 23; Id., appen. A, Initial Study at pp. 221-22.*
[90] *DEIR, appen. B.*

coming from the soil for VOCs or exposure to fugitive dust emissions from soil for non-VOCs.[91] Given the site's known contamination and close proximity to multiple schools, including one directly adjacent to the Project site, the failure to analyze such risks renders the DEIR legally inadequate." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.7])

"The DEIR evaluates cancer risks associated with diesel particulate matter (DPM),[139] but it fails to assess acute, non-cancer health impacts. This is a significant omission. Since the Office of Environmental Health Hazard Assessment (OEHHA) last evaluated health impacts of DPM in 1998, new research has been published regarding the acute effects of short-term DPM exposure, particularly on the respiratory system. Notably, Canada has established an acute reference exposure level for DPM of 10 $\mu g/m^3$ to protect against short-term adverse respiratory effects.[140] Although OEHHA has not yet adopted an acute reference exposure level for DPM, this does not relieve the lead agency of its obligation under CEQA to evaluate all reasonably foreseeable health risks, including acute exposures.[141]

The DEIR fails to evaluate potential acute health risks associated with short term exposure to DPM during construction activities. This omission is particularly concerning given that construction workers and nearby sensitive receptors may experience elevated, short-duration exposures to diesel emissions from heavy-duty construction equipment. An analysis of acute DPM impacts from Project construction is necessary to determine whether the Project could result in significant, short-term health effects, particularly for construction workers and nearby communities. Without such an analysis, the DEIR does not comply with CEQA's requirement to identify and disclose all potentially significant environmental impacts." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.13])

"The selection of meteorological is critical to the integrity of air dispersion modeling results. According to the Air Quality Analysis and HRA: "Air dispersion modeling applications require the use of meteorological data that ideally are spatially and temporally representative of conditions in the immediate vicinity of the site under consideration. For this HRA, the Mission Bay meteorological data for the year 2008 will be used. Both the San Francisco International Airport and Mission Bay meteorological stations present a similar pattern of wind conditions. However, the Mission Bay meteorological station was chosen because it is closer to the Project components, and it aligns with the Citywide HRA."[2] This rationale is not adequately supported.

The Mission Bay station is located approximately 4.25 miles north of the Project Site and is closer to the end of San Francisco Peninsula. This location is subject to wind patterns that are heavily influenced by the gap between Sausalito and San Fransico, and is downwind of the central San Francisco Peninsula. By contrast, the area Project Site lies a low-lying area between San Bruno Mountain and Mount Davidson, where wind dynamics are substantially different. Winds in this area tend to move through the gap and exit towards the

---

[91] *Clark Comments at p. 15.*
[139] *DEIR at p. 3.3-26, 3.3-40.*
[140] *Canada, Human Health Risk Assessment for Diesel Exhaust, (March 4, 2016) p. 11, available at http://publications.gc.ca/collections/collection_2016/sc-hc/H129-60-2016-eng.pdf.*
[141] *CEQA Guidelines § 15064(b).*
[2] *Ibid. p. 11.*

southern end of San Francisco, suggesting that the wind environment at the Project site may not be adequately characterized by the Mission Bay station data.

The Air Quality Analysis and HRA claim that the meteorological data from the Mission Bay station is equivalent to the San Francisco Airport (SFO), but it does not provide a wind rose or other quantitative comparison to substantiate this claim. Without a wind rose or equivalent meteorological analysis, the assumption of equivalency lacks technical support and cannot be independently verified.

Moreover, the use of only one year of data from a station that is not directly impacted by the Project is inconsistent with U.S. EPA Guidance. According to Section 8.4.2.1(e) of the *Revisions to the Guideline on Air Quality Models: Enhancements to the AERMOD Dispersion Modeling System and Incorporation of Approaches To Address Ozone and Fine Particulate Matter*,[3] (the gold standard for modeling): "The model user should acquire enough meteorological data to ensure that worst-case meteorological conditions are adequately represented in the model results. The use of 5 years of adequately representative NWS or comparable meteorological data, at least 1 year of site-specific, or at least 3 years of prognostic meteorological data, are required. If 1 year or more, up to 5 years, of site-specific data are available, these data are preferred for use in air quality analyses."

By relying solely on one year of data from a non-site-specific station, the analysis fails to demonstrate that the meteorological conditions at the Mission Bay station adequately represent conditions at the Project site. This approach may understate potential impacts and does not meet the standard of representativeness recommended by the U.S. EPA." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.22])

"The DEIR subjects San Mateo County residents to a higher cancer risk threshold than San Francisco residents." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.7])

"**Human Health Risk Assessment**

The DEIR's failure to analyze the linear components of the Project at a project level of detail impacts the adequacy of the DEIR's analyses of environmental effects. For example, the DEIR states on pages 3.3-43 and 3.3-44 that the alignment of the linear components is unknown and therefore the DEIR assumes the Maximally Exposed Individual (MEI) "for this hypothetical HRA configuration is the nearest receptor downwind of the midpoint of the 2,000-foot straight line; however, this does not represent a specific, physical receptor location but rather a hypothetical MEI." This seems to mean the HRA assumes that an MEI would be located 1,000 feet from the emission sources related to construction of the linear components of the Project. Neither the DEIR nor its appendices include a figure related to the linear components health risk assessments to aid a reader in interpreting the "hypothetical" analysis. A 1,000-foot distance to a receptor would appear to be an illogical assumption given that linear components work would primarily occur in roadways immediately adjacent to peoples' homes and businesses. Analyzing actual, rather than

[3] *Federal Register. Vol. 82, No. 10/Tuesday, January 17, 2017/Rules and Regulations, https://www.govinfo.gov/content/pkg/FR-2017-01-17/pdf/2016-31747.pdf.*

"hypothetical," alignments would provide a meaningful risk analysis and would be feasible if CCSF properly treated the Project as the unified action that it factually is. In fact, the border between San Francisco and San Mateo counties and the exact location of PG&E's existing electrical infrastructure that would need to be severed as part of the Project to allow CCSF to serve customers within CCSF has been known to CCSF for years.

The DEIR should be revised to include a project level air impact analysis and health risk assessment for all components of the Project as was done with the Cormorant Battery Storage Facility referenced on page 3.3-49 of the DEIR. Even though the final alignment of linear project components was not known at the time of approval of the CEQA document for that project, the health risk assessment analyzed potential alignments of those features and the health risk to actual, rather than hypothetical, sensitive receptors (*e.g.*, *see* Figure 1 of Cormorant HRA).[11] The health risk assessment analyzed the cancer risk of each potential alignment (see, e.g., Table 4 Cormorant HRA) which provided valuable information to the decision-makers and public of the potential health risks of each potential alignment. That information is wholly lacking in the DEIR. The DEIR should be revised and recirculated to include a project level analysis of the health risk of all project components." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.17])

"The DEIR applies different cancer risk thresholds for Project activities occurring within and outside of CCSF, with CCSF providing a more health protective threshold to its own residents versus those outside its jurisdiction (7 in a million [see, e.g., DEIR Table 3.3-14] versus 10 in a million [see, e.g., DEIR Table 3.3-13]). This distinction is unreasonable, as human biology or the significance to a person of an increased risk of cancer does not vary depending on a county line." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.28])

"As discussed above (*see* § II.D.1), the DEIR's failure to analyze actual linear components of the Project at a project level causes the DEIR's HRA to be deficient and not substantial evidence." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.32])

"The DEIR applies different cancer risk thresholds for Project activities occurring within and outside of CCSF. This distinction is unreasonable, as human biology does not vary depending on jurisdiction." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.56])

"The DEIR's failure to analyze the linear components of the Project at a project level of detail impacts the adequacy of the DEIR's analyses of environmental effects. For example, the DEIR states on pages 3.3-43 and -44 that the alignment of the linear components is unknown and therefore the DEIR assumes the Maximally Exposed Individual (MEI) "for this hypothetical HRA configuration is the nearest receptor downwind of the

[11] *The Cormorant Energy Storage Project Health Risk Assessment, also known as the 2150 Geneva Avenue Battery Storage project, is available at* https://files.ceqanet.opr.ca.gov/308406-1/attachment/A6hvbD_nBkCgjVu9yI-

midpoint of the 2,000-foot straight line; however this does not represent a specific, physical receptor location but rather a hypothetical MEI."

Thus, the HRA assumes that an MEI would be located within 1,000 feet from the emission sources related to construction of the linear components of the Project. Neither the DEIR nor its appendices include a figure related to the linear components health risk assessments to aid a reader in interpreting the "hypothetical" analysis. While the DEIR assumes a maximum distance of 1,000 feet in either direction from construction for analysis, it does not inform the reader of the minimum distance to an MEI for the linear facilities and also fails to assess the project's health risks on children at Bayview School. Tables 22 and 23 in the HRA do not identify the distance from construction activities on linear facilities to the MEI (nor is that identified elsewhere in the HRA), but rather state that the analyses apply to "hypothetical locations of maximum impact."

However, the Noise analysis in the DEIR (p. 3.2-32) states: "The operation of generators would result in nighttime noise levels of up to 88 dBA Leq at a worst-case ***distance of 15 feet from the work area to the nearest property boundary [emphasis added]***, which for conservative analysis purposes is assumed to be a residential use. Given that this information is available from the Noise analysis analyzing actual, rather than "hypothetical," alignments is feasible and would provide a much more meaningful risk analysis, and should be included in the DEIR." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.63])

RESPONSE AQ-1

Hazardous Emissions Near Schools

For this project and in general, the City's CEQA analyses of hazardous emissions near schools are informed by the Bay Area Air Quality Management District (Air District) CEQA Guidelines (Draft EIR p. 3.3-25 et. seq.). The City finds the Air District's CEQA guidance with respect to analyzing hazardous emissions near schools to be more relevant to the City's analysis than guidance from other jurisdictions, because the Air District is the agency with subject matter expertise over air quality in the region where the project or project variant would be implemented. Other counties or agencies may choose a different approach to evaluate health risk; however, this does not support a conclusion that the Draft EIR's analysis is either inadequate or inaccurate.

Air District guidelines recommend that a student analysis be included in the health risk assessment (HRA) in accordance with Appendix E, Recommended Methods for Screening and Modeling Local Risks and Hazards, for projects proposed within 1,000 feet of a school. As stated on Draft EIR page 3.3-27, all sensitive populations including daycares, schools, hospitals, and residences as well as off-site worker receptors within 1,000 feet of the modeled sources were included in the HRA. CEQA provides lead agencies with discretion to establish thresholds of significance.[2] The analysis uses the Air District's health risk thresholds for areas outside San Franscisco whereas receptors modeled within San Francisco are evaluated against the City's more stringent significance thresholds. While the Bayview school may not have been modeled as a specific discrete receptor, modeling all receptors within 1,000 feet of linear components as part of the hypothetical analysis shows that if construction associated with the linear components were to occur within 1,000 of the Bayview school, health risks to receptors at the school would be less than significant. The 1,000-foot analysis

[2] CEQA Guidelines Section 15064.4(b).

area is consistent with the Air District's guidance and recommendations, based on which receptors beyond 1,000 feet are not likely to experience substantial health risks and are therefore not required to be evaluated.

The Draft EIR evaluates hazardous emissions near schools in Impact HZ-2 (Draft EIR Appendix A p. 220 et seq.).[3] Consistent with Comment O-CUE.7, the Draft EIR does not rely on the HRA for evaluating risk of exposure to hazardous materials at the Martin Substation and Daly City Yard. The Draft EIR evaluates potential for exposure from work at the Martin Substation and Daly City Yard in Impact HZ-3 (Draft EIR Appendix A p. 222 et seq.). Refer to Response HZ-2 for additional clarifications regarding controls required during construction at the Martin Substation and Daly City Yard and Response HZ-3 for additional clarifications regarding exposure to vapors from hazardous soil.

Acute Non-Cancer Health Risks to Sensitive Receptors

Consistent with its authority under CEQA to identify and rely on appropriate thresholds of significance, the City's health risk assessment methodology is informed by the Air District CEQA Guidelines, the most recent Office of Environmental Health Hazard Assessment (OEHHA) Guidelines and the City's Air Quality and Greenhouse Gas Analysis Guidelines (Draft EIR p. 3.3-25 et. seq.). Comment O-CUE.13 asserts that acute, non-cancer health impacts from diesel particulate matter (DPM) are a significant health concern that should be addressed in the Draft EIR and cites a Canadian study that provides an acute reference exposure level of 10 micrograms per cubic meter ($\mu g/m^3$) for the analysis of acute health risks of DPM in the absence of an acute reference exposure level adopted by OEHHA.

The commenter correctly points out that the HRA for the proposed project and project variant quantifies cancer risk and chronic risk impacts but does not explicitly evaluate acute health impacts from DPM exposure. The Draft EIR HRA's focus on cancer and chronic health effects aligns with the both the Air District's CEQA Guidelines and the OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments (2015 OEHHA Guidance Manual) regarding air quality modeling and health risk assessment, which, as discussed below, identify long-term cancer risk as the primary health concern associated with exposure to diesel exhaust.

CEQA Guidelines Section 15064(b)(2) states that compliance with a threshold does not relieve a lead agency of the obligation to consider substantial evidence indicating that the project's environmental effects may be significant. As discussed below, the City has considered the commenter's suggested threshold for acute reference exposure level for DPM and determined that (1) the project or project variant's impacts would remain less than significant with mitigation, and (2) the Draft EIR evaluates potential acute health risks for construction workers associated with elevated, short-term exposure to DPM during construction activities. No Draft EIR revisions have been made in response to this comment.

California Assembly Bill 2588 requires the California Air Resources Board (CARB) to compile and maintain a list of substances posing cancer, chronic, or acute human health impacts when present in the air. In 1998, CARB identified DPM as a toxic air contaminant based on its potential exposures and health concerns.

[3] CEQA Guidelines sections 15186(b)(1) and (2) require the lead agency to consult with the affected school district or districts regarding the potential impact of the project on the school and notify the affected school district(s) of the project in writing, not less than 30 days before approval or certification of the negative declaration or EIR, for any project located within one-quarter mile of a school that involves the construction or alteration of a facility that might reasonably be anticipated to emit hazardous air emissions, or the handling of an extremely hazardous substance or mixture containing extremely hazardous substances in a quantity equal to or greater than the state threshold quantity specified in Health and Safety Code section 25532(j), and that may impose a health or safety hazard to persons who would attend or would be employed at the school.

Though adverse short-term health effects have been associated with exposure to diesel exhaust, the 2015 OEHHA Guidance Manual identifies long-term cancer risk as the primary health concern associated with exposure to diesel exhaust. The OEHHA Guidance Manual has not established an acute reference exposure level (REL) for DPM, indicating that available toxicological data do not support a quantifiable short-term threshold for adverse health effects. Air District staff have confirmed that, in the absence of an acute REL for DPM from OEHHA and CARB, calculating acute health risks associated with DPM exposure is not feasible.[4] Therefore, consistent with the OEHHA Guidance Manual and Air District's interpretation, the HRA for the project and project variant does not include acute impacts associated with DPM. The Draft EIR HRA's focus on chronic health effects, rather than acute impacts, reflects the City's current scientific understanding of health risks associated with exposure to DPM. While acute health effects from short-term DPM exposure are possible, they are much lower than the long-term health risks associated with chronic exposure, including incremental lifetime cancer risk.

The REL suggested by the commenter, published by Health Canada, is derived from studies that evaluated a potentially sensitive subgroup of individuals with mild asthma. The studies applied conservative uncertainty factors to account for further susceptibility and extrapolation from a Lowest Observed Adverse Effect Level to a No Observed Adverse Effect Level.[5] The REL from Health Canada is of limited usefulness for the Draft EIR because it is based on a specific study population of affected individuals that may not directly translate to other contexts, such as the sensitive receptors in the general population surrounding the proposed project site. Additionally, the conservative uncertainty factors applied in the derivation of the REL suggest that it may be overly protective for the general population. Even if this conservative REL for acute exposure were to be applied, the acute hazard index for DPM would be half the chronic hazard index reported in the Draft EIR (p. 3.3-41, Table 3.3-10; p. 3.3-42, Table 3.3-11), which is already well below the Air District threshold of 1. This underscores the fact that the primary health concern associated with diesel exhaust is lifetime cancer risk, which is associated with long-term exposure. The absence of an acute REL for diesel exhaust in California that is accepted by both the Air District and OEHHA further emphasizes that chronic health effects, not acute health effects, are a substantial health risk of DPM exposure.

Therefore, the Draft EIR's analysis of potential impacts on sensitive receptors is consistent with guidance from both the Air District and OEHHA which do not acknowledge acute health risks from diesel exhaust as a concern for the sensitive receptor population. The conclusions in the Draft EIR that the project or project variant would not result in significant impacts related to short-term DPM exposure remain valid. No Draft EIR revisions have been made in response to this comment.

Acute Non-Cancer Health Risks to Construction Workers

Contrary to the commenter's claims, the Draft EIR does evaluate potential acute health risks for construction workers associated with elevated, short-term exposure to DPM during construction activities. Onsite worker health and safety are primarily governed by stringent federal and state occupational safety and health regulations, enforced by agencies such as the California Occupational Safety and Health Administration

[4] Allen, Carol, Assistant Manager, Engineering Division, Bay Area Air Quality Management District, email correspondence with ESA, November 29, 2018.
[5] Government of Canada, *Human Health Risk Assessment for Diesel Exhaust*, 2016, http://publications.gc.ca/collections/collection_2016/sc-hc/H129-60-2016-eng.pdf, accessed August 2024.

(Cal/OSHA) Occupational Safety & Health Standards Board.[6,7] These regulations establish permissible exposure limits (PELs) and short-term exposure limits (STELs) for a wide range of airborne contaminants, to ensure worker protection. Specifically, for particulate matter not otherwise regulated, which includes DPM exposure, Cal/OSHA sets a PEL of 10 micrograms per cubic meter ($\mu g/m^3$) for total dust and a more stringent 5 $\mu g/m^3$ for the respirable fraction of this dust.[8] These limits represent the maximum allowable exposure levels averaged over an eight-hour workday. In addition to PELs, Cal/OSHA mandates the implementation of various control measures to minimize worker exposure. These include engineering controls (such as ventilation systems), administrative controls (such as limiting exposure duration), and the provision of respiratory protective equipment when other controls are not feasible or effective.[9] For specific hazardous substances like asbestos, lead, and welding fumes, even more stringent regulations and control measures are in place. The comprehensive nature of these regulations underscores the commitment to protecting worker health and safety on construction sites and in industrial facilities. These independently enforceable regulations are summarized in the following text added to Draft EIR page 3.3-17:

> ***CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS***
>
> California Code of Regulations Title 8, Division 1, Chapter 4, Subchapter 4 Construction Safety Orders apply to construction work in California. As required in Section 1528, whenever harmful dusts, fumes, mists, vapors, or gases exist or are produced in the course of employment in quantities giving rise to harmful exposure of employees, such hazards shall be controlled by removing the employees from exposure to the hazard, by limiting the daily exposure of employees to the hazard, or by application of engineering controls. Whenever such controls are not practicable or fail to achieve full compliance, respiratory protective equipment shall be provided. Employees exposed to hazardous substances must be protected as required by Group 16 of the General Industry Safety Orders (8 California Code of Regulations Section 5144), which in part (d) specifies that respirators provided to construction workers must be appropriate for the respiratory hazard(s) to which the worker is exposed, and workplace and user factors that affect respirator performance and reliability.

Further, as noted above, the analysis documented in the Draft EIR is informed by the Air District's Health Risk Assessment Guidelines and the City's Air Quality and Greenhouse Gas Analysis Guidelines. These guidelines define "worker receptors" as offsite locations where people work, and "onsite receptors" as individuals residing within the facility boundary but not employed by the project.[10] While the guidelines recommend evaluating all possible receptors as applicable, the primary focus remains on exposure to sensitive receptors outside the facility or project boundary.[11] Onsite construction workers are not identified as either receptors or sensitive receptors in the Air District guidelines.[12]

Therefore, the Draft EIR's analysis of potential impacts on construction workers has been prepared consistent with relevant guidance provided by the agency with subject matter jurisdiction over air quality

[6] Bay Area Air Quality Management District, *Regulation 2, Rule 5: Appendix E - CEQA Initial Study and Draft Mitigated Negative Declaration*, October 2021.
[7] Cal/OSHA Consultation Service, *Construction Industry Guide to Cal/OSHA Regulations*, 2022, https://www.dir.ca.gov/dosh/construction-guide-summary.html, accessed August 2024.
[8] California Code of Regulations, title 8, section 5155, Airborne Contaminants.
[9] Cal/OSHA Consultation Service, *Construction Industry Guide to Cal/OSHA Regulations*, 2022, https://www.dir.ca.gov/dosh/construction-guide-summary.html, accessed August 2024.
[10] Bay Area Air Quality Management District, *Appendix E: Recommended Methods for Screening and Modeling Local Risks and Hazards*, 2022.
[11] Ibid.
[12] Ibid.

and evaluates potential acute health risks for construction workers associated with elevated, short-term exposure to DPM during construction activities. As discussed, and consistent with the conclusions in the Draft EIR, the project or project variant would not result in significant impacts related to short-term DPM exposure. No Draft EIR revisions have been made in response to this comment.

Meteorological Data and Model Basis

Comment O-CUE.22 questions the justification for using meteorological data from the Mission Bay station for the Draft EIR's HRA. The comment also suggests that using only one year of data is inconsistent with U.S. EPA guidance for dispersion modeling and would not adequately represent conditions at the project site, thereby understating potential impacts from the project. As discussed below, the basis for using one year of Mission Bay station meteorological data to represent typical conditions in San Francisco is provided in the City's Citywide health risk assessment (Citywide HRA), which is cited in the Draft EIR (p. 3.3-11). The Citywide HRA is a collaborative effort between the San Francisco Public Health and Planning Departments and the Air District to inventory and assess air pollution emissions and exposures within San Francisco as part of an effort to identify areas with poor air quality, termed the air pollutant exposure zone. This modeling effort included dispersion modeling from the primary sources of air pollutants using the American Meteorological Society/AERMOD dispersion model and therefore represents a comprehensive assessment of cumulative exposures to air pollution throughout the City.[13]

As stated in Draft EIR Appendix F, the 2008 Mission Bay meteorological data were chosen since this station is the closest station to the project area and because reliance on this data aligns with the approach used in the 2020 Citywide HRA.[14] The 2020 Citywide HRA presented wind roses for the 2008 Mission Bay data set and for Mission Bay data from 2008-2012 and found that the 2008 data were representative of long-term conditions. Additionally, the Citywide HRA determined that the Mission Bay data were generally representative of the conditions in San Francisco. Furthermore, health risk results from the Citywide HRA were used as background risks at receptors that overlap with Citywide HRA receptors in San Francisco for the cumulative analysis in the Draft EIR. Using the same meteorological data as the Citywide HRA allows for a more accurate comparison between project impacts and background risks.

Alternatives to the Mission Bay station include the stations at San Francisco Airport (SFO), about 6.5 miles south of the Martin Substation, and Fort Funston, about 5.5 miles west of the Martin Substation. While the SFO station is an airport Automated Surface Observing Systems site and the Fort Funston station was operated by the Air District, both are less representative of the project's locations of emissions compared to the Mission Bay station. San Bruno Mountain is located between the project's locations and the SFO station, while the Fort Funston station is located next to the Pacific Ocean and so is affected by sea breezes in ways the project area would not be. Therefore, the 2008 Mission Bay meteorological data are an appropriate choice for the project health risk assessment.

Hypothetical Health Risk Assessment for Linear Components

Comments O-PGE-2.17 and O-PGE-2.63 state that the Draft EIR health risk analysis would be more meaningful if the health risks of linear components were evaluated at a project level of detail (i.e., if the exact locations of linear components were known), and that the hypothetical health risk assessment for linear

[13] San Francisco Planning Department, Air Quality and Greenhouse Gas Analysis Guidelines, February 2025.
[14] San Francisco Department of Public Health, San Francisco Planning Department, and Ramboll, San Francisco Citywide Health Risk Assessment: Technical Support Documentation, September 2020.

components should inform the reader of the minimum distance to an MEI for the linear facilities similar to the noise analysis (15 feet from the work area to receptors).

CEQA Guidelines Section 15151 states that an EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. As discussed in **Response PD-2**, EIRs should be prepared as early as feasible in the planning process to enable environmental considerations to influence design yet late enough to provide meaningful information for the evaluation of environmental impacts.[15]

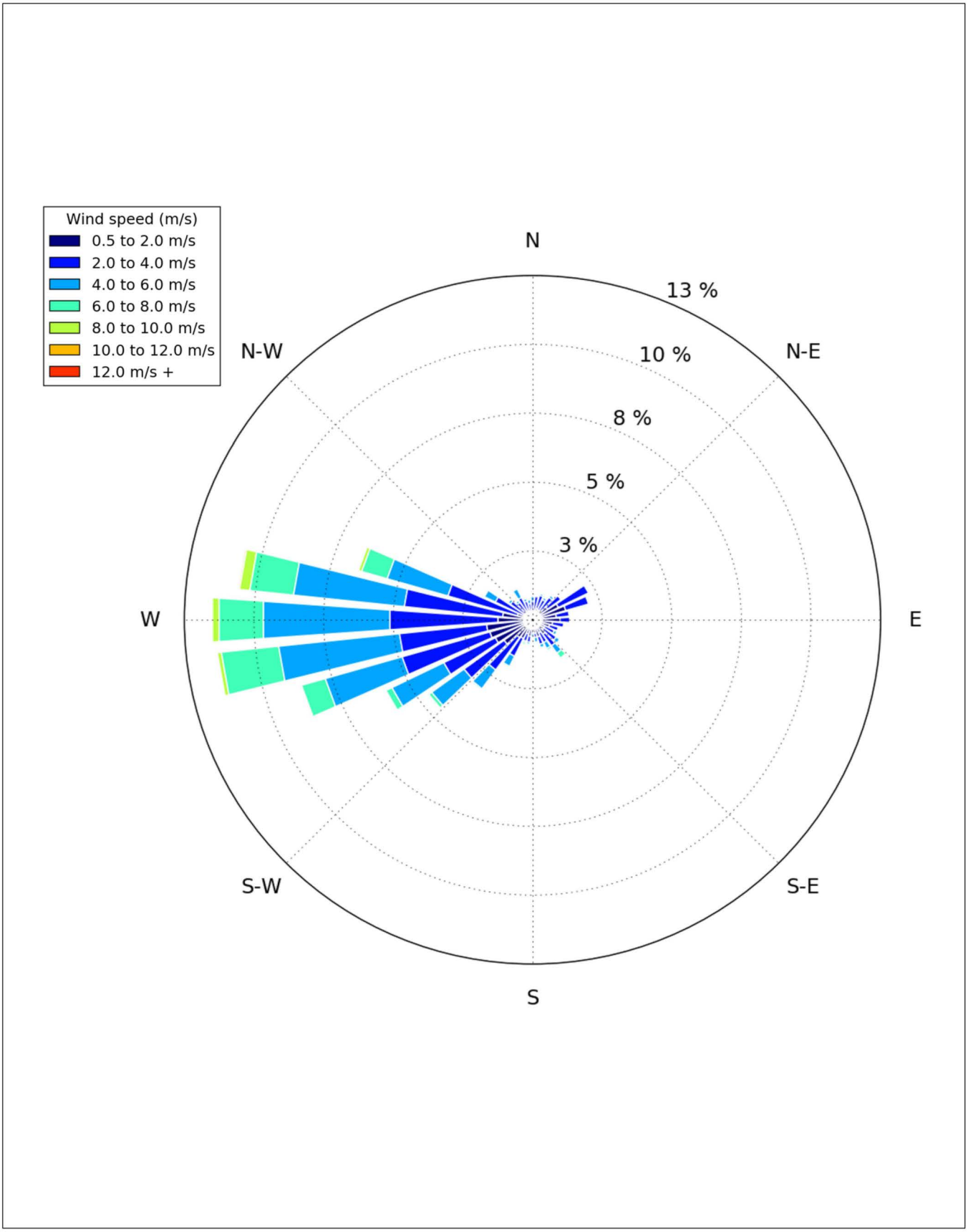
The following discussion provides further explanation of the hypothetical health risk assessment approach used in the Draft EIR, including clarification that the impact analysis is based on a health risk assessment that conservatively assumes the nearest receptor is immediately adjacent to the source of emissions – that is, next to the receptor and therefore less than 15 feet between the emissions source and receptor. This analysis approach presents a reasonable worst-case estimate of health risks with the information currently available and therefore is consistent with CEQA. No Draft EIR text revisions have been made in response to these comments.

The Draft EIR (p. 3.3-42) provides the following explanation of the health risk assessment approach for linear project components: "all three linear components (distribution express feeders, local distribution system separation, and system reinforcements) were modeled as moving area sources along a straight line at 40 feet a day, perpendicular to the predominant wind direction, in a zone of influence with a 2,000-foot diameter." Although CEQA does not require a figure, the city has provided two in response to Comment O-PGE-2.17 to clarify the health risk assessment approach. This response includes **Figure 10.5-1** and **Figure 10.5-2** to clarify the hypothetical HRA approach used in the Draft EIR impact evaluation.

The predominant wind direction from the meteorological data used to conduct the hypothetical health risk assessment is from the west as shown in Figure 10.5-1 below. The dispersion modeling assumes that for every construction day, the predominant wind direction is perpendicular to the 40-foot construction area. Dispersion modeling for Days 1, 2, 3, 10, 25, and 50 are shown as examples below in Figure 10.5-2. All 50 construction days are conservatively assumed to involve the identical off-road construction equipment and activities used for trenching. After Day 50, the linear construction area is more than 1,000 feet away from the hypothetical maximally exposed individual (MEI) location and is considered outside the zone of influence. Unit concentrations from the 50 dispersion modeling runs are summed at each receptor location within the 1,000-foot radius to account for the cumulative exposure at each receptor location, as seen in Figure 10.5-2.

In addition, on-road construction emissions from diesel haul trucks are assumed to occur over the entire length of the 2,000-foot line (representing the longest potential truck trip along a straight path within 1,000 feet of the receptor) for every day modeled. The hypothetical MEI shown as a red dot in Figure 10.5-2 is immediately downwind of the midpoint of the line. Therefore, health risk impacts at this MEI location represent the maximum possible impacts from the most intense construction activities that could occur for any one of the three linear components over the 50 days it would take for the construction to move along a straight path within 1,000 feet of the MEI (moving 40 feet per day).

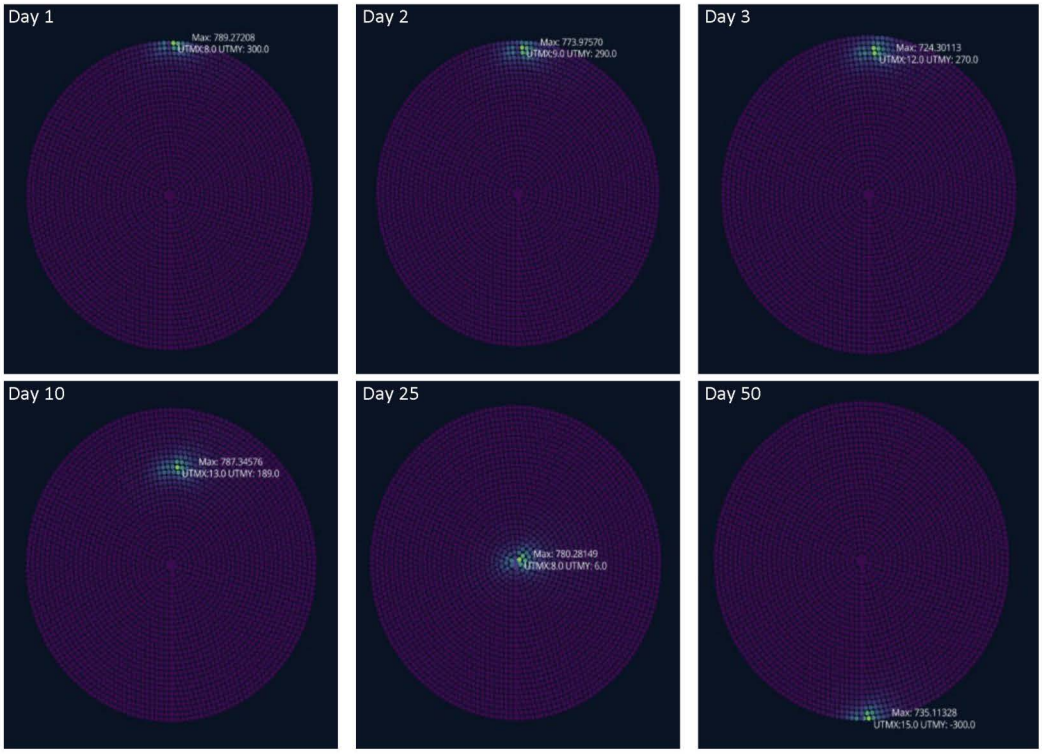
[15] CEQA Guidelines Section 15004(b)



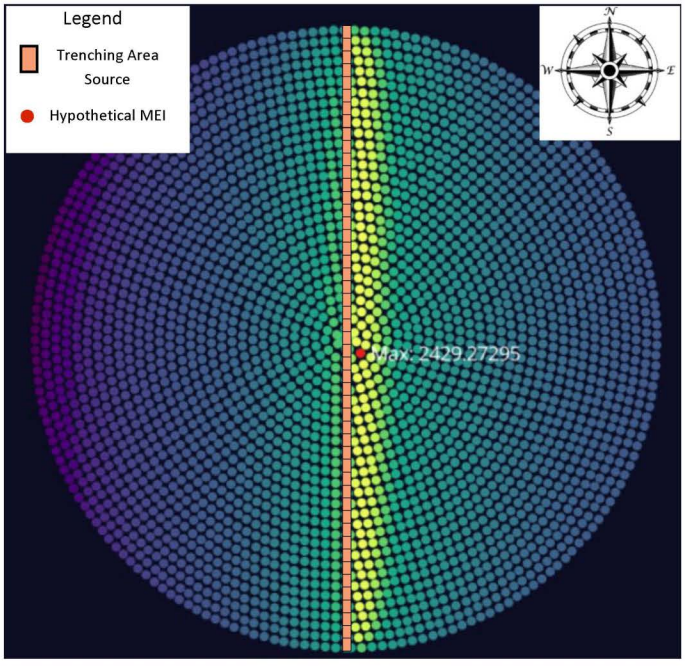
SOURCE: Ramboll and ESA

PG&E Asset Acquisition Project

Figure 10.5-1
Wind Rose from 2008 Mission Bay Meteorological Data



Dispersion modeling results for selected linear work construction days



Unit concentrations at receptors within 1,000 foot radius summed over the modeled 50-day construction period

SOURCE: Ramboll and ESA

PG&E Asset Acquisition Project

Figure 10.5-2
Dispersion Modeling Visualization

Comment O-PGE-2.63 states that the EIR does not inform the reader of the minimum distance to an MEI for the linear facilities and that using the distance from the noise analysis (15 feet from the work area to receptors) would provide a more meaningful risk analysis. The Draft EIR health risk assessment conservatively assumes the nearest receptor is immediately adjacent to the source of emissions – that is, next to the receptor and therefore less than 15 feet between the emissions source and receptor. The comment is therefore inaccurate, and no changes have been made to the Draft EIR in response.

Furthermore, Comments O-PGE-2.17 and O-PGE-2.63 state that the 1,000-foot distance to a receptor is illogical because the linear components work would primarily occur in areas immediately adjacent to people's homes and businesses. As shown in Figure 10.5-2 (lower panel), all receptors within 1,000-foot zone of influence were modeled (dots within circle). The reported health risks in the Draft EIR impact evaluation were for the MEI that represents the area immediately adjacent to the linear components work and in the predominant downwind direction (the red dot shown at the center of the circle).

The response above clarifies that the Draft EIR's hypothetical health risk assessment presents a reasonable worst-case estimate of health risks with the information currently available for the linear project components and therefore is consistent with CEQA. No Draft EIR text revisions have been made in response to these comments.

Health Risk Cancer Thresholds

Commenters correctly note that the Draft EIR applies different cancer risk thresholds for project activities within and outside of San Francisco (Draft EIR p. 3.3-27). The City maintains that this distinction is reasonable. As stated in CEQA Guidelines section 15064(b)(1), the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. The Draft EIR applies different cancer risk thresholds because different scientific and factual data are available to support the selected thresholds for San Francisco and San Mateo counties.

As discussed in Draft EIR Section 3.3.4.2, pp. 3.3-25 through 3.3-27, health risk methods used are based on agency guidance that documents evidence supporting the analysis approach. The Air District has established project-level and cumulative thresholds for the evaluation of health risks from projects and plans throughout the Bay Area. The Air District's thresholds address incremental lifetime cancer risk, acute and chronic hazard index and annual average $PM_{2.5}$ concentration. As discussed in Draft EIR Section 3.3.4.2 (p. 3.3-21), evidence supporting the Air District thresholds used for areas outside of San Francisco is identified in the Air District's Significance Thresholds Justification Report included as Appendix A of its 2022 CEQA Air Quality Guidelines.[16]

The City also considered additional evidence supporting use of health risk thresholds applied in certain areas of San Francisco. Within San Francisco, acknowledging the added sensitivity of populations located in close proximity to emission sources, the San Francisco Planning Department has established project-level health risk thresholds based on the location of projects relative to City's Air Pollutant Exposure Zone (APEZ) map, adopted per Health Code article 38. The APEZ is identified based on health-protective criteria that

[16] Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines, 2022,* Appendix A: Thresholds of Significance Justification, https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-a-thresholds-of-significance-justification_final-pdf.pdf?rev=d35960ec035546629124ae2a25fb1df9&sc_lang=en, accessed October 2025.

consider existing cumulative cancer risk and exposure to fine particulate matter, proximity to freeways, and locations with particularly vulnerable populations.[17]

Substantial evidence supports the City's decision to rely on different thresholds in different areas. As explained in Communities for a Better Environment v. California Resources Agency (2002) 103 Cal.App.4th 98, 120, "the greater the existing environmental problems are, the lower the threshold should be for treating a project's contribution to cumulative impacts as significant." Air quality impacts and resulting human health risks are by their very nature cumulative impacts. Emissions from past, present, and future projects contribute cumulatively to health risks for sensitive receptors. As such, the City evaluates project-level health risk impacts by considering existing health risks plus the additional health risks that would be experienced by sensitive receptors as a result of a project. In the APEZ, the planning department has determined that due to the severity of cumulative health risks, a more health-protective threshold is required for determining whether a project's contribution to health risks is considerable. In other areas, the planning department uses the Air District's health risk thresholds for determining whether a project's contribution to cumulatively significant health risks is considerable in certain scenarios. The planning department's methodology to use more health-protective thresholds for affected areas is consistent with the Air District's best practices for centering environmental justice, health, equity, and cited case law in the Air District guidelines.

Therefore, the planning department's use of more health-protective standards in areas disproportionately affected by air quality is consistent with case law interpreting CEQA, Air District guidance, and the City's Air Quality and Greenhouse Gas Analysis Guidelines. Further, as shown in Draft EIR Impact AQ-4 (p. 3.3-45), even if the analysis applied the San Francisco thresholds to health risks at the MEI outside of San Francisco, the Draft EIR's impact significance conclusions for the project and project variant would not change. Therefore, no change has been made to the Draft EIR in response to Comments O-PGE-2.28 and O-PGE-2.56.

Comment AQ-2: Air Quality Mitigation Measures

This response addresses the following comments, which are quoted below:

O-PGE-2.29, O-PGE-2.31, O-PGE-2.57, O-PGE-2.60, O-PGE-2.62

"DEIR Mitigation Measure M-AQ-2b states, "Where access to alternative sources of power are available, portable diesel engines shall be prohibited." Given the urbanized nature of the project area, this prohibition should be incorporated into the Project design. There should be little to no need for generators, as the Project's design can prioritize direct electrical grid connections. This approach would substantially reduce the noise and air quality impacts of the Project. The DEIR should be revised with this feasible approach to minimize the need for generators." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.29, O-PGE-2.60])

---

[17] San Francisco Planning Department, *Air Quality and Greenhouse Gas Analysis Guidelines*, February 2025, https://sfplanning.org/air-quality, accessed October 2025.

"The air quality toxic air contaminants ("TAC") assessment in the DEIR relies on a mitigation measure that has no TAC prescriptive values. Without clear performance standards for measuring and ensuring the effectiveness of this measure, the DEIR cannot assume that impacts from TACs will be adequately mitigated to a less than significant level." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.31, O-PGE-2.62])

"DEIR Mitigation Measure M-AQ-2b states: "Where access to alternative sources of power are available, portable diesel engines shall be prohibited." Yet the DEIR fails to discuss or identify where this could apply or what criteria should be used to determine "where an alternative source of power" may apply. This deficiency also affects noise impacts.

The DEIR at page 3.3-37 undercuts (and makes essentially meaningless) many of the air quality mitigation measures by discussing possible waivers to them that may be granted by CCSF. The effectiveness and enforceability of the air quality mitigation measures are called into question due to the existence of these waivers." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.57])

RESPONSE AQ-2

Use of Alternative Power Sources

Comments O-PGE.2.29, O-PGE.2.57, and O-PGE.2.60 suggest that the use of non-diesel power for generators should be part of the project design instead of a mitigation measure. While the commenter may prefer that the project description include the substance of Mitigation Measure M-AQ-2b as a design feature, the City did not include it in the initially proposed project description and CEQA does not require it to be added now. CEQA Guidelines section 15124 requires an EIR's project description to contain specified information and cautions that a project description "should not supply extensive detail beyond that needed for evaluation and review of the environmental impact." Consistent with section 15124(a), the Draft EIR includes a regional map as Figure 2-1 and identifies the precise location and boundaries of the project on the detailed maps provided as Figures 2-1, 2-2, 2-7, 2-8, and 2-11. Consistent with section 15124(b), the statement of project objectives provided in Draft EIR Section 2.2 is clearly written and includes the underlying purpose of the project. Consistent with section 15124(c), Draft EIR Chapter 2 provides a "general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities." Commenter's stated preference does not indicate in adequacy or inaccuracy in the Draft EIR. Therefore, no change has been made in response to this comment.

As analyzed in Draft EIR Section 3.3, Air Quality (p. 3.3-33 et. seq.), Impact AQ-2 concludes that the project or project variant could result in a significant impact associated with criteria air pollutant emissions during construction. When an EIR identifies a potential significant impact, CEQA requires the lead agency to identify one or more mitigation measures that, if adopted, could avoid or minimize the impact toward reducing its significance below an established threshold. Here, the Draft EIR identifies Mitigation Measure M-AQ-2b, which would reduce criteria air pollutant emissions associated with off-road construction equipment by requiring U.S. EPA Tier 4 Final engines. This would reduce the impact to less than significant because Tier 4 Final off-road engines emit approximately 90 percent less NOx and PM emissions when compared to

uncontrolled equipment. Because implementation of the mitigation measure would reduce the impact to less than significant, CEQA does not authorize the lead agency to impose additional mitigation (mitigation measures are not required for effects which are not found to be significant[18]). As shown in Draft EIR Appendix F Tables 1b, 2b, and 4b, the Draft EIR impact analysis assumes generators would be diesel-powered. The Draft EIR shows that, with Tier 4 Final engines as stated in subsection (A) of Mitigation Measure M-AQ-2b, the impact would be reduced to less than significant. Therefore, even if grid power were not available, Mitigation Measure M-AQ-2b would reduce impacts below the relevant threshold.

As the local electrical utility, PG&E receives regular requests to provide temporary grid power to construction sites if and when it can be made available. Project components (or locations) where grid power use could occur are not known at this time, nor is it necessary to identify these components or locations as part of the mitigation measure. To comply with this mitigation measure, the SFPUC construction management team would coordinate with PG&E to confirm whether PG&E could feasibly arrange temporary grid power during construction. Anywhere such connection is available, the use of portable diesel generators would be prohibited. Therefore, the commenter's stated preference does not indicate in adequacy or inaccuracy in the Draft EIR and no change has been made in response to this comment.

Performance Standards and Waivers

Comments O-PGE.2.31, O-PGE.2.57, and O-PGE.2.62 question the validity of Mitigation Measure M-AQ-2b with the inclusion of waivers and note that the allowance for waivers in Mitigation Measure M-AQ-2b without stating clear performance standards for health risk impacts could reduce the effectiveness of this measure.

CEQA allows specific details of a mitigation measure to be developed after project approval provided that the agency commits itself to the mitigation, adopts specific performance standards that the mitigation will achieve, and identifies the types of potential actions that can feasibly achieve that performance standard.[19] As discussed below, with clarifications to the measure the mitigation includes performance standards that can be feasibly achieved. As revised below to clarify the measure's performance standards, Mitigation Measure M-AQ-2b satisfies the requirements of CEQA.

As shown on Draft EIR p. 3.3-37, Mitigation Measure M-AQ-2b allows waivers to Tier 4 Final engines if it can be demonstrated that, with the substitute equipment, the project or project variant's average daily construction emissions would not exceed criteria air pollutant thresholds. Section B, Waivers, of Mitigation Measure M-AQ-2b has been revised as follows to incorporate health risk performance standards applicable should the environmental review officer (ERO) waive equipment requirements of Mitigation Measure M-AQ-2b subsection (A)(1). As explained in the Draft EIR, the most stringent health risk thresholds would apply to receptors located within the APEZ in San Francisco. The mitigation measure on Draft EIR page 3.3-37 has been revised to include these thresholds as performance standards:

> ***B. Waivers.***
>
> The environmental review officer (ERO) may waive the requirement of subsection (A)(2) regarding an alternative source of power if an alternative source is limited or infeasible at the project site. If the ERO grants the waiver, the SFPUC must submit documentation that the equipment used for onsite power generation meets the engine requirements of subsection (A)(1).

[18] CEQA Guidelines Section 15126.4(a)(3).
[19] CEQA Guidelines Section 15126.4(a)(1)(B).

> The ERO may waive the equipment requirements of subsection (A)(1) if a particular piece of Tier 4 Final off-road equipment is technically not feasible, the equipment would not produce the desired emissions reduction because of expected operating modes, or a compelling emergency requires the use off-road equipment that is not Tier 4 compliant. In seeking an exception, the SFPUC shall demonstrate that the project shall use the cleanest piece of construction equipment available and feasible and submit documentation that average daily construction emissions of ROG, NOx, $PM_{2.5}$ would not exceed 54 pounds per day, and PM_{10} emissions would not exceed 82 pounds per day. In addition, the SFPUC shall demonstrate that maximum project-level health risks with the use of waivers would not exceed a threshold of 7 in one million for incremental lifetime cancer risk and an annual average $PM_{2.5}$ concentration of 0.2 $\mu g/m^3$.

Emission stringency levels for the off-road sector engines are distinguished by the engine tier, starting with Tier 0 (the dirtiest uncontrolled engine) through the cleanest Tier 4 Final. These performance standards (which are mandated by the U.S. EPA and CARB) seek to reduce harmful exhaust pollutants from diesel-powered equipment and apply to engine manufacturers. Regulations have been phased in gradually at different tier levels to allow technology to be developed in order to achieve the target level of emissions. The federal standards began in 1996 and the final tier, Tier 4, became effective in 2015. These tier levels and standards align with CARB's regulation of off-road diesel engines through the In-Use Off-Road Diesel-Fueled Fleets Regulation. At the time of this writing, Tier 4 Final equipment is compliant with the latest emission standards.

In California, in addition to requiring that all new equipment manufactured since 2014 be Tier 4, fleets of all sizes have been prohibited from adding older Tier 0 vehicles beginning January 1, 2014, pursuant to CARB's In-Use Off-Road Diesel-Fueled Fleets rule (off-road rule). The 2022 amendments to the off-road rule further expanded requirements that any added vehicles be cleaner, and mandated an accelerated phase-out of older, higher-emitting engines from existing fleets. The off-road rule prohibited the addition of Tier 1 and Tier 2 engines from being added to fleets starting January 1, 2014, and 2018, respectively. The 2022 amendments added further restrictions as of January 1, 2024, prohibiting Tier 3 and Tier 4 Interim (Tier 4i) equipment from being added to large and medium fleets. In effect, only Tier 4 Final or cleaner engines may be added to large and medium fleets starting January 1, 2024. Small and ultra-small fleets have a more gradual rollout of added engine restrictions. For small and ultra-small fleets, the regulation prohibited Tier 1 and Tier 2 equipment from being added starting January 1, 2016, and 2023, respectively. The addition of vehicles with Tier 3 engines is prohibited for small and ultra-small fleets starting in 2024. Further, Tier 4i equipment is prohibited in 2028 for small fleets and in 2035 for ultra-small fleets.

This phase-out of older, lower tier equipment from fleets of all sizes with the addition of new, cleaner equipment has resulted in greater availability of Tier 4 Final equipment. Based on an Off-road Construction Equipment Vehicle Inventory[20] conducted by the San Francisco Planning Department in 2023, nearly 55 percent of engines in the Bay Area are either electric or Tier 4 Final engines, up from 33 percent in 2020. The availability of Tier 4 Final engines is expected to continue to increase in the coming years due to the CARB-mandated phase-out of older, lower tier engines.

[20] San Francisco Planning Department, Off-Road Construction Equipment Vehicle Inventory, October 2023, https://citypln-m-extnl.sfgov.org/SharedLinks.aspx?accesskey=07bd27912d0a83981dda16f5e8e2e3f3d7b3a75b68f31af27bf29110c7e9fcb8&VaultGUID=A4A7DACD-B0DC-4322-BD29-F6F07103C6E0.

Therefore, the performance standards in revised Mitigation Measure M-AQ-2b meet the requirements of CEQA and can be feasibly achieved.

Comment AQ-3: Emissions Outside the Air Basin

This response addresses the following comments, which are quoted below:

O-CUE.14, O-CUE.26

"The DEIR's air quality and health risk assessment accounts for emissions associated with the transport of hazardous waste materials via a combination of truck and rail.[142] However, the analysis significantly underestimates these emissions by limiting its modeling to one-way trip distances ending at the boundary of the San Francisco Bay Area Air Basin, rather than extending to the actual disposal site located in Utah.[143] Specifically, the DEIR assumes a rail line-haul distance of only 145 miles, which does not reflect the full transport route to the final landfill destination.[144]

Dr. Clark estimates that the landfill receiving the Project's hazardous waste is approximately 820 miles from the Project site by rail.[145] By artificially restricting its analysis to in-basin emissions, the DEIR omits a substantial portion of the air pollutant and greenhouse gas emissions attributable to Project-related waste disposal.[146] This results in a material underestimation of criteria air pollutants and as well as diesel particulate matter.[147]

The methodological flaw compromises the accuracy and completeness of the DEIR's air quality and health risk analyses, in violation of CEQA's requirement for a full and accurate disclosure of environmental impacts.[148] The DEIR must be revised to account for emissions along the entire transport route to the actual disposal site." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.14])

"The DEIR's air quality and health risk assessment includes emissions from the transport of hazardous waste materials using a combination of truck and rail transport.[13] However, the analysis significantly underestimates emissions by calculating one-way trip distances only to the edge of the San Francisco Bay Area Air Basin, rather than to the actual disposal site in Utah. Specifically, the DEIR assumes a truncated rail line-haul distance of 145 miles, which does not reflect the full length of the transport route. Publicly available data indicates that the actual landfill destination is located approximately 820 miles from the Project site. By failing to account for this full rail transport distance in its emissions modeling, the DEIR omits substantial air pollutant and greenhouse gas emissions associated with project-related waste disposal activities. This flaw

---

[142] *DEIR at p. 3.3-24.*
[143] *Clark Comments at p. 17.*
[144] *Ibid.*
[145] *Ibid.*
[146] *Ibid.*
[147] *Ibid.*
[148] *CEQA Guidelines §§ 15144, 15151.*
[13] *DEIR, Appendix F.*

leads to an underestimation of both criteria air pollutants (PM10, NOx) and health risk impacts from diesel particulate matter associated with rail haul emissions." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of Coalition of California Utility Employees [O-CUE.26])

RESPONSE AQ-3

Comments O-CUE.14 and O-CUE.26 assert that the Draft EIR should estimate criteria air pollutant and diesel particulate matter impacts by accounting for hazardous waste transport emissions beyond the San Francisco Bay Area Air Basin, including the full distance of transport, and that this information is needed for the Draft EIR to include a full and accurate disclosure of environmental effects. CEQA requires that direct and reasonably foreseeable indirect physical changes to the environment be considered.[21] Direct and indirect significant effects of the project on the environment should be clearly identified and described, and the discussion of significant effects should include relevant specifics of the area, the resources involved, physical changes, and health and safety problems caused by the physical changes, among other factors.[22]

The Draft EIR's criteria air pollutant impact analysis focuses on emissions within the San Francisco Bay Area Air Basin because most project or project variant construction (and construction emissions) would occur in the San Francisco Bay Area Air Basin. However, as discussed below, mass emissions from rail transport[23] through other air districts also would not exceed applicable thresholds for either the proposed project or the project variant during any construction year. In addition, health risk impacts of rail transport were sufficiently evaluated in the Draft EIR. Therefore, the Draft EIR meets the requirements of CEQA to consider direct and reasonably foreseeable indirect physical changes to the environment and clearly identifies significant effects of the project or project variant.

The Air District is the regional agency with regulatory authority over the San Francisco Bay Area Air Basin (air basin) and considers emission sources within the air basin in its air quality planning efforts to ensure that the region makes progress toward the attainment of standards for "nonattainment" pollutants such as ozone and particulate matter. Criteria air pollutants are regional pollutants, unlike TACs, whose effects are localized in nature, and greenhouse gas emissions, which are global pollutants. The study area for regional pollutants is typically the air basin boundaries, which were determined by grouping together areas with similar geographical and meteorological features, consistent with the requirements of the federal Clean Air Act. The construction mass emissions thresholds for criteria air pollutants adopted by the Air District represent the levels above which a project's individual emissions would result in a considerable contribution to the San Francisco Bay Area Air Basin's existing nonattainment air quality conditions and thus establish a nexus to regional air quality impacts. Therefore, the study area for the evaluation of regional air quality impacts is limited to the extent of the air basin (as noted on page 3.3-22 of the Draft EIR) and emissions generated outside the air basin boundaries are not included as part of project emissions for comparison with the mass emissions thresholds. However, mass emissions from rail transport through other California air districts also would not exceed applicable thresholds for either the proposed project or the project variant during any construction year, as shown in **Table 10.5-1**.

[21] CEQA Guidelines Section 15064(d)
[22] CEQA Guidelines Section 15126.2(a)
[23] As shown in Draft EIR Table 3.3-7, construction using rail instead of trucks would result in greater daily average criteria air pollutant emissions and therefore this discussion focuses on rail transport.

Table 10.5-1 Mass Emissions From Rail Transport in California Air Districts

Project Component	Jurisdiction[1]	Miles within Jurisdiction	Construction Year[2]	ROG	NOx	PM_{10}	$PM_{2.5}$
				pounds per day[3]			
Martin Substation	Rail transport emissions in Bay Area Air Quality Management District (BAAQMD)	145	2026	< 0.1	0.96	< 0.1	< 0.1
			2027	< 0.1	1.42	< 0.1	< 0.1
			2028	< 0.1	0.50	< 0.1	< 0.1
	BAAQMD Thresholds			54	54	82	54
	Rail transport emissions in Northern Sierra Air Quality Management District (NSAQMD)	50	2026	< 0.1	0.33	< 0.1	< 0.1
			2027	< 0.1	0.49	< 0.1	< 0.1
			2028	< 0.1	0.17	< 0.1	< 0.1
	NSAQMD Thresholds			24	24	79	--
	Rail transport emissions in Placer County Air Pollution Control District (PCAPCD)	71	2026	< 0.1	0.16	< 0.1	< 0.1
			2027	< 0.1	0.24	< 0.1	< 0.1
			2028	< 0.1	< 0.1	< 0.1	< 0.1
	PCAPCD Thresholds			82	82	82	--
	Rail transport emissions in Sacramento Metropolitan Air Quality Management District (SMAQMD)	18	2026	< 0.1	< 0.1	< 0.1	< 0.1
			2027	< 0.1	< 0.1	< 0.1	< 0.1
			2028	< 0.1	< 0.1	< 0.1	< 0.1
	SMAQMD Thresholds			65	65	80	82
	Rail transport emissions in Yolo-Solano Air Quality Management District (YSAQMD)	34	2026	*< 0.1*	*1.24*	< 0.1	< 0.1
			2027	*< 0.1*	*1.83*	< 0.1	< 0.1
			2028	*< 0.1*	*0.65*	< 0.1	< 0.1
	YSAQMD Thresholds			*10*	*10*	80	--
Project Variant	Rail transport emissions in BAAQMD	145	2026	0.30	7.19	0.16	0.15
			2027	0.15	3.56	< 0.1	< 0.1
	BAAQMD Thresholds			54	54	82	54
	Rail transport emissions in NSAQMD	50	2026	0.10	2.48	< 0.1	< 0.1
			2027	< 0.1	1.23	< 0.1	< 0.1
	NSAQMD Thresholds			24	24	79	--
	Rail transport emissions in PCAPCD	71	2026	< 0.1	1.22	< 0.1	< 0.1
			2027	< 0.1	0.60	< 0.1	< 0.1
	PCAPCD Thresholds			82	82	82	--

[1] California jurisdictions traversed by rail transport from San Francisco to Utah.
[2] The project variant would not require rail offhaul of material in year 3 of construction (2028).
[3] *Italicized* numbers represent tons per year.

Project Component	Jurisdiction[1]	Miles within Jurisdiction	Construction Year[2]	ROG	NOx	PM_{10}	$PM_{2.5}$
				pounds per day[3]			
	Rail transport emissions in SMAQMD	18	2026	< 0.1	0.15	< 0.1	< 0.1
			2027	< 0.1	< 0.1	< 0.1	< 0.1
	SMAQMD Thresholds			65	65	80	82
	Rail transport emissions in YSAQMD	34	2026	*0.39*	*9.27*	< 0.1	< 0.1
			2027	*0.19*	*4.59*	< 0.1	< 0.1
	YSAQMD Thresholds			*10*	*10*	80	--

ABBREVIATIONS:

ROG = reactive organic gases; NOx = nitrogen oxides; PM_{10} = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter

Similar to the approach used for the three linear components (distribution express feeders, local distribution system separation, and system reinforcements), the evaluation of health risks from rail transport was based on a hypothetical HRA with the rail emissions modeled as a moving area source perpendicular to the predominant wind direction, in a zone of influence with a 2,000-foot diameter. Based on a reasonable worst-case assumption that the predominant wind direction from the west would continue throughout the exposure duration, the hypothetical MEI was found to be immediately downwind of the midpoint of the line. Health risk impacts at this MEI location represent the maximum possible impacts from the rail transport along the transport route irrespective of the location of the 2,000-foot segment modeled. The analysis of health risks from rail transport presented in the Draft EIR and the less-than-significant impact conclusion would remain the same irrespective of the location of the segment along the transport route. Therefore, health risks from rail transport outside the air basin would also be less than significant. Refer to Figure 10.5-2 for a visualization of the hypothetical HRA approach.

The Draft EIR meets the requirements of CEQA to consider direct and reasonably foreseeable indirect physical changes to the environment and clearly identifies significant effects of the project or project variant related to air quality and health risks. No changes to the Draft EIR have been made in response to this comment.

Comment AQ-4: Cumulative Impact Analysis

This response addresses the following comments, which are quoted below:

O-PGE-2.33, O-PGE-2.58, O-PGE-2.64

“The DEIR’s Air Quality Cumulative Impacts states that quantitative data is not available for the cumulative projects. This, however, ignores that immediately adjacent Cormorant Battery Energy Project, for which detailed environmental review is readily available. The data from that environmental review should be used to determine cumulative impacts due to the similar timeline of that project and the Project.” (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.33])

"The DEIR's Air Quality Cumulative Impacts discussion uses project impact thresholds as the cumulative impacts thresholds. This is a misapplication of the cumulative impacts concept, which requires a lower threshold than for project-level impacts (i.e. "cumulatively considerable contribution" threshold)." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.58])

"The DEIR's Air Quality Cumulative Impacts states that quantitative data is not available for the cumulative projects. [T]his, however, ignores that the immediately adjacent Cormorant Battery Energy Project, for which detailed environmental review is readily available. The data from that environmental review should be used to determine cumulative impacts due to the similar timeline of that project and the Project." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.64])

RESPONSE AQ-4

Comments O-PGE-2.33 and O-PGE-2.64 state that the cumulative health risk analysis in the Draft EIR should incorporate quantified health risks for the Cormorant Battery Energy Project located in the vicinity. Construction of the Cormorant Battery Energy Project would occur approximately 2,000 feet and 2,800 feet west of the variant and Martin Substation sites, respectively. The construction area for the battery storage facility would be located approximately 3,500 feet away from the nearest MEI identified for the project and project variant located in San Mateo County, well beyond the 1,000 feet zone of influence recommended by the Air District for the assessment of cumulative health risks. Therefore, construction activities at the Cormorant Battery Energy Project site are not likely to influence health risks at the project and variant MEI. Construction of the proposed underground transmission line connecting the Cormorant Battery Energy Project to Martin Substation would occur adjacent to the Daly City substation's western boundary and may coincide with construction at the Martin Substation or the variant. Even in this case, the closest point on the transmission line alignment would be more than 1,400 feet away from the nearest MEI identified for the project and project variant.

In addition, construction activities associated with transmission lines are linear in nature and would progress along the alignment at a rate of approximately 100 feet per day.[24] Therefore, the duration of exposure to any receptor would be limited to between a few days to approximately one month using the Air District's recommended 1,000 feet as guide for the zone of influence. The scale of construction activities associated with transmission lines would also be much smaller than the construction of the battery storage facility itself. For these reasons, construction of the transmission line would not contribute substantially to the cumulative health risks at the project and variant MEI. Therefore, health risk impacts from the Cormorant Battery Energy Project are not included quantitatively in the cumulative HRA.

Comment O-PGE-2.58 states that the Draft EIR uses project-level health risk thresholds as the cumulative impact thresholds. The commenter also states that the CEQA cumulative impact concept requires a lower threshold than a project-level threshold and that the Draft EIR cumulative impact threshold should be lower than the project impact threshold.

[24] City of Daly City, Cormorant Energy Storage Project Initial Study, November 2024, page 116.

The Draft EIR does not misapply the cumulative impact concept, but rather the City's project-level health risk impact approach uses the cumulative impact concept as the basis for a lower project-level threshold. The San Francisco Planning Department's identification of project-level significance thresholds for the evaluation of health risks relies on the location of the receptor within Air Pollutant Exposure Zones (APEZs) mapped based on cumulative health risk exposure in the city. This approach has been substantiated in the planning department's *Air Quality and Greenhouse Gas Guidelines* and considers varying cumulative exposure in San Francisco due to its limited land supply, the existing dense pattern of development, and mix of land uses, which often results in development of sensitive land uses near sources of air pollution. As stated in the Draft EIR (p. 3.3-55), consistent with the Air District's 2022 CEQA Guidelines, when health risk impacts are considered significant under existing conditions, a more health protective standard (than what is considered a substantial health risk contribution if the receptor were to be located outside the APEZ) is required to reduce a project's contribution to existing health risks to less-than-significant levels. Therefore, the project-level thresholds are inherently based on cumulative risks and therefore serve as an appropriate threshold to use for the evaluation of a project's contribution to cumulative health risk.

Comment AQ-5: Other Air Quality Comments

This response addresses the following comments, which are quoted below:

A-Brisbane.6, O-PGE-2.59

"Air Quality Impacts: The summary of applicable regulations in Section 3.3.3.3 and the analysis of air quality impacts doesn't acknowledge City of Brisbane regulations for dust control in BMC Ch. 15.01, Section 15.01.510 (defers to BAAQMD CEQA guidelines, plus additional provisions for water truck to be present on-site at all times)." (John Swiecki, AICP, Community Development Director, City of Brisbane [A-Brisbane.6])

"The Air Quality impacts for the Project's storage/maintenance yard component cannot be determined absent a location and site plan for that yard." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.59])

RESPONSE AQ-5

City of Brisbane Dust Control Regulations

Comment A-Brisbane.6 notes that the regulatory setting described in Draft EIR Section 3.3.3.3 does not include relevant portions of the Brisbane Municipal Code that address dust control. In response to this comment the following text has been added to Draft EIR page 3.3-21:

CITY OF BRISBANE MUNICIPAL CODE

Section 15.01.510 of the Brisbane Municipal Code addresses fugitive dust emissions from the movement of earth materials either within, to, or from construction sites and requires the implementation of dust control measures in accordance with the Bay Area Air Quality Management District CEQA Guidelines and any additional measures that the city engineer deems to be necessary and appropriate. As determined by the city engineer, a water truck is required to be continuously present onsite to assure maximum control.

Storage/Maintenance Yard Impacts

Comment O-PGE-2.59 incorrectly asserts that air quality impacts associated with the project or project variant's storage/maintenance yards cannot be analyzed without a location and site plan for the yards.

As discussed in Response AQ-1, the study area for regional pollutants is typically the air basin boundaries, which were determined by grouping together areas with similar geographical and meteorological features, consistent with the requirements of the federal Clean Air Act. The precise site plan and location of the operations and maintenance service yards within southeastern San Francisco is not needed to estimate the impact of criteria air pollutant emissions because any configuration of equipment and any location in southeastern San Francisco would still be within the same regional air basins. The unmitigated criteria air pollutant emissions presented in Table 3.3-7 of the Draft EIR and the mitigated emissions presented in Table 3.3-8 of the Draft EIR include emissions from construction equipment and vehicles used for the construction of the operations and maintenance service yards. These emissions are considered along with emissions from other project components for comparison with the Air District's mass emissions thresholds for construction and are therefore included in the impact analysis for criteria air pollutants.

As noted on page 3.3-26 of the Draft EIR, health risks associated with construction of the operations and maintenance service yards were not evaluated as construction activities and emissions associated with this project component would be minimal and the construction activities would not use heavy equipment for more than two months. Due to the uncertainty in assessing cancer risk from very short-term exposures, OEHHA does not recommend assessing cancer risk for projects lasting less than two months.[25] Therefore, in accordance with OEHHA's guidelines, a quantitative HRA was not performed.

[25] Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments, February 2015.

10.6 Alternatives

The comments and corresponding responses in this section cover topics in Draft EIR Chapter 5, Alternatives.

- AL-1: PG&E Proposed Alternatives
- AL-2: Alternative D and Other Build Alternatives
- AL-3: Formulation of Objectives and No Project Alternative
- AL-4: Other Alternatives Comments

Comment AL-1: PG&E Proposed Alternatives

This response addresses the following comments, which are quoted below:[1]

O-PGE-2.10, O-PGE-2.23, O-PGE-2.123

"The DEIR fails to include a reasonable range of alternatives due to at least the following reasons: (i) its inclusion of an alternative (New Brisbane Baylands Substation Alternative D) that would be unlawful; (ii) its omission of an administrative alternative that includes a resolution of CCSF's protest in FERC proceedings to the mutual satisfaction of PG&E and CCSF along with CCSF's continued use of Community Choice Aggregation; and (iii) its omission of (as discussed above) CCSF's currently preferred Martin Substation alternative that is under negotiation with the CPUC and PG&E." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.10])

"As discussed below, the DEIR's alternatives analysis fails in multiple regards—by (1) omitting consideration of feasible alternatives necessary to permit a reasoned choice, (2) failing to provide sufficient detail to meaningfully compare the alternatives included in the DEIR with the Project, and (3) improperly rejecting the "No Project" Alternative based on a narrow conception of Project objectives.

1. <u>The DEIR's Omission of Certain Alternatives Violates the "Rule of Reason"</u>

CCSF has determined that the following four alternatives constitute a reasonable range of alternatives—the (1) "No Project" Alternative (*i.e.*, Alternative A); (2) "Meter Transmission at Martin Substation" Alternative (*i.e.*, Alternative B); (3) "Reduced Transmission Acquisition" Alternative (*i.e.*, Alternative C); and (4) "New Brisbane Baylands Substation" Alternative (*i.e.*, Alternative D). (DEIR, p. 5-7.) Notably absent from this range, or the alternatives that were initially evaluated but not carried forward for further analysis is an option that is feasible, would avoid the significant impacts of the Project (*i.e.*, is more environmentally protective) and would meet most of the Project objectives: an administrative[13] solution. CCSF's description of the

[1] Footnotes from quoted comments are indicated by *italicized* text and retain their original footnote number from the comment. Footnotes from response text are not italicized and are numbered in order of appearance in this section.

[13] *Notably, CCSF was open to considering a partial administrative solution as part of the alternatives that were initially evaluated but not carried forward for further analysis. (See DEIR, p. 5-43 [discussion of "Fringe Area Service Agreements" alternative].)*

"challenges and problems with the current arrangement" found in Section 1.4.2.2 of the DEIR obfuscate that the tension between CCSF and PG&E is driven by CCSF's dissatisfaction with the wholesale services PG&E provides under its applicable tariffs, which is different than the bilateral arrangement that CCSF previously enjoyed. In the FERC proceedings referenced in DEIR footnote 23, CCSF protested its obligation under PG&E's tariff to install its own facilities to transform high-voltage electricity delivered by PG&E in order to provide secondary distribution level voltage to CCSF customers. An alternative that includes a mutual resolution of that protest with PG&E combined with CCSF's continued use of Community Choice Aggregation for power supply to the vast majority of electric customers and majority share of the power consumption in San Francisco would satisfy most of the project objectives and eliminate the Project's environmental impacts because it would not require any new facilities. More specifically, this alternative would meet, at least, the following Project objectives identified in the DEIR:

2. Use public funds efficiently and prudently to maintain and improve San Francisco's existing electricity infrastructure over the long term.
3. Use existing electric facilities that are already serving customers in San Francisco and avoid, where feasible, the construction of unnecessary and duplicative electric facilities.
6. Provide cost-effective, timely, and reliable interconnections to San Francisco's electric grid for all electricity users in San Francisco.
7. Establish local accountability for the long-term performance and affordability of San Francisco's electricity infrastructure.
8. Minimize disruption to local communities. (DEIR, p. 2-3, pp. 5-31–32 [Table 5-3].)

And it would do so while reducing all impacts, let alone significant impacts, of the Project.[14] (*Cf.* DEIR, p. 5-13 ["the No Project Alternative would avoid all construction and operational impacts that were identified for the [P]roject or [P]roject variant"], p. 5-30 [discussion of the No Project Alternative as the environmentally superior alternative], pp. 5-33– 38 [reduced impacts of No Project Alternative for all environmental topic sections].) The feasibility of this alternative cannot reasonably be questioned as demonstrated by SFPUC's recent recommendation that CCSF settle its dispute with PG&E over service under PG&E's wholesale tariff.[15] Nor can CCSF simply discard it outright to the extent CCSF prefers the Project or another alternative. (*See*

---

[14] *Substantial evidence does not support that the Proposed project and Variant would "use public funds efficiently and prudently to maintain and improve" electricity infrastructure because no cost estimates are provided for the amount of public funds required to condemn PG&E's system or to construct or acquire each project component. This will be in the billions of dollars (see Exhibit D [in 2019, CCSF offered $2.5 billion for PG&E's distribution system, an amount PG&E deems less than fair market value. CCSF now seeks to acquire transmission assets in addition to distribution assets and would be also required to pay substantial construction and severance costs]). The examples of alleged excessive costs for connection of restrooms provided in the DEIR pales in comparison.*

[15] *See February 25, 2025 SFPUC meeting minutes, Items 18 and 19 ["Proposed settlement of litigated cases related to the terms and conditions of wholesale service PG&E provides to San Francisco, subject to final approval by the Board of Supervisors . . . President Stacy stated that the Commission recommends the Board of Supervisors approve the settlement referenced under Item 18"], available at https://www.sfpuc.gov/sites/default/files/about-us/commission/2.25.2025_M.pdf. Another possible Project alternative that would avoid environmental impacts would have CCSF negotiate a mutually agreeable arrangement between CCSF and PG&E that would avoid the apparent need for CCSF to acquire PG&E's assets. One recent example of this approach can be seen in the arrangement recently reached between the City of San José and PG&E in which, based upon certain commitments made by PG&E, the City of San José determined that it would not be necessary to establish its own municipal utility to provide electric service. (See February 28, 2025 Cooperation Agreement Between Pacific Gas and Electric Company and the City of San Jose for Electric Infrastructure Development, available at 20250228 Cooperation Agreement Between Pacific Gas and Electric Company 2.pdf and March 21, 2005 City Council Draft Meeting Minutes, available at https://sanjose.legistar.com/View.ashx?M=M&ID=1213840&GUID=69C3F8E5-23C5-4A31-9C04-FCE45494FE8C ["Adopt[ing] a resolution authorizing the City Manager or her designee to negotiate and execute the PG&E – City of San José Implementation Agreement"].)*

Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692, 736 [an agency cannot avoid an objective consideration of an alternative simply because, prior to commencing CEQA review, an applicant made substantial investments in the hope of gaining approval for a particular alternative].)

The DEIR also fails to discuss the CCSF currently preferred alternative that is under discussion with the CPUC and PG&E in the CPUC valuation proceeding. In the most recent Commission staff workshop, in January 2025, CCSF presented its leading scenarios and acknowledged that those scenarios would involve PG&E building a new substation outside of the Martin Substation. CCSF presentation materials noted that there were several different types of substations that might need to be built depending on the scope of CCSF's taking at Martin and its plan for separation of existing PG&E facilities. The size of a new PG&E substation, and its possible locations, would be influenced by those details. (*See* Exhibit B.) Yet, this approach, which CCSF has most recently expressed as its preferred approach in the CPUC valuation proceeding is wholly absent from the DEIR's alternatives analysis. If such alternatives are reasonable enough to warrant extensive exploration outside the CEQA context, and are apparently CCSF's current primary preference about how to implement the Project, it is plainly unreasonable to exclude their discussion and disclosure within the DEIR in either the Project description or within the reasonable range of alternatives. (Pub. Res. Code, § 21006 [CEQA is part of an agency's decision-making process].) Because the same Project forms the basis of both the CPUC valuation proceeding and this CEQA process, the CEQA analysis here must evaluate the same Project that the CPUC is considering.

Rather than provide a reasonable range of alternatives, the DEIR includes a technologically and legally infeasible alternative (Alternative D using SF6 technology), and reduced size alternatives that CCSF is not considering in current discussions with PG&E in the CPUC valuation proceeding (Alternatives B and C). The Alternatives chapter must be revised to include a contractual alternative with PG&E, a new PG&E-constructed substation, and an approach that matches the project being considered by the CPUC in the valuation proceeding. The existing Alternatives chapter appears drafted to simply attempt to check the box on CEQA compliance, rather than to inform decision-makers and the public of reasonable, feasible, and likely alternatives to the significant environmental impacts of, and extraordinary expenses of, the proposed Project." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.23])

"Alternative B states 'there will be interconnection metering at the 115kV/12kV transformers in the Martin Substation.' Under this alternative, PG&E would need to install new 115kV/12kV facilities to serve PG&E customers separately from the existing transformer. Also, this alternative says that two 230kV metering buildings and six 115kV Metering buildings will be installed. Doing so will require significant PG&E work to build and accommodate these buildings and may involve reconfiguration of equipment to provide proper clearances. The DEIR should be supplemented to address these impacts." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.123])

RESPONSE AL-1

The comments recommend an "administrative" alternative consisting of mutual resolution of a City protest regarding PG&E rates plus continued use of Community Choice Aggregation. The comments state that this alternative would avoid impacts and be feasible.

The Draft EIR discusses two "administrative" or partially administrative alternatives similar to the commenters' proposed alternatives. The first is Alternative A: No Project, discussed in Draft EIR Section 5.3.1 (p. 5-10 et seq.). In the No Project Alternative, the City would not acquire PG&E assets and would not separate the electric grid. The City would continue to rely on PG&E's Wholesale Distribution Tariff process for connection to distribution services and continue to use Community Choice Aggregation. The Draft EIR found that the No Project Alternative would meet two of the project's eight objectives; the commenter's recommended "administrative" alternative would similarly meet two of the eight project objectives. The second is an alternative considered but rejected (the Fringe Area Service Agreements) discussed in Draft EIR Section 5.6.7. In this concept, the City would establish fringe area service agreements at certain points for some customers or neighborhoods to avoid the need for local distribution system separation and system reinforcements in those areas. This is an administrative solution, in which some customers in San Francisco would be served from PG&E lines from San Mateo County, and some customers in San Mateo County would be served from City lines from San Francisco.

As acknowledged in Draft EIR Section 5.3.1.2, the No Project Alternative would avoid all construction and operational impacts of the project or project variant, although some construction associated with the Wholesale Distribution Tariff process could still occur. Draft EIR section 5.5.2, Environmentally Superior Alternative, identifies the No Project Alternative as environmentally superior to the project or project variant, consistent with the comments. As stated in the Draft EIR, if it is determined that the "no project" alternative would be the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other project alternatives (CEQA Guidelines section 15126.6[e][2]). The Draft EIR identifies Alternative B as the environmentally superior alternative among the other alternatives.

Consistent with CEQA Guidelines section 15126.6(c), the Draft EIR includes a reasonable range of alternatives. Pursuant to CEQA Guidelines section 15126.6(a), an EIR need not consider every conceivable alternative to a project but must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. The range of alternatives discussed in the Draft EIR includes the types of alternatives specified in the comments. The "administrative" alternatives identified by the comments are versions of the No Project Alternative (Alternative A) evaluated in the Draft EIR, as discussed above.

Other comments state that the EIR should evaluate various potential new substations based on discussions held as part of the valuation proceedings. As discussed in greater detail in Response PD-6, the commenters' assertion that the Draft EIR should reflect the CPUC valuation proceedings is not correct. The purpose of the valuation proceeding referred to by the commenters is to value those PG&E assets the City seeks to acquire. The valuation proceeding is an economic and administrative activity, not a physical one, that involves an assessment of monetary value. Neither the City's provision of a separation plan for the purposes of valuation nor a CPUC decision fixing just compensation constitutes a project approval, i.e., a commitment to "a definite course of action" with respect to the potential acquisition of PG&E assets. Furthermore, ownership status of the assets does not meaningfully enhance understanding of the project or inform impact analyses. However, the Draft EIR considers the impacts of two new substation options (impacts that would be the same regardless of whether the City or PG&E owns the substation). The first, the project variant, is a new City substation at Daly City Yard. The second is Alternative D, in which a new City substation would be built at Brisbane Baylands. As discussed in greater detail in Response PD-4, while it is feasible that SF6 gas-insulated switchgear could be installed before the phase-out dates specified in the current regulations, if construction occurs after the relevant phase-out date, other commercially available non-SF6 gas-insulated equipment

would be used at the new City Substation (project variant). Gas-insulated switchgear, utilizing SF6 gas or other commercially available non-SF6 gas, is also technologically feasible as evidenced by the existing availability of such equipment.[2] The greenhouse gas effects of the project and project variant are evaluated in Draft EIR Appendix A Section E.9, Greenhouse Gas Emissions. The comments do not provide sufficient detail regarding a different substation alternative that would result in reduced impacts compared to the project or project variant to require a more detailed response to the comments.

Comment O-PGE-2.123 states that PG&E would need to install new 115kV/12kV facilities to serve PG&E customers separately from the existing transformer. This is consistent with how Draft EIR Section 5.3.2.1 describes Alternative B (Draft EIR p. 5-14), stating in part, "The City… would construct two new 115/12 kV transformers for PG&E distribution at the Martin Substation." The comment mischaracterizes the work by stating that metering "buildings" would be installed; meter housing surrounds equipment only and is not designed for accommodating human occupation, even temporarily, and therefore the meters are not characterized as "buildings" in the Draft EIR. As shown in Draft EIR Table 2-2 (p. 2-10), meters require foundations that are 16 square feet (4 feet by 4 feet). As stated on Draft EIR p. 5-11 (in Table 5-2), meters would be installed on the 230 kV and 115 kV transmission lines at Martin Substation and on the existing 115/12 kV transformers at Martin Substation. The Draft EIR discusses the potential environmental impacts of installing the meters at Martin Substation in section 5.3.2.2 (starting on Draft EIR p. 5-15), and no further discussion of impacts is required to address this comment.

Comment AL-2: Alternative D and Other Build Alternatives

This response addresses the following comments, which are quoted below:

A-Brisbane.8, O-PGE-2.24, O-PGE-2.83, O-PGE-2.85

"Alternative D: Baylands Substation. The City of Brisbane objects to the inclusion of this alternative and the impact analysis provided in the DEIR for the following reasons:

- The impact analysis doesn't acknowledge conflicts with Brisbane General Plan designation for residential land use in the proposed substation location. A substation is not compatible with residential land uses.
- The impact analysis does not acknowledge the Baylands Specific Plan presently under consideration by the City of Brisbane which would also pose a land use conflict." (John Swiecki, AICP, Community Development Director, City of Brisbane [A-Brisbane.8])

"2. <u>The DEIR's Alternatives are Inadequately Described and Assessed</u>

The DEIR "shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." (CEQA Guidelines, § 15126.6(d).) As discussed in the GECo Letter, the DEIR fails this charge in several respects. (*See* Exhibit A, pp. 16–17.) For example, the

[2] U.S. Environmental Protection Agency, Moving Toward SF6-Free High Voltage Circuit Breakers: Considerations for Adopting Vacuum Breaker and Fluorinated Gas Alternative Technologies. 430-R-20-007, undated.

descriptions of each of the "build" alternatives is inadequate because they provide no plans, locations or descriptions of the physical features proposed in each of the "build" alternatives. (*Id*.) Even more specifically, the "New Brisbane Baylands Substation" Alternative (*i.e.*, Alternative D) fails to identify a laydown/staging area for the new substation work under that alternative. (*Id.*; *compare* DEIR, Figure 5-1 [Brisbane Baylands Substation with no indication of where the laydown area would be] *with* DEIR, Figure 2-2 [Martin Substation Project Site and Construction Staging Area].) This lack of information makes it impossible to meaningfully evaluate the impacts of the alternatives and then compare those to the Project.

Moreover, in regards to the New Brisbane Baylands Substation Alternative, the DEIR acknowledges that the "Brisbane Baylands Specific Plan development (*i.e.*, the planned adjacent housing)" could be completed prior to construction of the Project. (*E.g.*, DEIR, p. 5-24.) Yet the DEIR's discussion of this alternative fails to analyze land use compatibility issues and impacts to future residents in the planned adjacent housing that would result from this alternative, which would introduce (another) industrial use on vacant land in an area that has already been planned for housing. (*See* DEIR, p. 5-29.) These concerns are significant, because the DEIR acknowledges that residences would be located within 50 feet of the substation (DEIR, p. 5-25) but rejected other alternatives as infeasible because they would be located within 100 feet of sensitive receptors. (DEIR, pp. 5-40–41). Because Alternative D is facially infeasible because of its location and its unlawful insulation technology, it does not contribute to a reasonable range of alternatives and should be removed from the DEIR and replaced with an appropriate alternative." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.24])

_____

"Lack of Detailed Information for "Build" Alternatives: Similar to the deficiencies with the Project description discussed above, the DEIR's descriptions of each of the "build" alternatives is inadequate because it lacks critical detail, including site plans, locations, and descriptions of the physical features proposed in each of the "build" alternatives. Without this information, the public is unable to discern the physical differences between the alternatives. This omission precludes evaluation of whether the impacts analyses for the "build" alternatives are adequate or accurate." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.83])

_____

"Lack of Detailed Information for Baylands Substation Alternative: The Baylands Substation alternative lacks a site plan or other design details. Without this information it is unclear where each of this alternative's facilities would be located or whether the construction laydown area would be located. Further, it is unclear what types of construction activities would occur, including how much soil would need to be moved. In order to adequately evaluate potential impacts of this alternative, this information needs to be presented within the DEIR. Laydown space is not described in the alternative nor are the environmental impacts associated with that space necessary for construction evaluated." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.85])

_____

RESPONSE AL-2

The comments express disfavor for Alternative D (New Brisbane Baylands Substation) because a substation would be inconsistent with land uses proposed under the City of Brisbane General Plan designation and the Baylands Specific Plan, which is currently in development. The comments also state that plans, locations, or more specific descriptions are needed to evaluate impacts of the "build" alternatives, and that a laydown/staging area should be identified for Alternative D.

As discussed in Draft EIR Appendix A Section C.3, state law and judicial interpretations of state law (California Government Code section 53090 et seq.) mutually exempt cities and counties from complying with each other's building and zoning ordinances. The SFPUC, which is part of the City and County of San Francisco, is therefore exempt from complying with the building and zoning ordinances of other cities and counties. California Government Code Section 65402(b) requires that the location, purpose, and extent of real property transactions or public structures authorized by a county within either another county or a city be submitted to and reported on by the planning agency having jurisdiction as to conformity with the planning agency's adopted general plan. If Alternative D were proposed, the City would seek a General Plan conformity determination from the City of Brisbane, although the determination is advisory. Where City-owned facilities are sited outside of San Francisco, the SFPUC seeks to work cooperatively with local jurisdictions to avoid conflicts with local land use plans and building and zoning codes.

The Alternative D site is currently zoned C-1 (Commercial Mixed-Use District), which allows among other uses public and quasi-public facilities, service and utility uses (Brisbane Municipal Code Section 17.13.030). The only land use expressly prohibited is commercial parking lots (Brisbane Municipal Code Section 17.13.035). The Brisbane General Plan lists the Alternative D site as "planned development – residential permitted (PD-RP)". The description of Baylands Planned Development in the Brisbane General Plan indicates that the Baylands subarea would provide for a transit-oriented variety of residential, employment- and revenue-generating uses; natural resource management; and public and semi-public facilities. While not yet approved, the Baylands Specific Plan land use plan identifies low density residential and open space for the Alternative D site.[3] The General Plan language does not expressly prohibit public and semi-public utility uses at the Alternative D site. Furthermore, pursuant to Brisbane Municipal Code section 17.32.030, public utility facilities shall be conditionally allowed in all districts in Brisbane, and no conditional use permit is required where regulation of the public utility by the city is preempted by federal or state law, as in this case. By conditionally allowing public utility facilities in all districts, Brisbane Municipal Code Section 17.32.030 acknowledges that public utility facilities can be consistent with residential land use. Existing electrical substations in Brisbane and Daly City are located adjacent to residential areas, including Martin Substation (120 feet from residences) and Daly City Substation (90 feet from residences).

As noted in the Draft EIR (Appendix A, Initial Study, Section E.1, Land Use and Planning, Impact LU-2, p. 17), land use impacts are considered significant if the project would conflict with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Environmental plans are those that directly address environmental issues and/or contain targets or standards that must be met in order to preserve or improve characteristics of the physical environment. As noted above, public utility facilities are allowed under current zoning and are consistent with General Plan or Specific Plan proposed land uses of the area. In addition, public utility facilities are conditionally allowed in all districts in Brisbane

[3] Brisbane Baylands Specific Plan Land Use Program and Definitions, https://www.brisbaneca.gov/DocumentCenter/View/472/02-Land-Use-Program-and-Definitions-with-redline-PDF.

(Brisbane Municipal Code section 17.32.030). However, even if public utility facilities were not allowed at the Alternative D site, conflicts with plans, policies, and regulations do not necessarily indicate a significant environmental land use impact under CEQA, unless the project substantially conflicts with a land use plan or policy that was adopted for the purpose of avoiding or mitigating an environmental effect, such that a substantial adverse physical change in the environment would result (as discussed in Draft EIR Section 5.3.4.2, page 5-29, Alternative D was found to not conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect). And even if such substantial physical environmental impacts may result from any conflict between Alternative D and the Brisbane General Plan or Baylands Specific Plan, the Draft EIR discloses and analyzes the physical impacts in Draft EIR Section 5.3.4 (Alternative D: New Brisbane Baylands Substation).

Draft EIR section 5.3.4.2 evaluates the physical impacts associated with Alternative D (New Brisbane Baylands Substation). As noted there, in addition to examining impacts of Alternative D under existing conditions, the impact analysis also addresses relevant topics where project-level or cumulative impacts would be altered if the Brisbane Baylands Specific Plan development (i.e., the planned adjacent housing) were to be completed prior to construction of Alternative D. Therefore, contrary to the statement in Comment O-PGE-2.24, the Draft EIR discusses the potential environmental impacts to future residents of a substation at the Alternative D site (starting on Draft EIR page 5-24). Because the construction schedule of Brisbane Baylands Specific Plan is uncertain, the EIR presents both scenarios for impact analysis of Alternative D. As discussed in Draft EIR section 5.3.4.2, the Draft EIR impact analysis acknowledges the Baylands Specific Plan and considers potential environmental impacts of constructing a substation adjacent to residential land uses. The other new substation site alternative concepts referenced by Comment O-PGE-2.24 (on Draft EIR pages 5-40 through 5-41) were rejected for additional reasons beyond the distance to residences; as discussed in Draft EIR section 5.6.2, the other potential sites were too small or required more construction activity (e.g., additional building demolition) compared to the project. As discussed in greater detail in Response PD-4, while SF6 technology is currently legal and is expected to remain so at least until 2031, if construction occurs after the relevant phase-out date, other commercially available non-SF6 gas-insulated equipment would be used at the New Brisbane Baylands Substation.

An EIR is required to include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project.[4] There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.[5] The components of the "build" alternatives are described in Draft EIR Sections 5.3.2, 5.3.3, and 5.3.4. Draft EIR Table 5-2 summarizes characteristics of the proposed project, the project variant, and the alternatives. The Draft EIR identifies the locations of the components of the proposed "build" alternatives. The "build" alternatives include construction of the same type of equipment evaluated for the project or project variant, and each relevant section of Draft EIR Chapter 5 presents the physical features of the alternatives. The Draft EIR does not include a detailed site plan for the project (Martin Substation separation) and, as discussed in greater detail in Response PD-3 (Martin Substation Separation), the Draft EIR provides sufficient details to allow for overall evaluation of significant impacts within the larger Martin Substation footprint. Thus, individual diagrams for these components are not necessary for evaluation under CEQA, either for the project or alternatives.

As discussed in Response PD-4, a separate laydown/staging area would not be needed for construction of Alternative D because the footprint proposed incorporates the required laydown/staging area. The Draft EIR

[4] CEQA Guidelines section 15126.6(d).
[5] CEQA Guidelines section 15126.6(a).

includes the types of information that the commenter incorrectly states is missing from the description of Alternative D. The types of construction activities required for Alternative D are described on Draft EIR page 5-22 and would include the same equipment as construction of the project variant. As stated in Draft EIR Table 5-2, the amount of excavation required would be greater than the amount required for the project. Contrary to the suggestion in the comment, CEQA does not require site plans to be included in an adequate description of a project alternative, and the Draft EIR and its analysis (including its analysis of potential impacts of Alternative D) remain adequate without them. Furthermore, the Draft EIR provides enough detail to enable decision-makers and the public to understand and consider the issues raised by the project and alternatives.

Comment AL-3: Formulation of Objectives and No Project Alternative

This response addresses the following comment, which is quoted below:

O-PGE-2.25

_____

"A lead agency may not give a project's objectives an artificially narrow prescription. (*North Coast Rivers Alliance v. Kawamura* (2015) 243 Cal.App.4th 647, 668.) In *North Coast Rivers Alliance*, the California Department of Food and Agriculture prepared an EIR for a program whose stated objective was to "eradicate [Light Brown Apple Moths] from California." (*Id*., at p. 656.) The EIR rejected out of hand any alternative that would not achieve complete eradication. (*Id*., at pp. 667–668.) However, the court held that the agency improperly focused on its stated objective or eradication, rather than considering the project's actual purpose—to protect crops and plants. (*Id*., at pp. 668–669.) On that basis, the court found that the EIR violated CEQA by failing to study a control-based alternative that could have accomplished the project's purpose. (*Id*., at pp. 669–670.)

The most problematic objective is to "Provide the City with operational control of San Francisco's electric grid to allow the City to provide safe, reliable, sustainable, and affordable electricity service for all of San Francisco." Focusing on CCSF's operational control as an objective excludes all alternatives other than CCSF acquiring PG&E's system, rendering the other objectives meaningless for purposes of the DEIR—even though many could be achieved without transferring PG&E assets to CCSF. In other words, the objective and the Project are one and the same: ownership of PG&E's electric assets. At a minimum, this objective should be revised to include only its goal – "safe, reliable, sustainable, and affordable electricity service for all of San Francisco," rather than a singular, specific presumed means to achieve that goal – acquiring operational control of PG&E's system.

The DEIR dismisses out of hand the "No Project" Alternative because it fails to achieve the listed Project *objectives*. (DEIR, pp. S-12, 5-10, 5-30.) However, each of the three stated Project *purposes*—specifically related to ensuring delivery of Hetch Hetchy hydropower, and other clean power to San Francisco and improving cost and efficiency of interconnections to customers in San Francisco and improving operations of the portion of the CCSF grid that is owned by CCSF—could be achieved under the No Project Alternative. The DEIR emphasizes (whether accurately and completely reflected or not) that the Project is necessitated by "excessive" costs from current (PG&E) requirements. (*See*, *e.g.*, DEIR, p. 1-9 [slanted discussion of $650,000 cost for current required equipment for a restroom].) As such, given that cost savings is a true purpose of the Project, then, at a bare minimum, the DEIR needs to describe that the No Project Alternative could achieve

that purpose—as the Project's cost (*e.g.*, the cost to acquire PG&E power assets and construct and operate a separated grid) would be magnitudes greater than the cost savings emphasized in the DEIR.[17] By failing to meaningfully consider the No Project Alternative, the DEIR improperly conflates a byproduct—operational control—with its actual stated purpose of achieving cost-efficient provision of Hetch Hetchy (and other clean) energy to electric customers in San Francisco, which can be achieved with no environmental impact using the existing electric infrastructure and San Francisco's CCA, CleanPowerSF." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.25])

RESPONSE AL-3

The commenter states that the Draft EIR dismisses the No Project Alternative because it fails to meet the project objectives, and that the Draft EIR should "meaningfully consider" the No Project Alternative. The Draft EIR does not dismiss the No Project Alternative. The No Project Alternative is evaluated, along with its impacts, in Draft EIR Section 5.3.1, consistent with CEQA Guidelines section 15126.6(e). As noted on Draft EIR page 5-30, Alternative A (the No Project Alternative) is identified as environmentally superior because it would have fewer environmental impacts than the project or project variant.

The comment also focuses on the formulation of one of the project's eight objectives. An EIR is required to describe a range of reasonable alternatives to the project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. Whether a potential alternative meets "most of the basic objectives of the project" is thus one of the four threshold criteria for identifying suitable alternatives as part of the CEQA process. While lead agencies generally should not adopt artificially narrow project objectives that eliminate from consideration otherwise reasonable alternatives for achieving the project's underlying purpose, an EIR does not need to include alternatives that are incompatible with the project's fundamental purpose.[6] In this case, the acquisition of PG&E assets is included as one of the project objectives, and some extent of acquisition is included in each of the alternatives considered in the Draft EIR except for Alternative A (No Project). The acquisition of PG&E assets is clearly indicated as a fundamental purpose of the project due to the ongoing difficulties with the current (i.e., No Project) arrangement. As discussed in Draft EIR Section 1.4, the challenges and problems with the current arrangement have reduced the feasibility of achieving the City's objectives without asset acquisition. In addition, unlike in the *North Coast Rivers Alliance* case, the methods available to address the City's objectives are limited because the City depends on PG&E's distribution infrastructure for electrical service connections for most of the City's customers throughout San Francisco. The City's service connections are subject to the physical constraints of PG&E's distribution grid and the rules and requirements imposed by PG&E through its open access tariff. Consequently, unlike in the *North Coast Rivers Alliance* case in which the project's actual purpose of protecting crops and plants could be achieved in multiple ways, the particulars of the current situation limit the range of feasible alternatives.

The commenter states that many of the project objectives could be achieved without transferring PG&E assets to the City, and that the fourth project objective ("Provide the City with operational control of San

---

[17] *See DEIR Table 5-3 which states that the No Project Alternative would not use public funds efficiently and prudently. This is incorrect as the proposed Project would require the expenditure of billions of dollars of public funds while the No Project Alternative would not.*

[6] In re Bay-Delta Programmatic Envt'l Impact Report Coordinated Proceedings (2008) 43 C4th 1143; Practice Under the California Environmental Quality Act (2d ed. Cal. CEB 2025) §15.8

Francisco's electric grid to allow the City to provide safe, reliable, sustainable, and affordable electricity service for all of San Francisco", Draft EIR p. 2-3) should be revised to state the goal of providing "safe, reliable, sustainable, and affordable electricity service for all of San Francisco." Even if this goal were revised as the commenter proposes, the range of alternatives would not be substantially modified because, for the reasons discussed above, an alternative that does not include acquisition would fail to meet other project objectives.

The Draft EIR includes and evaluates impacts of three "build" alternatives to the project and identifies Alternative B (Meter Transmission at Martin Substation) as environmentally superior, and thus does not rely on narrow objectives to dismissively reject any alternatives. In addition, as shown in Draft EIR Table 5-3 (Summary of the Ability of Alternatives to Meet Project Objectives), the No Project Alternative would not meet six of the project's eight objectives; even if the City modified the objective quoted by the commenter, and even if the City were to then determine that the No Project Alternative met this modified objective, the No Project Alternative would still only meet three of the project's eight objectives. This is a sufficient basis for the City's rejection of the No Project Alternative.

In addition, the commenter's argument that "cost savings is a true purpose of the Project" is incorrect. As stated above, while cost savings are indeed one purpose of the project, the acquisition of PG&E assets is also a purpose of the project. Draft EIR Section 2.2, Objectives (p. 2-3) discusses the anticipated outcomes of the project, which include cost efficiencies, among other outcomes (such as allowing the City to provide clean power to all customers in San Francisco and improving efficiency of new electrical grid connections).

Comment AL-4: Other Alternatives Comments

This response addresses the following comment, which is quoted below:

O-PGE-2.86

"Unsupported Rejection of Cow Palace Substation Alternative: The DEIR summarily rejects the Cow Palace Substation alternative. This rejection, however, is unsupported by any fact or analysis in the DEIR. The DEIR's conclusory statements that impacts would be the same as at the Martin Substation lack analytical rigor and are not based on any supporting evidence.

Contradictory Fringing Area Service Agreement Alternative: The DEIR's discussion of the Fringing Area Service Agreement Alternative description is contradictory. The first paragraph states this alternative is an "administrative solution," but the second paragraph provides "*However, this concept would not clearly reduce the noise, air quality, cultural resources, tribal cultural resources, and paleontological resources impacts of the project because the other project components, and some local distribution system separation work and system reinforcements, would still be required*." The actual advantages, disadvantages, and reduction in environmental effects of this alternative cannot be meaningfully evaluated because it is unclear what this alternative actually entails." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.86])

RESPONSE AL-4

An EIR must describe a range of reasonable alternatives that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. An EIR alternatives analysis is required to briefly describe the rationale for selecting the alternatives to be discussed. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are (1) failure to meet most of the basic project objectives, (2) infeasibility, or (3) inability to avoid significant environmental impacts. An EIR need not consider every conceivable alternative to a project.

The Draft EIR evaluates a range of reasonable alternatives that would attain most of the basic project objectives while avoiding or lessening the significant impacts of the project. The Draft EIR also briefly describes alternatives considered but eliminated from further analysis and explains why the alternative concepts were eliminated.

The comment states that supporting evidence is needed to explain why a new substation at the Cow Palace was not carried forward as a potential project alternative. As explained in Draft EIR Section 5.6.2 (p. 5-40), construction at the Cow Palace site would not avoid or substantially lessen environmental impacts relative to construction at the Martin Substation or Daly City Yard. These impacts would include temporary increases in ambient noise within 100 feet of sensitive receptors, permanent increases in ambient noise, and exposure of sensitive receptors to substantial pollutant concentrations due to the proximity of the Cow Palace site to sensitive receptors. As noted in Draft EIR Section 5.6.2, the transmission lines from the Martin Substation to the Cow Palace site would be longer than for the project variant, and therefore would require more construction activity. As also noted in Draft EIR Section 5.6.2, the distribution express feeders would be shorter to the Cow Palace site; however, this would not clearly result in less total linear work (and fewer impacts) than the project or project variant.

Draft EIR Section 5.6.7 discusses the fringe area service agreements alternative concept, in which an administrative solution (e.g., agreements to allow some customers in San Francisco to continue to be served by PG&E lines from San Mateo County, instead of separating the grids) would be implemented for some customers or neighborhoods to reduce impacts associated with local distribution system separation and system reinforcements in those areas. For example, fringe area service agreements could be established for small groups of customers to avoid local distribution system separation or system reinforcements in potential butterfly habitat on San Bruno Mountain or Icehouse Hill. As stated in the Draft EIR, this alternative concept could reduce impacts in some areas. This is because construction of local distribution system separation and system reinforcements would not occur in those areas. However, most project components (including Martin Substation or new City substation, distribution express feeders, operations control center) would still be constructed and therefore impacts from these components would not be reduced by fringe service agreements. Consistent with the requirements in CEQA Guidelines section 15126.6(c), the Draft EIR explains that the fringe area service agreements concept could reduce some impacts but would not meet as many of the basic project objectives as Alternatives B and C, and therefore was eliminated from further consideration.

10.7 Aesthetics

The comment and corresponding response in this section cover topics in Draft EIR Appendix A (Initial Study) Section E.2, Aesthetics.

- AE-1: Aesthetics Impacts

Comment AE-1: Aesthetics Impacts

This response addresses the following comment, which is quoted below:

O-PGE-2.46

"Due to the DEIR's omission of site plans and failure to disclose or identify transformer and building locations and design at the substation, the aesthetic impacts of those facilities cannot be (and are not) meaningfully evaluated. The DEIR's failure to identify even the specific street corridors where new poles and local transformers would be installed, precludes the aesthetic impacts (e.g., potential of visual change) of those facilities from being meaningfully evaluated." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.46])

RESPONSE AE-1

The criteria for determining the significance of impacts in the Draft EIR aesthetics analysis are consistent with the environmental checklist in Appendix G of the CEQA Guidelines, as modified by the San Francisco Planning Department (planning department). As indicated in Draft EIR Appendix A, Section E.2, the analysis considers whether the project or project variant would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway;
- In an urbanized area, conflict with applicable zoning and other regulations governing scenic quality; and
- Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.

Consistent with the CEQA, Draft EIR Chapter 2, Project Description, provides text, figures, and tables to describe the main features of the project and project variant in sufficient detail to provide decisionmakers with the information necessary to make a decision that intelligently takes account of environmental consequences. Because CEQA does not require site plans to be included in an adequate project description, the Draft EIR and its analysis (including its analysis of potential impacts on aesthetic resources) remain adequate without them.

The comment incorrectly suggests that the Draft EIR fails to describe transformer and building locations and design at the substation. As described in Draft EIR Chapter 2, Project Description, a control house approximately 20 feet tall would be constructed within the existing Martin Substation site, adjacent to other similar equipment. The project also involves relocating one transformer and installing two new transformers all situated on concrete pads within a 44-by-44-by-20-foot area with 25-foot-high, 16-inch-thick fire walls around each unit. The analysis in the Draft EIR considers these features—including the control house, transformer locations, and substation design—because they are part of the project.

The existing perimeter wall around the substation would remain, and the 20-foot-tall building, 25-foot tall walls, and associated equipment would not obstruct existing views of scenic vistas, which are defined in the Draft EIR to include views of the site and surroundings from publicly accessible areas of nearby hillsides. The impact analysis would not change if the exact locations of the control house and transformer walls within Martin Substation were known because the relative scale of new structures compared to the heights of existing development in the vicinity and the elevated locations of existing viewpoints. The local distribution system separation and system reinforcement polygons shown in Draft EIR Figure 2-1—where new poles and other distribution equipment would be installed—are located near or within areas that already contain similar utility equipment and would not substantially disrupt the existing visual character of the area. Draft EIR Figure 2-6 presents visual representations of the local distribution system separation activities on poles and wires. The exact locations of new poles or wires in these areas is not necessary to determine whether the project would have a substantial adverse effect on a scenic vista because they are not discernable from identified vistas in the project vicinity.

Regarding the Draft EIR's aesthetic analysis, refer to Draft EIR Appendix A Impact AE-1, which indicates that both construction and permanent equipment—the latter with a maximum height of 30 feet—would not interrupt or diminish panoramic views of San Francisco Bay, the East Bay hills, San Bruno Mountain, or mid-range hilltop parks as seen from publicly accessible scenic vistas, because they would closely match the scale of existing urban infrastructure. The analysis concludes that the impact would be less than significant because project components would be visually consistent with surrounding development and would not obstruct or degrade scenic vistas from public viewpoints. Impact AE-2 indicates that no mature trees, rock outcroppings, or historic buildings along eligible state highways (State Routes 1 and 35, Interstate 280) would be removed or altered, since new overhead lines would occupy already developed rights-of-way. This part of the analysis concludes the impact would be less than significant because the project or project variant would not substantially damage scenic resources within the eligible state scenic highways, and no corridor protection programs have been adopted for these routes. Therefore, contrary to the suggestion in the comment, the Draft EIR, including the Project Description, provides enough detail to enable the decision-makers and the public to understand and consider the issues raised by the project or project variant.

10.8 Cultural Resources

The comments and corresponding responses in this section cover topics in Draft EIR Appendix A (Initial Study) Section E.4, Cultural Resources.

- CR-1: Cultural Resources Analysis
- CR-2: Historic Resources
- CR-3: Archeological and Buried Resources

Comment CR-1: Cultural Resources Analysis

This response addresses the following comments, which are quoted below:

O-PGE-2.27a, O-PGE-2.27c, O-PGE-2.47, O-PGE-2.52, O-PGE-2.54, O-PGE-2.97b, O-PGE-2.103, O-PGE-2.105, O-PGE-2.107, O-PGE-2.109

"The DEIR's archaeological and historic resources analysis is deficient, among other reasons, because:

- The cultural resources section is fundamentally deficient from an informational standpoint due to the unavailability of the underlying Cultural Resources Report or a redacted copy of that Report. Without this Report, there is insufficient information in the DEIR to determine whether the impacts have been adequately identified, studied, and mitigated. CCSF must circulate a copy of the underlying Cultural Resources Report, or, at a minimum, an appropriately redacted version, to ensure that the public and decisionmakers have sufficient information to evaluate the Project's potential impacts on cultural resources." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.27a])

- "The locations of the Operations and Maintenance Service Yards must be identified in the DEIR, not deferred to a later phase. Without clearly defined locations and footprints, it is not possible to meaningfully evaluate the Project's potential impacts on cultural resources." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.27c])

"The DEIR's Project Description is inadequate to determine potential impacts to either historic structures or archaeological resources because of the DEIR's lack of a site plan for the Martin Substation, lack of storage/ maintenance yard location and plans, lack of locations for subsurface work (i.e. vaults, tranches, foundation work, and jack-and-bore pits) and lack of a detailed vibration impacts analysis to the Martin Substation Building,

- The cultural resources section is fundamentally deficient from an informational standpoint due to the unavailability of the underlying Cultural Resources Report or a redacted copy of that Report. Without this Report, there is insufficient information in the DEIR to determine whether the impacts

have been adequately identified, studied, and mitigated. CCSF must circulate a copy of the underlying Cultural Resources Report for review by a qualified historian and/or archaeologist, or, at a minimum, an appropriately redacted version for public review, to ensure that the public and decisionmakers have sufficient information to evaluate the Project's potential impacts on cultural resources." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.47])

"The locations of the Operations and Maintenance Service Yards must be identified in the DEIR, not deferred to a later phase. Without clearly defined locations and footprints, it is not possible to meaningfully evaluate the Project's potential impacts on cultural resources." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.52])

- "The DEIR (IS) lacks a sufficient description of background methods and findings. Given all of the deferred data collection/testing, the DEIR (IS) needs to be substantially updated with actual information that allows for meaningful evaluation by the public. (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.54])

"The IS repeatedly defers the identification, evaluation, and amelioration of impacts to cultural resources to a subsequent mitigation stage such that the IS/EIR is missing substantial information necessary to identify cultural resources impacts and their significance. While it is understood that some project locations are difficult to access due to extant hardscaping and not all project element locations have been defined, deferred analysis and mitigation leads to incomplete identification and evaluation of potentially significant impacts. Deferring analysis until a resource is encountered during construction causes damage to the resource, potentially destroying the characteristics which make it eligible for listing on the California Register of Historical Resources (CRHR) or National Register of Historic Places (NRHP). There will always be unanticipated finds made during construction, but the lack of an adequate identification effort as part of regulatory document preparation enhances the opportunities for significant and what could have been avoidable impacts. Therefore, the cultural resources section of the IS/EIR is inadequate and it is inappropriate to dismiss cultural resources from further consideration within the EIR." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.97b])

"11) The locations of Operations and Maintenance Service Yards need to be identified now and not deferred to a later phase. Without clearly defined locations and footprints, it is not possible to meaningfully evaluate the project's potential impacts on cultural resources." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.103])

"13) The EIR does not provide the qualifications for the two people who prepared the Cultural Resources Review memorandum, and without being able to review the PAR study or the results of the NWIC record searches, we have no idea whether the information derived from those sources is appropriately conveyed in

the IS by people with the correct background experience." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.105])

"15) Because Cultural Resources were dismissed from further consideration in the EIR, a much more specific description of background methods and findings is needed; given all of the deferred data collection/testing, the IS needs to be updated drastically with actual information." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.107])

"As detailed above, the IS/EIR presents incomplete information regarding location, type, and style of improvements to be completed as part of the project. The lack of location information in particular makes it impossible to meaningfully assess the project's impacts to known built environment and archaeological resources. While unexpected finds may occur during construction no matter what level of effort is applied during the planning stage, a proper program of resource identification and evaluation is required under CEQA, and would guide construction away from the most sensitive resources and offer the opportunity to reduce impacts to less-than-significant levels. The EIR dismisses consideration of cultural resources based on a flawed and incomplete study and therefore does not constitute substantial evidence and does not adequately assess potential significant impacts on the environment created by implementation of the project. Furthermore, the information presented in the IS/EIR fails to provide the public and decision-makers with sufficient information to evaluate the project's potential impacts on cultural resources." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.109])

RESPONSE CR-1

The comments state that the cultural resources report must be publicly available and circulated along with the Draft EIR for the Draft EIR's cultural resources analysis to be sufficient, that the defined locations and footprints of all project components are required to evaluate the project's impacts on cultural resources, that further description of background methods and findings should be included in the EIR, that additional information is needed to identify cultural resources impacts and their significance, and that the EIR should include qualifications of the people who prepared the cultural resources review memorandum.

CEQA establishes that an EIR is legally sufficient if it provides decision-makers with enough information to make a decision that intelligently takes account of environmental consequences of the project.[1] As described below, the Draft EIR for this project (including Appendix A, Initial Study) passes this test, including with respect to cultural resources. CEQA also is clear that the sufficiency of an EIR's analysis is properly reviewed in light of what is reasonably feasible.

Comments O-PGE-2.27, O-PGE-2.47, O-PGE-2.105, and other comments state that the cultural resources report must be publicly available and circulated along with the Draft EIR for the Draft EIR's cultural resources analysis to be sufficient. Pursuant to CEQA, placement of highly detailed and specialized analysis and data in the body of an EIR should be avoided, although supporting information must be available for public

[1] CEQA Guidelines Section 15151.

examination.[2] The Cultural Resources Review (CRR) Memorandum is confidential due to information regarding known cultural resource locations, which is protected under section 304 of the National Historic Preservation Act, the Archaeological Resources Protection Act, and California Government Code section 6250 et seq. and section 6254 et seq., among other applicable regulations. Those who meet the U.S. Secretary of the Interior's professional standards can request the CRR Memorandum on an as-needed basis from the San Francisco Planning Department's Environmental Planning Division. Therefore, the Draft EIR is not required to include the CRR Memorandum, which is available to qualified members of the public, consistent with CEQA requirements. For resources that are not subject to confidentiality requirements, including built environment resources, the methodology for resource identification, a summary of resources considered, and an assessment of potential impacts on those resources can be found in Draft EIR Appendix A, pages 31-37, as well as in the reference materials available as part of the administrative record. These records can be viewed by the public at the San Francisco Planning Department.

Comment O-PGE-2.27, O-PGE-2.47, O-PGE-2.52, O-PGE-2.103, and O-PGE-2.109 state that clearly defined locations and other information describing the operations and maintenance service yards, Martin Substation separation, and other project components are needed to evaluate project impacts on cultural resources. Draft EIR Chapter 2, Project Description, characterizes and includes the anticipated locations of the project components. As discussed in Response PD-2, in the absence of specific information, the Draft EIR makes realistic reasonable conservative assumptions to characterize potential impacts of the project or project variant (including operations and maintenance service yards), thereby avoiding understating potential impacts. Although the City has made a good-faith effort at considering potential significant impacts on the environment that could result from implementation of the project, including its project-level and program-level components, the Draft EIR (e.g., page 1-3) acknowledges that additional environmental review may be warranted in the future as project details are developed. A review of the Draft EIR impact analyses shows each component is evaluated in all sections. The comments do not provide any substantial evidence as defined by CEQA Guidelines Section 15384 (facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts) indicating that the Draft EIR's evaluation of the potential cultural resources impacts is undetermined or inadequate. As summarized below, the Draft EIR evaluates potential impacts of the operations and maintenance service yards on cultural resources (including archeological and historic architectural resources):

- As discussed in the Draft EIR (Appendix A p. 48 et. seq.), the preliminary archeological review conducted by qualified San Francisco Planning Department archeological staff identified the potential for significant archeological impacts associated with improvements at the service yards (ground disturbance associated with fence installation) and includes mitigation measures to address potential impacts. This includes development of an archeological testing program at the direction of the Environmental Planning Archeologist.
- As noted in Chapter 2 of the Draft EIR, operation and maintenance service yards would be located either within existing maintenance and storage or substation properties or within vacant parcels and would not be located on any site that requires demolition of historic architectural resources. Draft EIR Mitigation Measure M-CR-1e (Historic Resources Impact Minimization for Service Yard Improvements) requires that potential historic architectural resources on adjacent parcels are identified and, if any are determined to qualify as historical resources, requires protection of those resources if project activities occur within 20 feet. Mitigation Measure M-CR-1e also includes review

[2] CEQA Guidelines Section 15147.

> to ensure consistency with the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties (Secretary of the Interior's Standards), which together with the other protections in the mitigation measure, is compliant with CEQA Guidelines section 15064.5(b)(3) regarding application of the Secretary of the Interior's Standards to mitigate impacts on historical resources to a less than significant level. Draft EIR Impact NO-4, in Section 3.2, Noise and Vibration (p. 3.2-54), discusses the potential vibration impacts on the Martin Substation building. Impact NO-4 also evaluates vibration impacts associated with all other project components, including the operations and maintenance service yards and distribution express feeders (including trenchless construction).

Comment O-PGE-2.105 states that it is unclear whether cultural resources information in the Draft EIR is appropriately conveyed by people with the correct background experience. State statutes may provide that only registered professionals can prepare technical studies that will be used to support an EIR; however, in its intended usage, an EIR is not a technical document that can be prepared only by a registered professional.[3] The Draft EIR lists the document preparers in Chapter 6, EIR Preparation, and with the revisions to Draft EIR page 6-1 shown below includes relevant professional credentials of the EIR preparers, including preparers of the CRR Memorandum.

> Preservation Planners: Justin Greving, M.A. Architectural History, meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History; Allison Vanderslice, M.A. Cultural Resources Management, meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History and Archeology
>
> Planner/Archeologists: Allison Vanderslice, M.A. Cultural Resources Management, meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History and Archeology; Kari Hervey-Lentz, M.A. Cultural Resources Management, meets the Secretary of the Interior's Professional Qualifications Standards for History and Archeology

Comments O-PGE-2.54, O-PGE-2.97b and O-PGE-2.107 state generally that more information is needed in the Draft EIR to identify cultural resources impacts and their significance, and generally describe concerns related to deferred analysis, but do not do not provide any substantial evidence as defined by CEQA Guidelines Section 15384 (facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts) indicating that the Draft EIR's evaluation of the potential cultural resources impacts is undetermined or inadequate. Draft EIR Appendix A Section E.4, Cultural Resources (pp. 30 through 67) evaluates the cultural resources impacts of the project or project variant. The methods of analysis are described on Draft EIR Appendix A page 31 (for the analysis of impacts on historic architectural resources) and page 45 et. seq. (for the analysis of impacts on archeological resources). The impact findings are summarized in the impact statements on pages 30 and 45 and the bases for the impact findings are discussed following each impact statement.

However, to clarify the methods used in the Draft EIR's identification of historic architectural resources, Draft EIR Appendix A page 31 et seq. has been revised as follows:

[3] CEQA Guidelines Section 15149(b).

INVENTORY OF ARCHITECTURAL RESOURCES

Identification of Historical Resources

Identification of historical resources within the project area included an initial identification of known resources as presented in the Property Information Map (PIM) maintained by the City and County of San Francisco.[32a] PIM is a publicly available database maintained by the Planning Department and referenced to by preservation staff because it provides a comprehensive record of the historic resource status of every parcel in the City and County of San Francisco. PIM includes information about past historic resource surveys conducted by the Planning Department and other organizations, California Register and National Register designations for individual properties and historic districts, local article 10 and 11 individual properties and historic districts, and previous historic resource evaluations conducted as part of environmental review. This information was then verified by San Francisco Planning Department staff and presented in a memorandum-to-file dated January 29, 2025.[32b] Additional identification efforts were then undertaken by the consultant team and included a records search of the project area at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) located at Sonoma State University. The NWIC maintains the official CHRIS records of previous cultural resources studies and recorded cultural resources in the project area. The records search included a review of previous studies, records, and maps on file at the NWIC, and included a review of the State of California Office of Historic Preservation Historic Properties Directory with summary information from the National Register, Registered California State Landmarks, California Historic Points of Interest, Archaeological Determinations of Eligibility, and California Inventory of Historical Resources (March 1976). The purpose of the records search was to determine whether known cultural resources have been recorded in the project area; assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby cultural resources; and develop a context for the identification and preliminary evaluation of cultural resources. The consultant team also reviewed the Built Environment Resource Directory (BERD) for San Francisco and San Mateo counties, the list of City and County of San Francisco Article 10 Landmarks (and associated landmarking ordinances), and past environmental documents that had project sites that overlapped with this project.

Additional guidance on historical resource identification was provided by the following prior energy infrastructure documentation that have contextual information about the history of PG&E and energy distribution in San Francisco:

- Polly Seddon Allen, Matt Walker, and Iris Eschen (Cardno), *Pacific Gas and Electric Company Historic-Era Electrical Infrastructure Management Plan,* prepared for Pacific Gas and Electric, 2020.[32c]
- John Gordon Turnbull (Page & Turnbull), *National Register Nomination: Pacific Gas & Electric Company General Office Building and Annex,* 1995.[32d]
- Fredric C. Divine Associates Architects, *National Register Nomination: Pacific Gas and Electric Company Substation J,* 1986.[32e]
- City and County of San Francisco, *Landmark Ordinance 266-91: The Path of Gold Light Standards (LM 200),* June 1991.[32f]
- City and County of San Francisco, *Landmark Ordinance 210-77: The Jessie Street Substation (LM 87),* May 1977.[32g]

Copies of these documents have been added to the EIR references which are available upon request at the San Francisco Planning Department and are available online (tinyurl.com/PGEPowerAssetEIR).

For those historical resources that could be affected by components of the project or project variant where locations were known (project-level components), the consultant team conducted site visits to record existing conditions and verify the accuracy of prior documentation.

Draft EIR Appendix A pages 31 and 32 have been revised to include the following footnotes:

[32a] The PIM can be accessed online at https://sfplanninggis.org/pim/. PIM includes details regarding the current historical status of a parcel as well as links to prior studies, context statements, environmental documents, and/or permits that may be associated with the property and/or surrounding neighborhood.

[32b] Greving, Justin, Senior Preservation Planner, San Francisco Planning Department, Memorandum to File Re: Pacific Gas and Electric Company (PG&E) Power Asset Acquisition Project (2023-005370ENV), to Julie Moore, Principal Environmental Planner, San Francisco Planning Department, January 29, 2025.

[32c] Allen et al., Pacific Gas and Electric Company Historic-Era Electrical Infrastructure Management Plan, April 2020.

[32d] Turnbull, John Gordon (Page & Turnbull), *National Register Nomination: Pacific Gas & Electric Company General Office Building and Annex,* 1995.

[32e] Fredric C. Divine Associates Architects, *National Register Nomination: Pacific Gas and Electric Company Substation J,* 1986.

[32f] City and County of San Francisco, *Landmark Ordinance 266-91: The Path of Gold Light Standards (LM 200),* June 1991.

[32g] City and County of San Francisco, *Landmark Ordinance 210-77: The Jessie Street Substation (LM 87),* May 1977.

Comment CR-2: Historic Resources

This response addresses the following comments, which are quoted below:

A-CPUC.6, O-PGE-2.48, O-PGE-2.50, O-PGE-2.98, O-PGE-2.101, O-PGE-2.104

"Evaluation of the historical significance of the existing PG&E electrical system components would be required in a historic-era built environment survey report." (Michelle Wilson, Program and Project Supervisor, CEQA and FERC Branch, Energy Division California Public Utilities Commission [A-CPUC.6])

"The DEIR (including the IS) fails to include a figure showing the different impact areas, the different project areas, and the locations of the Historical Resources and districts in relation to those areas. The verbal descriptions in the DEIR are inadequate to convey any potential visual impacts resulting from changes to the setting near CRHR-eligible resources. The DEIR must include appropriate figures addressing the above." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.48])

"While the DEIR lists historic districts, the DEIR omits any description, character-defining features, discussion, or analysis of features of these historic districts that may be impacted by the Project. This analysis of historic districts needs to be included for CEQA compliance.

MM M-CR-1c does not ensure adequate protection of cultural resources as it continues the pattern of improper deferred mitigation without clear performance standards for measuring and ensuring the

effectiveness of the measure, which deferred mitigation deficiency is present throughout the DEIR (IS)." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.50])

"1) Resources eligible to the CRHR are called Historical Resources; resources eligible to the NRHP are called Historic Properties. In the main, the IS/EIR cultural resources section does not use correct terminology – the IS/EIR continually describes CRHR-eligible buildings and structures as historic resources; the IS/EIR should clarify definitions for public review and define Historical Resources (eligible to the CRHR) and Historic Properties (eligible to the NRHP). The IS/EIR should also remove uses of the phrase "adverse effects" since that language is used to describe significant impacts under the National Historic Preservation Act rather than CEQA.

2) The figures presented in the EIR Project Description (and referred to in the IS) are not adequate to identify the range of potential significant historic resource impacts described in the IS/EIR. There should be a figure showing the different portions of the project with the locations of the Historical Resources and Historical Districts in relation to those areas. The verbal descriptions are inadequate to convey any potential visual impacts resulting from permanent changes to the visual setting near CRHR-eligible resources or districts.

3) CEQA's Cultural Resources significance evaluation criteria list for CEQA (PRC Section 5024.1 – see below) are not presented in the IS/EIR, which instead had just brief mentions in association with various resources. The public cannot understand the impact evaluations without seeing the entirety of the four criteria. If San Francisco and San Mateo Counties have relevant Cultural Resources policies, they should be listed as well and used to screen potential impacts:

> CA Public Resources Code Section 5024.1 defines eligibility requirements and states that a resource may be eligible for inclusion in the CRHR if it:
>
> 1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
> 2. Is associated with the lives of persons important in our past;
> 3. Embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values; or
> 4. Has yielded, or may be likely to yield, information important in prehistory or history.

4) Cultural resources mitigation measures refer to the Secretary of the Interior's Standards, but don't offer an explanation of what those standards entail; these standards need to be identified so the reviewing public can fully understand treatment of impacts on Historical Resources under CEQA. It is presumed that the IS/EIR is referring to The Secretary of the Interior's Standards for the Treatment of Historic Properties using the Standards and Guidelines for Preservation, Rehabilitation, Restoration & Reconstruction. If so, it should be clearly stated and should include a brief description of what it would mean specifically, particularly regarding the Martin Substation and Warehouse buildings (14 CCR § 15126.4(b)(1)), e.g. new construction should contain similar characteristics but be distinguishable from the original." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.98])

"7) There is a list of historic districts in the project vicinity but no description or discussion of district character-defining features which might be impacted by the project; this should be included.

8) The provisions within MM M-CR-1c continue the pattern of deferred mitigation without clear performance standards for measuring and ensuring the effectiveness of the measure that is present throughout the IS.

9) There is no description of the Operations Control Center as it currently exists and therefore no way to judge the adequacy or necessity of MM M-CR-1d." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.101])

_____

"12) MM M-CR-1e is basically a repeat of M-CR-1b, better to refer to that rather than duplicating it." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.104])

_____

RESPONSE CR-2

CEQA section 15064.4 defines historical resources and describes requirements for determining the significance of impacts to archeological and historical resources. As discussed below, the Draft EIR's historical resources impact analysis meets the requirements of CEQA.

Comment A-CPUC.6 states that evaluation of the historical significance of existing PG&E electrical system components in a historic-era built environment survey report is required. For those components analyzed at the project level, site visits to confirm current conditions and to verify continued eligibility of PG&E electrical system components (such as the Martin Substation Building) for listing on the National Register and/or California Register, or as a City and County of San Francisco article 10 resources, were completed by professionals meeting the Secretary of the Interior's professional standards to support the description of resources starting on Draft EIR Appendix A page 33. The Draft EIR analysis was completed with guidance for the evaluation and management of electrical power infrastructure as presented in the *Pacific Gas and Electric Company Historic-Era Electrical Infrastructure Management Plan*, prepared in April 2020 by Allen et al. of Cardno. This document presents power distribution lines as a "standardized property type" with "little to no potential to convey any significance" associated with the development of PG&E or of electrical utility evolution within California. With this supplemental guidance, the Draft EIR considers all existing PG&E electrical system components that could be physically affected by the project and the commenter has not provided any evidence that would demonstrate otherwise. Consistent with CEQA and the San Francisco checklist, the Draft EIR evaluates the historical significance of all PG&E electrical system components that may be affected by the project.

Information regarding the potential of the electrical distribution system to be considered as a potential historic resource has been added to Draft EIR Appendix A page 31 ahead of Table 1, as follows:

> **Table 1** presents the historic architectural resources identified by San Francisco Planning Department staff in the vicinity of the project areas.[33] While portions of the existing power distribution system, including those components that would be modified as part of the local distribution system separation and system reinforcements, may be more than 45 years of age, no parts of the system that would be altered by these components of the project are considered to be

> historical resources for the purposes of CEQA. This approach follows guidance provided by PG&E for the evaluation and management of electrical power infrastructure as presented in the *Pacific Gas and Electric Company Historic-Era Electrical Infrastructure Management Plan*, prepared in April 2020 by Allen et al. of Cardno. This guidance explains that PG&E's distribution lines are the most ubiquitous and physically expansive component of the entire PG&E electrical infrastructure. Because the majority of this infrastructure is carried on standardized wood poles that have a life span of less than 50 years, and other related components (conductor, insulators, and transformers) are replaced on an ongoing basis, it does not have the potential to communicate significance.[33a]

Draft EIR Appendix A page 32 has been revised to include the following footnote:

> [33a] Allen et al., *Pacific Gas and Electric Company Historic-Era Electrical Infrastructure Management Plan*, prepared for Pacific Gas and Electric, April 2020, p. 5-20.

Comment O-PGE-2.48 and O-PGE-2.98 state that figures showing the project location in relation to historical resources and districts are needed to assess the visual impacts of the project on these resources. CEQA Section 15064.5(a)(1)-(2) characterizes a substantial adverse change in the significance of a historical resource, and does not state that figures are required showing potential visual impacts from project activities near historic resources. Furthermore, while the exact locations of all project components are not known, historic resources have been identified within the general project area and its vicinity. Draft EIR Appendix A pages 31-37 describe the known historic architectural resources within the project area and include references to background materials that can be viewed as part of the administrative record on file and available to the public at the San Francisco Planning Department. Each identified historic architectural resource is briefly described to present its eligibility status as a historical resource (eligible or listed, and on what register) along with the criteria under which it is significant and, where known, the period of significance. The Draft EIR considers potential impacts from the direct implementation of project components (i.e., new electrical vaults or power poles) and indirect impacts that could change the setting or views from or to historical resources. The Draft EIR pays particular attention to these potential impacts within historic districts where there is greater potential for impacts to setting resulting from the introduction of new elements within the public right-of-way. As discussed in the Draft EIR (page 41), given the dense urban setting, modifications to existing overhead and underground distribution lines, and in some cases new overhead and underground distribution lines and the installation of new duct banks and vaults, would minimally change the existing setting of the identified historic resources. However, because the specific locations for each element associated with project components that would be placed within historic districts currently are uncertain, the Draft EIR anticipates that impacts could occur and identifies Mitigation Measure M-CR-1c (Historic Resources Impact Minimization within Historic Resources and Historic Districts) to address potential visual impacts of the local distribution system separation and system reinforcements. Mitigation Measure M-CR-1c requires review of new pole placement by qualified professionals to ensure conformance with the Secretary of the Interior's Standards. The addition of figures to illustrate the setting of historical resources would not alter the analysis in the Draft EIR or otherwise provide additional information that is not already presented in the Draft EIR Appendix A, Section E.4; therefore no new figures have been added to the Final EIR.

Comment O-PGE-2.50 and O-PGE-2.101 indicate that the Draft EIR should include a description of historic districts and character-defining features, and discussion or analysis of the features that may be impacted by the project. Draft EIR Appendix A, pages 30-37, and the discussion under Impact CR-1 (p. 37 et seq.) includes an inventory of historic architectural resources, including historic districts, in the project areas, summarizing them in Table 1 (p. 31) and detailing each in text following the table. Draft EIR Appendix A Section E.4 Impact

CR-1 discusses the project or project variant's impacts on historic resources, including historic districts, starting on page 37. The only historic districts near project activities are adjacent to proposed system reinforcements. Draft EIR Appendix A Impact CR-1 (p. 43) describes the potential impacts of the system reinforcements on historic districts. The impact analysis is summarized below.

As described in the Draft EIR, because work associated with the system reinforcements "would take place primarily in the public right-of-way or would be located on existing electric equipment, the physical change to the existing environment would be minimal. The installation of new poles and duct banks would cause the greatest change in the physical environment affecting known historic resources. The installation of new poles near the identified historic resources would be a minimal change to the individual historic resources identified within system reinforcement areas because all of the identified historic resources are located within a dense urban environment where the prevalence of electrical equipment, both aboveground and belowground, is common."

The historic districts through which this work would extend include residential districts as well as the San Francisco Zoo. As such, possible character-defining features that would be impacted would be within the public spaces and are generally characterized in Draft EIR Mitigation Measure M-CR-1c (Historic Resources Impact Minimization within Historic Resources and Historic Districts) as "brick surfacing, brick gutters, gutters lined with former cemetery furniture [broken head and foot stones], granite curbs, cobblestones, railway and streetcar rails, sidewalk lights, street lamps, street furniture, monuments or plaques, and/or utility plates)" as well as other elements in the districts that appear to meet the 45-year threshold for consideration as potential historic resources. Mitigation Measure M-CR-1c provides for detailed review of the specific character-defining features of each district at the time that specific locations are known and specific potential impacts could be determined.

The level of description and analysis presented in the Draft EIR regarding analysis of potential impacts on historical resources is commensurate with the level of specificity of the proposed project components. Project-level analysis is provided for those components with known locations, footprints, and construction methods. Program-level analysis is provided for those components where details are less well defined. This analysis addresses a wider range of possible impacts and presents mitigation for those potential impacts that are more general and allow for additional analysis when details are developed. This is allowed by CEQA as explained further in Response PD-2. No further analysis or detailed description of the historic districts is warranted or required.

Comment O-PGE-2.98 calls attention to the use of terminology in the Draft EIR and Draft EIR Appendix A. The Draft EIR uses the term "historical resource" when quoting from or referring to the CEQA statute or guidelines. The term is also used as a general reference when describing architectural and archeological resources together. Because the analysis differs between historical resources that are architectural in nature and those that are archeological in nature "historic architectural resources" is used to describe buildings, structures, landscapes, and objects that are located above ground, and "archeological resources" is used to describe sites, artifacts, or features that are located below ground. With regard to the use of the term "impacts," which is used for CEQA, and the term "adverse effects," which is used for section 106 of the National Historic Preservation Act, the terms are used interchangeably in the discussion because the document is focused only on the CEQA environmental review process and, as noted in CEQA Guidelines Section 15358, "effects" and "impacts" as used in CEQA are generally synonymous. This usage is consistent with the general meaning of the two terms as interchangeable and with the purpose of an EIR as an

informational document which will inform public agency decision makers and the public generally of the significant environmental effect of the project.[4] Where specific impact statements in the Draft EIR are discussed, and in particular within Appendix A, Section E.4, the term "impact" is used consistently to clearly indicate the conclusions of the environmental impact discussions.

Comment O-PGE-2.98 also states the Draft EIR should explain the Secretary of the Interior's Standards (Secretary of the Interior's Standards for the Treatment of Historic Properties) and include a brief description of what it would mean specifically. The Secretary of the Interior's Standards have been added to the regulatory section of Draft EIR Appendix A Section E.4, Cultural Resources, as shown below and Chapter 11, Section 11.9. The comment further assesses the references to the Secretary of the Interior's Standards for the Treatment of Historic Properties. Where this reference is made the first time in each section, the full name as just presented is used. Where subsequent mentions are made, the name is shortened to the "Secretary of the Interior's Standards" for simplicity. This application is consistent throughout the document but most noticeable in Section E.4 of the Initial Study. In recognition that the language of the mitigation measures may be excerpted from the EIR in the future, the text within the mitigation measures has been modified to ensure clarity of reference.

Mitigation Measure M-CR-1a: Martin Substation Historic Resources Setting Protection, page 38 of Draft EIR Appendix A, first non-bulleted paragraph has been revised to:

> Other locations for new aboveground structures near historic resources, if proposed, would be subject to review and approval by San Francisco Planning Department preservation staff to ensure conformance with Secretary of the Interior's Standards for the Treatment of Historic Properties regarding the setting of the historic resource.

Mitigation Measure M-CR-1c: Historic Resource Impact Minimization within Historic Resources and Historic Districts, page 42 through 43 of Draft EIR Appendix A, second paragraph has been revised to:

> For project components that would occur within historic resources or historic districts that have character-defining features related to setting, placement of new poles and/or installation of new electrical or telecommunications equipment shall be in locations that follow established patterns. If maintenance of the current pattern of poles and equipment installation is not possible, locations for new poles, if proposed, would be subject to review and approval by San Francisco Planning Department preservation staff to ensure conformance with Secretary of the Interior's Standards for the Treatment of Historic Properties regarding the setting of the historic resource.

Mitigation Measure M-CR-1d: Historic Resource Impact Minimization for Adaptive Reuse, page 44 of Draft EIR Appendix A, has been revised to:

> After selection of a proposed building for the operations control center, the SFPUC shall notify the ERO of the selected building. If required based upon ERO and preservation staff review, the SFPUC shall engage a qualified architectural historian to evaluate the historic significance of the operations control center building and provide the relevant historic resource documentation to the ERO. If the building is a historic resource, then the character-defining features of the historic resource shall be preserved or reconstructed consistent with Secretary of the Interior's Standards for the Treatment of Historic Properties. The SFPUC shall submit proposed renovation plans to the ERO for review and

[4] CEQA Guidelines Section 15121.

approval prior to construction to ensure the work conforms to the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Additionally, further clarification on the application of the Secretary of the Interior's Standards to minimize impacts to the Martin Substation Separation component has been provided. The second paragraph on page 38 of Draft EIR Appendix A has been revised to read:

> Some of the construction work for the Martin Substation separation could also occur near the Martin Substation building, even if the proposed buildings are sited away from the building. The use of cranes or other large equipment could accidentally damage the Martin Substation building during construction. **Mitigation Measure M-CR-1b (Historic Resources Protection Program)** would require the SFPUC to implement measures that protect and avoid damage to onsite and adjacent historic resources, including at the Martin Substation. This mitigation measure requires review for conformance to the Secretary of the Interior's Standards to ensure new construction is sufficiently differentiated from the original historical resource, that new construction is compatible in size and detail with the Martin Substation, and that adequate protections have been implemented to limit inadvertent damage as a result of construction.

Comment O-PGE-2.98 states that the Cultural Resources significance evaluation criteria list for CEQA (PRC Section 5024.1) should be presented in the Draft EIR to aid public understanding of the impact evaluations. In response to Comment O-PGE-2.98, Draft EIR Appendix A page 37 et seq. has been revised to include additional legal definitions related to historical resources as follows:

> ***REGULATORY FRAMEWORK***
>
> **NATIONAL REGISTER OF HISTORIC PLACES**
>
> The National Register is the nation's master inventory of cultural resources worthy of preservation. It is administered by the National Park Service, which is represented at the state level by the State Historic Preservation Officer (SHPO). The National Register includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archeological, or cultural significance at the federal, state, or local level. Resources that are listed in or have been found by the SHPO to be eligible for listing in the National Register are called *historic properties*.
>
> Under the National Historic Preservation Act (NHPA), a property is considered significant if it meets the NHPA listing criteria in 36 CFR 60.4, which read as follows:
>
> > The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and
> >
> > (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
> >
> > (b) that are associated with the lives of persons significant in our past; or
> >
> > (c) that embody the characteristics of a type, period, or method of construction, or that represent works of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(d) that have yielded, or may be likely to yield, information important in prehistory or history.

Although there are exceptions, certain kinds of resources are not usually considered for listing in the National Register: religious properties, moved properties, birthplaces and graves, cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

In addition to meeting at least one of the four criteria, a property or district must retain *integrity*, meaning that it must have the ability to convey its significance through the retention of seven aspects, or qualities, that in various combinations define integrity. These seven aspects are location, design, setting, materials, workmanship, feeling, and association.

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES

The *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Secretary of the Interior's Standards) were published and codified as 36 CFR 68 in 1995 and updated in 2017.[51a] The Secretary of the Interior's Standards for rehabilitation have been adopted by local government bodies across the country, including the City and County of San Francisco, for reviewing proposed work on historic properties under local preservation ordinances. The Secretary of the Interior's Standards provide a useful analytical tool for understanding and describing the potential impacts of changes to historic resources and are used to inform CEQA review. Developed by the National Park Service for reviewing certified rehabilitation tax credit projects, the rehabilitation standards provide guidance for reviewing work on historic properties. The rehabilitation standards are as follows:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale, and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Conformance with all rehabilitation standards does not determine whether a project would cause a substantial adverse change in the significance of a historical resource under CEQA. Rather, projects that comply with the standards benefit from a regulatory presumption that they would have a less-than-significant adverse impact on a historic resource. Projects that do not comply with the rehabilitation standards may or may not cause a substantial adverse change in the significance of a historic resource and would require further analysis to determine whether the historic resource would be "materially impaired" by the project under CEQA Guidelines section 15064.5(b).

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA is the principal statute governing environmental review of projects in California. To be considered a historic resource, a property must generally be at least 50 years old; when acting as the CEQA lead agency, the planning department uses a threshold of 45 years. A historical resource is defined in CEQA Guidelines section 15064.5 as a cultural resource (i.e., a built-environment resource, archeological resource, or human remains) that meets at least one of the following criteria:

- A resource listed in, or determined by the State Historical Resources Commission to be eligible for listing in, the California Register.
- A resource included in a local register of historical resources, as defined in Public Resources Code section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of Public Resources Code section 5024.1(g). Such a resource shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Such a resource may be considered to be a historical resource, provided that the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register.

The fact that a resource is not listed in or determined to be eligible for listing in the California Register, not included in a local register of historical resources (pursuant to Public Resources Code section 5020.1[k]), or not identified in a historical resources survey (meeting the criteria in Public

Resources Code section 5024.1[g]) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code section 5020.1(j) or 5024.1.

Therefore, under the CEQA Guidelines, even if a resource is neither included in any federal, state, or local register nor identified in a qualifying historic resources survey, a lead agency may still determine that the resource is a historic resource for the purposes of CEQA if there is substantial evidence supporting such a determination. The lead agency must consider the resource historically significant if it finds that the resource meets the criteria for listing in the California Register.

CEQA requires a lead agency to determine whether a project would have a significant effect on important historic resources or unique archeological resources. The CEQA Guidelines note that if a resource is neither a unique archeological resource nor a historic resource, the effects of the project on that resource shall not be considered a significant effect on the environment. Projects that comply with the Secretary of the Interior's Standards benefit from a regulatory presumption under CEQA that they would have a less-than-significant impact on a historic resource. Projects that do not comply with the Secretary of the Interior's Standards may or may not cause a substantial adverse change in the significance of a historic resource and must be subject to further analysis to assess whether they would result in material impairment of a historic resource's significance.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register, administered by the California Office of Historic Preservation, is the authoritative guide to historical and archeological resources that are significant within the context of California's history. The eligibility criteria for inclusion in the California Register are based on and correspond to the National Register criteria. Under CEQA, certain resources are determined to be automatically included in the California Register, including California properties that are formally eligible for or listed in the National Register. These resources are considered historical resources by the San Francisco Planning Department for the purposes of CEQA. The criteria used for determining eligibility for listing in the California Register closely parallel those developed by the National Park Service for the National Register but also include relevance to California history. To be eligible for listing in the California Register as a historical resource, a resource must meet at least one of the following criteria (Public Resources Code section 5024.1[c]):

- **Criterion 1 (Event):** Resources that are associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California.
- **Criterion 2 (Person):** Resources that are associated with the lives of persons important to history.
- **Criterion 3 (Design/Construction):** Resources that embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values.
- **Criterion 4 (Information Potential):** Resources or sites that have yielded or have the potential to yield information important in prehistory or history.

In addition, to be considered eligible for listing in the California Register, a historical resource must possess integrity. Consideration of integrity for evaluation of California Register eligibility closely follows the seven aspects of integrity that apply to the National Register (listed above).

Resources that are eligible for the California Register may also be eligible for the National Register.

Draft EIR Appendix A page 37 has been revised to include the following footnote:

[51a] U.S. Department of the Interior, National Park Service (Kay D. Weeks and Anne E. Grimmer), *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstruction Historic Buildings*, revised 2017, https://www.nps.gov/orgs/1739/secretary-standards-treatment-historic-properties.htm, accessed January 27, 2025.

In response to Comment O-PGE-2.98, to clarify the impact analysis approach and qualifications of personnel involved in historic architectural resources impact discussion, Draft EIR Appendix A page 37 et seq. has been revised as follows:

IMPACT DISCUSSION

This section analyzes impacts of the proposed project on historical resources. It describes the methods used to determine the impacts of the proposed project and lists the criteria used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany the discussion of each identified significant impact.

SIGNIFICANCE CRITERIA

The proposed project would have a significant impact on historical resources if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines section 15064.5, including those resources listed in article 10 or article 11 of the San Francisco Planning Code.

A *substantial adverse change* is defined by CEQA Guidelines section 15064.5 as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired." The significance of a historical resource is "materially impaired," according to CEQA Guidelines section 15064.5(b)(2), when a project "demolishes or materially alters in an adverse manner those physical characteristics" of the resource that do any of the following:

(A) Convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register.

(B) Account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of Public Resources Code section 5024.1(g), unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant.

(C) Convey its historical significance and justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

Potential impacts on historical resources are assessed by identifying any activities (during either construction or operation) that could affect resources that have been identified as historical resources for the purposes of CEQA. Once a resource has been identified, it then must be determined

whether the proposed project would "cause a substantial adverse change in the significance" of the resource, as described above. As such, in accordance with CEQA Guidelines section 15064.5(b)(2), the following analysis considers the potential for the proposed project to materially impair the significance of a historical resource by causing direct or indirect changes to the physical characteristics of the resource that convey its historical significance. Mitigation of impacts on historical resources may involve avoiding the resource, revising the project to minimize the effect, or, where avoidance or minimization is not feasible, documenting the resource. However, as noted above, documentation may not reduce impacts on a historical resource to a less-than-significant level.

For all historical resources identified within the project area, an analysis of potential direct and indirect impacts was undertaken by the City and County of San Francisco. This analysis was based on component-specific construction and operations information and varied by component. Components for which location information was known were analyzed at a project level. Those for which location information was not yet known were analyzed at a programmatic level.

All historical resource identification and analysis was completed by professionals meeting the Secretary of the Interior's professional qualification standards for history, architectural history, or archeology as appropriate.

Comments O-PGE-2.50 and O-PGE-2.101 state that Draft EIR Mitigation Measure M-CR-1c should include performance standards. Mitigation Measure M-CR-1c includes replacement of temporarily disturbed character-defining features and, for features that cannot be avoided, conformance with the Secretary of the Interior's Standards, as reviewed and approved by the San Francisco Planning Department, as the performance standards. San Francisco Planning Department staff reviewing the project for compliance meet the Secretary of the Interior's Professional Qualifications as noted in Response CR-1. Therefore, this mitigation measure is consistent with the requirements of CEQA Guidelines section 15126.4(a)(1)(B).

Regarding Comment O-PGE-2.101, while the exact location of the operations control center is uncertain, the Draft EIR conservatively assumes that the operations control center could be placed within a historic building. Mitigation Measure M-CR-1d (Historic Resource Impact Minimization for Adaptive Reuse) requires an evaluation of historical significance once an operations control center building has been selected. Should the selected building be determined eligible, the work proposed under the Operations Control Center component would be required to be compliant with the Secretary of the Interior's Standards, as determined by the San Francisco Planning Department.

Comment O-PGE-2.104, which points out the similarities between M-CR-1b (Historic Resources Protection Program) and M-CR-1e (Historic Resources Impact Minimization for Service Yards Improvements), is noted but does not provide substantial evidence as defined by CEQA Guidelines Section 15384 (facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts) indicating that the Draft EIR's evaluation of the potential cultural resources impacts is undetermined or inadequate. No Draft EIR revisions have been made in response to this comment.

Comment CR-3: Archeological and Buried Resources

This response addresses the following comments, which are quoted below:

A-Caltrans.3, O-PGE-2.27b, O-PGE-2.27d, O-PGE-2.49, O-PGE-2.51, O-PGE-2.53, O-PGE-2.55, O-PGE-2.99, O PGE-2.100, O-PGE-2.102, O-PGE-2.106, O-PGE-2.108

"Cultural Resources

Should construction activities within Caltrans' ROW take place in relation to this project, these mitigation measures shall be implemented if there is an archaeological discovery. If there is an inadvertent archaeological or burial discovery within Caltrans' ROW, please immediately contact the Caltrans Office of Cultural Resource Studies at (510) 847-1977. A staff archaeologist will evaluate the finds within one business day after contact. Caltrans requires review of any potential data recovery plans within Caltrans' ROW." (Yunsheng Luo, Branch Chief, Local Development Review, Office of Regional and Community Planning [A-Caltrans.3])

- "The DEIR (including the IS) improperly treats the public right-of-way (ROW) as automatically culturally sterile. This assumption is flawed, as archaeological resources are known to exist throughout San Francisco, including within roadways." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.27b])

- "The stop-work radius of 25 feet in MM M-CR-2a is significantly smaller than the standard 50 feet stop-work radius typically required in similar mitigation measures for other projects. This difference is material as expanding the radius to 50 feet would provide significantly better protection of cultural resources or human remains discovered during construction." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.27d])

"The DEIR (including the IS) treats the public right-of-way (ROW) as automatically culturally sterile. This assumption is flawed, as archaeological resources are known to exist throughout San Francisco, including within roadways. The statement that there is nothing in the ROW is a misleading and inappropriate conclusory assumption. The DEIR lacks a clear description of background research conducted to identify potentially significant sub-surface historic-era resources. The information presented in the DEIR is inadequate for determining impacts. More specifically, the DEIR omits mention of examination of historic maps, bird's-eye views, etc. Given the length of the Cultural Resources section in the DEIR, it would be appropriate for the DEIR to overlay Project elements onto a historic map so that the public (inclusive of technical experts) reviewing the DEIR can see drainages, proximity to the Bay, early structures, etc.—all of which have bearing on the potential for significant cultural resources to be present within the Project area. Further, an assessment should also include a buried site sensitivity analysis, based on a geoarchaeological model and review of historic maps." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.49])

"The Project's systems reinforcements description suffers from a general lack of specificity and the DEIR's assumption that simply because this Project component is to occur in the ROW, there are no subsurface cultural materials is entirely unsupported by substantial evidence." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.51])

"The predictive modeling described under DEIR (IS) Impact CR-2 indicates that the Project site is located much farther from the current Bayshore than is considered to be within the range of increased sensitivity. However, there are repeated references to high sensitivity throughout the discussion. The DEIR (IS) should include specific discussion of local waterways, changes in the distance to the Bay, distance to shellmound sites, distance to other prehistoric resources, and should include a table listing known prehistoric sites within a 0.5 (minimum) mile radius of the Project site or potential corridors that involve any ground-disturbing activity. This can be easily done without giving away precise resource locations, and is a standard component of cultural resource assessments in CEQA documents." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.53])

- "The DEIR (IS) Impact CR-2 conclusion of "any component could affect any kind of resource" is broad, uninformative, and does not convey the data needed to create an informed opinion regarding potential Project impacts. The conclusion improperly relies on deferred analysis.
- The stop-work radius of 25 feet in MM M-CR-2a is significantly smaller than the standard 50 feet stop-work radius typically required in similar mitigation measures for other projects. This difference is material as expanding the radius to 50 feet would provide significantly better protection of cultural resources or human remains discovered during construction.
- MM M-CR-2b is impact analysis improperly deferred as mitigation without clear performance standards for measuring and ensuring the effectiveness of the measure. Testing and evaluation of resources must be completed prior to approval of the Project. This includes testing and evaluation of all elements of the project—*e.g.*, Martin Substation, Local Distribution System Separation, System Reinforcements, Operations Control Center, Operation and Maintenance Service Yards." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.55])

"5) The IS/EIR treats public right-of-way (ROW) as automatically culturally sterile; but archaeological resources are known to exist throughout San Francisco, including within roadways. The statement that there is nothing in the ROW is a misleading and inappropriate conclusory assumption." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.99])

"6) The IS/EIR does not include a copy of the cultural resources or a redacted copy of that report or research documents prepared for the project and does an inadequate job of describing the extent and results of background research (e.g. identification of potentially significant subsurface resources. Any examination of historic maps, bird's-eye views, etc.) should be mentioned. Project elements should be overlain onto one or more early maps of the region so that reviewers and the public could see drainages, proximity to the

Bayshore, early structures, etc. to help evaluate potential impacts. The assessment should also include a buried site sensitivity analysis, based on a geoarchaeological model and review of historic maps." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.100])

_____

"10) The Systems Reinforcements description suffers from the same general lack of specificity and the assumption that just because it's in the City's ROW, there are no subsurface cultural materials." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.102])

_____

"14) The project site appears to be much farther from the current Bayshore than is considered to be within the range of increased sensitivity according to predictive modeling described under Impact CR-2. There are repeated references to high sensitivity - the IS should include some specific discussion of local waterways, changes in the distance to the Bay, distance to shellmound sites, distance to other prehistoric resources, and help the reader understand why these locations are sensitive for cultural resources. There should also be a table listing known prehistoric sites within a 0.5 (minimum) mile radius of the project site or potential corridors that involve any ground-disturbing activity. This can be easily done without giving away precise resource locations, is included in record searches (unless the searches are requested by nonarchaeologists), is a standard component of any regulatory document, and can be used to help convey the sensitivity of the project area." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.106])

_____

"16) The Impact CR-2 conclusion of "any component could affect any kind of resource" is broad, uninformative, and does not convey the data needed to create an informed opinion regarding potential project impacts. The conclusion improperly relies on deferred analysis.

17) MM CR-2a – the stop-work radius of 25 feet is much smaller than the standard 50 feet; 50 feet offers much better protection of a resource or human remains discovered during construction. If the find is comparatively small, the stop work radius can later be reduced while the find is treated.

18) MM CR-2b is deferred mitigation without clear performance standards for measuring and ensuring the effectiveness of the measure; testing and evaluation of resources needs to be completed prior to issuance of a Final EIR; this includes all elements of the project – Martin Substation, Local Distribution System Separation, System Reinforcements, Operations Control Center, Operation and Maintenance Service Yards.

19) MM CR 2c should refer back to MM CR-2b as well as 2a." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.108])

_____

RESPONSE CR-3

Comment A-Caltrans.3 requests that appropriate Caltrans staff be notified if there is an inadvertent archeological or burial discovery within Caltrans' right of way. This comment does not raise specific issues concerning the adequacy or accuracy of the EIR's discussion of physical impacts. As listed in Draft EIR

Section 2.8, Anticipated Permits and Approvals, encroachment permits from Caltrans are anticipated to be required for construction of the project or project variant. Construction would comply with requirements of the encroachment permits, including notification of Caltrans staff regarding inadvertent archeological or burial discovery within Caltrans right-of-way, and submittal of potential data recovery plans within Caltrans' right-of-way for Caltrans review. Mitigation Measure M-CR-2a identifies procedures that would be followed in case of inadvertent discovery, including requirements of an archeological data recovery program, which were determined to reduce potential impacts on cultural resources.

Comments O-PGE-2.27b, O-PGE-2.49, O-PGE-2.51, O-PGE-2.99, and O-PGE-2.102 question whether the cultural resources section of the Draft EIR accurately describes the potential archeological sensitivity within the road right-of-way. The Draft EIR does not state that the right-of-way is culturally sterile. In contrast, as described on Draft EIR Appendix A page 46, the pre-contact archeological resource sensitivity model shows that portions of the project or project variant have very high sensitivity for Native American archeological resources based on distance from historical water sources, including the bay shore, as well as proximity of Native American archeological sites in a similar setting. The analysis for Native American site sensitivity considers areas both within and outside of road rights-of-way. However, there is a relatively low sensitivity for encountering historic-period archeological resources during construction of the project or project variant throughout most of the project areas because historic-era artifact concentrations related to artifact-filled privies or wells would not be located in established roadways but rather in the rear of residences as documented throughout the City and in other urban environments. As discussed below, archeological sensitivity maps are included in the Cultural Resources Review memorandum, which informs the Draft EIR impact analysis. Therefore, the Draft EIR's impact conclusions regarding archeological resources or subsurface cultural materials are supported by substantial evidence and are not conclusory. Regarding general comments about the level of detail in the Draft EIR archeological analysis, refer to Response CR-1.

Comments O-PGE-2.49, O-PGE-2.53, O-PGE-2.100, and O-PGE-2.106 question the basis of the Draft EIR's determination of archeological sensitivity and recommend that, to convey the sensitivity of the project areas, the Draft EIR include additional setting information such as discussion of local waterways, distance to other prehistoric resources, a table listing known prehistoric sites within a 0.5 mile radius of the project. Draft EIR Appendix A pages 45-46 summarize the archeological sensitivity assessment approach and results, and reference the Cultural Resources Review memorandum, which is available for review by those who meet the U.S. Secretary of the Interior's professional standards as discussed in Response CR-1. The Cultural Resources Review memorandum includes historic maps and discusses the geoarcheological basis for archeological resource sensitivity described in the Draft EIR. As discussed in Draft EIR Appendix A page 46, the City developed a Native American archeological sensitivity model covering San Francisco. The model is based on a reconstruction of the bay and ocean shoreline at 1,000 year intervals; proximity to the bay shore, creeks, creek confluences, and other water sources; distance from recorded Native American archeological resources; and landform history, among other information. Therefore, the archeological sensitivity assessment conducted in the Draft EIR is based on the types of information recommended in the comments, and is adequate for determining impacts. The historic architectural resources evaluation methodology is discussed in Response CR-2. Findings of both the archeological and architectural resources evaluations are included in Draft EIR Appendix A Section E.4, Cultural Resources.

However, to clarify the methods used in the Draft EIR's identification of archeological resources, the following text has been added to the end of the first paragraph on Draft EIR Appendix A page 46:

> The records search included a review of previous studies, records, and maps on file at the NWIC, as well as a review of the Archaeological Determinations of Eligibility (updated 2012). The purpose of the records search was to determine whether known archeological resources have been recorded in the project area; assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby cultural resources; and develop a context for the identification and preliminary evaluation of archaeological resources. Specific locational information on archeological resources is confidential according to applicable state regulations (Government Code section 6250 et seq. and section 6254 et seq).
>
> The Cultural Resources Review memorandum additionally included a review of historical topographic and land use maps from 1861, 1864, 1869, 1870, 1884, 1895, 1905, 1911, 1915, 1926, and 1927. The memorandum also included a review of archeological archival information on file at the planning department including documented archeological resources, archeological investigation reports and previous preliminary archeological review memorandums, nearby historical and modern natural water sources, cut and fill landscape change analysis, and the Native American archeological sensitivity model regarding surface, buried, and submerged sensitivity was also considered in the analysis.

Comments O-PGE-2.27d and O-PGE-2.55 state that the stop-work radius of 25 feet in the event of an inadvertent discovery of cultural materials is significantly smaller than a standard 50-foot stop-work radius required for other projects. CEQA does not require analysis of every imaginable mitigation measure, but EIRs should include measures that are feasible, practical, and effective.[5] The comments do not provide substantial evidence supporting the statement that a larger radius would provide "significantly better protection" than already afforded by the stop work radius in Mitigation Measure M-CR-2a. Without more information about why the commenter may believe the Draft EIR's analysis or conclusions to be inadequate or inaccurate in this context, the City does not have enough information to provide a more detailed response.

Comments O-PGE-2.55 and O-PGE-2.108 state that testing and evaluation of resources must be completed prior to issuance of the Final EIR. CEQA establishes standards regarding reliance on measures that include future studies and plans to mitigate project impacts.[6] CEQA also provides specific considerations applicable to mitigation measures related to impacts on historical resources, including archeological resources.[7] As stated in CEQA Guidelines section 15126.4(b)(3)(C), "when data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provisions for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted *prior to any excavation being undertaken*" (emphasis added). That is, CEQA does not require testing and evaluation of resources prior to issuance of a Final EIR. The comments also state that Draft EIR Mitigation Measure M-CR-2b needs clear performance standards. As discussed in Draft EIR Appendix A Impact CR-2 (p. 49), destruction of archeological resources would be considered a significant impact. Draft EIR Mitigation Measure M-CR-2b includes detailed contents of a testing plan, which is designed to investigate areas of ground disturbance to

[5] *Gilroy Citizens for Responsible Planning v City of Gilroy* (2006) 140 Cal.App.4th 911, 935; *San Franciscans for Reasonable Growth v City & County of San Francisco* (1989) 209 Cal.App.3d 1502, 1519. *Napa Citizens for Honest Gov't v Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 365; *Concerned Citizens of S. Cent. L.A. v Los Angeles Unified Sch. Dist.* (1994) 24 Cal.App.4th 826, 841.
[6] CEQA Guidelines section 15126.4(a)(1)(B).
[7] CEQA Guidelines section 15126.4(b).

avoid significant impacts, and specifies additional requirements that would apply should archeological resources be found during testing, including requirements of Mitigation Measure M-CR-2a, such as an archeological data recovery program, treatment of human remains and funerary objects, and curation. Implementation of Mitigation Measure M-CR-2b would help to ensure a less-than-significant adverse impact by reducing or avoiding the destruction of archeological resources during project construction and by preserving and interpreting noteworthy information represented by the resources encountered. Therefore, Mitigation Measure M-CR-2b includes performance standards and testing is not required prior to issuance of a Final EIR, and the Draft EIR has not been revised in response to these comments.

Mitigation Measure M-CR-2c does not refer back to Mitigation Measure M-CR-2b because it applies to the specific locations along the distribution express feeders where testing (required by Mitigation Measure M-CR-2b) is not feasible.

10.9 Transportation and Circulation

The comments and corresponding responses in this section cover topics in Draft EIR Appendix A (Initial Study) Section E.6, Transportation and Circulation.

- TR-1: Transportation and Circulation Impacts

Comment TR-1: Transportation and Circulation Impacts

This response addresses the following comments, which are quoted below:

A-Caltrans.4, O-PGE-2.82

"Construction-Related Impacts

Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, please visit Caltrans Transportation Permits (*link*).

Prior to construction, coordination may be required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the State Transportation Network (STN).

Equitable Access

If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users." (Yunsheng Luo, Branch Chief, Local Development Review, Office of Regional and Community Planning [A-Caltrans.4])

"Traffic

- The DEIR must include a detailed site plan for the Martin Substation and for the SF maintenance/ storage yard to enable an adequate assessment of safe access and circulation for those sites. This omission prevents an adequate assessment of traffic impacts.
- The traffic analysis in the DEIR fails to include adequate information to analyze potential conflicts with bicycle route during construction. This omission prevents an adequate assessment of traffic impacts." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.82])

RESPONSE TR-1

Consistent with the CEQA, Draft EIR Chapter 2, Project Description, provides text, figures, and tables that describe the main features of the project and project variant in sufficient detail to provide decisionmakers with the information necessary to make a decision that intelligently takes account of environmental consequences. Draft EIR Figure 2-2, Martin Substation Project Site and Construction Staging Area, shows the locations of access to the Martin Substation and Daly City Yard during construction and operation of the proposed project. As shown in revised Figure 2-2, access to Martin Substation during operations would be provided via existing driveways from Geneva Avenue. The Martin Substation work is described in Draft EIR Section 2.4.1, related construction is described in Section 2.5.1.1, and operations and maintenance activities are described in Section 2.6. Other separation work, including operations and maintenance service yards, are described in Draft EIR Sections 2.4.6.2 and 2.5.1.6. Related assumptions are disclosed in Table 2-9, Project Construction Schedule, Table 2-10, Construction Assumptions, and Table 2-11, Project Operations Energy Usage. CEQA[1] does not require detailed site plans to be included in an adequate project description; the Draft EIR and its analysis (including its analysis of potential impacts on transportation) remain adequate without them.

For example, Draft EIR Section 2.5.5, Construction Coordination, specifically addresses project plans for bicycle safety consistent with the San Francisco Regulations for Working in San Francisco Streets (also known as the "SFMTA Blue Book"), which "establishes rules and guidance so that work can be done safely and with the least possible interference with pedestrians, bicycle, transit, and vehicular traffic." Section 2.5.5 also describes the project's construction management plan(s), which would be developed with the SFMTA under the authority derived from the San Francisco Transportation Code and, as relevant, the City of Brisbane and City of Daly City pursuant to the requirements of encroachment permits from each city.[2] Among other things, such plan(s) would maintain "pedestrian and bicycle access and circulation during project construction where safe to do so," including by maintaining adequate travel widths and requiring permits for any detours, clear signage, and safe crossings. Without some information about what additional details about the Martin Substation and the SF maintenance/storage (service) yard are believed necessary by the commenter, the lead agency does not have enough information to provide a more detailed response about the adequacy of the Draft EIR's description of these project features as they relate to safe access and circulation for bicyclists and others. The access considerations described in the project description are consistent with the summary of Caltrans' equity mission described in Comment A-Caltrans.4.

The Draft EIR, including as documented in the Initial Study provided in Appendix A, adequately analyzes the project or project variant's potential significant impacts, including potential impacts resulting from conflict with a program, plan, ordinance or policy addressing the circulation system, including bicycle facilities during construction. The transportation and circulation impact analysis in Draft EIR Appendix A, Section E.6, Transportation and Circulation, evaluates impacts associated with the circulation shown in Figure 2-2. This section also evaluates impacts of the operations and maintenance service yards, which would be located in southeast San Francisco. The approach to analysis is discussed in Draft EIR Appendix A Section E.6 (page 83 et seq.) and in Draft EIR Appendix G (Transportation and Circulation Supporting Documentation). Refer also to Response PD-2 regarding the level of detail available and programmatic EIR review.

[1] CEQA Guidelines Section 15124
[2] As discussed in greater detail in Draft EIR Appendix A Section E.6 Transportation, page 82.

Draft EIR Appendix A Section E.6, Impact TR-1 discusses the effects of project construction on transportation and circulation, including on people walking or bicycling. A specific discussion is provided for each project component. The Draft EIR impact analysis concluded that, for construction activities that affect the transportation network, the SFMTA blue book and City of Brisbane and City of Daly City requirements and other city and state regulations require maintaining pedestrian and bicycle circulation and implementing construction safety measures for people walking, bicycling, and driving to reduce such impacts. With implementation of these requirements, including the project or project variant's construction management plan, project or project variant construction would not result in potentially hazardous conditions for people walking, bicycling, or driving, or interfere with emergency access or accessibility for people walking and bicycling during construction, or substantially delay transit. Draft EIR Appendix A Section E.6, Impact TR-2 evaluated operation of all project components, including the operations and maintenance service yards, and determined that operation of the project or project variant would not create potentially hazardous conditions for people walking, bicycling, or driving, interfere with public transit operations, or result in inadequate emergency access because components that include changes to sidewalks and driveways would be required to comply with San Francisco Better Streets Plan requirements. Without some information supporting the opinion expressed in Comment O-PGE-2.82 about the adequacy of the analysis, the lead agency does not have enough information to provide a more detailed response.

Regarding Comment A-Caltrans.4, a preliminary list of potential actions and approvals needed for project construction and operation is provided in Draft EIR Section 2.8, Anticipated Permits and Approvals. Section 2.8.2 of the list expressly discloses the possibility that permits could be required from California Department of Transportation (Caltrans), including encroachment permits and access permits. As discussed in Draft EIR Appendix A, page 81, project-related construction and maintenance vehicles would use state roadways as access routes for construction workers, and some project construction activities would occur in a state highway right-of-way (e.g., on Sickles Avenue under I-280). Draft EIR Section 2.5.5, Construction Coordination, and Draft EIR Appendix A Section E.6, Transportation and Circulation, discuss the construction management plan(s) that would be implemented for the project or project variant, including coordination with Caltrans, among other agencies. To clarify that coordination with Caltrans could result in a determination that a transportation permit is needed for oversize or overweight vehicles, the fourth bullet in Draft EIR Section 2.8.2, State Actions and Approvals, on page 2-58, is revised as follows to include a potential transportation permit for excessive loads:

- California Department of Transportation (Caltrans)
  - Encroachment permits, access permits, transportation permits

This page intentionally left blank

10.10 Utilities and Service Systems

The comments and corresponding responses in this section cover topics in Draft EIR Appendix A Initial Study Section E.13, Utilities and Service Systems.

- UT-1: Utilities and Service Systems Impacts

Comment UT-1: Utilities and Service Systems Impacts

This response addresses the following comments, which are quoted below:

A-CPUC.5, O-PGE-2.113

"An analysis of the project impacts on telecommunications service and gas service is required. Gas infrastructure is dependent upon electrical service. In addition, telecommunications equipment is often attached to electrical power poles and towers or could be co-located with substations. An analysis of the project impacts on this infrastructure would be required to adequately analyze impacts on utilities and service systems." (Michelle Wilson, Program and Project Supervisor, CEQA and FERC Branch, Energy Division, California Public Utilities Commission [A-CPUC.5])

"The DEIR lacks crucial details about the required separation of the anticipated CCSF system from the PG&E system.

For example, the DEIR does not adequately describe the protection and communications re-wiring required for the Project. This re-wiring is critical to maintaining the reliability and security of the electric grid. Electrical system failures can trigger the need for temporary backup diesel generators as well as emergency services and traffic disruptions and associated environmental impacts. Detailed planning and coordination are necessary to ensure that all circuits are properly separated and reconfigured. Specifically, the following key analyses would be required:

- **A System Impact Study (SIS**) that assesses the system configuration change from a transmission planning and protection perspective and identifies all changes required to the system resulting from the Project. A SIS typically takes 90 days to complete.
- **A Facility Study**, including a substation work scope and cost estimate that provides a detailed bill of material, to fully develop the scope of work and costs associated with the project. A Facility Study also includes a detailed review of the substation configurations and protection changes required. A Facility Study typically takes 90 days to complete assuming no reconfigurations are identified in the SIS that would warrant a change and subsequent SIS.
- **A full design package**, which would be developed and shared with PG&E's team to conduct an outage coordination study to determine outage requirement to complete the Project work. The full design package can require up to 90 days to complete, and if issues are identified, this process will

> need to be repeated. Once all outage requirements are identified, those outages are subject to approval and scheduling with the California Independent System Operator (CAISO). CAISO may not grant those outages, or it may schedule those outages in a way that does not align with the project's planned in-service date due to system conditions and other planned work.

None of these studies can be performed because of the deficiencies in the DEIR. Once CCSF reveals additional information about its plans, these studies will be required." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.113])

RESPONSE UT-1

As described in Draft EIR Chapter 2, Project Description, Section 2.4.6.3 (page 2-30), the City would acquire existing communication, control, and protection equipment at the substations. To the extent the City needs to install telecommunications equipment, this would consist of (1) new equipment at substations (e.g., remote terminal units, power line carrier equipment, telecommunication switches, routers, wireless mesh equipment); (2) fiber optic cables between substations and other telecommunication aggregation points underground within duct banks; and (3) other telecommunications equipment (e.g., wireless mesh SMART devices) mounted on poles. Telecommunications equipment would be installed on the same equipment that is built or modified as part of other project components (i.e., in existing duct banks, conduits within proposed duct banks, mounted on existing or proposed poles, or inside the substation control rooms). The Draft EIR discusses environmental impacts of the telecommunications equipment installation along with evaluation of other project components.

Regarding telecommunications equipment attached to electrical power poles and towers, for local distribution system separation, as stated on Draft EIR page 2-19 (Table 2-4) poles would remain if they are jointly used by other utilities (e.g., telecommunications) even if other existing electrical equipment is removed from the pole by the project or project variant. The project or project variant also include system reinforcements, which would be implemented for both grids to maintain the same level of reliability and the ability to isolate lines if a fault occurs (e.g., a line is short-circuited) and restore power on existing distribution lines and sections in the event of outages. As discussed in greater detail in Response PD-1, the system reinforcements are intended to encompass the type of re-wiring work discussed in Comment O-PGE-2.113. As noted on Draft EIR page 2-26 in footnote 27, the system reinforcements work is based, in part, on information provided by PG&E in Exhibit B of its appeal letter dated March 7, 2022, which describes actions needed to ensure reliability with the City's acquisition.

The Draft EIR acknowledges on page 2-27 that additional analysis would be needed to identify the specific locations of individual system reinforcements. As indicated in the Draft EIR (page 2-9 *et seq*), some of the project components, including system reinforcements, are evaluated at a program level based on the level of information available. This program-level approach is consistent with CEQA Guidelines section 15168 and is appropriate because the Draft EIR identifies the types of activities and geographic areas where work would occur and estimates foreseeable impacts, providing sufficient detail for CEQA analysis. Consistent with Response PD-2, the EIR makes reasonable conservative assumptions to disclose potential impacts. Any future refinements to the project as project design progresses would be compared to what was proposed and analyzed in the EIR. If final project designs are not consistent with the project analyzed in the EIR and have the potential for additional impacts, subsequent CEQA screening consistent with the CEQA Guidelines

could be required. CEQA's subsequent review requirements exist precisely because project design may change as more detailed design and field studies become available after project approval. For purposes of disclosure and analysis, the Draft EIR anticipates that some temporary outages would occur during project implementation. As discussed in Draft EIR section 2.5.1.3, temporary customer power service disruptions could occur during local distribution system separation work. Work would be sequenced to minimize power outage by, where feasible, conducting most of the work before final connections are made and connecting to the appropriate grid as the final step. Typically, individual interruptions could last between four to six hours for these types of activities. The number of customers affected would depend on the nature of the work but could range from one customer to an entire block (if, for example, one transformer that provides service to multiple customers is replaced). Customers would be notified in advance of any potential customer power service disruptions. As indicated in the Draft EIR in multiple sections and chapters, some of the project components, including system reinforcements, are evaluated at a program level based on the level of information available. Response PD-2 discusses the adequacy of the Draft EIR's analysis in light of available project detail.

PG&E currently provides electric service to its gas equipment, and equipment would continue to receive electric service regardless of ownership, including if SFPUC assumes ownership of the electric system. This change would involve only ownership, and would result in no physical changes to the service. Therefore, reliance on temporary diesel generation is not reasonably foreseeable given the assumption that SFPUC would provide electric service to PG&E gas equipment where needed. In the event of an outage, PG&E is expected to provide its own backup generation for gas equipment, consistent with practices for other critical facilities.

This page intentionally left blank

10.11 Biological Resources

The comments and corresponding responses in this section cover topics in Draft EIR Appendix A Initial Study, Section E.15, Biological Resources.

- BI-1: Special-Status Bumble Bees
- BI-2: Other Special-Status Species
- BI-3: Sensitive Natural Communities and Nesting Birds
- BI-4: Other Biological Resources Comments

Comment BI-1: Special-Status Bumble Bees

This response addresses the following comments, which are quoted below:[1]

A-CDFW.4, O-PGE-2.40, O-PGE-2.79

"COMMENT 4: Crotch's Bumble Bee

Issue: The draft EIR does not identify potential impacts to Crotch's bumble bee (*Bombus crotchii*, CBB). The current range of CBB encompasses the Project area, and proposed Project activities could impact bumble bees if they are present on-site. The draft EIR does not include avoidance, minimization or mitigation measures to protect potential CBB that may occur within the Project area.

Specific impacts, why they may occur and be potentially significant: CBB is a candidate species under CESA and therefore should be considered a threatened, endangered, or rare species under CEQA pursuant to CEQA Guidelines section 15380. Many bumble bee species, including CBB, once common in the western United States, have undergone a dramatic decline in both distribution and abundance and are now extirpated from much of their historic ranges. Many bumble bees are threatened with extinction due primarily to reductions in habitat from urbanization, intensive agriculture, and invasive species introductions.

Bumble bees, including CBB, are found in a wide variety of natural, agricultural, urban and rural habitats, and require suitable nesting and overwintering sites as well as availability of nectar and pollen from floral resources (Hatfield et al. 2018). Potential nest habitat utilized from late February to late October includes underground abandoned small mammal burrows, perennial bunch grasses and/or thatched annual grasses, brush piles, old bird nests, dead trees, or hollow logs. Overwintering sites are utilized from November through early February by mated queens in self-excavated hibernacula, and could be present in soft, disturbed soil, sand, well-drained or loose soils, under leaf litter or other debris with ground cover requisites such as barren areas, tree litter, and bare patches within short grass in areas lacking dense vegetation. Any near-surface or subsurface ground disturbance within Project sites could result in the direct take of bumble bee colonies or overwintering queens. Bumble bees are generalist foragers, and do not depend on any one

[1] Footnotes from quoted comments are indicated by *italicized* text and retain their original footnote number from the comment. Footnotes from response text are not italicized and are numbered in order of appearance in this section.

flower type, often visiting native and non-native flowering plants alike to collect the pollen and nectar resources needed to sustain their colonies and provision nest cells. Vegetation removal, including removal of any flowering plants within the Project area, could impact bumble bee habitat.

If CBB are injured or killed, or their habitat is removed as a result of Project development, the Project may result in a substantial reduction in the number or restriction in the range of a threatened species or endangered species, a Mandatory Finding of Significance pursuant to CEQA Guidelines section 15065, subdivision (a)(1).

Recommendation 4: CDFW recommends the EIR provide an assessment of the potential for the Project to impact CBB, and to incorporate the following mitigation measure to avoid, minimize, and mitigate potential impacts on CBB.

> **Recommended Crotch's Bumble Bee Mitigation Measure:** CBB habitat assessments shall be performed in Project sites that may provide suitable CBB habitat and that could be impacted by Project development. The habitat assessment shall be conducted by a qualified biologist knowledgeable with the life history and ecological requirements of CBB, and include all areas of suitable overwintering, nesting, and foraging habitats within 100 feet of proposed work areas.
>
> In areas with potential CBB habitat, pre-construction surveys for CBB individuals shall be conducted by a qualified biologist between March to August. Surveys shall include a minimum of three survey efforts, over a three-day period within a temperature range of 15 degrees Celsius and 30 degrees Celsius. If the qualified biologist suspects CBB detection or occupancy, CDFW shall be consulted immediately. CBB survey results shall be considered valid for one year at a given site, but additional surveys shall be performed prior to ground-disturbing activities at the discretion of the qualified biologist in consultation with CDFW. If surveys document the presence of CBB within Project sites, the City shall consult with CDFW prior to construction to determine if a CESA ITP authorization is required.
>
> Further, if CBB are detected during surveys, the qualified biologist shall identify the location of all nests in or adjacent to Project sites. If nests are identified, a minimum 45-foot no-disturbance buffer zones shall be established around nests. The qualified biologist shall expand buffer zones as necessary to prevent disturbance and avoid take.
>
> Bumble bee floral resources shall be mitigated at a 3:1 ratio for any permanent impacts to CBB habitat. Floral resources shall be replaced as close to their original location as is feasible. If active CBB nests have been identified and floral resources cannot be replaced within 600 feet of their original location, floral resources shall be planted in the most centrally available location relative to identified nests. This location shall be no more than 4,900 feet (1.5-kilometers) from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests." (Erin Chappell, Regional Manager, Bay Delta Region, California Department of Fish and Wildlife [A-CDFW.4])

"The DEIR does not address the proposed Project's potential impacts to the special status Crotch's bumblebees. Note that the Biological Resources Technical Memorandum (Appendix H) omits analysis of this

bumblebee species, and states that the potential for the Obscure and Western bumblebees to be low because of minimal observed occurrences in the Project area. However, this information is contradicted by the October 2024 DEIR on the proposed Guadalupe Quarry Redevelopment Project (SCH # 2022060358), located less than a mile to the south of the Martin Substation, which states that the western bumblebee, obscure bumblebee, and Stages dufourine bee all may occur in that Project's area.

Given the Martin Substation's proximity to San Bruno Mountain, and the fact that construction would occur elsewhere on the edge of the Mountain as well as in open space areas such as the Olympic Club [golf] course, it is possible that such species may be present on or near the project construction areas.

Further, the Biological Resources Memo completely omits the potential for Crotch's bumblebee to occur in the Project area and be affected by Project construction. The Guadalupe Project EIR had a similar omission, resulting in an extensive comment letter from the California Department of Fish and Wildlife[19], (CDFW) stating in part:

> The current range of CBB, a species listed as candidate endangered under the CESA, encompasses the proposed Project area. Bumble bees, including CBB, are found in a wide variety of natural, agricultural, urban and rural habitats, and require suitable nesting and overwintering sites as well as availability of nectar and pollen from floral resources (Hatfield et al. 2018). Proposed Project activities as described in the draft EIR could impact bumble bees if they are present on-site.
>
> **Evidence the impact would be significant:** The Project as described in the DEIR would impact approximately 4.8 acres of potentially suitable bumblebee habitat, consisting of grassy and scrub mosaic habitats which could potentially provide nesting and/or foraging habitat for CBB. Bumble bee nests are most often located underground in abandoned holes made by ground squirrels and rodents, and occasionally in abandoned bird nests. Any near-surface or subsurface ground disturbance could result in the direct take of bumble bee colonies or overwintering queens. Project activities involving removal of floral resources would also impact survival of resident bumble bees, given that bumble bees visit native and nonnative flowering plants alike to collect the pollen and nectar resources needed to sustain their colonies and provision nest cells. Further, the use of pesticides and herbicides in landscaping during Project operation could cause direct or indirect mortality of special-status bees, including CBB.
>
> Many bumble bee species, once common in the western United States, have undergone a dramatic decline in both distribution and abundance and are now extirpated from much of their historic ranges. Many bumble bees are threatened with extinction due primarily to reductions in habitat from urbanization, intensive agricultural practices, and invasive species introductions. CBB is a candidate species under CESA and therefore should be considered a threatened, endangered, or rare species under CEQA pursuant to CEQA Guidelines section 15380. Therefore, if CBB occur at the Project site and Project impacts to CBB would occur, this may result in a substantial reduction in the species' population, which would be a mandatory finding of significance (CEQA Guidelines Section 15065).

[19] *Letter from Erin Chappell, Regional Manager, Bay Delta Region, California Department of Fish and Wildlife re: Guadalupe Quarry Redevelopment Project, Draft Environmental Impact Report, SCH No 2022060358, City of Brisbane, San Mateo County, to Julia Ayers, Principal Planner, City of Brisbane, December 5, 2024.*

The CDFW letter goes on to list extensive mitigation including habitat assessment, bee surveys, nesting colony avoidance, take authorization, and compensatory mitigation. All of this must be considered with respect to proposed Project impacts to this species.

In addition, the project's potential impacts on the Western and Obscure bumblebees should be reconsidered in light of the detailed analyses of those species and mitigation required, in the Guadalupe Project EIR." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.40; O-PGE-2.79])

RESPONSE BI-1

Comments A-CDFW.4, O-PGE-2.40, and O-PGE-2.79 express concern about the EIR's omission of Crotch's bumble bee (*Bombus crotchii*) from the biological resources analysis and Biological Resources Technical Memorandum, and the latter two comments question whether the analysis of potential project impacts on western bumble bee (*Bombus occidentalis*) and obscure bumble bee (*Bombus caliginosus*) is sufficient. Comments O-PGE-2.40 and O-PGE-2.79 compare the project with the City of Brisbane's Guadalupe Quarry Redevelopment Project (Quarry Project), and present CDFW's comments received on that project's draft EIR related to candidate or otherwise sensitive bumble bee species. As discussed in Draft EIR Appendix A, Initial Study, Section E.15, Biological Resources, information on natural communities, plant and animal species, and sensitive biological resources used in preparation of the impact analysis was obtained from regional databases, plans, and reports relevant to the project, including the California Department of Fish and Wildlife Natural Diversity Database (CNDDB), the California Native Plant Society Electronic Inventory, the U.S. Fish and Wildlife Service, scientific biological literature, eBird.org, and the Biological Resources Technical Memorandum prepared for the project (Draft EIR Appendix H). Results of these queries did not identify Crotch's bumble bee within the San Francisco North or San Francisco South U.S. Geological Survey 7.5-minute quadrangles, which is why this species was not evaluated. In response to comments received on the Draft EIR, ESA conducted additional research on the historical and current presence of Crotch's bumble bee, western bumble bee, and obscure bumble bee in San Francisco and San Mateo counties and prepared a technical memorandum with the results and conclusions of the analysis.[2] The technical memorandum is included as **Attachment C** to this response to comments document. The following discussion summarizes the results of the analysis.

Crotch's bumble bee is understood to occupy grassland and scrub habitats and is characterized as a generalist forager, but may prefer the following plant families because of its shorter tongue: *Fabaceae, Apocynaceae, Asteraceae, Hydrophyllacae, Asclepiadaceae*, and *Borginaceae*.[3] They overwinter and nest below ground in animal burrows or beneath leaf litter or other debris. This species tolerates a limited climatic range favoring hotter and drier climates.[4] The historic range for this species is understood to extend from near Shasta County, California, south to Baja California.[5] Contemporary observations of this species

[2] Environmental Science Associates (ESA), 2026. Memorandum: Evaluation of Special-Status Bees within the City of San Francisco's Pacific Gas and Electric Company Power Asset Acquisition Project Area. Prepared for the City and County of San Francisco. January 2026.
[3] Citations for this statement and subsequent statements in this response are provided in Attachment C.
[4] NatureServe 2025. Bombus crotchii, Crotch's Bumble Bee, Nature Serve Explorer. Accessed September 11, 2025. Available: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.834085/Bombus_crotchii
[5] The Xerces Society for Invertebrate Conservation, Defenders of Wildlife, Center for Food Safety, A Petition to the State of California Fish and Game Commission to List the Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*) and western bumble bee (*Bombus occidentalis occidentalis*) as Endangered under the California Endangered Species Act, October 2018.

indicate a retraction from the northern extent of its historical range, with most records for this species concentrated in coastal southern California.

The Crotch's bumble bee range was evaluated in the 2015 IUCN Assessments for Northern American *Bombus* spp., which applied a dataset of 202,198 specimen records of North American *Bombus* species from academic, research, citizen science and private collections to depict changes in the species' spatial distribution over time.[6] On this basis, species occurrence records from 1805 to 2012 indicate that Crotch's bumble bee have not been observed in coastal California north of Santa Cruz.

ESA expanded the CNDDB records search for Crotch's bumble bee to include the entirety of San Francisco and San Mateo counties, which returned one occurrence record from 1909, near Palo Alto. The Bumble Bee Watch tool developed by the Xerces Society and partners was also used to view records of Crotch's bumble bee in San Francisco and San Mateo counties that might not be captured in the CNDDB. The only record (verified or unverified) of Crotch's bumble bee was documented on April 8, 2025, within the Jasper Ridge Biological Preserve in San Mateo County where the bumble bee was found on *Castilleja exserta.* ESA also queried the Bumble Bee Atlas, another tool administered by the Xerces Society, for records of Crotch's bumble bee within San Francisco and San Mateo counties which produced additional records from 2023 and 2024, located in Palo Alto within the Baylands Nature Preserve, east of Highway 101. In summary, the range of Crotch's bumble bee on the San Francisco Peninsula has remained consistent since the 1909 observation near the city of Palo Alto. There are no recent records (2002-present) for this species overlapping or nearby the project area, and no current or historic sightings within 20 miles.

Crotch's bumble bee are known to occupy a limited climatic range that is hotter and drier than areas affected by persistent maritime fog such as the San Francisco Peninsula, southwest Marin County, and coastal Mendocino and Humboldt counties, which could explain the low occurrence (no records) for this species in areas with coastal climates.

Comment A-CDFW.4 states that the current range of Crotch's bumble bee includes the project site and that therefore the proposed project activities could impact this bumble bee, if present onsite. This species' range was closely considered during the Draft EIR analysis, and the statement that the site is within its range is not supported by empirical data or conclusions from the 2015 IUCN Assessment, CNDDB, Bumble Bee Watch, or Bumble Bee Atlas. CDFW's informational website for the species inadvertently includes San Francisco County and coastal San Mateo County east of Interstate 280 within their current range map. Their map cites occurrence records through 2024 from the Bumble Bees of North America Occurrence Record Database, the CNDDB, and other datasets submitted directly to CDFW, and notes that range boundary delineations are based primarily on U.S. Department of Agriculture Forest Service Ecological Subregions of the United States, watersheds, and 10 kilometer occurrence [record] buffers which they acknowledge may result in the range polygons including areas not currently occupied by a species – which appears to be the case for the project area. In the absence of verified records for Crotch's bumble bee on the San Francisco Peninsula north of the City of Palo Alto, the inclusion of San Francisco and the project area within the species range map is likely the result of buffering errors and aligning species range boundaries with mapped ecoregions.

[6] Hatfield, R., S. Colla, S. Jepsen, L. Richardson, R. Thorp, and S. Foltz Jordan, 2015. IUCN Assessments for North American *Bombus* spp. for the North American IUCN Bumble Bee Specialist Group. The Xerces Society for Invertebrate Conservation, www.xerces.org, Portland, OR. Assessments completed December 2014. Document updated March 2, 2015.

The Biological Resources Technical Memorandum prepared for the project (Draft EIR Appendix H) included western bumble bee and obscure bumble bee in Table B-1: Comprehensive special status species list with occurrences documented in CNDDB within 3 miles of the project area ("Potential to Occur" Table). Both species were determined to have a low potential to occur based on evaluation of understood species' range, recent occurrences, and suitable habitat within the project study area. Records for western bumble bee and obscure bumble bee reviewed in a wider CNDDB search, the Bumble Bee Watch and Bumble Bee Atlas tools for San Francisco and San Mateo counties in response to these comments revealed recent records (less than 20 years old) for obscure bumble bee only. The conclusion about likelihood of presence of western bumble bee as presented in the Draft EIR remains accurate. Therefore, no avoidance or minimization measures are proposed to offset potential impacts of the proposed project on western bumble bee. Analysis findings related to obscure bumble bee are discussed below.

In response to the comments presented above and based on the additional analysis and conclusions presented in Attachment C, the Draft EIR has been revised to incorporate rationale supporting the conclusion that obscure bumble bee has moderate potential to occur and Crotch's bumble bee and western bumble bee are not expected in the project area. The following text has been added following the first paragraph on Draft EIR Appendix A (Initial Study) page 159:

> *Bees*
>
> Several bees were evaluated for their potential to occur within the project area, including Crotch's bumble bee (*Bombus crotchii;* candidate for listing as endangered under California Endangered Species Act [CESA]), western bumble bee (*B. occidentalis*; candidate for listing as endangered under CESA), and obscure bumble bee (*B. caliginosus*; no formal or informal protection status). Crotch's bumble bee inhabits a limited climatic range that is hotter and dryer than the coastal climate of the project area and there are no occurrence records for this species on the San Francisco Peninsula north of Palo Alto.[225a] The current understood range for western bumble bee is concentrated in mountainous areas north and east of Sacramento and west of the Nevada border, and north of Chico, with few observations in the Inner Coast Range.[225b] Considering the current understood range and collective occurrence data from several sources which track bees nationwide, Crotch's bumble bee and western bumble bee are not expected to occur in the project area.
>
> Obscure bumble bee is considered extant in San Francisco and San Mateo counties. This species is understood to occupy coastal shrubland and grassland areas from Santa Barbara County north to Washington state. Obscure bumble bee nests underground in abandoned rodent burrows, and above ground in tufts of grass, rock piles, cavities in dead trees, and in abandoned bird nests. Because obscure bumble bee is considered extant within counties overlapping the project area and there are multiple recent records for this species within San Francisco near the project area, including records of a verified sighting of obscure bumble bee on bee plant (*Scrophularia* sp.) in a native shrub restoration area located on the east shore of East Lake (Merced) from 2021,[225c] this species is

[225a] Environmental Science Associates (ESA), 2026. Memorandum: Evaluation of Special-Status Bees within the City of San Francisco's Pacific Gas and Electric Company Power Asset Acquisition Project Area. Prepared for the City and County of San Francisco. January 2026.
[225b] California Department of Fish and Wildlife. 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, June 6, 2023. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline.
[225c] Environmental Science Associates (ESA), 2026. Memorandum: Evaluation of Special-Status Bees within the City of San Francisco's Pacific Gas and Electric Company Power Asset Acquisition Project Area. Prepared for the City and County of San Francisco. January 2026.

considered to have a moderate[225d] potential to occur in portions of the project area that provide suitable foraging and nesting habitat.

Portions of the project area where obscure bumble bee would be expected to forage or nest include vegetated areas near Lake Merced, grasslands of San Bruno Mountain State and County Park, undeveloped grasslands between the park lands and Bayshore Boulevard, grasslands at Icehouse Hill east of Bayshore Boulevard, and within private residential properties. Obscure bumble bee is not expected to forage or nest within the project area where vegetation is heavily managed through mechanical or chemical methods, such as at golf courses.

The following footnotes have been added to Draft EIR Appendix A (Initial Study) page 159:

[225a] Environmental Science Associates (ESA), 2026. Memorandum: Evaluation of Special-Status Bees within the City of San Francisco's Pacific Gas and Electric Company Power Asset Acquisition Project Area. Prepared for the City and County of San Francisco. January 2026.
[225b] California Department of Fish and Wildlife. 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, June 6, 2023. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline.
[225c] Environmental Science Associates (ESA), 2026. Memorandum: Evaluation of Special-Status Bees within the City of San Francisco's Pacific Gas and Electric Company Power Asset Acquisition Project Area. Prepared for the City and County of San Francisco. January 2026.
[225d] Moderate Potential indicates species not observed during field investigations but have some (medium) probability for occurrence based on habitats present on site. Some documented occurrences of species occur in the general region.

Obscure bumble bee. Obscure bumble bee is considered extant in San Francisco and San Mateo counties. This species is understood to occupy coastal shrubland and grassland areas from Santa Barbara County north to Washington state. Obscure bumble bee nests underground in abandoned rodent burrows, and above ground in tufts of grass, rock piles, cavities in dead trees, and in abandoned bird nests. The "Potential to Occur" Table noted one recent occurrence within the Appendix H study area for obscure bumble bee; this record is from 2004 and located in the northern part of San Bruno Mountain State and County Park. The three other recent CNDDB records for obscure bumble bee in San Francisco and San Mateo counties are from 2009 and located in the Presidio. As discussed in Attachment C, new occurrence information from the Bumble Bee Watch tool includes records of a verified sighting of obscure bumble bee on bee plant (*Scrophularia* sp.) in a native shrub restoration area located on the east shore of East Lake (Merced) from 2021.

Because obscure bumble bee is considered extant within counties overlapping the project area and there are multiple recent records within San Francisco near the project area, this species is now considered to have a moderate[7] potential to occur in portions of the project area that provide suitable foraging and nesting habitat. Portions of the project area where obscure bumble bee would be expected to forage or nest include vegetated areas near Lake Merced, grasslands of San Bruno Mountain State and County Park, undeveloped grasslands between the park lands and Bayshore Boulevard, grasslands at Icehouse Hill east of Bayshore Boulevard, and within private residential properties. Obscure bumble bee is not expected to forage or nest within the project area where vegetation is heavily managed through mechanical or chemical methods, such as at golf courses.

[225d] Moderate Potential indicates species not observed during field investigations but have some (medium) probability for occurrence based on habitats present on site. Some documented occurrences of species occur in the general region.
[7] Moderate Potential indicates species not observed during field investigations but have some (medium) probability for occurrence based on habitats present on site. Some documented occurrences of species occur in the general region.

CEQA requires that a lead agency find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to substantially reduce the number or restrict the range of an endangered, rare, or threatened species.[8] The obscure bumble bee is not formally protected by the state or identified as a species of special concern by CDFW. Further, the obscure bumble bee was not discussed by CDFW in its comments on the Draft EIR. Based on the CEQA definition, a rare species is considered a species whose survival and reproduction in the wild is in immediate jeopardy or it is likely to be in danger of extinction within the foreseeable future throughout all or a significant portion of its range.[9] Given the species is considered vulnerable[10] and therefore potentially rare, and the species' moderate potential to occur within the project area based on local sightings, the following discussion considers whether the project or project variant could substantially reduce the number or restrict the range of obscure bumble bee.

As noted above, the range of obscure bumble bee extends from Santa Barbara County to Washington State in coastal shrubland and grassland. As discussed in Draft EIR Impact BI-1, vegetation- and ground-disturbing activities related to the local distribution system separation and system reinforcements would involve construction trenching, installation of new utility pole foundations, and tree trimming or other vegetation removal to access existing vaults and other electrical infrastructure. These activities may be necessary in the grassy median between the road and perimeter trail surrounding Lake Merced, in grassland and scrub habitat south of John Muir Drive and bordering the Olympic Club golf course, and in grassland habitat at Icehouse Hill. No ground disturbance or vegetation removal is proposed within the City of Daly City's easement within San Bruno Mountain State and County Park; project work in this location would be limited to vehicle, equipment, and pedestrian access to existing electrical infrastructure bordering the park.

Vegetation removal and ground disturbance activities associated with the local distribution system separation and system reinforcements could directly affect obscure bumble bee foraging habitat or nests located underground or in vegetation being trimmed or removed. Removal of obscure bumble bee forage alone is not expected to result in a significant impact on the species because the project would require so little vegetation removal to support system reinforcements and the local distribution system separation. Ground disturbance and vegetation removal in suitable nest locations could crush or damage active nests, risking mortality of occupants, including obscure bumble bee queens. However, the inadvertent mortality of individuals resulting from project implementation is not expected to substantially affect the viability of the species population or constrict the population's range because the project locations where suitable habitat is present are relatively small and are adjacent to relatively large expanses of protected land (i.e., Lake Merced Park, San Bruno Mountain State and County Park) where obscure bumble bees have been observed. Substantial suitable habitat for this species exists on nearby San Bruno Mountain, where it has been documented and is afforded long-term protection under the San Bruno Mountain Habitat Conservation Plan. Additionally, the project or project variant would not substantially increase development in coastal grassland or shrubland because new development is likely limited to utility poles. Therefore, it is likely that obscure bumble bees from the adjacent protected areas would reoccupy locations temporarily disturbed by project activities. As a result, while individual obscure bumble bees may be encountered during project activities, the project or project variant are not expected to substantially reduce the species' population, restrict its range, or affect its long-term viability. Therefore, the project or project variant would not result in a population-level impact under CEQA.

[8] CEQA Guidelines Section 15065(a)(1).
[9] CEQA Guidelines Section 15380(b)-(d).
[10] Refer to Attachment C.

The following text has been added prior to the discussion of Operation Impacts on Draft EIR Appendix A (Initial Study) page 167:

Obscure Bumble Bee

The obscure bumble bee is not formally protected by the state or identified as a species of special concern by CDFW. Obscure bumble bee is considered vulnerable[230a] and therefore potentially rare, defined under CEQA as a species whose survival and reproduction in the wild is in immediate jeopardy or it is likely to be in danger of extinction within the foreseeable future throughout all or a significant portion of its range.[230b] Because of the species' potential rarity, and moderate potential to occur within the project area based on local sightings, the following discussion considers whether the project or project variant could substantially reduce the number or restrict the range of obscure bumble bee.

Vegetation- and ground-disturbing activities related to the local distribution system separation and system reinforcements would involve construction trenching, installation of new utility pole foundations, and tree trimming or other vegetation removal to access existing vaults and other electrical infrastructure. These activities may be necessary in the grassy median between the road and perimeter trail surrounding Lake Merced, in grassland and scrub habitat south of John Muir Drive and bordering the Olympic Club golf course, and in grassland habitat at Icehouse Hill. No ground disturbance or vegetation removal is proposed within the City of Daly City's easement within San Bruno Mountain State and County Park; project work in this location would be limited to vehicle, equipment, and pedestrian access to existing electrical infrastructure bordering the park.

Vegetation removal and ground disturbance activities associated with the local distribution system separation and system reinforcements could directly affect obscure bumble bee foraging habitat or nests located underground or in vegetation being trimmed or removed. Removal of obscure bumble bee forage alone is not expected to result in a significant impact on the species because the project would require so little vegetation removal to support system reinforcements and the local distribution system separation. Ground disturbance and vegetation removal in suitable nest locations could crush or damage active nests, risking mortality of occupants, including obscure bumble bee queens. However, the inadvertent mortality of individuals resulting from project implementation is not expected to substantially affect the viability of the species population or constrict the population's range because the project locations where suitable habitat is present are relatively small and are adjacent to relatively large expanses of protected land (i.e., Lake Merced Park, San Bruno Mountain State and County Park) where obscure bumble bees have been observed. Substantial suitable habitat for this species exists on nearby San Bruno Mountain, where it has been documented and is afforded long-term protection under the San Bruno Mountain Habitat Conservation Plan. Additionally, the project or project variant would not substantially increase development in coastal grassland or shrubland because new development is likely limited to utility poles. Therefore, it is likely that obscure bumble bees from the adjacent protected areas would reoccupy locations temporarily disturbed by project activities. As a result, while individual obscure bumble bees may be encountered during project activities, the project or project variant are not expected to substantially reduce the species' population, restrict its range, or affect its long-term viability. Therefore, the

[230a] Refer to Attachment C.
[230b] CEQA Guidelines Section 15380(b)-(d).

project or project variant would not result in a population-level impact under CEQA. The impact of the project or project variant on obscure bumble bee would be ***less than significant***.

The following footnotes have been added to Draft EIR Appendix A (Initial Study) pages 167-168:

[230a] Refer to Attachment C.
[230b] CEQA Guidelines Section 15380(b)-(d).

Comment BI-2: Other Special-Status Species

This response addresses the following comments, which are quoted below:

A-CDFW.3, A-CDFW.5, A-CDFW.6, I-Freedman.2

"COMMENT 3: Special-Status Plants

Issue: Appendix H of the draft EIR identifies the potential for special-status plant species to occur within the Project area, including San Francisco lessingia (*Lessingia germanorum*), and states that "there is one occurrence of this species within Harding Park near Lake Merced approximately 0.5 miles from the Project area and one occurrence on the west side of San Bruno Mountain approximately 0.2 miles from the Project area," and that the occurrence at San Bruno Mountain is likely extant. The draft EIR, however, does not provide avoidance, minimization or mitigation measures to address potential temporary or permanent impacts to special-status plant species due to Project activities.

Specific impact, why impact would occur, and evidence impact would be significant: San Francisco lessingia is a plant species listed as endangered under the California Endangered Species Act (CESA), and has a California Rare Plant Rank (CRPR) of 1B.1. Plants with a CRPR of 1B are rare throughout their range, endemic to California, and are seriously or fairly threatened. Most plants that are ranked 1B have declined significantly over the last century. The additional threat rank of 0.1 indicates that over 80 percent of their occurrences are threatened.

The conservation of special-status native plants is essential to maintaining biodiversity in the California Bay Area. Native plants are better adapted to the local environment, allowing them to grow more efficiently, require less maintenance, and provide habitat resources for other native species (Berthon et al. 2020). Industrial land development is a leading threat to endangered plant communities, causing resource depletion through direct habitat replacement and increased input of pollutants into the environment (Czech et al. 2000). Limited distribution and small population sizes of special-status plants can increase the difficulty in species detection, and robust survey efforts are imperative to determine whether plant species protected under the CESA and NPPA occur within the Project area. Robust and timely survey efforts are a necessary first step in avoiding take of listed species.

If any special-status plants, including San Francisco lessingia, occur within or adjacent to Project sites and would be directly or indirectly impacted by Project development, the Project may result in a substantial reduction in the number or restriction in the range of endangered, rare, or threatened species, a mandatory finding of significance pursuant to CEQA Guidelines section 15065, subdivision (a).

Recommendation 3: CDFW recommends the EIR incorporate the following mitigation measure to avoid, minimize, and mitigate potential impacts on special-status plants.

> **Recommended Special-Status Plant Mitigation Measure:** A qualified biologist shall conduct botanical surveys prior to construction at all Project sites where suitable habitat occurs (e.g., not composed of hardscape or ornamental vegetation), Surveys shall be conducted during the appropriate blooming period for all special-status plants that have the potential to occur at or adjacent to each site where plants could be directly and/or indirectly impacted. Surveys shall be conducted following CDFW's Protocol for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities (https://wildlife.ca.gov/Conservation/SurveyProtocols#377281280-plants) and include checking reference sites for target special-status plant species. Per this protocol, more than one year of surveys may be necessary if, for example, lack of rain inhibits growth of annual plants. If any special-status plant species are observed, the Project shall fully avoid direct and indirect impacts to all individuals and provide an avoidance plan to CDFW and obtain CDFW written approval of the plan. If full avoidance is not possible, Project activities may not commence until the Project has consulted with CDFW and obtained CDFW's written approval prior to the start of construction, which may include salvaging topsoil, transplanting and monitoring individuals, compensatory habitat mitigation, or other measures, based on the life history of the species and other relevant factors." (Erin Chappell, Regional Manager, Bay Delta Region, California Department of Fish and Wildlife [A-CDFW.3])

_____

"COMMENT 5: California Ridgway's Rail and California Black Rail

Issue: The draft EIR depicts a portion of the Project area as occurring adjacent to northern coastal salt marsh habitat that supports populations of California Ridgway's rail (CRRA) and California black rail (BLRA). The drafty EIR identifies CRRA as occurring in the vicinity of the Project area and states that although the "area is unlikely to support breeding habitat for this species, [it] may provide temporary foraging habitat." The draft EIR, however, does not include analysis of the potential for Project development to impact CRRA or BLRA, nor does it include measures to avoid, minimize or mitigate potentially significant impacts to CRRA or BLRA.

Specific impact, why impact would occur, and evidence impact would be significant: CRRA is a state and federally endangered and state fully protected species, and BLRA is a state threatened and state fully protected species. These species are at great conservation risk and are experiencing serious population declines or range retractions. Project activities could include impacts such as generation of noise, groundwork, and operation and movement of equipment and workers that would have the potential to disturb CRRA or BLRA foraging, roosting, and nesting. Direct mortality of CRRA or BLRA could occur through nest abandonment, loss of potential foraging habitat resulting in reduced reproductive success (loss or reduced health or vigor of eggs or young), inadvertent entrapment or entrainment, or impingement.

If CRRA or BLRA are injured or killed, or their habitat is removed as a result of Project development, the Project may result in a substantial reduction in the number or restriction in the range of a threatened species or endangered species, a Mandatory Finding of Significance pursuant to CEQA Guidelines section 15065, subdivision (a)(1).

Recommendation 5: CDFW recommends the EIR provide an assessment of the potential for the Project to impact CRRA and BLRA, and incorporate the following mitigation measure to avoid, minimize, and mitigate potential impacts on these species.

> **Recommended CRRA and BLRA Mitigation Measure:** A CDFW and USFWS approved biologist shall conduct protocol-level surveys of CRRA and BLRA in all suitable habitats adjacent to the Project using the 2017 California Clapper Rail Survey Protocol to determine where CRRA or BLRA are present in each year of construction (Wood et al. 2017). CDFW staff are available to collaborate to incorporate calls of BLRA into the protocol to ensure that both species are sufficiently surveyed.
>
> If CRRA or BLRA are found in suitable habitat near the Project site, appropriate buffers shall be incorporated to avoid and minimize impacts to CRRA and BLRA. A 700-foot no-work buffer shall be implemented between construction activities and any current-year breeding CRRA and BLRA detections if construction cannot be avoided during the rail breeding season (January 15-August 31 for CRRA, February 1- August 31 for BLRA). If establishing a 700-foot buffer around breeding rail detections is not feasible, noise reducing modifications to equipment as well as portable acoustic barriers/blankets placed near noise sources may be appropriate to reduce auditory and visual impacts to breeding rails. Note that these noise reduction features may be appropriate regardless of time of year to minimize impacts to foraging rails as well. A qualified avian biologist shall advise and support buffer establishment in consultation with CDFW.
>
> Fully protected species such as CRRA and BLRA may not be taken or possessed at any time. In the event a fully protected species is found within or adjacent to the Project site, an agency-approved qualified biologist shall implement an appropriate no-disturbance buffer and allow the individual to leave the Project site of its own volition. The qualified biologist shall also be on-site during all Project activities to ensure that fully protected species are not being disturbed by Project activities." (Erin Chappell, Regional Manager, Bay Delta Region, California Department of Fish and Wildlife [A-CDFW.5])

"COMMENT 6: California Red-Legged Frog

Issue: California Red-Legged Frog (*Rana draytonii*, CRLF) has the potential to occur within the Project area, but the draft EIR does not adequately discuss or evaluate to what extent direct and/or indirect impacts to CRLF individuals or their habitat may result due to Project activities. The draft EIR states that "there is potentially suitable habitat at Lake Merced and Visitacion Creek Marsh for CRLF." Currently the draft EIR does not include sufficient avoidance, minimization (and potentially mitigation) measures to offset potentially significant impacts to CRLF. Specifically, the draft EIR does not include location-specific habitat delineations to determine if buffers can be developed to avoid CRLF breeding and upland habitat. Overall, the draft EIR does not provide sufficient information to facilitate a meaningful review of potentially significant impacts to CRLF due to Project construction.

Specific impact, why impact would occur, and evidence impact would be significant: CRLF is a species listed as threatened under the Federal Endangered Species Act (ESA) and is a California Species of Special Concern. CRLF requires a variety of habitats, including aquatic breeding habitat and upland dispersal habitat. Construction and/or maintenance activities in suitable habitat has the potential to result in direct

and indirect take of CRLF. Project development could injure or kill CRLF if they occur on-site, potentially resulting in a substantial reduction of their populations. Indirect take may occur due to upland habitat loss and degraded site suitability for CRLF to complete all stages of their life cycle.

CRLF breeding sites occur in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons. (USFWS 2002). Upland dispersal habitat includes nearly any area within one to two miles of a breeding site that stays moist and cool through the summer, such as aquatic habitat in pools of slow-moving streams, perennial or ephemeral ponds, and sheltering habitat in and amongst rocks, small mammal burrows, logs, densely vegetated areas, and even man-made structures (i.e., culverts, livestock troughs, spring-boxes, and abandoned sheds) (USFWS 2017). CRLF populations throughout the State have experienced ongoing and drastic declines and many have been extirpated (Thomson et al. 2016). Habitat loss from growth of cities and suburbs, mining, overgrazing by cattle, invasion of nonnative plants, impoundments, water diversions, stream maintenance for flood control, degraded water quality, and introduced predators such as bullfrogs are the primary threats to the species (Thomson et al. 2016, USFWS 2017).

Delineations of CRLF habitat components by a qualified expert are necessary to determine the size of suitable buffers to be implemented prior to construction in areas where CRLF may occur. Buffers should include migration corridors, breeding and non-breeding habitat, as well as adjacent land necessary to protect these areas. The design of protected areas and size of construction buffers are often developed under the assumption that only the most sedentary CRLF individuals can or need to be protected, without consideration for individuals that disperse across long distances (Fellers and Kleeman 2007). CRLF have been documented to disperse up to one mile. Far-dispersing individuals provide genetic diversity to distant breeding sites and thus aid the survival of small, disparate populations. Establishing appropriately sized construction buffers and protected areas that consider both short- and long-range CRLF dispersal is essential to protect CRLF individuals, populations, and habitat.

CRLF are federally listed as a threatened species and therefore are considered to be a threatened or endangered species pursuant to CEQA Guidelines section 15380. Therefore, CRLF are injured or killed, or their habitat is removed as a result of the Project, the Project may result in a substantial reduction in the number or restriction in the range of a threatened species or endangered species, which is considered a Mandatory Finding of Significance pursuant to CEQA Guidelines section 15065, subdivision (a)(1).

Recommendation 6: CDFW recommends the EIR include additional information to facilitate meaningful review and understanding of Project impacts on CRLF habitat and populations. Specifically, the EIR should describe the extent of temporary and permanent impacts that would occur to CRLF breeding and/or upland habitat within site-specific Project construction boundaries. The EIR should also incorporate the results of site-specific habitat delineations performed by a qualified professional.

> **Recommended CRLF Mitigation Measure:** The Project shall be designed to avoid impacts to CRLF individuals and habitat. Protocol-level surveys for CRLF individuals and habitat shall be performed by an agency-approved qualified biologist prior to construction in or adjacent to potentially suitable CRLF aquatic and/or upland habitat, including wetlands, riparian areas, grasslands near ponds/ wetlands, or other sensitive habitat, following survey protocols approved by USFWS and CDFW. An agency-approved qualified biologist, in consultation with USFWS and CDFW, shall determine appropriate, site-specific buffers to protect CRLF breeding and upland habitat prior to conducting

grading or other construction activities." (Erin Chappell, Regional Manager, Bay Delta Region, California Department of Fish and Wildlife [A-CDFW.6])

_____

"1.5 Table 1-2

The project would involve work within the Coastal Zone and could impact sensitive habitat for special status species. Appendix A, Plans and (does not have effects on the environment that I would care about - its construction downtown) Policies, and Section E.15, Biological Resources

* What impact of sensitive habitat and special status species? Appendix A did not prove information about the co[a]stal zone and sensitive habitat and special status species. Please present this information.

___

Endangered species at Martin station

San Bruno Elfin Butterfly *(callophrys mossii bayensis)*

Callipe Silverspot Butterfly (s*peyeria callippe callippe)*

Mission Blue Butterfly *(Icaricia icarioides missionensis)*

* The endangered species are protected. What are you going to do to protect these sensitive butterflies and their host plants?" (Tera Freedman [I-Freedman.2])

_____

RESPONSE BI-2

Special-Status Plants. Comment A-CDFW.3 expresses concern that the project could adversely affect special-status plants through direct or indirect actions that could substantially reduce the number of individuals or range for endangered, rare, or threatened plant species. This comment and other CDFW comments are predicated on uncertainty regarding the location of project activities within the system reinforcement areas shown in Draft EIR Figures 2-1 and 2-8. As discussed in greater detail in Chapter 8, Project Description Refinements, Draft EIR Figure 2-8 has been revised to clarify that system reinforcements would avoid San Bruno Mountain State and County Park and areas within or immediately adjacent to water bodies (such as the southern portion of Lake Merced [Impound Lake], San Francisco Bay, and Brisbane Lagoon).

Comment A-CDFW.3 references the discussion of San Francisco lessingia (*Lessingia germanorum*) within the Biological Resources Technical Memorandum (Draft EIR Appendix H), which identifies two occurrences for this species near the project area: one near Harding Park and one on the west side of San Bruno Mountain State and County Park. As summarized in the Biological Resources Technical Memorandum, all special-status plants evaluated for their potential to occur within the project area were concluded either to have "low

potential"[11] or are "not expected"[12] based on knowledge of current range and habitat requirements of the subject species, review of special-status plant occurrence data in the project area, the limited presence of native plant communities within the project area, results of the reconnaissance survey, and professional judgment.

The San Francisco lessingia CNDDB occurrence record in the vicinity of Harding Park golf course (# 11487) is from 1947, has an accuracy of 1 mile, and is characterized as "possibly extirpated," which means the record is not associated with a specific location and is likely no longer present.[13] The San Francisco lessingia CNDDB record on the west side of San Bruno Mountain State and County Park (#8774) is from 1999, is mapped to a specific area, and is characterized as "presumed extant," meaning the individual or population identified in 1999 is assumed present.[14] The San Francisco lessingia occurrence record on San Bruno Mountain does not overlap the Daly City easement that could be accessed during project construction.

The conclusions related to special-status plants presented in the Draft EIR, Appendix A, Initial Study, Section E.15, Biological Resources, and within the supporting Biological Resources Technical Memorandum (Draft EIR Appendix H), remain accurate. Because of the developed nature of the project area and associated lack of native plant communities and conditions that support special-status plants, it is unlikely that project activities, including vegetation removal, ground disturbance, or access to open space areas, could directly or indirectly affect special-status plants, as stated in the Draft EIR. Therefore, no avoidance or minimization measures are proposed for special-status plants.

California Ridgway's Rail and California Black Rail. Comment A-CDFW.5 expresses concern about potential project impacts on California Ridgway's rail (*Rallus longirostris obsoletus*) and California black rail (*Laterallus jamaicensis coturniculus*). Similar to Comment A-CDFW.3, this comment is predicated on uncertainty regarding the location of project activities within the system reinforcement areas shown in Draft EIR Figures 2-1 and 2-8. Draft EIR Figures 2-1 and 2-8 have been revised to clarify that system reinforcements would avoid work within or immediately adjacent to water bodies, which was stated within Draft EIR text.

California Ridgway's rail occupies salt marsh habitat bordering San Francisco Bay and the CNDDB documents three records of this species along the western shoreline between Candlestick Point State Recreation Area and San Francisco International Airport. The occurrence record closest to the project area is from 2011, within a discrete area of salt marsh vegetation east of Harney Way and the Sunnydale Pump Station, located south of the 90-degree road bend where Harney Way aligns with the U.S. 101 north and south lanes (#52691), and is presumed to be extant.[15] As the comment notes, the Draft EIR and Biological Resources Technical

[11] Species characterized as having a "low potential" to occur indicates species was not observed during field investigations but have some (low) probability for occurrence based on habitats present on site.
[12] "Not expected" denotes situations where suitable habitat or key habitat elements are either absent, or may be present but of poor quality or isolated from the nearest extant occurrences. Incompatible habitat suitability refers to elevation, geology, soil chemistry and type, vegetation communities, microhabitats, and degraded/significantly altered habitats. These factors create unsuitable ecological conditions for the consideration of even a low occurrence potential within the study area.
[13] California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) Rarefind version 5 query of the San Francisco North, San Francisco South, and San Mateo USGS 7.5-minute topographic quadrangle, *Lesessingia germanosum.* Commercial Version, August 7, 2025.
[14] California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) Rarefind version 5 query of the San Francisco North, San Francisco South, and San Mateo USGS 7.5-minute topographic quadrangle, *Lesessingia germanosum.* Commercial Version, August 7, 2025.
[15] California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) Rarefind version 5 query of the San Francisco North and San Francisco South USGS 7.5-minute topographic quadrangles, *Rallus obsoletus obsoletus* and *Laterallus jamaicensis coturniculus.* Commercial Version, August 7, 2025.

Memorandum identify this area of salt marsh as providing potential foraging habitat for California Ridgway's rail but do not characterize it as providing suitable habitat for nesting because of its relatively small size and isolation from other established salt marsh habitat with complex tidal channel development and expansive high, middle, and low marsh vegetation zones that together support inconspicuous movement and refugia, typically present in known breeding locations for this species in the San Francisco Bay Estuary.

The Draft EIR is clear that no work is proposed within the open waters of San Francisco Bay, avoiding direct impacts on potential habitat for California Ridgway's rail. The revised EIR Figure 2-8, System Reinforcements, depicts the boundaries of proposed work within the northern extent of Harney Way, north of the 90-degree road bend and along a portion of Harney Way where the shoreline is armored with rock, approximately 300 feet from the northernmost extent of salt marsh vegetation. It is very unlikely that California Ridgway's rail would be present along the rocky shoreline closest to where system reinforcement work would occur, because of the lack of suitable habitat.

While California Ridgway's rail could forage in the salt marsh vegetation east of Harney Way when system reinforcements are being implemented, it is unlikely that noise from construction activities near the shoreline would exceed the ambient noise levels such that disturbance of California Ridgway's rail could occur, for the following reasons. Roadway noise modeling conducted by the City for the 2022 Housing Element EIR estimated that US 101 in the vicinity of Harney Way results in noise levels of approximately 75 to 80 Ldn in areas within 400 to 500 feet of the roadway.[16] The distance between the salt marsh habitat and US 101 ranges from approximately 130 to 450 feet. Therefore, it is likely that ambient noise levels at the salt marsh habitat range from 75 to 80 Ldn, corresponding to maximum daytime hourly noise levels of approximately 77 to 82 dBA.[17] The project's loudest linear construction work (trench excavation) would proceed at a rate of 40 feet per day. This work would generate noise levels of a maximum of 70 dBA for work nearest the salt marsh habitat (i.e., within 300 feet of the habitat) and would be within the recommended 700-foot buffer distance of the nearest shoreline salt marsh habitat for approximately 10 days.[18] Because the project's construction noise would not increase ambient noise levels at the salt marsh habitat, any foraging California Ridgway's rails would not be disturbed by construction activities. The potential indirect effects of the project or project variant on Ridgway's rail remain less than significant, and no mitigation measures are proposed for this species.

California black rail occupies dense vegetation in tidal salt marshes and less often freshwater marshes. CNDDB documents three historic records (greater than 20 years old) for this species in San Francisco; the only one near the project area is overlapping Lake Merced from 1937 and is presumed extant (#11916).[19] The California bulrush (*Schoenoplectus californicus*) marsh vegetation along the shoreline of Lake Merced is appropriate habitat for the California black rail, but because of the lack of recent documented occurrences there is a low potential for the species to be present.

---

[16] Ldn = day-night noise level, characterizing the level of noise over a 24-hour period. Modeled Traffic Noise Levels Under 2020 Conditions from the San Francisco Housing Element EIR represent existing noise level data for the roadway segment. (San Francisco Planning Department, San Francisco Housing Element 2022 Update Environmental Impact Report, 2023, Figure 4.5-2.)

[17] Caltrans recognizes that, in general, 24-hour Ldn values are usually within 2 dBA of daytime peak hour conditions. Thus, if the estimated Ldn is 70 dBA, hourly noise levels could be up to 72 dBA during the daytime. (Caltrans, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013, page 2-56.)

[18] As discussed in Draft EIR Impact NO-2, p. 3.2-42, trenching could generate a noise level of 96 dBA at 15 feet. At a distance of 300 feet, the noise level would be 70 dBA.

[19] California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) Rarefind version 5 query of the San Francisco North and San Francisco South USGS 7.5-minute topographic quadrangles, *Rallus obsoletus obsoletus* and *Laterallus jamaicensis coturniculus*, Commercial Version, August 7, 2025.

Draft EIR Figure 2-8 has been revised to clarify that system reinforcements would avoid work within or immediately adjacent to water bodies, including the southern portion of Lake Merced (Impound Lake; refer to revised Figure 2-8 in Chapter 8, Project Description Refinements). Impound Lake is the smallest lake in the Lake Merced system, providing the least amount of California bulrush habitat. With this clarification of system reinforcement work limits, direct impacts of the project or project variant on potential habitat within Lake Merced for California black rail would be avoided. The system reinforcements around Lake Merced would occur in uplands, within or beyond the pedestrian trail that encircles the lake. As discussed in Impact BI-1, system reinforcements and local distribution system separation would involve some vegetation- and ground-disturbing activities limited to construction trenching, installation of new utility pole foundations, and tree trimming or other vegetation removal to access existing vaults and other electrical infrastructure, which could cause short-term and temporary exceedance of the local ambient noise environment near Impound Lake. Because this species has not been documented at Lake Merced since 1937, it is unlikely that California black rail is present, and less likely that it would be present in Impound Lake closest to the proposed system reinforcement work due to the limited extent of suitable habitat in comparison with the greater lake system. While unlikely, even if California black rail are present in Impound Lake marsh habitat during system reinforcements and local distribution system separation activities, this temporary disturbance in adjacent uplands would not result in the substantial reduction in number or restriction in the range of this species. Therefore, the potential indirect effects of the project or project variant on California black rail from a temporary exceedance of the ambient noise environment remain less than significant and no mitigation measures are proposed for this species.

California Red-Legged Frog. Comment A-CDFW.6 raises concern about adverse effects on California red-legged frog resulting from project work around Lake Merced and Visitacion Creek Marsh, identified as potential suitable habitat for the species. The closest extant CNDDB occurrences to the project area are five records of California red-legged frog within Golden Gate Park, located over 2 miles north of the closest system reinforcements project site.[20] California red-legged frog was known to occur historically at Lake Merced, but the species is now considered extirpated from the lake based on a lack of recent sightings, protocol-level survey results since 2000, and the presence of predators and competitors, such as American bullfrog (*Lithobates catesbeianus*) and red-eared slider (*Trachemys scripta elegans*).[21,22] This species is considered extirpated from Lake Merced; therefore, it is not expected onsite. As stated in the Biological Resources Technical Memorandum (Draft EIR Appendix H), Visitacion Creek Marsh may provide suitable aquatic habitat for this species, located nearby upland dispersal habitat on San Bruno Mountain; however, absent any occurrence records for this species closer than those within Golden Gate Park, located more than 5 miles away through dense urban development, California red-legged frog is unlikely to be present.

As discussed above, Draft EIR Figure 2-8 has been revised to clarify that system reinforcements would mostly avoid work within or immediately adjacent to water bodies, including aquatic habitat at Lake Merced (refer to Figure 2-8 in Chapter 8, Project Description Refinements). The upland area where work would occur within the grassy median between the pedestrian trail surrounding the lake and existing roadways does not provide suitable upland dispersal or refugia habitat for California red-legged frog, and therefore this species is not expected here. However, the geographic areas where system reinforcements and local distribution system

[20] California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) Rarefind version 5 query of the San Francisco North, San Francisco South, and San Mateo USGS 7.5-minute topographic quadrangles, *Rana draytonii*, Commercial Version, September 1, 2025.
[21] Jones and Stokes, Probable Absence of California Red-Legged Frog from Lake Merced, Oakland, CA, February 2007.
[22] San Francisco Planning Department (SFPD), *Significant Natural Resource Areas Management Plan Draft Environmental Impact Report*, Planning Department Case No. 2005.1912E, State Clearinghouse No. 2009042102, August 2011.

separation activities could occur both overlap Visitacion Creek Marsh. As stated in the Draft EIR, Appendix A, Section E.15, Biological Resources, page 170, because the exact locations of the local distribution system separation and system reinforcement activities are not yet known, this analysis conservatively assumes that project activities could occur within or adjacent to Visitacion Creek Marsh. The analysis explains that direct wetland impacts are not anticipated under the project or project variant and wetlands and waters would be avoided if possible. Project actions may require trenching to access existing vaults or install new wooden poles that could directly affect wetland features; however, if impacts occur they are anticipated to be very small (e.g., approximately on the order of less than 0.01 acre in total) and temporary in nature. Because there is a low likelihood that California red-legged frog are present at Visitacion Creek Marsh, and the potential direct impacts of the project or project variant on aquatic habitat at this location would be minimal, substantial adverse effects from the project or project variant on California red-legged frog are not expected. Therefore, no mitigation measures are proposed for this species.

Coastal Zone and Special-Status Butterflies. Comment I-Freedman.2 expresses concerns about potential project impacts on sensitive habitat for special-status species and the project's location in the coastal zone. The Draft EIR evaluates potential project impacts on sensitive habitat for special-status species and coastal resources. Draft EIR Appendix A, Initial Study Section E.15, Biological Resources, characterizes biological resources in the project area, including vegetation communities and habitat types, sensitive natural communities, wetlands and other waters, wildlife movement corridors, special-status and otherwise protected species with potential to occur, designated critical habitat for species listed as threatened or endangered under the federal Endangered Species Act (FESA), and potential environmentally sensitive habitat areas (ESHA; a resource designation unique to the coastal zone). Section E.15 evaluates the potential effects of the project or project variant on these resources, including analysis of impacts on the FESA-listed endangered butterflies identified by the commenter: San Bruno elfin butterfly, callippe silverspot butterfly, and mission blue butterfly. Following analysis of anticipated project effects on all special-status butterflies that may occur in the project area, Section E.15 identifies mitigation to avoid or minimize potential project effects associated with local distribution system separation and system reinforcements that would occur within suitable grassland habitat for these species, restricted to the Daly City easement adjacent to San Bruno Mountain State and County Park, undeveloped grasslands east of the park, and grasslands associated with Icehouse Hill (refer to **Mitigation Measure M-BI-1c: Special-Status Butterfly Protection Measures**). In summary, Mitigation Measure M-BI-1c requires a preconstruction habitat delineation survey during the blooming period for host plants, avoidance of host plant populations identified during preconstruction surveys, habitat monitoring during construction within 100 feet of these host plant populations, and a habitat occupancy survey if construction activities require ground disturbance within 20 feet of host plant populations. The mitigation measure also requires compensatory mitigation if occupied (or presumed occupied) host plant populations cannot be avoided. Therefore, Draft EIR Appendix A, Initial Study, Section E.15, Biological Resources, provides sufficient characterization and analysis of resources identified by the commenter to appropriately evaluate project impacts.

Comment BI-3: Sensitive Natural Communities and Nesting Birds

This response addresses the following comments, which are quoted below:

A-CDFW.1, A-Brisbane.3, O-PGE-2.78

"COMMENT 1: Riparian Delineation and Setbacks

Issue: The draft EIR describes existing conditions within the Project area and states that "although riparian habitat is present around Impound Lake, it was not identified within the limits of the project areas," concluding that no impacts on riparian communities would occur with implementation of the project. However, on page 155 of the Initial Study (DEIR Appendix A), under the "Wetlands and Other Waters" section in the review of potential impacts to biological resources, the draft EIR states that "an aquatic resources delineation to identify the boundaries of aquatic resources under the jurisdiction of [the] federal and state regulatory agencies was not conducted for the project or project variant." Further, cursory review of the Project area reveals the presence of creeks adjacent to Lake Merced and within Visitacion Valley near Brisbane Lagoon.

Per CEQA Guidelines section 15125 (a), EIRs must include descriptions of the physical environmental conditions in the vicinity of the Project, and this environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant, the purpose of which is to give the public and decision makers the most accurate and understandable picture practically possible of the Project's likely near-term and long-term impacts. The draft EIR does not provide sufficient information on the location and extent of aquatic resources and their associated riparian areas within the Project area and inhibits meaningful review of potential significant impacts of development within the Project area.

Specific impact, why impact would occur, and evidence impact would be significant: Riparian vegetation, and associated floodplains, provide many essential benefits to stream and aquatic species habitat (Moyle 2002, CDFW 2007). Development within or adjacent to riparian zones can result in fragmentation of riparian habitat and decreases in native species abundance and biodiversity (Davies et al. 2001, CDFW 2007). Riparian buffers help keep pollutants from entering adjacent waters, benefiting species who rely on those waters for habitat and drinking water. Narrow riparian buffers are considerably less effective in minimizing the effects of adjacent development than wider buffers (Castelle et al. 1992, Brosofske et al. 1997, Dong et al. 1998, Kiffney et al. 2003, Moore et al. 2005).

Riparian habitats also contribute to bank stability and provide flood protection. Development can modify natural streamflow patterns by increasing the magnitude and frequency of high flow events and storm flows (Hollis 1975, Konrad and Booth 2005). Riparian habitat and adjacent wetlands and floodplains are critical to lessening these impacts because they store and meter floodwaters, recharge groundwater aquifers, trap sediment, filter pollution, help minimize erosion, lessen peak flow velocities, and protect against storm surges. In doing so, they protect adjacent upland, down-stream, and coastal properties from loss and damage during flooding and help maintain surface and groundwater during summer months.

Recommendation 1: CDFW recommends the draft EIR include sufficient information to facilitate meaningful review of potentially significant impacts of Project development within any streams and riparian habitat. Specifically, CDFW recommends conducting aquatic resources delineations and habitat assessments to determine the locations, extent, and vegetation composition of riparian areas in the Project area and include this information in detailed map depictions in the draft EIR. The following site-specific mitigation measure is recommended for inclusion in the draft EIR to protect riparian areas:

> **Recommended Riparian Setback Mitigation Measure:** Prior to Project development in the vicinity of streams, wetlands, or other aquatic areas, an agency-approved qualified biologist shall conduct habitat surveys to identify riparian boundaries and determine the size of site-specific buffers

necessary to protect riparian areas. Consideration for appropriate riparian buffer widths shall depend on site-specific characteristics such as the area and type of habitat to be buffered, the presence of habitat for sensitive species and their potential habitat use, site topography, slope, slope stability, and soils present at a particular site." (Erin Chappell, Regional Manager, Bay Delta Region, California Department of Fish and Wildlife [A-CDFW.1])

"Impact Analysis and Mitigation Measures

a. Mitigation Measure M-BI-3a: Restoration of Freshwater Emergent Marsh Wetlands. Mitigation measure to prepare a Wetland Restoration and Mitigation Monitoring Plan is noted. This work should be coordinated with implementation of the Baylands Specific Plan, which is described in the DEIR for the Baylands Specific Plan available here on the City's website: https://www.brisbaneca.org/baylands/page/2025-draft-eir." (John Swiecki, AICP, Community Development Director, City of Brisbane [A-Brisbane.3])

"The nesting bird impacts and mitigation appear to overlook construction noise impacts (see Mitigation M-BI-4). This oversight needs to be addressed to ensure no significant impacts." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.78])

RESPONSE BI-3

Sensitive Natural Communities. Comment A-CDFW.1 questions whether the Draft EIR adequately identifies the presence and extent of aquatic resources and riparian habitat and recommends preconstruction habitat assessments and setbacks from such resources. The two-day reconnaissance survey of the project area that informed the Biological Resources Technical Memorandum (Draft EIR Appendix H) and Draft EIR Appendix A, Initial Study, Section E.15, Biological Resources, was performed by professional biologists experienced in identifying and characterizing aquatic resources, vegetation communities, and wildlife habitats, sufficient to accurately describe riparian areas of the project area. As discussed in Response PD-2, the Draft EIR evaluates all project components commensurate with the level of detail available, consistent with requirements of CEQA. As discussed in Response BI-2, Draft EIR Figure 2-8 has been revised to clarify that system reinforcements would avoid work within or immediately adjacent to water bodies, including aquatic habitat and associated wetland and riparian vegetation at Lake Merced and aquatic habitat at Brisbane Lagoon (refer to revised Figure 2-8 in Chapter 8, Project Description Refinements). Project activities near Lake Merced (local distribution system separation and system reinforcements) would not disturb lands inside of the perimeter pedestrian trail, providing an adequate buffer to avoid direct and indirect impacts on riparian vegetation. Furthermore, as discussed in Draft EIR Appendix A, Initial Study, Section E.15, Biological Resources (page 170), and Section E.17, Hydrology and Water Quality (page 201), the project or project variant would be required to implement stormwater best management practices during construction, which would prevent indirect effects on adjacent riparian vegetation, wetlands, and open water.

Comment A-Brisbane.3 requests that any wetland restoration implemented consistent with **Mitigation Measure M-BI-3a (Restoration of Freshwater Emergent Marsh Wetlands)** be coordinated with implementation of the Baylands Specific Plan. This request would apply to the two unnamed freshwater

emergent marsh wetlands east of Industrial Way that could be affected by the project or project variant (and restored under M-BI-3a) and that are within the Baylands Specific Plan boundary. The analysis, conclusions, and mitigation identified in Draft EIR Appendix A, Initial Study, Section E.15, Biological Resources, for Impact BI-3 reflect the existing conditions at these locations (where no development of the specific plan area has occurred), which results in the greatest potential impact on these sensitive natural communities. Work in this location would be coordinated with the applicable landowner at the time of project construction. Should wetlands no longer be present at this location at the time of project implementation due to progress made in the Baylands Specific Plan development, then the project or project variant's impact on sensitive natural communities would be reduced and M-BI-3a would not apply.

Nesting Birds. Comment O-PGE-2.78 questions whether the Draft EIR impact analysis and mitigation measure (M-BI-4) address construction noise impacts on nesting birds. In Draft EIR Appendix A, Initial Study, Section E.15, Biological Resources, Impact BI-4 characterizes potential project impacts on nesting birds, including from construction noise that exceeds ambient conditions. The project or project variant would comply with all local, state, and federal requirements for protection of nesting and migratory birds and implement **Mitigation Measure M-BI-4 (Nesting Bird Protection Measures**). In summary, Mitigation Measure M-BI-4 requires preconstruction surveys for active nests during the bird nesting season and establishment of protective measures around active nests to avoid or minimize disturbance resulting from project activities until the young fledge. Protective measures would include no-work or work restriction (based on activity and potential effect, such as elevated noise levels from construction) buffers around active nests, monitoring of bird behavior at the nests by qualified biologists during construction that must occur within the established buffers, and stop work authority should the biologist(s) observe response behavior from the nest occupants to construction activities that indicates disturbance (e.g., flushing from the nest, other signs of distress). Therefore, Impact BI-4 and Mitigation Measure M-BI-4 adequately characterize the potential project impacts of construction noise on nesting birds and identify appropriate measures to avoid or minimize such impacts.

Comment BI-4: Other Biological Resources Comments

This response addresses the following comments, which are quoted below:

O-PGE-2.39, O-PGE-2.76, O-PGE-2.77, O-PGE-2.80

"The DEIR's failure to clearly identify all of the Project facilities and construction work makes the DEIR inadequate in its assessment of the Project's potential impacts to biological resources." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.39; O-PGE-2.77])

"The butterfly habitat study is impermissibly deferred to mitigation given that the DEIR fails to disclose the Project's actual impacts on the special-status butterflies, and lacks clear performance standards for measuring and ensuring the effectiveness of the measure." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.76])

"Given the extent of facilities proposed and the land area potentially affected by the Project, it is unclear how a two-day biological resources study could completely and accurately capture potential site-specific project impacts. This is a likely consequence of the "programmatic' approach in the DEIR." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.80])

_____

RESPONSE BI-4

As discussed in Response PD-2, the Draft EIR evaluates all project components commensurate with the level of detail available, consistent with requirements of CEQA. Draft EIR Appendix A, Initial Study, Section E.15, Biological Resources, evaluates the effects of all project components on biological resources. The two-day reconnaissance survey of the project area performed by technical experts familiar with species and their suitable habitats of the region is sufficient to accurately characterize the project setting and evaluate potential impacts on biological resources because most of the work proposed under the project or project variant would occur in developed areas (e.g., within roads and at the Martin Substation). Draft EIR Appendix A, Initial Study, Section E.15, supported by the Biological Resources Technical Memorandum (Draft EIR Appendix H), describes the grassland habitat of the project area and any observations of special-status butterfly species' host plants during the reconnaissance survey, then evaluates whether the location is suitable to host special-status butterflies based on these observations and considering prior observations of host plants within or near the project area.

Mitigation Measure M-BI-1c (Special-Status Butterfly Protection Measures) is presented on Draft EIR Appendix A pages 165-167 and includes compensatory mitigation with clear, measurable performance standards applicable to the project or project variant for potential impacts on special-status butterfly host plants that are foreseeable at this time. Mitigation Measure M-BI-1c identifies at least a 1:1 ratio for acreage of habitat impacted and acreage of habitat enhanced, establishes a 5-year performance period with twice-a-year assessments, establishes 20 percent mortality in a given year as the threshold for adaptive management actions, and conditions the end of the performance period on at least 75 percent of the planted material achieving good or better vigor ratings without the need for supplemental irrigation or maintenance.

In conclusion, Draft EIR Appendix A, Initial Study, Section E.15 provides sufficient characterization and analysis of resources identified by the commenters to appropriately evaluate project impacts, and Mitigation Measure M-BI-1c prescribes effective mitigation for potential project impacts on special-status butterflies, including the details pertinent to establishing adequate compensatory mitigation.

10.12 Geology and Soils

The comments and corresponding responses in this section cover topics in Draft EIR Appendix A (Initial Study) Section E.16, Geology and Soils.

- GE-1: Geology and Soils Impacts

Comment GE-1: Geology and Soils Impacts

This response addresses the following comment, which is quoted below:

O-PGE-2.81

"**Geology/Soils**

- The DEIR (IS) contains no site-specific evaluation of potential paleontological impacts. Rather, this analysis has been impermissibly deferred to mitigation given the lack of clear performance standards for measuring and ensuring the effectiveness of this mitigation.
- The geologic analysis fails to address potential impacts on foundations and structures from trenching up to 11 feet deep that may be excavated directly adjacent to older structures. The DEIR, thus, fails from an informational standpoint and lacks substantial evidence of no such potential impacts." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.81])

RESPONSE GE-1

CEQA establishes that an EIR is legally sufficient if it provides decision-makers with enough information to make a decision that intelligently takes account of environmental consequences of the project. As described below, the Draft EIR for this project (including Appendix A, Initial Study) passes this test, including with respect to paleontological resources. CEQA also is clear that the sufficiency of an EIR's analysis is properly reviewed in light of what is reasonably feasible. Draft EIR section 2.3, Location, describes the project area as consisting of all areas of San Francisco and San Mateo counties where the City would acquire PG&E's electric transmission and distribution assets. The places where project activities could result in physical environmental effects primarily are located in the southern portions of San Francisco and the northern parts of Brisbane and Daly City, along the San Francisco-San Mateo County border (see Figure 2-1). To identify locations where potential impacts on paleontological resources could occur, the Draft EIR considers the paleontological sensitivity of the project area based on mapped geologic units within the areas where ground disturbance would occur. The analysis concludes that construction of some components of the project or project variant would involve excavation in areas with moderate sensitivity for paleontological resources and, as a result, could damage or destroy paleontological resources if they are present (Impact GE-5, C-GE-2). Refer to Table 5-1, Summary of Project and Project Variant Significant Impacts by Project Component, for details.

In this way, the Draft EIR has not deferred analysis, it has conducted it. The Draft EIR's analysis of potential impacts on paleontological resources proceeds in the stepwise approach CEQA requires. It identifies the

study area (i.e., the project area), documents baseline conditions via project area-wide mapping to establish the point of comparison for measuring any project-caused change in conditions, and discloses what about the project or project variant could affect existing physical environmental conditions to cause an adverse impact (i.e., excavation in a paleontologically sensitive area, if resources are present). The analysis considers all geologic units that could be affected within the project areas shown in Draft EIR Figure 2-1 and Appendix A (Initial Study) Figure 4 and at depths up to 15 feet below ground surface. As discussed in Draft EIR Appendix A Impact GE-5 (page 194), destruction of paleontological resources could be a significant impact. Based on this conclusion, the Draft EIR describes Mitigation Measure M-GE-5, implementation of which would reduce or avoid destruction of paleontological resources by implementing a worker awareness training by a qualified professional; requiring work to halt within 25 feet of any fossil discovery until a qualified paleontologist in consultation with the planning department deems further work is appropriate; and implementing a paleontological mitigation program that includes fossil preparation and curation procedures, developed by a qualified paleontologist, should the qualified paleontologist determine the encountered paleontological resources are scientifically important. The mitigation measure relies on sufficient analysis and investigation, and its requirement of consistency with recommended standards of the Society of Vertebrate Paleontology (Society of Vertebrate Paleontology 2010), best practices in mitigation paleontology (Murphey et al. 2019), and applicable statutory requirements set forth in the Federal Antiquities Act of 1906, CEQA Guidelines section 15064.5, Public Resources Code section 5097.5 and the Paleontological Resources Preservation Act help to ensure that standards of performance are clear and would be effective to mitigate the impact to less than significant. For these reasons, no improper deferral of analysis for paleontological resource impacts is indicated.

Regarding the Draft EIR's geologic analysis, refer to Draft EIR Appendix A Impact GE-3, which discusses potential impacts related to soil instability associated with construction trenching. Excavation for project components would reach depths of approximately 15 feet (as stated in Chapter 2, Project Description), which is greater than the commenter's reference to 11 feet. The analysis concludes the impact would be less than significant because although some project components would involve excavation in unconsolidated or potentially unstable geologic units, compliance with Cal/OSHA regulations requiring appropriate sloping or shoring during trenching would prevent soil instability that could affect adjacent structures. Potential effects of construction activities on adjacent buildings and structures due to construction vibration are discussed in Draft EIR Section 3.2 Impact NO-4. This part of the analysis concludes the impact would be less than significant because with implementation of mitigation measures vibration levels would be reduced such that structural damage to nearby buildings would be avoided.

10.13 Hydrology and Water Quality

The comments and corresponding responses in this section cover topics in Draft EIR Appendix A (Initial Study) Section E.17, Hydrology and Water Quality.

- HY-1: Hydrology and Water Quality Impacts

Comment HY-1: Hydrology and Water Quality Impacts

This response addresses the following comment, which is quoted below:

A-Caltrans.1

_____

"**Hydrology**

Due to the extensive work proposed and the general description of the proposed work in and around State Routes 1, 82 and 101, the following comments are general.

- All proposed developments will need to adhere to the C3 requirements of the Municipal Regional Permit (MRP) to ensure post-project surface flows, due to rainfall, to/from State routes will match or be less than pre-project surface flows.
- All proposed developments will need to ensure there are no changes in existing drainage patterns to/from State routes or facilities.
- Any existing drainage easements, maintenance agreements or other access agreements with PG&E which will or could affect Caltrans or the City's ability to access and maintain drainage or other State-owned facilities will need to be reviewed by legal professionals and Right-of-Way (ROW) staff to ensure State facilities can be properly maintained.
- All proposed development plans will need to show how surface flows are intercepted, stored and conveyed to State facilities and demonstrate that all drainage flows to State facilities are adequately contained within City or State drainage systems. A drainage report for each proposed development is suggested. Any floodplain impacts must be documented and mitigated." (Yunsheng Luo, Branch Chief, Local Development Review, Office of Regional and Community Planning [A-Caltrans.1])

_____

RESPONSE HY-1

The project or project variant includes replacement of impervious areas in San Francisco, Daly City, Brisbane, and unincorporated San Mateo County. Regarding the general comment that the proposed developments will need to adhere to the C.3 requirements of the Municipal Regional Permit, while the requirements of provision C.3 of the San Francisco Bay Municipal Regional Stormwater Permit are not applicable to all project locations, the project or project variant would implement low impact development in redeveloped areas consistent with the requirements in San Francisco Public Works Code and San Francisco Environment Code, or pursuant to requirements specified by encroachment permits from the cities of Daly City and Brisbane and from Caltrans, as described below. Low impact development measures reduce runoff by minimizing

impervious cover and infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source.

Pursuant to San Francisco Public Works Code article 4.2, section 147, all development projects creating or replacing impervious surface of 5,000 square feet or more in combined or separate sewer areas must manage stormwater on-site using low impact design. Development projects in San Francisco must comply with the Stormwater Management Ordinance, including SFPUC Stormwater Design Guidelines, and implement Post Construction Stormwater Controls and prepare a Stormwater Control Plan. In addition, San Francisco Public Works Code article 4.2, section 147 requires all development projects creating or replacing impervious surface of between 2,500 and 5,000 square feet in separate sewer areas to implement Post Construction Stormwater Controls. Pursuant to San Francisco Environment Code chapter 7, section 704(e), a Municipal Construction Project located outside of the City and County of San Francisco may be subject to selected San Francisco Municipal Code required measures if the project is not mandated by the local agency having jurisdiction to meet equivalent requirements, including the requirements of Public Works Code section 147. The project or project variant would be required to comply with these sections of San Francisco Municipal Code, including in locations outside of San Francisco.

As listed in Draft EIR Section 2.8, the project or project variant would require encroachment permits from the cities of Daly City and Brisbane, both of which are permittees under the San Francisco Bay Municipal Regional Stormwater Permit. Encroachment permits from Daly City and Brisbane would likely require compliance with provision C.3 of the municipal regional stormwater permit, under which road reconstruction projects that involve the reconstruction of existing streets or roads and create or replace one acre or more of impervious surface, including roadway reconstruction projects associated with utility trenching greater than, on average, 8 feet wide, must include low impact development stormwater treatment controls as part of the reconstruction.

As listed in Draft EIR Section 2.8, Anticipated Permits and Approvals, encroachment permits from Caltrans, the City of Brisbane, and the City of Daly City are anticipated to be required for the project or project variant. The SFPUC would comply with requirements of the encroachment permits, including submission of development plans at that time and any provisions relating to restoration of existing drainage patterns in disturbed areas required pursuant to the San Francisco Bay Municipal Regional Stormwater Permit (under which the cities of Daly City and Brisbane are permittees). As discussed in the Draft EIR (Impact HY-3, Draft EIR Appendix A p. 205), the project or project variant would involve work primarily within previously developed areas characterized by existing impervious surfaces such as paved streets, sidewalks, and substation yards. Ground-disturbing activities, including trenching for duct bank and foundation installation and pole replacement, would be temporary in nature. All disturbed areas would be restored following construction. As discussed in Impact HY-3 on page 205 of Draft EIR Appendix A, construction activities may temporarily alter local drainage patterns; however, the SFPUC would implement site-specific best management practices (BMPs) consistent with the Construction General Permit and San Francisco Public Works Code article 4.2, section 146, to avoid causing temporary hydrology and water quality impacts. Draft EIR Impact HY-3 concludes that the impact would be less than significant because construction would occur in developed areas and would not substantially increase impervious surfaces or alter natural watercourses (including in a manner that would impede or redirecting flood flows), and BMPs would effectively manage stormwater and prevent erosion, sedimentation, and polluted runoff. The lead agency has received and reviewed the suggestion that legal review of easements and agreements may be required and has included them in the record where they may be considered by SFPUC if the project or project variant is approved; however, such comments are outside the scope of CEQA and this EIR.

10.14 Hazards and Hazardous Materials

The comments and corresponding responses in this section cover topics in Draft EIR Appendix A Initial Study Section E.18, Hazards and Hazardous Materials.

- HZ-1: Regulatory Compliance and Level of Detail
- HZ-2: Construction Soil and Groundwater Management
- HZ-3: Indoor Air Quality, Vapor Intrusion, and Worker Exposure

Comment HZ-1: Regulatory Compliance and Level of Detail

This response addresses the following comments, which are quoted below:[1]

O-PGE-2.37, O-PGE-2.73, O-PGE-2.87, O-PGE-2.89, O-PGE-2.90

"The DEIR's hazards and hazardous materials analysis is deficient, among other reasons, because:

- Project activity and facility locations need to be identified and clearly mapped to allow an adequate hazardous-materials-impacts analysis. Project description deficiencies likely have resulted in failure to fully identify impacts. For example, the exact locations of underground work at Martin Substation and the Martin Service Center (which would require impacting existing caps covering contaminated soil) and for the local distribution system separation components, system reinforcements components, operations control center, and operations and maintenance service yards have not been identified, and their proximity to known hazardous material sites and Maher Ordinance areas cannot be determined.

- The DEIR (IS) states, "The exact locations of underground work for the local distribution system separation and system reinforcements are not known but could occur within 500 feet of most of the sites identified in Table 1." The close proximity to identified sites further emphasizes the need for the project locations to be clearly identified; without adequately noting project disturbance areas, the currently noted criteria are insufficient for determining if and when supplemental analyses and plans will be provided (e.g., site history/Phase I environmental site assessment report, soil and groundwater sampling prior to roadway excavation and stockpiling, and site mitigation plan(s) for handling and disposal of contaminated materials)." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.37])

---

[1] Footnotes from quoted comments are indicated by *italicized* text and retain their original footnote number from the comment. Footnotes from response text are not italicized and are numbered in order of appearance in this section.

“Hazardous Materials

- Project activity and facility locations need to be identified and clearly mapped to allow an adequate hazardous-materials-impacts analysis. Project description deficiencies likely have resulted in failure to fully identify impacts. For example, the exact locations of underground work at Martin Substation and for the local distribution system separation components, system reinforcements components, operations control center, and operations and maintenance service yards have not been identified, and their proximity to known hazardous material sites and Maher Ordinance areas cannot be determined.
- The DEIR (IS) states, “The exact locations of underground work for the local distribution system separation and system reinforcements are not known but could occur within 500 feet of most of the sites identified in Table 1.” The close proximity to identified sites further emphasizes the need for the project locations to be clearly identified; without adequately noting project disturbance areas, the currently noted criteria are insufficient for determining if and when supplemental analyses and plans will be provided (e.g., site history/Phase I environmental site assessment report, soil and groundwater sampling prior to roadway excavation and stockpiling, and site mitigation plan(s) for handling and disposal of contaminated materials).
- The DEIR gives no consideration to unregulated, potentially contaminated sites such as historical gasoline service stations and dry cleaner facilities that may be adjacent to or within project excavation areas. Specifically, adjacent sites need to be evaluated in relation to the actual proposed project footprint, which is inadequately defined in the DEIR.” (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.73])

_____

“The level of detail in some parts of the Project Description is inadequate to provide a basis for fully assessing project impacts. First, exact locations of the local distribution system separation components, system reinforcements components, operations control center, and operations and maintenance service yards have not been identified. Second, the description of proposed construction on the PG&E Martin Service Center is incomplete, including the scope details that pertain to the extent of excavation or other soil disturbance, where on the site excavation would occur, and the construction methods that would be used (e.g., pile driving, trenching, cut-and-fill excavation, footing excavation). Without complete descriptions and mapped locations of these project components, their proximity to known hazardous material storage, waste, or cleanup sites, and to contaminated areas and soil depth intervals at the Martin Service Center, cannot be determined, and therefore exposure to potentially contaminated soil or groundwater in these construction areas cannot be adequately assessed.” (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.87])

_____

“2. Initial Study (Appendix A, Section E.18), Impact HZ-1:

- The locations of project areas where soil excavation would occur have not been fully identified. Specifically, the exact locations of underground work for the local distribution system separation and system reinforcements are not known. Section HZ-1 states that excavations for these components could occur within 500 feet of known hazardous material storage, waste, or cleanup sites identified in

Table 1 of the Hazardous Materials Study (Appendix J.1). In addition, the locations of the operations control center and operations and maintenance service yards are not known. Without specific mapped areas at which soil excavation for these project components would occur, adequate assessment of Impact HZ-1 is not feasible.

- Multiple mapped Maher Ordinance areas under Article 22A of the San Francisco Health Code (i.e., areas identified as associated with fill and industrial activities) also occur within 500 feet of various project areas. These Maher Ordinance areas are shown in Figure 4 of the Hazardous Materials Study (Appendix J.1). However, since the exact locations of the local distribution system separation and system reinforcements components have not been identified, the likelihood of exposure to potentially contaminated soil in Maher Ordinance areas during underground work for these project components cannot be fully assessed under Impact HZ-1." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.89])

- "The Impact HZ-1 discussion on page 217 states that under the Maher Ordinance requirements, a site history/Phase I environmental site assessment report, soil and groundwater sampling, and a site mitigation plan describing the handling and disposal of contaminated materials *may be* required. This section should more explicitly state whether and under what conditions such Maher Ordinance measures would be required, or how their necessity will be determined.
- The Impact HZ-1 discussion on page 217 states that a site-specific health and safety plan must be prepared to address potential workplace hazards, including encountering hazardous substances in soil or groundwater. The health and safety plan cannot be adequately site-specific unless the locations of the local distribution system separation components, system reinforcements components, operations control center, and operations and maintenance service yards are known.
- The Hazards and Hazardous Materials section of the Initial Study (Appendix A, Section E.18), and the Hazardous Materials Study (Appendix J.1) upon which it is based, lists a total of 155 known hazardous material storage, waste or cleanup sites located within 500 feet of the project components. These regulated sites were identified from the California Environmental Protection Agency (CalEPA) Cortese List Data Resources, California Department of Toxic Substances Control (DTSC) EnviroStor database, and State Water Resources Control Board (SWRCB) GeoTracker database, as appropriate. This information was used to assess exposure to potentially contaminated soil or groundwater as part of Impact HZ-1, as well as project locations on Cortese List sites as part of Impact HZ-3. However, to fully assess Impact HZ-1, there is also a potential for other unregulated sites such as historical gasoline service stations and dry cleaner facilities to be located adjacent to proposed project areas. If any such historical facilities are located adjacent to planned excavation areas, a review of their dates of operation and other available information should be conducted to assess the need for sampling prior to excavation to identify unknown contamination that could impact the health of construction workers and the public. If the results of that review provide justification that sampling is or is not warranted, describe the criteria for making the determination. Listings of such historical facilities are available from searches by standard commercial regulatory agency database/site history listings services.
- After sites' remediation and/or case closure, residual soil contamination may still be present on private parcels adjacent to project excavation areas along roadways; contamination associated with open sites also may have migrated from private parcels to roadways and have potential to impact

project construction. Aside from testing already excavated soils for hazardous waste profiling prior to offsite disposal, provisions for soil sampling in project areas prior to roadway excavation should be established to protect the health of construction workers and the public and justify the determination of a less than significant Impact HZ-1. A process for determining if and when such sampling is justified, based on the presence of known or suspected hazardous material storage, waste, or cleanup sites, should be explicitly stated." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.90])

_____

RESPONSE HZ-1

Commenters state that without exact mapped locations of project components, adequate assessment of Impact HZ-1 (i.e., whether the project would create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials or reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment) is not feasible, and that without the exact locations the likelihood of exposure to potentially contaminated soil in Maher Ordinance areas during underground work cannot be fully assessed.

Comments also state that the EIR should more explicitly state whether and under what conditions such Maher Ordinance measures would be required, or how their necessity will be determined.

Consistent with CEQA, Draft EIR Chapter 2, Project Description, provides text, figures, and tables that describe the main features of the project in sufficient detail to provide decision makers with the information necessary to make a decision that intelligently takes account of environmental consequences. As discussed in greater detail in Response PD-2 (Level of Detail: Project and Program Analysis), the EIR evaluates proposed system separation activities based on the best available information, and acknowledges that some uncertainty remains regarding the exact locations of the local distribution system separation, system reinforcements, and other separation components. Consequently, while some project components are described and evaluated at a project level of detail, other components are evaluated at a program level of detail. This distinction is clearly indicated throughout the Draft EIR. The City's decision to prepare an EIR that evaluates components at both a project and program level of detail reflects CEQA guidance regarding the timing of preparing an EIR and determining the appropriate level of analysis. The figures included in the Draft EIR outline the areas where the local distribution system separation and system reinforcements could occur, and Draft EIR Tables 2-4, 2-5, and 2-6 identify the types of activities that are anticipated to occur in the specified areas. The exact locations where local distribution system separation and system reinforcements would occur are not certain, but general areas where such activities could occur are known based on existing available information about current PG&E electric service to San Francisco and San Mateo County.

Contrary to the statements in Comment O-PGE-2.87, the Draft EIR includes a description of the extent of excavation or other soil disturbance at the Martin Substation, identifies where excavation would occur, and lists construction methods used. The location of ground disturbance at the Martin Substation is shown on Revised Draft EIR Figure 2-2. Excavation could occur anywhere within the area shown. The estimated total amount of excavation within the area shown is listed in Draft EIR Table 2-10 (page 2-44). Construction methods are discussed in Draft EIR Section 2.5, Construction, and Section 2.7.5, Project Variant Construction. Because CEQA[2] does not require detailed site plans to be included in an adequate project description, the

[2] See CEQA Guidelines section 15124, which specifies the requisite contents of a legally adequate project description.

Draft EIR and its analysis (including its analysis of potential impacts related to hazards and hazardous materials) remain adequate without them.

Draft EIR Appendix A Impacts HZ-1 and HZ-3 identify the proximity of work to hazardous materials sites. The regulatory requirements discussed in Impact HZ-1 (Draft EIR Appendix A page 211) and Impact HZ-3 (Draft EIR Appendix A page 222) would apply to work within the local distribution system separation, system reinforcement, distribution express feeders, operational control center, and operations and maintenance service yard areas and to work at the Martin Substation and Daly City Yard, respectively.

Regarding proposed project or project variant excavation near historical gasoline service stations and dry cleaner facilities that might be contaminated, Draft EIR Appendix A (page 217) discusses the required preparation of a health and safety plan, which must be site-specific and prepared by a qualified professional. In addition, as detailed in text revisions below, excavated soil and groundwater would be evaluated to determine whether they meet the definition of "hazardous" consistent with state regulations and therefore would be managed and disposed of accordingly. The regulations that apply would remain applicable at contaminated sites regardless of whether they currently are subject to oversight. Within San Francisco, the Maher Ordinance areas include areas of current and historic industrial uses and areas of undocumented fill material, along with other areas, as also shown in the text clarifications below. Compliance with independently enforceable obligations of state law and the Maher Ordinance would help ensure that no significant adverse impact on the public or the environment would result in the project area because soil and groundwater would be handled using methods designed to prevent impacts to public health and the environment during construction.

To clarify the applicability of state regulations and local requirements, Draft EIR Appendix A pages 217-218 have been revised as follows:

> Excavation within 500 feet of open or closed hazardous materials sites or within mapped Maher Ordinance areas could encounter contamination and without proper management, could expose workers to contamination or release contaminated soil or groundwater into the environment.
>
> Consistent with federal Occupational Safety and Health Administration regulations (29 CFR 1910.120) and California Occupational Safety and Health Administration regulations (8 CCR Section 5192), the SFPUC would be required to prepare a health and safety plan that addresses the potential to encounter workplace hazards, including hazardous substances in soil or groundwater, for project or project variant construction in San Francisco and San Mateo counties. The health and safety plan must be site-specific and be prepared by a qualified professional.
>
> Under title 22 of the California Code of Regulations section 66261.20, et seq., excavated soil and groundwater are classified as a hazardous waste for offsite disposal purposes if either exhibit the characteristics of ignitability, corrosivity, reactivity, or toxicity. Title 22 of the California Code of Regulations, division 4.5, article 3, section 66261.24 also defines toxic waste as material containing certain substances at concentrations above thresholds specified in the code.
>
> Consistent with the California Code of Regulations title 22, division 4.5, chapter 12, section 66262.11 (Hazardous Waste Determination), ~~Hazardous Waste Control Act~~, in all project locations, the SFPUC would also be required to identify and manage hazardous soil and groundwater and identify appropriate disposal methods. Implementation of a health and safety plan and hazardous soil and

groundwater management consistent with these requirements would reduce the risk of creating a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials or reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Additional local requirements in San Francisco Health Code article 22A would apply to project construction that involves disturbance of more than 50 cubic yards of soil, in locations that are bayward of the historic high tide line, have been zoned or used for industrial purposes, are located within 150 feet of an elevated highway, have soil or groundwater contamination, or are within 100 feet of a known or suspected underground storage tank (i.e., ~~construction~~ within Maher Ordinance areas, shown in Appendix J) in San Francisco, which would further limit the potential for release of hazardous soil or groundwater. Article 22A of the San Francisco Health Code requires that a qualified professional prepare a site history report ~~(commonly referred to as a phase I environmental site assessment)~~ to determine whether hazardous substances ~~may~~ could be present on the site at levels that exceed health risk levels or other applicable standards established by California Environmental Protection Agency, the regional water board, and DTSC. The site history report must include results of a permit records search investigating the history of permitted uses on the site, as well as any known or discovered unpermitted uses or activities on the site. ~~If~~ Unless the site history report finds that there is no information that hazardous substances could be present in the soil or groundwater at concentrations exceeding the California Department of Toxic Substances Control or Regional Water Quality Control Board health risk levels, ~~hazardous substances may be present on the site at levels that exceed health risk levels or other applicable standards,~~ the SFPUC ~~may~~ would ~~be required to~~ prepare a plan that meets the substantive requirements of the health code (e.g., site mitigation plan) and implement the plan for treating, containing, or removing the hazardous materials ~~conduct soil and/or groundwater sampling and analysis under a work plan approved by the health department~~. ~~Where such analysis reveals the presence of hazardous substances in excess of state or federal standards, preparation of a site mitigation plan describing the methods that will be implemented to handle and dispose of contaminated materials~~ to prevent impacts to public health and the environment during construction ~~would be required~~. Specific requirements for sites located on City-owned land would be coordinated with the health department, pursuant to Article 22A.17 of the health code.

~~The~~A site mitigation plan must contain measures to mitigate potential risks to the environment and to protect construction workers, nearby residents, workers, and/or pedestrians from potential exposure to hazardous substances and underground structures during soil excavation and grading activities. ~~The~~A site mitigation plan must also contain procedures for initial response to unanticipated conditions such as discovery of underground storage tanks, sumps, or pipelines during excavation activities. Specified construction procedures at a minimum must comply with building code section 106A.3.2.6.3 and health code article 22B related to construction dust control; and San Francisco Public Works Code section 146 et seq. concerning construction site runoff control. Additional measures would typically include notification, field screening, and worker health and safety measures to comply with Cal/OSHA requirements. The health department would require discovered underground storage tanks to be closed pursuant to article 21 of the health code and comply with applicable provisions of chapters 6.7 and 6.75 of the California Health and Safety Code (commencing with section 25280) and its implementing regulations. The closure of any underground storage tank must also be conducted in accordance with a permit from the San Francisco Fire Department.

The Brisbane Municipal Code also establishes requirements applicable to activities within Brisbane city limits. Brisbane Municipal Code Section 13.06.142 requires that any person "delivering, hauling, disposing, storing, discharging or otherwise handling hazardous materials or potentially polluting substances, solid or liquid, such as, but not limited to the following: fuel oil, gasoline, solvents, industrial liquids or fluids, milk, grease trap and catch-basin wastes, oil or petroleum wastes, shall immediately clean up any such spilled materials or substances to prevent such materials or substances becoming a hazard to health or safety or, directly or indirectly, permitting such materials or substances to enter the city's storm sewer system."

In compliance with state~~, and~~ federal, and local regulations~~, and health code article 22A~~, the SFPUC would assess the potential for site contamination prior to construction and would handle potential soil and/or groundwater contamination in accordance with all applicable regulatory requirements and through coordination with the health department, as required. Thus, the project or project variant would not result in a significant hazard to the public or environment from the release of contaminated soil and/or groundwater.

Hazardous materials sites are ubiquitous in urban areas and, as discussed above, a robust regulatory framework is in place for oversight of routine construction activities that could encounter hazardous materials or wastes. The Draft EIR disclosed the potential presence of listed sites in the project area, the types of contaminants that could be encountered, and potential impacts that could result if precautions are not taken. The Draft EIR identified regulations that would require the proper handling, transportation and disposal of materials encountered to avoid potential impacts. Additional information regarding the specific concentration of contaminants at specific locations is not necessary to reach these conclusions.

Comment HZ-2: Construction Soil and Groundwater Management

This response addresses the following comments, which are quoted below:

A-DTSC.1, A-DTSC.2, O-PGE-2.38, O-PGE-2.74, O-PGE-2.75, O-PGE-2.88, O-PGE-2.91, O-CUE.10, O-CUE.11, O-CUE.12, O-CUE.23

"1. Appendix A, Initial Study, Section E.18 Hazards and Hazardous Materials, Page 226. The Initial Study finds that "Groundwater extraction from dewatering of the excavations could result in contaminated water that would require appropriate handling and disposal. Contaminated water could be disposed of into the sanitary sewer in accordance with the requirements of the Bayshore Sanitary District or it would require onsite treatment to remove contaminants prior to disposal in accordance with a NPDES permit."

2. DTSC reiterates that significant polycyclic aromatic hydrocarbon (PAH) and volatile organic compound (VOC) contamination exists within the groundwater beneath OU-2 of the PG&E Martin Service Station site. As such, a groundwater management plan should be prepared alongside the soil management plan discussed in the body of the EIR. The groundwater management plan should include containerization of potentially impacted groundwater collected during dewatering activities and the chemicals the wastewater would be analyzed for prior to disposal. DTSC recommends that the analytical program include the following analytes:

a) Total Oil and Grease and Non-polar Oil and Grease by EPA Method 1664 with silica gel treatment.

b) Benzene, toluene, ethylbenzene, and o-, m- and p-xylenes (BTEX) by EPA Method 8260.

c) PAHs by EPA Method 8270C

d) Nine metals, total (not dissolved) concentrations: arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), silver (Ag), and zinc (Zn) by EPA 6010.

e) Sulfide and pH by EPA Test Method 9030 series and 9040B, respectively." (Tamara Purvis, Associate Environmental Planner, HWMP-Permitting Division-CEQA Unit, Department of Toxic Substances Control [A-DTSC.1])

"3. DTSC recommends that all imported soil and fill material should be tested to assess any contaminants of concern meet screening levels as outlined in DTSC's Preliminary Endangerment Assessment Guidance Manual. Additionally, DTSC advises referencing the DTSC Information Advisory Clean Imported Fill Material Fact Sheet if importing fill is necessary. To minimize the possibility of introducing contaminated soil and fill material there should be documentation of the origins of the soil or fill material and, if applicable, sampling be conducted to ensure that the imported soil and fill material are suitable for the intended land use. The soil sampling should include analysis based on the source of the fill and knowledge of prior land use. Additional information can be found by visiting DTSC's Human and Ecological Risk Office (HERO) webpage." (Tamara Purvis, Associate Environmental Planner, HWMP-Permitting Division-CEQA Unit, Department of Toxic Substances Control [A-DTSC.2])

"The DEIR (IS) assumes regulatory compliance will eliminate the potential for significant impacts. This general assumption is common among projects of this type but insufficient in terms of first needing to identify potential project-specific significant impacts and then needing to mitigate the identified impacts." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.38])

"• Regulatory compliance includes future preparation of a site-specific health and safety plan for project construction. The potential site-specific impacts to human health and safety must be included and evaluated in the DEIR, along with the specific safety mitigation measures that will be addressed by developing the health and safety plan(s). The failure to include clear performance standards precludes assurance that impacts would be mitigated to a less than significant level.

• The DEIR (IS) assumes regulatory compliance will eliminate the potential for significant impacts. This general assumption is common among projects of this type but insufficient in terms of first needing to identify potential project-specific significant impacts and then needing to mitigate the identified impacts." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.74])

"Possible disposal of contaminated groundwater into Bayshore Sanitary District sewer system is proposed. Regulatory requirements for disposal to the sewer system should be provided in the DEIR. However, there is

no discussion of the discharge compliance criteria or process plan contingencies, sampling, potential pre-discharge storage with secondary containment and/or pre-discharge treatment, and potential discharge limits." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.75])

"The comments below identify specific deficiencies identified in the Draft EIR.

1. Project Description (Chapter 2), *Earthwork and Haul Trips* (Section 2.5.4):

• This section states that excavated soil from Martin Substation would be exported to a permitted landfill due to potential contamination. Please clarify that excavated soils at Martin Substation will be tested for contaminants prior to disposal, and, if necessary, excavated soils would be disposed of at a landfill licensed to accept hazardous waste, as stated in *Hazardous Materials Handling* (Section 2.5.4.1).

• This section also states that for distribution express feeders, local distribution separation, system reinforcements, and other construction activities, half of the excavated soil would be exported to the nearest landfill and the other half would be suitable for reuse as backfill. Please justify the basis for this assumption." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.88])

"3. Initial Study (Appendix A, Section E.18), Impact HZ-3:

- For the assessment of construction impacts of the Martin Substation separation or the new City Substation (project variant) on pages 223-224, more detail in the narrative or figures should be given to the areas of proposed excavation and other soil disturbance relative to the horizontal and vertical extent of contamination at the Martin Service Center.
- The soil management plan measures to be applied before, during, and after disturbance of soil at the Martin Service Center are summarized on pages 225-226. This summary does not provide an adequate basis for providing assurance that the plan would be health protective. What would be the likely methods to address risk during construction, and how would different soil waste types be managed prior to removal?
- For the Martin Substation separation or the new City Substation (project variant), potentially contaminated groundwater extracted from dewatering of excavations would require appropriate disposal. Although the Revised Operation and Monitoring Agreement is provided in Appendix J, a more explicit discussion of the process and requirements for determining whether potentially contaminated groundwater can be discharged to the Bayshore Sanitary District sewer system should be provided in the EIR (e.g., provisions of the wastewater discharge permit, testing requirements, water quality criteria and system capacity requirements). If pre-discharge storage within secondary containment may be required, provide a discussion on type, volume, footprint staging areas and security, potential duration, spill prevention measures, and evaluated contingencies." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.91])

"C. Compliance with Regulatory Standards Governing Soil and Groundwater Contamination Is Not Adequately Analyzed

Compliance with applicable regulatory standards may support a finding that a project will not result in significant environmental impacts.[104] However, such a conclusion must be based on a project-specific analysis that demonstrates how compliance will effectively avoid or reduce those impacts.[105] While adherence to specific laws, regulations, or permit requirements can, in some cases, constitute adequate mitigation under CEQA, reliance on regulatory compliance is only appropriate where substantial evidence shows that compliance will, in practice, reduce the impact below a level of significance.[106] This determination requires a detailed analysis of both anticipated environmental impact and the effectiveness of the regulatory measure, considered in the context of applicable performance standards and oversight mechanisms.[107]

1. *Existing Land Use Controls Are Not Adequate*

The DEIR acknowledges that the Martin Service Center, including the Martin Substation and Daly City Yard, is subject to significant soil and groundwater contamination resulting from historical operation of a manufactured gas plant.[108] While the DEIR references existing land use covenants (LUCs), operations and maintenance agreements, and soil management plan requirements as applicable to proposed activities – such as Martin Substation separation or new City Substation construction – it concludes that these controls are sufficient to prevent unacceptable risks to human health or the environment.[109] However, this conclusion is unsupported and overly reliant on existing controls that were developed for a different land use context than the disturbance scenario required for Project construction.[110]

These institutional and engineering controls were designed to manage residual contamination under existing site conditions and ongoing operations, not for the scale and intensity of ground-disturbing activities proposed under the Project.[111] Activities such as excavation, grading, utility trenching, demolition, or pile driving could disturb contaminated soils, create new exposure pathways, or mobilize contaminants into air, surface water, or groundwater.[112] The DEIR does not evaluate these specific risks or assess whether existing mitigation measures are adequate to address them.[113]

In particular, the DEIR fails to provide a construction-phase risk assessment or analyze the potential for increased human or environmental exposure during intrusive activities. For example, excavation in areas with known contamination could result in the release of VOCs into the air, increasing inhalation risks for construction workers and adjacent sensitive receptors.[114] Similarly, deep foundation work could breach existing contamination barriers or create preferential pathways for contaminant migration into groundwater

---

[104] *Tracy First v. City of Tracy (2009) 177 Cal.App.4th 912.*
[105] *Save Our Capitol! v. Department of Gen. Servs. (2023) 87 Cal.App.5th 655, 696; Californians for Alternatives to Toxics v. Department of Food & Agric. (2005) 136 Cal.App.4th 1.*
[106] *CEQA Guidelines § 15126.4(a)(1)(B); see Save Our Capitol! v. Department of Gen. Servs. (2023) 87 Cal.App.5th 655, 687-88, 699.*
[107] *Tiburon Open Space Comm. v. County of Marin (2022) 78 Cal.App.5th 700, 763.*
[108] *DEIR, appen. A, Initial Study at p. 222.*
[109] *DEIR, appen. A, Initial Study at p. 226.*
[110] *Clark Comments at pp. 7-8.*
[111] *Ibid.*
[112] *Id. at pp. 7-8, 11-12.*
[113] *Id.at pp. 11-12.*
[114] *Ibid.*

or nearby stormwater systems.[115] These are foreseeable impacts that are not examined in the DEIR but warrant a thorough evaluation under CEQA.

Additionally, the DEIR does not clarify whether the existing soil management plan is sufficiently detailed or tailored to address Project-specific activities. A soil management plan prepared for routine operations and maintenance activities may not contain protocols necessary for managing largescale earthwork, off-haul of contaminated soils, dewatering, or other construction phase environmental management needs.[116] Without an updated, project-specific soil management plan or confirmation that the existing plan addresses the full range of Project activities, the DEIR's reliance on it is inadequate.

In sum, while the presence of existing environmental controls is relevant, the DEIR improperly assumes that these measures are sufficient without demonstrating that they are capable of mitigating risks associated with the proposed construction. The DEIR must include a detailed, project-specific evaluation of potential hazardous materials impacts, and it should commit to appropriate mitigation measures, including an updated soil management plan, construction health and safety plan, and regulatory agency oversight, as necessary." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of California Coalition of Utility Employees [O-CUE.10])

"2. *Compliance with the Land Use Covenant Variance Process Is Not Disclosed or Analyzed*

The DEIR acknowledges that the Daly City Yard is subject to a LUC, and the entire Martin Substation site is further restricted by a separate LUC.[117] Both LUCs expressly prohibit any grading, excavation or construction activities that could adversely affect operation or maintenance of the cap.[118] The Daly City Yard cap includes the concrete parking lot, building foundations, and a constructed cap over the berm and the Schwerin Street Strip.[119] The other cap includes the Brisbane Yard and Brisbane Yard Annex.[120]

Martin Substation separation would require excavation of 7,930 cubic yards of soil and a maximum depth of 15 feet,[121] some of which could occur in the capped area. Construction of the new City Substation would require excavation of 34,980 cubic yards and a maximum depth of 15 feet,[122] all of which would occur in the capped area. Because grading, excavation, and construction activities in capped areas are necessary to implement the Project, CCSF would need to obtain a LUC variance from DTSC.

Health and Safety Code § 25223 establishes the criteria for obtaining a variance from a LUC related to hazardous or extremely hazardous waste. Under this provision, the applicant bears the burden of demonstrating that the proposed variance will not cause or allow any of the following: (1) the creation or

---

[115] *Ibid.*
[116] *Ibid.*
[117] *DEIR, appen. A, Initial Study at p. 224.*
[118] *Clark Comments at pp. 7-11; DEIR, appen. A, Initial Study at p. 224; see also Department of Toxic Substances Control, EnviroStor, PG&E – Martin Service Daly City Yard (41360100), https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=41360100 (last visited May 19, 2025); Department of Toxic Substances Control, EnviroStor, PG&E – Maritn Service OU-2 and Levison (41360093), https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=41360093 (last visited May 19, 2025).*
[119] *DEIR, appen. A, Initial Study at pp. 223-24.*
[120] *Ibid.*
[121] *Id.at p. 2-10, 2-44.*
[122] *Id.at p. 2-56.*

increase of significant present or future hazards to public health, (2) a significant diminution of the ability to mitigate any significant potential or actual hazard to public health, and (3) a long-term increase in the number of humans or animals exposed to significant hazards that affect the health, well-being, or safety of the public.[123]

In evaluating whether a variance is appropriate, DTSC must consider substantial evidence related to the specific risks posed by the site.[124] This includes:

(1) **Hazardous characteristics** of the waste that caused the land to be restricted, such as, but not limited to, toxicity, reactivity, corrosivity, flammability, persistence, bioaccumulation, and infectiousness;[125]

(2) **Potential for waste migration** through environmental media – air, water, or soil – based on factors such as the quantity, physical state, volatility, solubility, soil-binding characteristics, as well as site-specific characteristics like permeability, geology, hydrology, flood risk and terrain;[126] and

(3) **Potential for population exposure** within a 2,000-foot radius, considering factors like containment, accessibility, groundwater and surface water use, wells, existing and potential land uses, sensitive environmental receptors, and critical habitats.[127]

The DEIR fails to mention or describe DTSC's variance process, much less to evaluate whether the project could meet the specific criteria required for a variance under Health & Safety Code § 25223. The DEIR does not assess the hazardous characteristics of the waste, site-specific migration potential, or exposure risks to nearby populations.[128] Nor does it provide substantial evidence demonstrating that compliance with DTSC's variance process would reduce potential impacts to a less than significant level. Absent this analysis, the DEIR's reliance on future regulatory compliance as a basis for finding the impact less than significant is unsupported and legally inadequate.

The existence of a regulatory program does not, by itself, constitute substantial evidence that impacts will be less than significant or mitigated to a level of insignificance. CEQA requires the lead agency to provide evidence that such compliance is reasonably certain to occur and will, in fact, achieve the performance standard of reducing the impact to below the threshold of significance. The DEIR's omission of any reference to DTSC's variance process and its failure to analyze the likelihood or effectiveness of compliance renders its conclusions speculative and insufficient." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of California Coalition of Utility Employees [O-CUE.11])

"D. Mitigation Measure M-AQ-2a Does Not Adequately Prevent Migration of Contaminated Soils to Sensitive Receptor Locations

Although the DEIR acknowledges the presence of contaminated soil and groundwater, it fails to identify any mitigation measures specifically designed to reduce impacts associated with the potential migration of

[123] *Health & Safety Code § 25223(c).*
[124] *22 Cal. Code Regs. § 67390.2.*
[125] *Id. § 67390.2(b)(1).*
[126] *Id. § 67390.2(b)(2).*
[127] *Id. § 67390.2(b)(3).*
[128] *Clark Comments at pp. 7-12.*

contaminated soil during construction activities. To the extent CCSF relies on Mitigation Measure M-AQ-2a to address these impacts, the proposed mitigation is not sufficient. M-AQ-2 requires implementation of basic best management practices (BMPs) for controlling construction-related fugitive dust emissions.[129] These BMPs include watering exposed surfaces, covering haul trucks, removing visible mud and dirt track-out, imposing vehicle speed limits, completing paving as soon as possible, suspending of construction during high winds, washing vehicles and equipment, treating unpaved roads, and maintain a complaint hotline.[130]

While such measures may be appropriate for controlling nuisance dust from clean soils, they are not adequate for protecting public health and the environment when the dust originates from soil known to contain hazardous substances.[131] First, the measure does not include enhanced protocols specifically tailored to hazardous dust, such as the use of soil binders or chemical stabilizers, application of impermeable tarps over excavated areas, or negative air pressure containments systems in high-risk zones.[132] These are widely accepted practices for construction in contaminated areas but are omitted entirely from the DEIR's proposed mitigation measures.[133]

Second, there is no requirement for real-time air monitoring of particulate matter or hazardous constituents during soil-disturbing activities.[134] In addition, the current remedial action plan governing the Martin Substation site does not include community air monitoring.[135] Without air monitoring, the Project cannot demonstrate that mitigation is effective or protect onsite workers and nearby receptors from exposure to dust from disturbance of contaminated soils.[136]

Third, watering twice daily may reduce dust generation by approximately 61%, but increasing the frequency to three times per day can achieve up to 81% reduction.[137] The DEIR does not explain why a higher standard of control is not required in a setting with recognized contamination risks.[138]

In sum M-AQ-2a is inadequate for the site's contamination context and fails to meet CEQA's requirement that mitigation measures be fully enforceable and capable of substantially reducing significant impacts. Additional, contamination-specific mitigation measures must be developed in consultation with the appropriate regulatory agencies to ensure that fugitive emissions of hazardous dust are effectively controlled, monitored, and mitigated throughout all phases of Project construction." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of California Coalition of Utility Employees [O-CUE.12])

"2. The Martin Substation Site Is Known To Have Hazardous Materials In The Soils And Groundwater, And Is Under A Land Use Covenant/Deed Restriction Regarding Any Excavations Within The Substation Facility. The LUC Does Not Include A Requirement To Monitor Dust During Excavations Onsite.

[129] *DEIR at p. 3.3-34.*
[130] *Ibid.*
[131] *Clark Comments at p. 12.*
[132] *Ibid.*
[133] *Ibid.*
[134] *Ibid.*
[135] *Ibid.*
[136] *Ibid*
[137] *Ibid*
[138] *Ibid*

According to the DEIR,[4] "The Martin Substation is identified on multiple lists of hazardous materials sites compiled pursuant to Government Code section 65962.5. The following provides an overview of the history and status of environmental investigation at the Martin Substation, the location of project components within the subareas of investigation, and the land use covenants/deed restrictions that pertain to any excavations within the substation facilities." The soil beneath the site is contaminated with residues including benzene, polycyclic aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPH)-motor oil, and TPH-diesel.

Martin Service Center is a former manufactured gas plant (MGP) site and activities that may disturb subsurface soil are under oversight from the Department of Toxic Substances Control (DTSC). Areas of known MGP impacts have been documented across a large portion of the Site. MGP-impacted soils are managed in-place under a cap composed of asphalt, concrete, and/or chipseal.

The DEIR references existing land use covenants, operations and maintenance agreements, and soil management requirements applicable to the Martin Substation separation and construction of the new City Substation and concludes these existing institutional controls and engineering measures are sufficient to prevent unacceptable risks to human health and the environment.[5] However, these measures are designed to manage residual contamination under stable conditions associated with existing operations. They were not developed to address the scale and intensity of intrusive-ground disturbing activities anticipated under the Project, including excavation, grading, utility trenching, and pile driving. Such activities have the potential to disturb contaminated soils, create new exposure pathways, and facilitate contaminant mobilization into environmental media such as air, surface, and groundwater.

For example, a land use restriction is recorded for this Site includes a requirement that capped soils may not be disturbed without approval of a health and safety plan and an soil management plan by DTSC (DTSC and PG&E, October 17, 2002).

The Site is divided into several sections, including Daly City Yard, Brisbane Yard, Brisbane Yard Annex, Martin Substation, Levinson North Parcel, and the building located at 2850 Bayshore Blvd, Brisbane that was formerly the PSEA Clubhouse/Records Center and is now used as office and warehouse space for PG&E's General Construction Gas and Corporate Real Estate. From 1905 to 1916, an MGP operated on the Site at the current location of the PG&E Martin Service Center. Residual waste associated with the MGP operations, including lampblack and tar, is known to exist locally in the Site fill and on adjacent areas to the south and west. Previous environmental investigations conducted at the Site indicate that such waste variably exists under much of the Site to depths up to 16 feet below ground surface (bgs).

Multiple soil investigation and characterization reports were prepared between 1987 and 2003. Data from the 1988 soil characterization report indicated that soil on portions of the Site was impacted with PAHs from MGP residues from 3 to 12 feet bgs, depending on the thickness of the overlying fill, with concentrations of total PAHs up to 6,951 milligrams per kilogram (mg/kg) (CH2M HILL, 1988). Total phenol concentrations in the soil samples ranged from 0.6 to 300 mg/kg and were detected in 11 out of the 25 borings. Benzene, toluene, ethylbenzene and xylenes (BTEX) concentrations ranged from 0.1 to 13.4 mg/kg. BTEX was detected in 7 of the 25 borings. The maximum concentration of cyanide was 7.11 mg/kg. Cyanide was detected in 16 of the borings, including 3 of the borings where field observations did not indicate the presence of MGP residues.

[4] *DEIR, Appendix A, Initial Study. Pg 222,*
[5] *DEIR, Appendix A, Initial Study. Pgs. 222-226.*



Figure 3: Areas Of Known Contamination

The Site has been divided into two Operable Units (OU-1 and OU-2). OU-1 includes the areas where the potential existed for contact with surface soil containing PAHs. These areas are on the western portion of the Site, including the bermed area along the southern boundary of the Daly City Yard and the Schwerin Street Strip. OU-2 encompasses the eastern portion of the Site and addresses the potential routes of PAH transport by surface water and groundwater. It includes the drainage ditch, storm drain and groundwater flowing offsite to the east.

PG&E then prepared a second remedial action plan in 1998 that further addressed potential routes of PAH transport offsite and included recordation of a second land use covenant to control future land use for the entirety of the Martin Service Center. The second land use covenant prohibits the following land uses: residence, hospital, public or private school, or day care center for children. The second land use covenant also expands the prohibition on soil disturbance without a soil management plan and health and safety plan approved by DTSC.

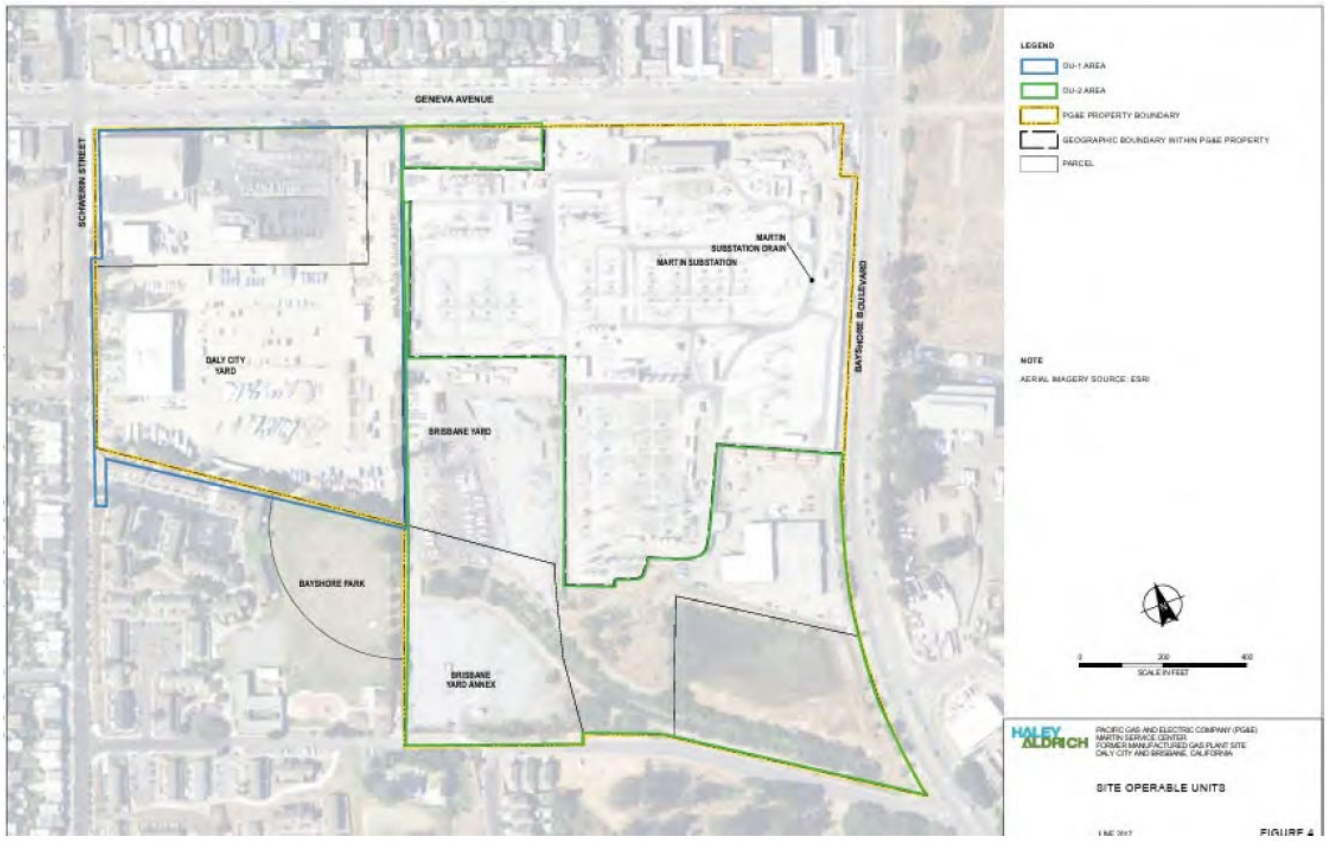


Figure 4: Operable Units

According to the DEIR, "The 1995 land use covenant applies only to the Daly City Yard. The 2002 land use covenant applies to the entire Martin Service Center. The covenants follow the land and notify landowners of site contaminants, restrict sensitive property uses, prohibit certain activities, require DTSC notice and approval of site construction, and require protection of site remediation remedial measures (e.g., caps and interceptor trench). As described above, both land use covenants prohibit activities that disturb soil below the caps without a soil management plan and health and safety plan approved by DTSC. The second land use covenant also requires that activities that may disturb the caps or the interceptor trench shall not be permitted without prior review and approval by the DTSC. All uses and development of the property must preserve the integrity of the cap and the interceptor trench."[6]

The 1995 land use covenant was based in part on the 1991 Human Health Risk Assessment[7] ("HHRA") assessed the risk to workers at the Martin Substation, the Daly Yard, the Brisbane Yard, the Brisbane Yard Annex, and the PSEA Clubhouse and Record Storage Facility. The assumptions in the HHRA did not envision the significant changes that will occur on-site under the DEIR, including excavation, grading, and construction activities below the cap. Nor did the HHRA include an assessment of the potential soil and groundwater contamination exposure to nearby residents or students and staff at the Bayshore Elementary School immediately adjacent to the Martin Substation. Notably, according to the DTSC's Envirostor website,

[6] *DEIR, Appendix A, Initial Study. Pg 224*
[7] *CH2M Hill. 1991. Human Health And Environmental Risk Assessment Report PG&E Daly City Manufactured Gas Plant Site. Dated August 30, 1991, https://www.envirostor.dtsc.ca.gov/getfile?filename=/public%2Fdeliverable_documents%2F4419285416%2FPGE_Daly%20City%20HH-ERA%20vol%201.pdf.*

based on the 2015 Preliminary Endangerment Assessment[8] (PEA) of the school site, it was clear that polycyclic aromatic hydrocarbons (PAHs) from the PG&E manufactured gas plant (Martin Substation location) had impacted the school site.



Figure 5: Martin Substation And Surrounding Neighborhood

From Figure 5 (above) it is evident that the Martin Substation is surrounded by residential properties to the southwest, west, and north of the site. Residences along Main Street, Midway Drive, Schwerin Street and Geneva Avenue abut the Martin Substation property. In addition to the residences, Bayshore Elementary School is located immediately adjacent to the Martin Substation property.

Excavation in areas with known contamination could result in the release of volatile organic compounds ("VOCs") into the air, increasing inhalation risks for construction workers and adjacent sensitive receptors. Similarly, deep foundation work could breach existing contamination barriers or create preferential pathways for contaminant migration into groundwater or nearby stormwater systems. The DEIR does not

[8] *Padre. 2015. Preliminary Environmental Assessment Bayshore Elementary School Reconstruction Project, 155 Oriente Street, Daly City, San Mateo County, California. Dated July 2015. Pg ES-1, https://www.envirostor.dtsc.ca.gov/getfile?filename=/public%2Fdeliverable_documents%2F3980558633%2FBayshore_FINAL_PEA.pdf.*

clarify whether the existing land use controls or engineering measures is sufficiently detailed or tailored to address the Project-specific construction activities. For example, the existing soil management plan prepared for routine operations and maintenance activities does not contain protocols necessary for managing large-scale earthwork, off-haul of contaminated soils, dewater, or other construction-phase environmental management needs. Without an updated, project-specific soil management plan or confirmation that the existing plan addresses the full range of construction activities, the DEIR's reliance on existing controls is misplaced.

Moreover, any dust generated onsite during the construction phase of the Project will impact these sensitive receptors, and the proposed air quality mitigation measures do not sufficiently protect nearby residents and students from potential migration of contaminated soil. Mitigation Measure M-AQ-2a requires implementation of basic best management practices ("BMPs") for controlling construction-related fugitive dust emissions. While basic BMPs may be appropriate for controlling nuisance dust from clean soils, they are not adequate for protecting public health when dust originates form soil known to contain hazardous substances.

For example, M-AQ-2a does not include enhanced protocols specifically tailored to hazardous dust, such as the use of soil binders or chemical stabilizers, application of impermeable tarps over excavated areas, or negative air pressure containment systems in high-risk zones. These are widely accepted practices for construction in contaminated areas but are entirely omitted.

M-AQ-2 does not contain a requirement for real-time air quality monitoring of particulate matter or hazardous constituents during soul-disturbing activities. In addition, the currently approved remedial action plan does not include community air monitoring.[9] Without air monitoring, the Project cannot demonstrate that mitigation is effective or protects on-site workers and nearby receptors from exposure.

Finally, M-AQ-2 requires "All exposed surfaces (e.g., unpaved parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day." Watering the exposed area twice a day, reduces dust generation by 61%. Increasing the watering frequency to 3 times per day would reduce the total dust generation by 81%. The DEIR does not explain why a higher standard of control is not required in a setting with recognized contamination risks." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of California Coalition of Utility Employees [O-CUE.23])

RESPONSE HZ-2

Comments coded HZ-2 cover the following topics, which are addressed in subsections of this response:

- The Draft EIR's hazards and hazardous materials impact analysis approach (Comments O-PGE-2.38 and O-PGE-2.74)
- The Draft EIR's description of regulatory compliance including applicability of existing land use controls and the land use covenant variance process (Comments O-PGE-2-74, O-CUE.10, O-CUE.11, and O-CUE.23)
- The content and adequacy of the Draft EIR's description of soil and groundwater management, including dust controls (Comments A-DTSC.1, A-DTSC.2, O-PGE-2.75, O-PGE-2.88, and O-PGE-2.91)

[9] *DEIR, Appendix J, CDIM, Technical Memorandum, Site Management Requirements, PG&E Martin Service Station. Pg. 9.*

- The content and adequacy of the Draft EIR's description of air quality controls applicable during construction (O-CUE.12 and O-CUE.23)
- The basis for the Draft EIR's estimate of hazardous soil that could be encountered during construction of linear components (distribution express feeder, local distribution system separation, and system reinforcements) (Comment O-PGE-2.88)

IMPACT ANALYSIS APPROACH

Comments O-PGE-2.38 and O-PGE-2.74 generally state that the Draft EIR needs to identify potential project-specific significant impacts and then mitigate the identified impacts. The Draft EIR hazards and hazardous materials impact analysis (Draft EIR Appendix A Section E.18, page 210 et seq.) describes potential hazards in areas affected by the project or project variant, identifies potential risks to the public or the environment that could occur due to project or project variant construction or operation, describes existing regulatory controls that are in place to reduce risks from hazards and hazardous materials, and explains how the regulatory controls would apply to the project or project variant. Using this information, the Draft EIR identifies the effects of the project or project variant in combination with required regulatory compliance and makes a significance determination. Comments O-PGE-2.38 and O-PGE-2.74 do not provide any substantial evidence as defined by CEQA Guidelines section 15384 (facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts) indicating that the Draft EIR's evaluation of the potential hazards and hazardous materials impacts is undetermined or inadequate.

HAZARDOUS MATERIALS REGULATORY COMPLIANCE

Comments O-PGE-2.74, O-CUE.10, O-CUE.11, and O-CUE.23 question whether the Draft EIR's discussion of regulatory compliance and the associated impact conclusions for hazards and hazardous materials meet the requirements of CEQA, as follows:

- Comments O-PGE-2.74 and O-CUE.10 both indicate that the Draft EIR should include and evaluate the potential for increased human or environmental exposure to contaminants during construction, and that the Draft EIR should commit to mitigation measures. (Example measures provided by the comments include an updated soil management plan, construction health and safety plan, and regulatory agency oversight.) Comment O-CUE.23 also states that mitigation measures must be developed in consultation with the appropriate regulatory agencies to address fugitive emissions of hazardous dust during construction.
- Comments O-CUE.10 and O-CUE.11 recommend that the Draft EIR include further explanation of the regulatory compliance process, specifically by (1) clarifying whether the existing soil management plan is sufficiently detailed to address project or project variant activities, and (2) including a discussion of the land use covenant variance process. Comment O-CUE.11 also explains that CEQA requires the lead agency to provide substantial evidence that regulatory program compliance is reasonably certain to occur and would reduce impacts below the threshold of significance.

As discussed in this section of Response HZ-2, the Draft EIR has been refined to clarify the regulatory compliance process specific to the project or project variant, including discussion of applicability of the existing soil management plan and land use covenant variance process. The Draft EIR clarifications also provide additional supporting information to explain how regulatory compliance would occur and would reduce impacts.

Draft EIR Appendix A pages 222 and 223 list the hazardous characteristics of soil and groundwater at the Martin Substation and Daly City Yard. As described in the Draft EIR text revisions below, any work that disturbs pavement at the Martin Substation or Daly City Yard would be overseen by the relevant state regulatory agency (DTSC). DTSC has successfully overseen other construction projects at the Martin Service Center that included ground disturbance up to 21 feet deep in contaminated areas.[3] Multiple Draft EIR Appendix A text revisions, shown below, clarify the role of the DTSC at the Martin Substation and Daly City Yard and the controls that would apply to project construction and operation at the Martin Substation or Daly City Yard. Revisions shown are based in part on compliance information provided by DTSC staff with regulatory oversight authority at the Martin Substation and Daly City Yard.[4]

Draft EIR Appendix A page 223 has been revised to add the following text after the fourth bullet to further detail the role of DTSC in cleanup activities at the Martin Substation and Daly City Yard:

> DTSC has extensive authority to require cleanup of hazardous wastes or other corrective measures. Pursuant to California Health and Safety Code title 45 section 78000 et seq., when DTSC has determined that a release of hazardous materials has occurred, DTSC has the authority to undertake planning, legal, fiscal, economic, engineering, architectural, and other studies or investigations that are necessary or appropriate to plan and direct response actions to address the hazardous materials release. DTSC, or, if appropriate, the regional board, is the state agency with sole responsibility for ensuring that required action in response to a hazardous substance release or threatened release at a listed site is carried out in compliance with the procedures, standards, and other requirements identified in relevant sections of the Health and Safety Code, and shall, as appropriate, coordinate the involvement of interested or affected agencies in the response action. DTSC has specialized technical expertise and its authority and requirements are designed specifically to prevent the release of contaminants into the environment.
>
> Pursuant to the Health and Safety Code, DTSC is responsible for overseeing the evaluation and cleanup of contaminated properties throughout California, including brownfields, sites where voluntary agreements are in place, State Superfund sites, military facilities, school construction and expansion projects, and corrective action and tiered permitted facilities.[301a]
>
> A "land use restricted site" is a property where DTSC has placed limits or requirements on future use of the property due to varying levels of cleanup possible, practical, or necessary at the site. DTSC maintains and makes publicly available a list of land use restricted sites. The DTSC cleanup program list identifies sites under DTSC oversight where land use restrictions are active.[301b] The Martin Substation and Daly City Yard sites are on the DTSC cleanup program list. As discussed below, the DTSC has overseen cleanup and containment activities designed since 1991 to protect the public and the environment from contaminants at the Martin Substation and Daly City Yard.

[3] PG&E has completed work at the Martin Substation since approval of the programmatic 2017 soil management plan that has included ground disturbance up to 21 feet below ground surface (Haley Aldrich, Final Revised Soil Management Plan Addendum: 230 kV Bus Seismic Retrofit Pacific Gas and Electric Company, Martin Service Center/Daly City Manufactured Gas Plant Site, October 30, 2018). The SFPUC has also entered voluntary agreement with DTSC in the past for pipeline installation across the site (Voluntary Cleanup Agreement for Crystal Springs Pipeline No. 1. Replacement [2000], included in Draft EIR Appendix J-2 Attachment E).
[4] San Francisco Planning Department, Meeting Notes, PG&E Asset Acquisition Project, August 19, 2025.

The following footnotes have been added to Draft EIR Appendix A page 223:

> [301a] California Department of Toxic Substances Control, Site Mitigation & Restoration Program, available online https://dtsc.ca.gov/site-mitigation/, accessed January 23, 2026.
> [301b] California Department of Toxic Substances Control, Land Use Restriction Sites, available online https://dtsc.ca.gov/land-use-restriction-sites/, accessed January 23, 2026.

Draft EIR Appendix A page 226 et seq. has been revised as follows to further detail the regulatory requirements applicable to work at Martin Substation and Daly City Yard:

> During ground disturbance at the Martin Substation or Daly City Yard, including excavation for new structures and utilities, if proper precautions are not implemented the public (including students and staff at nearby schools as well as occupants of offsite residences and developments on adjacent parcels) could be exposed to chemicals of concern through inhalation of airborne dust, contact with accumulated dust, and contaminated runoff, potentially resulting in adverse health effects. In addition, if not properly handled, contaminated groundwater could be released into the environment. However, fFor the Martin Substation separation or the new City Substation (project variant), the SFPUC would not be allowed to conduct any activities currently prohibited by the existing land use covenants (including disturbing soil below the existing pavement) without DTSC approval. Land use covenants "run with the land," meaning they automatically apply to activities by future landowners.[306a] If a land use or land use control is proposed that differs from filed land use restrictions, California Health and Safety Code section 25220 requires that the proponent apply to DTSC for a variance from the land use restrictions (for temporary activities) or secure an updated land use covenant (for long-term changes), based on coordination with DTSC and as detailed further in Attachment D. DTSC typically requires parties to enter into a voluntary oversight agreement to administer DTSC's review of land use covenant variances and other technical work associated with a site. For this project or the project variant, the City would enter a voluntary oversight agreement with DTSC and either would implement the requirements of the land use covenants, soil management plan, and operations and maintenance agreement, or would obtain a land use covenant variance to construct the Martin Substation separation or new City Substation. In either case, DTSC oversight and written authorization of activities affecting the remedy would be required. If a land use covenant variance is required, then the City would apply for and obtain a land use covenant variance prior to project construction.[306b] As required under California Health and Safety Code section 25223(c), the land use covenant application would document that the variance, if granted, would not create or increase significant present or future hazards to public health. In its review of the variance application, DTSC is required under California Code of Regulations title 22, section 67390.2 to consider both the factors affecting the potential for movement of waste constituents away from the site through air, water or soil, and the factors affecting the potential for exposure of any population within 2,000 feet of the wastes.
>
> Due to the extent of ground disturbance, DTSC would require the City to prepare either a project-specific soil management plan, a removal action workplan, or an updated remedial action plan for the project or project variant. The process for each of these options is described below. Each option would require DTSC review and approval.
>
> - **Project-Specific Soil Management Plan**. If DTSC determines that the Martin Substation separation project or new City Substation falls within the assumptions and remedy of the existing approved remedial action plan, the project would be implemented through existing

approval pathways (i.e., preparation of a project-specific soil management plan or soil management plan addendum to address the specific construction scope and requirements under the framework of the existing 2017 program-level soil management plan). The 2017 program-level soil management plan lists[306c] additional items that DTSC would expect to see in project-specific plans, including information for best management practices regarding stockpile management, stormwater runoff, odor suppression, and dust and noise mitigation and monitoring; a plan for dewatering, groundwater storage, analysis, and disposal; and a project-specific health and safety plan applicable to construction workers that includes procedures for containing accidental releases during work activities and contingencies for when unknown or unexpected contamination is encountered. Unless otherwise specified by DTSC, imported soil would also be required to meet the requirements of the 2017 soil management plan, which states that any soil imported onto the site for use as backfill would be subject to the same screening levels as soil reused onsite. Soil may be reused at the site only if analytical results from its composite soil sample analysis are below the commercial/industrial screening criteria These criteria are based on DTSC-Modified Screening Levels 2 (DTSC-SLs) established by DTSC in the Human Health Risk Assessment (HHRA) Note 3, and Environmental Screening Levels 3 (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (RWQCB) for screening for environmental concerns at sites with contaminated soil and groundwater.

- **Removal Action Workplan**. If DTSC determines that the Martin Substation separation or new City Substation (project variant) constitutes a removal action outside the assumptions of the existing approved remedial action plan and the total removal cost associated with the removal action is less than $2 million, the DTSC may require preparation and implementation of a Removal Action Workplan (RAW) under Health and Safety Code section 79225[306d] The RAW must present and evaluate existing site conditions, establish appropriate cleanup goals, evaluate alternatives, and identify a recommended workplan alternative that is protective of human health and the environment.[306e] The contents of the RAW must also include implementation details, a sampling and analysis plan, a health and safety plan to ensure the health and safety of workers and the public, and long-term stewardship (operations and maintenance) requirements.[306f]

- **Updated Remedial Action Plan.** The other cleanup plan allowed under California Health and Safety Code section 79205-79215 is a remedial action plan. If DTSC determines that the project or project variant constitutes a removal action outside the assumptions of the existing approved remedial action plan and would cost more than $2 million, then an updated remedial action plan would be prepared to re-evaluate risks to human health and the environment, and to compare and select revised remedial alternatives. DTSC would also require preparation and implementation of a remedial design and implementation plan (RDIP) specifying measures to be implemented during construction to provide for protection of public health, including nearby schools and other sensitive receptors. ~~The SFPUC would be required to notify DTSC and secure approval by the DTSC of the health and safety plan and soil management plan prior to activity that could affect the caps or interceptor trench. The health and safety plan and soil management plan would include specific practices related to soil handling, disposal, and site safety, among other considerations. The SFPUC would enter into an agreement with DTSC for DTSC review of the proposed soil management plan and health and safety plan. All work must comply with the *Guidelines for Excavations at Former Manufactured Gas Plant Sites* or comparable excavation guideline approved by DTSC.~~[307] The ~~site health and safety~~ remedial design and implementation

plan would include measures such as the following ~~ensure that appropriate work procedures and personal protective equipment would be used so that construction workers and the public would not be exposed to contaminants in soil and groundwater~~ based on project scope:

- Detailed excavation, soil handling, and disposal plans;
- Groundwater management and dewatering protocols, including containerization, sampling, and discharge/treatment/disposal requirements;
- Air monitoring and dust control measures, including implementation of a Community Air Monitoring Program in which monitoring results can trigger immediate response including dust suppression and odor control measures (e.g., increased watering frequency, application of soil binders, covering of stockpiles or haul trucks, foam or misting agents);
- Vapor intrusion control measures for new occupied structures;
- Health and Safety Plan requirements for workers;
- Contingency procedures for unexpected conditions or materials; and
- Any additional measures deemed necessary by the DTSC.

~~The soil management plan would include provisions for the safe and lawful disposal of soil generated from construction activities, including requirements for treatment of extracted groundwater. Excavated soil must be analyzed for contamination and impacted soil must be disposed of at an appropriate landfill, in accordance with state and federal regulations. Groundwater extraction from dewatering of the excavations could result in contaminated water that would require appropriate handling and disposal. Contaminated water could be disposed of into the sanitary sewer in accordance with the requirements of the Bayshore Sanitary District or it would require on-site treatment to remove contaminants prior to disposal in accordance with a NPDES permit. The DTSC may require additional measures it deems necessary to protect the health of the public in the community.~~ The remedial design and implementation plan and all subordinate plans would require DTSC approval that the proposed construction activities and uses would be protective of public health and the environment prior to implementation. The DTSC would also provide oversight of construction to verify compliance with the approved plans and permit conditions.

~~As stated in the land use covenant, the residual contamination at the PG&E Martin Service Center does not present an unacceptable threat to human safety or the environment provided the restrictions of the covenant are implemented. The City and its contractor must comply with the provisions of the covenant, specifically procedures for soil management and health and safety, as well as all regulations related to hazardous waste storage, handling, transportation, and disposal.~~ With required compliance via one of the three options outlined above, all of which require DTSC review and approval, impacts associated with construction activities on a hazardous waste site would not result in adverse effects to people or the environment.

Summary

As outlined above, recorded covenants restrict development and impose requirements for ground-disturbing activities at the Martin Substation separation site or the new City Substation (project variant) site, where known hazardous contamination has historically occurred. Remedial actions

have been previously undertaken and continue to be maintained at this site to protect ~~in order to ensure the protection of~~ public health and the environment. Stringent requirements for excavation in this area are specified in the recorded land use covenants ~~for excavation in this area~~. Although commercial and industrial uses are permitted, excavation or other activities that could alter the effectiveness of the existing remedy ~~this area is subject to land use restrictions, commercial and industrial uses are permitted, and excavation is allowed if performed in accordance with relevant plans (e.g., soil management plan and health and safety plan), relevant treatments (e.g., caps) at the site are protected, and~~ may not proceed without DTSC approval. DTSC would determine whether a project-specific soil management plan, or a removal action workplan or updated remedial action plan pursuant to California Health and Safety Code section 79205-79215 would be required for the project or project variant. DTSC approval would be required for any of the three options and, as discussed above, DTSC has specialized technical expertise and its authority and requirements are intended specifically to minimize risks to human health and the environment, such as during project or project variant implementation. ~~the oversight agency is notified in advance and approves the work~~. For construction work at this site, SFPUC would comply with relevant covenants, associated plans, and all applicable local, state, and federal regulations related to hazardous materials, as discussed above. ~~Because the project or project variant would comply with all relevant~~ With implementation of the regulatory requirements identified above concerning the handling, use, and storage of hazardous materials, the project or project variant would not create a significant hazard to the public or the environment. The impact would be ***less than significant***.

The following footnotes have been added to Draft EIR Appendix A beginning on page 226:

[306a] Land use covenants of this type run with the land pursuant to Civil Code section 1471 and/or Health and Safety Code sections 25202.5, 25355.5, or 25395.99 and shall continue in perpetuity unless modified or terminated in accordance with applicable law. (22 CCR Section 67391.1(d)).

[306b] As discussed in greater detail in Attachment D, under Health and Safety Code section 25220, the sole explicit trigger for a land use covenant variance is when a project proposes "*a land use that differs from filed land use restrictions on the property*." The proposed Martin Substation separation or new City Substation (project variant) would not result in a change in land use, as either site would continue to be used for utility purposes, and would involve construction activities that may temporarily affect existing remedy components. The 1995 and 2002 land use covenants applicable to the site do not categorically prohibit construction or utility activities, but instead restrict specific actions such as alterations to the existing cap or interceptor trench "without written approval by the Department [DTSC]." However, DTSC indicated during an August 19, 2025, meeting with CDIM, the SFPUC, and the San Francisco Planning Department that a variance may be required, citing the adjacent Midway Housing Development as precedent. The Midway Housing Development proponents submitted a land use covenant variance application for implementation of a remedial action plan amendment, including penetration and reconstruction of the cap, as well as for a proposed change in site uses to residential and childcare, which directly conflicted with recorded restrictions. The variance was therefore driven by both a change in land use and by remedy modifications associated with that change. Accordingly, two regulatory pathways are available for implementation of the proposed project or project variant.

[306c] Haley & Aldrich, Soil Management Plan Pacific Gas and Electric Company Martin Service Center/Daly City MGP, 3004 Geneva Avenue, Daly City California, June 2017. Page 14.

[306d] A removal action workplan is one of two types of cleanup documents that may be prepared for a cleanup site pursuant to California Health and Safety Code sections 79195 and 79225.

[306e] California Department of Toxic Substances Control, Removal Action Work Plan (RAW) Quick Reference Guide, available online https://dtsc.ca.gov/removal-action-work-plan-raw-quick-reference-guide/, accessed January 23, 2026.

[306f] California Department of Toxic Substances Control, Removal Action Work Plan (RAW) Quick Reference Guide, available online https://dtsc.ca.gov/removal-action-work-plan-raw-quick-reference-guide/, accessed January 23, 2026.

SOIL AND GROUNDWATER MANAGEMENT

Comments A-DTSC.1, O-PGE-2.75, and O-PGE-2.91 discuss groundwater testing and handling during project or project variant construction. Specifically:

- Comment A-DTSC.1 includes specific recommendations related to groundwater handling and testing, including that a groundwater management plan should include containerization of potentially impacted groundwater collected during dewatering activities and the chemicals the wastewater would be analyzed prior to disposal.
- O-PGE-2.75 states that regulatory requirements for disposal of groundwater to the sewer system should be provided in the Draft EIR, and that there is no discussion of the discharge compliance criteria or process plan contingencies, sampling, potential pre-discharge storage with secondary containment and/or pre-discharge treatment, and potential discharge limits.
- Comment O-PGE-2.91 states that a more explicit discussion of the process and requirements for determining whether potentially contaminated groundwater can be discharged to the Bayshore Sanitary District sewer system should be provided in the EIR (e.g., provisions of the wastewater discharge permit, testing requirements, water quality criteria, and system capacity requirements).

As stated in the updated text for Draft EIR Appendix A page 223, above, DTSC, or, if appropriate, the regional board, is the state agency with sole responsibility for ensuring that required action in response to a hazardous substance release or threatened release at a listed site is carried out in compliance with the procedures, standards, and other requirements identified in relevant sections of the Health and Safety Code, and shall, as appropriate, coordinate the involvement of interested or affected agencies in the response action. DTSC has specialized technical expertise and its authority and requirements are designed specifically to prevent the release of contaminants into the environment. As shown in the updated text for Draft EIR Appendix A page 226 et. seq., above, a project-specific soil management plan, removal action workplan, or updated remedial action plan would include measures required to be implemented during construction to provide for protection of public health, including nearby schools and sensitive receptors. These measures would also help to ensure appropriate disposition of contaminated soil and groundwater removed from the site. As stated in the Draft EIR (Appendix A page 226), groundwater extraction from dewatering of excavations at the Martin Substation or Daly City Yard could result in contaminated water that would require appropriate handling and disposal, and would either be disposed of into the sanitary sewer in accordance with the requirements of the Bayshore Sanitary District or would require onsite treatment to remove contaminants prior to disposal. Groundwater management requirements would be subject to review and approval of DTSC; as noted in DTSC's comment on the Draft EIR (Comment A-DTSC.1), groundwater management would be required to include containerization of potentially impacted (i.e., contaminated) groundwater collected during dewatering activities and analysis of the chemicals in the collected groundwater prior to disposal.

Comments A-DTSC.2, O-PGE-2.88, and O-PGE-2.91 discuss soil testing and handling during project or project variant construction. Specifically:

- Comment A-DTSC.2 recommends that all imported soil and fill material be tested to assess any contaminants of concern meet screening levels as outlined in DTSC's Preliminary Endangerment Assessment Guidance Manual.

- O-PGE-2.88 recommends clarifying that excavated soils at the Martin Substation would be tested for contaminants prior to disposal, and, if necessary, excavated soils would be disposed of at a landfill licensed to accept hazardous waste, as stated in *Hazardous Materials Handling* (Section 2.5.4.1).
- O-PGE-2.91 states the Draft EIR should have more description of the extent of excavation relative to the extent of contamination at the Martin Substation and questions the likely methods in the soil management plan to address risk during construction and how different soil waste would types be managed prior to removal.

Regarding Comments A-DTSC.2 and O-PGE-2.91, as stated in the updated text for Draft EIR Appendix A page 226 et. seq., above, the project-specific soil management plan, removal action workplan, or updated remedial action plan would include measures to be implemented during construction to provide for protection of public health, including nearby schools and sensitive receptors. DTSC's Preliminary Endangerment Assessment Guidance Manual mentioned in Comment A-DTSC.2 recommends using the DTSC recommendations in Human Health Risk Assessment Note 3 and San Francisco Bay RWQCB Environmental Screening Levels (ESLs) as screening levels, which is consistent with the criteria established in the 2017 soil management plan, and would be included in the removal action workplan or updated remedial action plan if required by DTSC.

In response to Comment O-PGE-2.88, suggesting a clarification regarding excavated soil testing, the fourth sentence in the first paragraph on Draft EIR page 2-46 has been revised as follows:

> Soils excavated within the Martin Substation would be tested for contaminants prior to disposal and, if necessary, excavated spoils would be disposed of at a landfill licensed to accept hazardous waste.

Regarding Comment O-PGE-2.91, refer to Draft EIR Appendix J-2 Figure 2, which shows the extent of contamination at the Martin Substation and Daly City Yard.

AIR QUALITY CONTROLS

Comments O-CUE.12 and O-CUE.23 include specific comments related to dust control, specifically stating that the City cannot rely on Mitigation Measure M-AQ-2a to reduce construction impacts associated with contaminated soil, that air monitoring is needed to demonstrate that mitigation is effective, and that watering three times daily instead of twice daily would further reduce dust during construction.

The Draft EIR does not rely on Mitigation Measure AQ-2a for compliance with regulations applicable to contaminated soil. Land use restrictions for the Martin Substation site include the requirement that capped soils may not be disturbed without approval of a health and safety plan and soil management plan by DTSC. As discussed in the revised text for Draft EIR Appendix A page 226 et. seq. above, measures to ensure the safety of construction workers and the public would be required by DTSC in any plan prepared for construction activity at the site. A community air monitoring program would likely be required due to the estimated soil excavation volumes, proximity to residences and schools, and presence of volatile and particle-bound contaminants. A community air monitoring program would be prepared using the current DTSC *Interim Guidance for Implementing a Community Air Monitoring Program at Contaminated Sites* guidance document under DTSC's broad remedial authority (California Health and Safety Code sections 79055 and 79195-79240). A community air monitoring program typically requires installation of perimeter and offsite air sensors to continuously monitor particulars and site-specific contaminants of concern in surrounding residential areas or along haul routes. Monitoring results are compared against actions levels that

trigger immediate response measures. Such measures commonly include requirements that result in VOC and dust control, such as:

- Wetting down soil surfaces of excavations, excavator buckets, and loadout areas
- Compacting soil
- Implementing soil stockpile management measures
- Covering truck trailers/bins once soil is loaded
- Limiting size, number, and volume of open excavations to reduce the contact of impacted soil with air
- Reducing the volatilization of contaminants by minimizing soil vapor pore volume
- Using foam or misting agents to control VOCs

The effectiveness of best management practices for dust control would be monitored though combination of techniques both at the excavation area(s) and at the site perimeter, such as real-time community air monitoring during soil-disturbing activities as mentioned in Comments O-CUE.12 and O-CUE.23. The best management practices and monitoring methods would be outlined in a project-specific soil management plan, removal action workplan, or updated remedial action plan.

ESTIMATE OF HAZARDOUS SOILS FOR LINEAR COMPONENTS

Comment O-PGE-2.88 requests a justification for the estimate that half of the soil excavated for linear components would be suitable for backfill. The SFPUC provides water and wastewater services to all of San Francisco and consequently has extensive experience installing pipelines throughout San Francisco. The SFPUC conservatively estimated the amount of excavated soil unsuitable for backfill based on their extensive San Francisco experience.

Comment HZ-3: Indoor Air Quality, Vapor Intrusion, and Worker Exposure

This response addresses the following comments, which are quoted below:

O-CUE.9, O-CUE.24

"B. Potential Vapor Intrusion Impacts from Known Soil and Groundwater Contamination at the Martin Substation and Daly City Yard Are Not Disclosed or Analyzed

The DEIR is legally deficient because it fails to adequately identify, disclose, and analyze potential vapor intrusion arising from known vapor-forming chemicals present at the Project site.[92] An EIR must provide a full and accurate disclosure of all potentially significant environmental impacts, including those related to hazardous materials contamination.[93] This obligation extends to reasonably foreseeable risks posed by volatile chemicals in subsurface soils or groundwater that may migrate into overlying structures, posing a threat to indoor air quality and human health.

[92] *Id. at pp. 13-16.*
[93] *Pub. Res. Code § 21061; CEQA Guidelines § 15126.2(a).*

The DEIR acknowledges the historic presence of TPH and VOCs in the soil and groundwater at the Project site.[94] However, it fails to assess the potential for these contaminants to migrate in vapor form because of the proposed grounddisturbing activities.[95] This omission is especially concerning given the volatile nature of these chemicals and the well-established pathways through which vapor intrusion into can occur in enclosed structures.[96]

Notably, CCSF's environmental consultant concedes that no vapor evaluation has been conducted for the Project site.[97] The consultant also acknowledges that construction of any new occupied structures will require further assessment of vapor intrusion potential in accordance with applicable guidance issued by DTSC and SWRCB.[98] Such evaluations may ultimately necessitate implementation of vapor intrusion mitigation measures[99]. Yet, despite this acknowledgement, the DEIR does not include any site-specific vapor intrusion modeling, indoor air sampling, or even preliminary screening-level risk analysis consistent with regulatory standards.[100] The consultant further notes that existing remedial action plans for the site do not address vapor intrusion mitigation.[101]

By failing to address this foreseeable risk, the DEIR deprives decisionmakers and the public of critical information necessary to evaluate the project's health and safety impacts. CEQA requires that an EIR analyze not only direct effects, but also reasonably foreseeable indirect environmental consequences of a project.[102] Vapor intrusion is both foreseeable and potentially significant, particularly given the proposed construction and future occupancy of new buildings.[103] The DEIR's failure to evaluate this risk renders its analysis incomplete and legally inadequate under CEQA." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of California Coalition of Utility Employees [O-CUE.9])

"3. The DEIR Does Not Disclose Vapor Intrusion Risks and the Health Risk Assessment Does Not Consider The Potential For Exposure To Soil Vapors

The DEIR fails to disclose and analyze the potential for vapor intrusion at the Martin Substation site. Based on the information presented, the DEIR neither provides sufficient site-specific data, nor incorporates scientifically sound methodology to assess the presence, extent, or implications of vapor intrusion risk, despite evidence showing subsurface contamination in proximity to and within the Project area. Vapor intrusion is a well-documented pathway by which VOCs and other hazardous vapors migrate from subsurface sources into overlying structures, potentially exposing occupants to carcinogenic and toxic compounds. Guidance from DTSC and U.S. EPA stresses the importance of vapor impact assessment in any redevelopment project involving former industrial, commercial, or brownfield sites.

---

[94] *DEIR, Appendix A., Initial Study.*
[95] *Clark Comments at p. 13.*
[96] *Ibid.*
[97] *Id.at p. 16; see also Memorandum to Karen Lancelle, Environmental Science Associates et al., from Scott Bourne, CDIM Engineering et al. re: Technical Memorandum, Site Management Requirements, PG&E Martin Service Center, PG&E Power Asset Acquisition Project, Brisbane and Daly City, California (Aug. 5, 2024) p. 8 (hereinafter "ESA Memo").*
[98] *ESA Memorandum at p. 8.*
[99] *Ibid.*
[100] *Clark Comments at p. 13.*
[101] *ESA Memo at p. 8.*
[102] *CEQA Guidelines § 15378.*
[103] *Clark Comments at pp. 13-16.*

The DEIR omits critical elements required for a credible vapor impact assessment, including the lack of risk modeling or mitigation measures. For example, the DEIR does not apply current screening levels for vapor risk (e.g., EPA's Vapor Intrusion Screening Level calculator or DTSC's Human Health Risk Assessment guidance). The DEIR should at a minimum reference the guidance from State and Federal authorities to ensure that all appropriate modeling and mitigation measures are accounted for. Those guidance include, but are not limited to:

- CalEPA. 2015. Advisory – Active Soil Gas Investigations. California Environmental Protection Agency, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, and San Francisco Bay Regional Water Quality Control Board. July.
- DoD [Department of Defense]. 2019. Matrix for Selecting Vapor Intrusion Investigation Technologies, DoD Vapor Intrusion Handbook Fact Sheet Update No: 007. July.
- DTSC. 2011a. Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). California Environmental Protection Agency, Department of Toxic Substances Control. October.
- DTSC. 2011b. Final Vapor Intrusion Mitigation Advisory, Revision 1. California Environmental Protection Agency, Department of Toxic Substances Control. October.
- ITRC [Interstate Technology & Regulatory Council]. 2007. Vapor Intrusion Pathway: A Practical Guideline. VI-1. January.
- ITRC. 2014. Petroleum Vapor Intrusion: Fundamentals of Screening, Investigation and Management. October.
- SF-RWQCB. 2022. Vapor Intrusion Mitigation Guidance, Technical Resource Document. San Francisco Bay Regional Water Quality Control Board. June 2022.
- USEPA. 2008. Engineering Issue: Indoor Air Vapor Intrusion Mitigation Approaches. EPA/600/R-08/115. October.
- USEPA. 2011a. Background Indoor Air Concentrations of Volatile Organic Compounds in North American Residences (1990–2005): A Compilation of Statistics for Assessing Vapor Intrusion. EPA 530-R-10-001. Office of Solid Waste and Emergency Response. June.
- USEPA. 2012a. Conceptual Model Scenarios for the Vapor Intrusion Pathway. Office of Solid Waste and Emergency Response. February.
- USEPA. 2012b. Petroleum Hydrocarbons and Chlorinated Solvents Differ in their Potential for Vapor Intrusion. Office of Underground Storage Tanks. March.
- USEPA. 2012c. U.S. EPA's Vapor Intrusion Database: Evaluation and Characterization of Attenuation Factors for Chlorinated Volatile Organic Compounds and Residential Buildings. Office of Solid Waste and Emergency Response. March 16.
- USEPA. 2013a. Evaluation of Empirical Data to Support Soil Vapor Intrusion Screening Criteria for Petroleum Hydrocarbon Compounds. U.S. Environmental Protection Agency, Office of Underground Storage Tanks. January.

- USEPA. 2013b. EPA Region 9 Guidelines and Supplemental Information Needed for Vapor Intrusion Evaluations at the South Bay National Priorities List (NPL) Sites. Letter to California Regional Water Quality Control Board – SF Bay Region. December 3.
- USEPA. 2014a. Engineering Issue: Challenges in Bulk Soil Sampling and Analysis for Vapor Intrusion Screening of Soil. USEPA Office of Research and Development, EPA/600/R-14-277, December.
- USEPA. 2014b. Engineering Issue: Passive Samplers for Investigations of Air Quality: Method Description, Implementation, and Comparison to Alternative Sampling Methods. USEPA Office of Research and Development, EPA/600/R-14-434, December.
- USEPA. 2015a. OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air.
- USEPA. 2015b. Technical Guide for Addressing Petroleum Vapor Intrusion at Leaking Underground Storage Tank Sites. Office of Underground Storage Tanks (OUST). EPA 510-R-15-001. June.
- USEPA. 2016. Petroleum Vapor Intrusion Modeling Assessment with PVI Screen. Office of Research and Development. EPA 600/R-16/175. August. USEPA. 2017a. Engineering Issue: Adsorption-based Treatment Systems for Removing Chemical Vapors from Indoor Air. US Environmental Protection Agency, Office of Research and Development. EPA/600/R-17/276. August.
- USEPA. 2017b. Documentation for EPA's Implementation of the Johnson and Ettinger Model to Evaluate Site Specific Vapor Intrusion into Buildings, Version 6.0. US Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. September.

Furthermore, the DEIR proposes no mitigation measures to address potential vapor intrusion impacts, such as vapor barriers or sub-slab depressurization systems, even on a contingency basis.

Moreover, the Health Risk Assessment (HRA) performed as part of the air quality impact analysis focused on the construction phase emissions of diesel particulate matter (DPM) from the construction activities at the Martin Substation, and linear components.[10] The HRA did not quantify the risks from construction emissions associated with 1) modifications to retain PG&E access to nonelectrical facilities, 2) operations control center construction, 3) operations and maintenance service yards; materials and equipment storage, and 4) telecommunications equipment. Nor did the HRA did not quantify or analyze the health risks from soil vapors from volatile organic compounds and semi-volatile organic compounds that were left in place at the Martin Substation.

According to the 2005 Environmental Characterization Sampling Report For The PG&E Martin and Jefferson Substations[11] (Secor), the subsurface at the Martin Substation is characterized as consisting either of sand with silt and gravel or gravelly silty sand (inferred fill materials) from the surface to approximately 4.5 to 8 feet bgs. This was underlain by gravelly sand, silty clayey sand, or silty sand to a depth of at least 8.25 to 16 feet bgs. Well-graded sand was encountered in B-1, B-2, and B-3 between 8.25 and 14.5 feet bgs. Groundwater was encountered in each of the six soil borings at depths of between 4 and 5 feet bgs. As was noted above, data from the 1988 soil characterization reported benzene, toluene, ethylbenzene and xylenes (BTEX) concentrations ranged from 0.1 to 13.4 mg/kg in soils onsite. BTEX was detected in 7 of the 25 borings.

[10] *DEIR, Appendix F.*
[11] *Secor. 2005. Environmental Characterization Sampling Report PG&E Martin and Jefferson Substations Brisbane and Redwood City, California. Dated May 26, 2005. Pg 5.*

Benzene, toluene, ethylbenzene and xylenes are VOCs that readily transition from liquid to vapor phase under ambient environmental conditions. These compounds pose a well-documented risk of vapor intrusion, particularly within buildings constructed over or near VOC-impacted soil or within a subsurface vapor plume. Once vapor-phase contaminants migrate into enclosed structures, they can become concentrated in indoor air at levels significantly exceeding those found in ambient outdoor air, thereby exposing building occupants to elevated health risks. Construction workers are also at risk of inhalation exposure during site grading and subsurface disturbance activities.

Despite this recognized hazard, none of the available investigations for the Martin Substation site report any collection or analysis of soil vapor data. CCSF's own consultant recognizes this gap.[12] The failure to conduct soil gas sampling or otherwise evaluate vapor-phase contamination represents a significant gap. Without this information, the extent and magnitude of VOC-related vapor intrusion risks remain unknown. The DEIR must consider the requirements of any and all investigation processes to define the lateral and vertical extent of any contamination prior to development of a site in a revised EIR." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo and others on behalf of California Coalition of Utility Employees [O-CUE.24])

RESPONSE HZ-3

Comments coded HZ-3, quoted above, state that vapor intrusion risks must be evaluated for the EIR impact analysis to be adequate. This response clarifies the relevant regulatory requirements applicable to project or project variant activities at the Martin Substation and Daly City Yard.

CEQA requires an EIR to identify and focus on significant effects of the proposed project on the environment as well as analyze any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected (CEQA Guidelines section 15126.2(a)). The CEQA Guidelines (section 15151) also state that an EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. With the following clarifications and the clarifications in Response HZ-2, the EIR discussion satisfies the requirements of CEQA.

Draft EIR Appendix J-2 Figure 2 shows the extent of contamination at the Martin Substation and Daly City Yard. As noted in Draft EIR Appendix J-2, the need for implementing a plan for vapor intrusion and indoor air quality would be driven by the location of occupied structures along with the concentrations of contaminants of potential concern in gas under the site. As noted in Draft EIR Chapter 2, Project Description, page 2-48, the approximately 400 employees that would be hired for administration, operation, and maintenance of the electrical system would be based at SFPUC offices, operations and maintenance service yards, and the operations control center. The employees would not be located at the Martin Substation or Daly City Yard. However, new structures enclosing electrical equipment that could be accessed by workers would be built as part of either the proposed project or the project variant. While the Draft EIR analysis assumes that excavated soil would be contaminated, offhauled to a licensed landfill, and replaced with clean imported soil, any contaminated soil that remains onsite outside of or deeper than the construction area could release contaminated vapor into overlying at-grade structures.

---

[12] *DEIR, Appendix J, CDIM, Technical Memorandum, Site Management Requirements, PG&E Martin Service Station. Pg. 9. ("Neither the 1983 nor the 1998 RAP addresses vapor intrusion mitigation.")*

It is anticipated that workers could enter the new structures for brief periods to maintain electrical equipment. DTSC staff has indicated that, although structures would not be occupied for extended periods (i.e., business hours during a standard work week), enclosed structures in contact with soil may still result in some risk that workers who enter the structures could be exposed to hazardous vapors if vapor intrusion controls are not included in structure design. As stated in the Draft EIR (Appendix A page 224), the 2002 land use covenant applicable to the Martin Substation and Daly City Yard requires that activities that may disturb the caps or the interceptor trench shall not be permitted without prior review and approval by the DTSC. As clarified in Draft EIR text revisions presented in Response HZ-2 (Draft EIR Appendix A page 223), a land use restricted site is a property where DTSC has placed limits or requirements on future use of the property due to varying levels of cleanup possible, practical, or necessary at the site. As clarified in Draft EIR text revisions presented in Response HZ-2 (Draft EIR Appendix A page 226 et. seq.), excavation or other activities that could alter the effectiveness of the existing remedial remedy may not proceed without DTSC approval. DTSC has specialized technical expertise and its authority and requirements are intended specifically to minimize risks to human health and the environment from hazardous materials. Consistent with California Health and Safety Code sections 79195, 79225, and 79230, DTSC would identify one of three approaches to completing project or project variant construction and operation, as outlined in revisions to the Draft EIR (Draft EIR Appendix A page 226 et. seq.). With respect to vapor intrusion during project operations, the DTSC would specify in the updated remedial action plan and remedial design and implementation plan the type of vapor intrusion control system to be constructed and operated. Any new land use covenant or operations and maintenance requirements to be implemented would be determined with DTSC completion or approval of a remedial design and implementation plan. A typical vapor intrusion control system includes some or all of the following measures (refer to Attachment D):

- Installation of passive or active sub-slab depressurization systems;
- Placement of vapor barriers or engineered membranes beneath building slabs;
- Ventilation enhancements or pressure control systems in enclosed spaces;
- Long-term monitoring of sub-slab vapor and/or indoor air to verify protectiveness; and/or
- Elevation of structures above grade such that they are not in direct contact with underlying soil or soil gas.

Draft EIR Appendix A page 227 has been revised as follows to further detail the regulatory requirements applicable to the project or project variant that would avoid exposing workers to hazardous vapors:

> The project would involve operations and maintenance of the new electricity system infrastructure in the Martin Substation or, under the project variant, at Daly City Yard. Operations activities would include occasional worker access to electrical equipment within enclosed structures at the site (e.g., control house). Without proper precautions, workers could be exposed to hazardous vapors in enclosed areas. However, for the Martin Substation separation or new City Substation (project variant), the SFPUC would not be allowed to conduct any activities currently prohibited by the existing land use covenants (including excavation or other activities that could alter the effectiveness of the existing remedial remedy) without DTSC approval of a project-specific soil management plan, a removal action workplan, or an updated remedial action plan (RAP) for the project or project variant. In the plan, the DTSC would specify the type of vapor intrusion control system to be constructed and operated; typical measures include installation of passive or active sub-slab depressurization systems, placement of vapor barriers or engineered membranes beneath building

slabs, elevation of structures above grade, and ventilation enhancements or pressure control systems in enclosed spaces. A new land use covenant or operations and maintenance agreement specified by DTSC would specify how the vapor intrusion control system would operate and how maintenance activities could occur. Maintenance activities such as repairing and replacing installed equipment could entail repairs that would require temporary excavations to access this facility and could encounter hazardous materials in soil and/or groundwater. ~~This work~~ Operations and maintenance activities would be conducted in compliance with the land use covenants, standard construction measures, and regulations described for construction, and thus would not result in significant hazard to the public or environment from potential releases of contaminated soil or groundwater. The impact would be ***less than significant***.

Project or project variant construction could not proceed without a plan that DTSC has determined is protective of human health and the environment, including vapor intrusion controls to address potential vapors in structures that would be accessed by maintenance workers if specified by DTSC, and a construction worker health and safety plan. With implementation of regulatory requirements under the oversight of DTSC and in compliance with Cal/OSHA requirements, impacts related to exposure to hazardous materials in soil vapors during construction and operation would be less than significant because worker exposure to soil vapors would be controlled to below levels that would cause harm. With these clarifications the Draft EIR discussion satisfies the requirements of CEQA and no further change has been made to the Draft EIR in response to comments regarding vapor intrusion.

This page intentionally left blank

10.15 Analysis Approach

The comments and corresponding responses in this section cover topics related to the Draft EIR's analysis approach.

- AA-1: CPUC-Specific Environmental Topics
- AA-2: Initial Study

Comment AA-1: CPUC-Specific Environmental Topics

This response addresses the following comment, which is quoted below:[1]

O-PGE-2.12

"As a threshold matter, CCSF's assertions that it is not legally required to consider CPUC-specific environmental concerns because they are not included on CCSF's environmental checklist are incorrect. (DEIR, pp. 1-13, 3.1-4.) "An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting." (CEQA Guidelines, § 15064(b).) "Compliance with [a] threshold [of significance] does not relieve a lead agency of the obligation to consider substantial evidence indicating that the project's environmental effects may still be significant." (CEQA Guidelines, §15064(c).) "[T]hresholds cannot be used to determine automatically whether a given effect will or will not be significant. Instead, threshold of significance can be used only as a measure of whether a certain environmental effect 'will *normally* be determined to be significant' or '*normally* will be determined to be less than significant by the agency." (*Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1109, emphasis in the original.) "Thus, in preparing an EIR, the agency must consider and resolve every fair argument that can be made about the possible significant environmental effects of a project, irrespective of whether an established threshold of significance has been met with respect to any given effect." (*Id*., at p. 1110.)

The CPUC-specific environmental concerns are undoubtedly highly relevant to the Project, such as whether the Project would expose workers or the public to excessive shock hazards. After all, the CPUC is the agency that necessarily oversees projects in the nature of the Project and has developed expertise in understanding the potential environmental impacts they present. Accordingly, CCSF cannot simply disclaim legal responsibility for evaluating these specific concerns by asserting that its own checklist does not address them. Such an approach is too narrowly focused under CEQA for the Project in question. The fact that CCSF has assertedly considered these issues within the DEIR does not cure the informational defect that CCSF has created.[6] CCSF's position that it is not legally required to consider these concerns creates the false impression that these concerns are outside the scope of CEQA review—misleading the public (and potentially decision-

[1] Footnotes from quoted comments are indicated by *italicized* text and retain their original footnote number from the comment. Footnotes from response text are not italicized and are numbered in order of appearance in this section.

[6] *We note that the Initial Study often does not separately list each additional PEA Guidelines impact question, but instead integrates them into other impact discussions. (See DEIR, Appendix A [Initial Study], p. 151 [biological resources], p. 234 [energy], p. 210 [hazards and hazardous materials], p. 128 [recreation], pp. 72–73 [transportation and circulation], p. 135 [utilities and service systems].) This makes it difficult for the public to ascertain whether the DEIR has adequately addressed these additional items.*

makers) by downplaying the significance of these issues that undoubtedly are highly relevant to projects in the nature of the Project.

CCSF should remedy the issue by recirculating the DEIR and clearly informing the public that these are (at least equally) important concerns requiring assessment and warranting equal attention in reviewing the Project.

Further, as discussed above, only one CEQA review document is generally prepared for a project, and that document is normally intended to be used by all the agencies carrying out or approving the project. (Pub. Res. Code, § 21080.1(a); CEdyQA Guidelines, § 15050(c).) As such, a lead agency must take a comprehensive view in its environmental document, which must include enough information to meet the requirements of the review and approval needs of another agency that is to use its discretion toward the project. (*Banning Ranch Conservancy v. City of Newport Beach* (2017) 2 Cal.5th 918, 941.) Accordingly, the omission of the CPUC-specific environmental concerns would violate the review requirements of the CPUC as a responsible agency and, under *Banning Ranch*, would violate CEQA." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.12])

_____

RESPONSE AA-1

As stated in the Draft EIR (e.g., in Section 3.1.1.1, Initial Study Topics), to provide the most comprehensive review of potential environmental effects that could result from the project or project variant, the impact analyses consider California Public Utilities Commission (CPUC)-specific environmental concerns that are not on the City and County of San Francisco ("City") environmental checklist. The CPUC-specific environmental analysis topics are identified in the *Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments* (2019), or the Proponent's Environmental Assessment (PEA) checklist. The topics relate to biological resources; energy; hazards, hazardous materials, and public safety; recreation; transportation; and utilities and service systems. As shown in **Table 10.15-1**, below, the additional analysis topics from the PEA checklist are included in the Draft EIR impact analysis. As shown in the relevant sections of the Draft EIR listed below, the Draft EIR does not downplay the significance of effects on certain topics because they are from the CPUC's environmental checklist. The Draft EIR does not duplicate CPUC-specific environmental topics that are similar to the City's modified Appendix G checklist but instead incorporates analysis consistent with the CPUC-specific environmental topics into the relevant modified Appendix G topics, as shown in Table 10.15-1. Without substantial evidence from the commenter indicating that the project or project variant's environmental effects may still be significant pursuant to CEQA Guidelines section 15064(c), the lead agency cannot provide a more detailed response. Therefore, the identified topics are addressed in the draft EIR and recirculation is not required. Regarding the level of detail required for impact analysis and potential for subsequent CEQA screening, refer to Response PD-2. Regarding the proper lead agency, refer to Response OC-1.

Table 10.15-1 CPUC-Specific Environmental Topics

Topic and PEA Question	Addressed in Draft EIR
BIOLOGICAL RESOURCES	
Would the project create a substantial collision or electrocution risk for birds or bats?	Appendix A, Section E.15 Biological Resources, Impact BI-4, Operation Impacts
ENERGY	
Would the project add capacity for the purpose of serving a nonrenewable energy resource?	Appendix A, Section E.20 Energy, Impact EN-2
HAZARDS, HAZARDOUS MATERIALS, AND PUBLIC SAFETY	
Would the project create a significant hazard to air traffic from the installation of new power lines and structures?	Appendix A, Section E.18 Hazards and Hazardous Materials, first paragraph
Would the project create a significant hazard to the public or environment through the transport of heavy materials using helicopters?	Appendix A, Section E.18 Hazards and Hazardous Materials, first paragraph
Would the project expose people to a significant risk of injury or death involving unexploded ordnance?	Appendix A, Section E.18 Hazards and Hazardous Materials, Impact HZ-3
Would the project expose workers or the public to excessive shock hazards?	Appendix A, Section E.18 Hazards and Hazardous Materials, Impact HZ-5
RECREATION	
Would the project reduce or prevent access to a designated recreation facility or area?	Appendix A, Section E.12 Recreation, Impact RE-1
Would the project substantially change the character of a recreational area by reducing the scenic, biological, cultural, geologic, or other important characteristics that contribute to the value of recreational facilities or areas?	*Change character or scenic characteristics*: Appendix A, Section E.2 Aesthetics, Impact AE-1 *Biological characteristics*: Appendix A, Section E.15 Biological Resources *Cultural characteristics:* Appendix A, Sections E.4 Cultural Resources and E.5 Tribal Cultural Resources *Geologic characteristics*: Appendix A, Section E.16 Geology and Soils, Impact GE-5
Would the project damage recreational trails or facilities?	Appendix A, Section E.12 Recreation, Impact RE-1
TRANSPORTATION	
Would the project create potentially hazardous conditions for people walking, bicycling, or driving or for public transit operations?	Appendix A, Section E.6 Transportation and Circulation, Impacts TR-1 and TR-2
Would the project interfere with walking or bicycling accessibility?	Appendix A, Section E.6 Transportation and Circulation, Impacts TR-1 and TR-2
Would the project substantially delay public transit?	Appendix A, Section E.6 Transportation and Circulation, Impacts TR-1 and TR-3
UTILITIES AND SERVICE SYSTEMS	
Would the project increase the rate of corrosion of adjacent utility lines as a result of alternating current impacts?	Appendix A, Section E.13 Utilities and Service Systems, Impact UT-1, Operation Impacts

Comment AA-2: Initial Study

This response addresses the following comment, which is quoted below:

O-PGE-2.14

_____

""Following preliminary review, the [l]ead [a]gency shall conduct an Initial Study to determine if the project may have a significant effect on the environment. If the [l]ead [a]gency can determine that an EIR will clearly be required for the project, an Initial Study is not required but may still be desirable."[7](CEQA Guidelines, § 15063(a).) Where, as here, an initial study is used in the preparation of an EIR, it should be used to focus the EIR "on the effects determined to be significant" and identifying "the effects determined not to be significant." (CEQA Guidelines, § 15063(c)(3).)

Here, CCSF "prepared an initial study to identify topics for which the [P]roject's effects **would be less than significant** and not require further analysis, and those topics that warrant more detailed environmental analysis in an EIR." (DEIR, p. 1-3 [emphasis added].) Further, "[b]ased on the findings of the initial study, [the] EIR [only] focused on air quality and noise and vibration." (*Id*.) In other words, here, CCSF has relegated nearly all of the Project's environmental analysis to the Project's initial study (the "Initial Study" or "IS"), even for impacts that would be significant without mitigation. As discussed below, this approach violates CEQA.

As a threshold matter, we note that any reliance CCSF would put on *Ocean Street Extension Neighborhood Assn. v. City of Santa Cruz* (2021) 73 Cal.App.5th 985 ("*Ocean Street*") to support its bifurcated environmental analysis and discussion approach would be misplaced. *Ocean Street* involved a procedurally distinct situation than that here. In *Ocean Street*, the local agency circulated the initial study alongside the notice of preparation ("NOP") for the EIR for a 30-day comment period. (*Ocean Street* at p. 997.) The initial study highlighted potentially significant impact areas as well as those that were potentially significant unless mitigation were incorporated. (*Id*. at p. 999.) The initial study concluded an EIR was required and identified topics to be discussed in the EIR, none of which were factors identified as potentially significant unless mitigation were incorporated. (*Id*.) The public was able to focus its comments exclusively on the initial study and the analysis therein. (*Id*. at p. 997.) The local agency addressed those focused comments. (*Id*.) After the public's input in framing the EIR scope, the local agency released a draft EIR for public comment that included the initial study as an appendix. (*Id*.)

In contrast, CCSF has not undertaken such a transparent and involved process. CCSF did not circulate the Initial Study alongside the DEIR's NOP. Nor has CCSF focused input on the Initial Study. Rather, CCSF has simply appended the Initial Study to the DEIR only at the time of its publication of the DEIR. (*See* DEIR, Appendix A, p. 269 [Initial Study determination that EIR is required dated the same day (March 19, 2025) as the DEIR publication date].) If anything, CCSF's approach has focused comment away from the environmental topic sections within the Initial Study. By analyzing only certain environmental topic sections (air quality and noise and vibration) within the DEIR and everything else within an appendix Initial Study, CCSF has created the false impression that the environmental topic sections addressed solely in the Initial

[7] *CCSF acknowledged in July 2022 that an EIR was required for the Project. (See Letter from Lisa Gibson (CCSF Environmental Review Officer) to Barbara Hale (CCSF Assistant General Manager, Power Enterprise), dated July 8, 2022—entitled "Appeals of PG&E Power Asset Acquisition Project Preliminary Mitigated Negative Declaration Case No. 2019-017272ENV.")*

Study are of less significance (both colloquially and from a CEQA perspective). After all, because information in appendices may not be sufficiently highlighted, there is a general CEQA principle that members of the public should not be forced to sift through appendices to review environmental impacts. (*Banning Ranch Conservancy v. City of Newport Beach* (2017) 2 Cal.5th 918, 941; *California Oak Foundation v. City of Santa Clarita* (2005) 133 Cal.App.4th 1219, 1239–1240.) This disparate approach has undermined CEQA's core functions of full environmental disclosure and informed public participation. For example, the mitigation measures proposed to reduce significant environmental impacts, and the rationale for why CCSF purports they are adequate, is not presented to the public in the main body of the DEIR where a reader would normally focus its review.

There appears to be no discernable rationale for the City's selective treatment of two environmental topic areas within the DEIR and the balance within the Initial Study. While the DEIR identifies significant and unavoidable noise and vibration impacts (DEIR, pp. 3.2-33, 3.2-35, 3.2-41, 3.2-43, 3.2-45, 3.2-47, 3.2-48, 3.2-51, 3.2-54, 3.2-62, 3.2-63), air quality is not presented with such significant and unavoidable impacts (DEIR, §3.3), yet receives the full DEIR treatment. In fact, air quality impacts are determined to be mitigated to a less-than-significant level (DEIR, pp. 3.3-34, 3.3-38, 3.3-46, 3.3-55), but the impacts on several environmental topic areas—biological resources, cultural resources, tribal cultural resources, geology and paleontological resources—are likewise determined to be less-than-significant only with mitigation. In other words, the Initial Study determines each of these impact areas to be significant, which according to the DEIR would be a basis to analyze it in the DEIR, but then proposes mitigation that is used to justify not including those impact areas in the DEIR.

The Initial Study spills much ink on potentially significant impacts without mitigation and the accordant mitigation measures the DEIR relies on for less-than-significant determinations for these environmental topic areas. (*See* DEIR, Appendix A [Initial Study], § E.4 [Cultural Resources], pp. 40, 41, 43, 44, 45, 49, 50, 51, 64, 65, 66, 67; § E.5 [Tribal Cultural Resources], pp. 70, 71, 72; § E.15 [Biological Resources], pp. 163, 167, 172, 175, 177, 180, 182, 183, 184; § E.16 [Geology and Soils], pp. 197, 198.) The DEIR, however, fails to explain (at the very least) why these mitigation-dependent topic areas are excluded from the analysis in the DEIR, especially when the similarly situated air quality topic area is fully addressed in the DEIR. The public should not be misled to believe that the Project does not have significant risks to the environment solely as a result of CCSF minimizing the importance of such impact areas by relegating their discussion to the Initial Study.

Moreover, the framework of the assessment of environmental topic sections within the DEIR contrasts with those left to the Initial Study. Illustrative is that DEIR section 3.1.2 lays out a structured format that enables the public and decision-makers to engage meaningfully with CCSF's analysis of the environmental topic sections within the DEIR (as opposed to the Initial Study) and evaluate the adequacy of the analysis. (DEIR, pp. 3.1-2–3.) That section details that the environmental topic sections within the DEIR (as opposed to the Initial Study) contain an introduction, description of the environmental setting, regulatory framework, and discussion of the significance criteria, the analysis, the impacts, and the mitigation measures, as well as of cumulative impacts. (DEIR, pp. 3.1-2–3.) This framework is noticeably missing from the environmental topic sections solely analyzed within the Initial Study, even though several of those sections rely on mitigation for a determination of less than significance. (*See*, *e.g.*, DEIR, Appendix A [Initial Study], § E.2 [Aesthetics section, which effectively dives right into discussion of "impacts and mitigation measures" following brief "concepts and terminology" discussion], § E.5 [Tribal Cultural Resources section, with immediate discussion of

mitigations measures]; *see also* CPUC PEA Guidelines[8] pp. 42–74 [requiring environmental analysis for each environmental topic to follow a set framework that includes a description of the environmental setting, regulatory setting, impact criteria, impact analyses, and mitigation measures].) As described above, no matter the ultimate significance conclusion, the CEQA EIR process cannot be short-circuited. (*See Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 515; *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 653–658; *see also Farmland Protection Alliance v. County of Yolo* (2021) 71 Cal.App.5th 300, 310, emphasis in original ["[w]e find nothing in the text of [CEQA] or common law interpreting [CEQA] suggesting a project's impact analysis may be divided across the second and third tiers of environmental review such that some impacts are analyzed in a mitigated negative declaration and others are analyzed in an environmental impact report. … Rather, as explained *ante*, if *any* aspect of the project triggers preparation of an environmental impact report, a full environmental impact report must be prepared."].) The DEIR framework is imperative for informed public participation (and informed agency decision-making)—as without it meaningful evaluation of the adequacy of the DEIR, inclusive of the mitigation and feasibility of alternatives, is lacking.

CCSF cannot take the position that because the Initial Study is attached and incorporated into the DEIR, it has satisfied CEQA's disclosure requirements. CCSF's approach fails to meet the requirement that the information in the EIR be "presented in a manner calculated to adequately inform the decisionmakers and the public." (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442.)

CCSF should remedy the issue by revising and recirculating the DEIR to include the environmental topic sections that have been limited to the Initial Study but that include proposed mitigation measures, utilizing the analysis framework contained in the DEIR (thereby enabling meaningful evaluation of CCSF's environmental analysis)." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.14])

RESPONSE AA-2

Comment O-PGE-2.14 questions the EIR's inclusion of environmental analysis for some topics in the initial study appendix to the Draft EIR; cites case law text stating that "if *any* aspect of the project triggers preparation of an environmental impact report, a full environmental impact report must be prepared"; questions the rationale for including two environmental topics in Draft EIR Chapter 3; notes that the framework of impact discussions in Draft EIR Chapter 3 and Draft EIR Appendix A (initial study) differ; and indicates that initial study topics should be included in Draft EIR Chapter 3. The comment questions whether including the initial study topics for which impacts would be less than significant with mitigation minimizes the importance of such impact areas, and indicates that a revised and recirculated Draft EIR that includes topics from the initial study in Draft EIR Chapter 3 is required to adequately satisfy CEQA's disclosure requirements.

CEQA Guidelines section 15081 states that the decision to prepare an EIR "will be made either during preliminary review under Section 15060 or at the conclusion of an Initial Study after applying the standards described in Section 15064." CEQA Guidelines section 15063 requires that a lead agency conduct an initial

[8] *California Public Utilities Commission, Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments, November 2019.*

study to determine if the project may have a significant effect on the environment. Draft EIR Appendix A is the initial study, which when prepared identified the potential for air quality and noise impacts to be significant. As discussed in CEQA Guidelines section 15063(b)(1), if the agency determines that there is substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment, the lead agency shall prepare an EIR or, if there is no substantial evidence that the project may cause a significant effect on the environment, a negative declaration. The CEQA Guidelines do not say that the evaluations identifying whether an impact would occur must be fully completed as part of the initial study. Rather, the Guidelines state that an EIR shall be prepared in light of evidence the project "may" have an effect – which could be, as in this case, comments received by the City from the commenter on a previous initial study for an earlier version of the project asserting that there could be significant noise and air quality impacts. CEQA Guidelines section 15128 also requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and therefore not discussed in detail in an EIR, and notes that "Such a statement may be contained in an attached copy of an initial study." Nothing in CEQA precludes the concurrent publication of an EIR and an initial study.

The commenter states that the impact analysis framework provided in Draft EIR Section 3.1 is not provided for environmental topic sections solely analyzed in the initial study (Draft EIR Appendix A). The impact analyses in Draft EIR Appendix A contain the relevant environmental setting and regulatory framework needed to identify effects determined not to be significant and to explain why potentially significant effects would not be significant (CEQA Guidelines section 15063(c)(3)). For example, Draft EIR Appendix A includes 7 pages of setting information regarding historic resources, 4 pages of setting information regarding archeological resources, 8 pages of setting information for hazards and hazardous materials, 11 pages of setting information for transportation and circulation, and 9 pages of setting information for biological resources, based on further contextual information contained in technical studies listed in the Draft EIR table of contents as part of the Draft EIR. For some topics, less information is presented because it is not required to ascertain potential impacts under CEQA; as noted in CEQA Guidelines section 15151, an EIR should be prepared with a sufficient degree of analysis to provide decision makers with information that enables them to make a decision that intelligently takes account of environmental consequences. The impact analyses in Draft EIR Appendix A are also consistent with CEQA Guidelines section 15063(a)(3), which states "an initial study is neither intended nor required to include the level of detail included in an EIR."

As noted by the commenter, the City acknowledged in July 2022 that an EIR would be required for the project. The City's next step in the CEQA process, as discussed in Draft EIR Chapter 1 Section 1.5, Environmental Review Process, was to send a Notice of Preparation of an Environmental Impact Report and Notice of Public Scoping Meetings, consistent with sections 15063 and 15082 of the CEQA Guidelines. The notice of preparation stated that the City would prepare an initial study and EIR for the project. The Summary chapter of the Draft EIR includes a summary table (Table S-1) that lists all potentially significant impacts of the project or project variant, the mitigation measures proposed to reduce potential impacts, and the specific sections of the Draft EIR where each impact is analyzed. The purpose of Table S-1 in the Summary chapter is to clearly list for the public and decision-makers the potential effects of the project or project variant and associated mitigation measures. Draft EIR Section 3.1, Overview, also identifies where the environmental impact topics are addressed in the document, and environmental topics for which effects were found not to be significant based on the extent of analysis required for an initial study are listed in Table 3.1-1. As clearly stated on page 3.1-1, "the initial study is an integral part of this EIR. CEQA does not require further assessment of effects not found to be significant in the initial study; thus, those issues are not included in

this chapter." Furthermore, the initial study (Draft EIR Appendix A) was bound into the published Draft EIR document instead of being included in the separate digital appendices. As such, the Draft EIR presents the information in a manner calculated to clearly inform decision-makers and the public.

Farmland Protection Alliance discussed by the commenter was a situation that was procedurally distinct from the process for the current project. In *Farmland Protection Alliance*, the overturned lower court order directed the lead agency to prepare a limited environmental impact report for only certain impacts of the project. The appeal court took exception to this order by indicating that CEQA requires either a mitigated negative declaration or environmental impact report *for the project* [emphasis included in appeal court decision]. The Draft EIR prepared by the City is consistent with CEQA's requirement to prepare an environmental impact report for the project because the City considered all potential environmental impacts of the project in the Draft EIR, inclusive of Appendix A. Inclusion of the initial study as an appendix to the EIR is consistent with CEQA Guidelines section 15128 and with CEQA Guidelines section 15143, which acknowledges in part that a copy of the initial study may be attached to an EIR to provide the basis for limiting the impacts discussed in the EIR.

The concurrent release of the initial study alongside the EIR is often done for transparency and to provide a comprehensive understanding of the project's potential environmental impacts. The initial study helps inform the scope of the EIR by identifying areas requiring detailed analysis, and its inclusion alongside the EIR ensures stakeholders have access to the full context of the environmental review. This approach complies with CEQA's goals of disclosure, informed decision making, and public participation, allowing for a thorough evaluation of the project's environmental effects.

The initial study provides thorough analysis and was circulated with the Draft EIR for public review and comment. The public was able to, and did, provide comments on content in the initial study. Responses to those comments are provided in this RTC document. Draft EIR recirculation requirements are specified in CEQA Guidelines section 15088.5. As stated there,

> "A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification… New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement… Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR."

Updating the Draft EIR to copy impact analyses from Appendix A (initial study) into Chapter 3 and add more detailed environmental setting and regulatory background would not be considered "significant" new information warranting recirculation per CEQA Guidelines section 15088.5.

These comments do not raise specific issues pertaining to the adequacy, accuracy, or completeness of the Draft EIR's analysis of the project or project variant's physical environmental impacts. The comments will be provided to City decision-makers for their consideration before they take an approval action on the project or project variant.

10.16 Other CEQA Considerations

The comments and corresponding responses in this section cover other CEQA considerations in the Draft EIR.

- OC-1: Proper Lead Agency
- OC-2: Mitigation Deferral

Comment OC-1: Proper Lead Agency

This response addresses the following comments, which are quoted below:[1]

O-PGE-2.1, O-PGE-2.11

"Despite the passage of nearly three years since CCSF determined the previously published Mitigated Negative Declaration ("MND") was an inadequate California Environmental Quality Act ("CEQA") document for the Project, and a DEIR was required[2] our review of the DEIR indicates that CCSF remains non-compliant with CEQA in its assessment of the Project. It appears that CCSF remains committed to pushing forward its CEQA review of the Project even though the Project planning is incomplete and the approval of the Project by the *proper* lead agency, the California Public Utilities Commission ("CPUC"), remains years away. This has resulted in a DEIR that does not present to the public or relevant decision makers a meaningful opportunity for environmental review." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.1])

"A lead agency has the principal responsibility for carrying out or approving a project and prepares the appropriate CEQA review document for the project. (Pub. Res. Code, § 21067; CEQA Guidelines, § 15367.) A responsible agency is an agency, other than the lead agency, that proposes to carry out or approve the project. (Pub. Res. Code, § 21069; CEQA Guidelines, § 15381.)

The proper lead agency is ordinarily the agency with the principal responsibility measured in regard to the *total* environment. (*See*, *e.g.*, *Planning & Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892, 906-907 [regional contractor held improper lead agency when state agency charged with statutory responsibility, and in turn principal responsibility, over the supply of water resources impacted by the project was the logical choice for lead agency because its statewide perspective and expertise made it aptly suited to analyze the environmental effects of the project on the *total* environment].) Here, that agency is the CPUC, not CCSF.

It is undeniable that the Project is subject to CPUC approval. (*See* DEIR, pp. 2-57 [CPUC "[a]pproval for transfer of utility assets"], 1-10 [CCSF submitted petition to CPUC in July 2021].) More specifically, in order for

[1] Footnotes from quoted comments are indicated by *italicized* text and retain their original footnote number from the comment. Footnotes from response text are not italicized and are numbered in order of appearance in this section.
[2] *See Letter from Lisa Gibson (CCSF Environmental Review Officer) to Barbara Hale (CCSF Assistant General Manager, Power Enterprise), dated July 8, 2022—entitled "Appeals of PG&E Power Asset Acquisition Project Preliminary Mitigated Negative Declaration Case No. 2019-017272ENV."*

the Project to ultimately go forward the CPUC must make a "Section 851 Determination"[5] that the Project (*e.g.*, the asset transfer) serves the public interest (*e.g.*, among the various factors and criteria that the CPUC will consider that the assets to be transferred will be used for other productive purposes without interfering with the utility's operations or affecting utility customers). In other words, the CPUC necessarily needs to assess the total *inter-connected* system of PG&E (inclusive of the surrounding region) in determining whether the Project serves the public interest, and as such has the significantly greater purview in assessing the *total* environmental impact of the Project. Rather than confronting this reality, CCSF appears to be manufacturing a trigger for CEQA ahead of the CPUC determination, so it can assume the role of lead agency and gain control over the CEQA process and its timeline (potentially influencing the outcome of the environmental review). (*See* DEIR, p. 2-58 [generalized statements of "[a]pproval of the [P]roject" and "[c]ertification of the [DEIR]" for local CCSF actions and approvals].)

Despite taking three years to publish the DEIR, CCSF continues to obfuscate over what the actual first-in-time CCSF "project approval" that will rely on the DEIR would be. (*See*, *e.g.*, DEIR, p. 2-58 [SFPUC and SF Board of Supervisor actions described as "approval of the project"].) PG&E understands that the first "approval" that will rely on the DEIR to comply with CEQA is not a CCSF action, but the CPUC's Section 851 determination that would conclude whether the Project is in the public interest or not. If CCSF will "approve" the Project prior to the CPUC's Section 851 approval, the DEIR should clearly state how, so that the public can determine if the DEIR is adequate to support that approval. If CCSF will not take an approval action prior to the CPUC, that is further support for the CPUC being the proper lead agency to complete the environmental review for the Project prior to the first Project "approval."

We understand that CCSF consulted with the CPUC, which confirmed to CCSF that CCSF should be designated the lead agency for the Project. (*See* DEIR, pp. 1-13, 3.1-4.) However, even an agreement between agencies cannot justify a lead agency designation when such designation does not comply with CEQA. (*Planning & Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892, 905–907 [agreement to designate regional water contractor as lead agency rather than the Department of Water Resources ("DWR") was improper, including because DWR had statewide perspective and expertise over the project].) The CPUC is plainly the proper lead agency to undertake the CEQA review of the whole of the Project and to consider its total environmental impact prior to making a potential Section 851 determination." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.11])

———————————————

[5] *Public Utilities Code section 851(a) provides that a public utility (such as PG&E) "shall not sell, lease, assign, mortgage, or otherwise dispose of or encumber the whole or any part of its … property necessary or useful in the performance of its duties to the public … without first having [] secured an order from the [CPUC] authorizing it to do so[.]" Public Utilities Code section 851(b)(1) provides that section 851(a) applies to "any transaction described in subparagraph (F) of paragraph (1) of subdivision (b) of Section 854.2[,]" which subparagraph covers "[a] voluntary or involuntary change in ownership of assets from an electrical or gas corporation to ownership by a public entity." In other words, either a voluntary transfer and/or involuntary change of ownership (e.g., condemnation) require CPUC approval under section 851(a)—and by long-standing tradition, when reviewing an action under section 851(a), the CPUC applies the public interest standard. Further, notably, the CPUC has previously acted as lead agency related to Section 851 Determinations. (See, e.g., Application of Pac. Gas & Elec. Co. (Sept. 3, 1997) 75 CPUC 2d 340; see also In Re Commission's Rules of Practice & Procedure (Apr. 3, 1973) 75 CPUC 133 ["[w]hile other agencies may have jurisdiction over certain aspects of the proposed project (see Orange County Air Pol. Con. Dist. v Public Util. Com'n. (1971) 4 Cal 3d 945), the primary determination whether the project is necessary, considering social, economic, environmental, and technical factors-is to be determined by the Commission. [Citation omitted.] When an EIR is required in connection with an electric generating plant project, the Commission would be the lead agency"].)*

RESPONSE OC-1

Public Resources Code section 21067 and CEQA Guidelines section 15367 define a lead agency as the public agency that has the principal responsibility for carrying out or approving a project. See also, *Planning & Conservation League v. Castaic Lake Water Agency* (2009) 180 Cal.App.4th 210, 239 (when multiple public agencies are involved in a project, "the public agency that shoulders primary responsibility for creating and implementing a project is the lead agency, even though other public agencies have a role in approving or realizing it"). Here, the City and County of San Francisco (the City) has proposed the project and would shoulder the primary responsibility for implementing it. The Draft EIR acknowledges that other agencies, including the CPUC, would also have to permit or approve the project as shown in Draft EIR Section 2.8, Anticipated Permits and Approvals (Draft EIR p. 2-57). As noted on Draft EIR page 1-13, the CPUC is a CEQA responsible agency on the project. It is anticipated that any project approval by the CPUC would come after project sponsor approval and the CPUC's involvement would be more limited, as explained below. CEQA Guidelines section 15051 provides further direction for determining the appropriate lead agency when multiple public agencies are involved, resulting in the following determinations for the project:

- Section 15051(a) states that if a project will be carried out by a public agency, that agency shall be the lead agency, even if the project would be located within the jurisdiction of another public agency. The CPUC would not "carry out" the project or project variant, but rather would issue necessary discretionary approvals. By contrast, the City would carry out the project or project variant by purchasing the Assets and implementing the work needed to separate necessary infrastructure within the project areas located in San Francisco and San Mateo counties. The CPUC regulates investor-owned electric utilities such as PG&E and components of the safety operations of government-run utilities and common carriers. Its jurisdiction is statewide, including oversight for regulated activities occurring in the project areas. CEQA Guidelines Section 15051(a) authorizes the City to be the lead agency.
- Section 15051(b) guides decision-making if the project is to be carried out by a nongovernmental person or entity. Because the City would carry out the project or project variant and is a governmental entity, subsection (b) does not apply.
- Section 15051(c) states that when more than one public agency has responsibility for supervising or approving a project, the agency that will act first on the project will normally be the lead agency. Here, as described in Draft EIR Section 2.8.3, Local Actions and Approvals, the City expects to authorize financing, issue revenue bonds, and approve real estate transactions before a project approval by the CPUC would be needed.
- The City is a lead agency under the standards in CEQA and the CEQA Guidelines section 15051(a) and (c). In addition, Section 15051(d) allows public agencies by agreement to designate an agency as the lead agency. CEQA does not require any specific format to memorialize an agreement. Here, as explained in Draft EIR Section 1.5.3 (p. 1-13), the CPUC and the City agree that the City is the appropriate CEQA lead agency for this project.

For these reasons, the City, acting as lead agency, is both proper and consistent with CEQA and the CEQA Guidelines. In its role as lead agency, the City has prepared a Draft EIR that presents the information necessary to provide a meaningful opportunity for environmental review. Comment O-PGE-2.1's suggestion to the contrary is not supported by substantial evidence and, without more information from the commenter, the City does not have sufficient information to provide a more detailed response.

Comment OC-2: Mitigation Deferral

This response addresses the following comments, which are quoted below:

O-PGE-2.42, O-PGE-2.45

_____

"It is generally inappropriate to defer studies to determine presence and the details of mitigation measures to the future (*e.g.*, removed from the environmental review process). (CEQA Guidelines, § 15126.4(a)(1)(B); *see*, *e.g.*, *Save the Agoura Cornell Knoll v. City of Agoura Hills* (2020) 46 Cal.App.5th 665, 688, 693, 791 [mitigation measures calling for future surveys and future formulation of various components of mitigation measures found to be improper deferral of mitigation.]) Deferral will be found improper if no reason is given or justification for why the deferral is appropriate. (*See*, *e.g.*, 1 Kostka & Zischke, Practice Under the Cal. Envtl. Quality Act (Cont.Ed.Bar 2025) ("Kostka & Zischke"), § 14.12 ["[d]eferral can be found improper if no reason for it is given."].) Moreover, a mitigation measure: (1) needs to be fully enforceable (CEQA Guidelines § 15126.4(a)(2)); (2) needs to be feasible (*e.g.*, viable and effective) (CEQA Guidelines § 15126.4(a)(1); and (3) cannot be too vague to ensure it will be viable and effective (*Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1116). In this sense, deferred studies must include clear performance standards for measuring the effectiveness of the mitigation in committing the agency to mitigating impacts. (Kostka & Zischke, § 14.12.)

Much of the "mitigation" in the DEIR does not meet these standards. Instead, the DEIR often relies on SFPUC's admittedly generalized Standard Construction Measures and/or future plans (*e.g.*, Noise Control Plan) as a form of mitigation in merely determining no significant impact. This does not provide sufficient analysis and disclosure of the Project's impacts to the public, responsible agencies, and the decision-makers. (*See also* Exhibit A [further discussing inadequate mitigation and improper deferral of studies].)

Furthermore, several of the DEIR's mitigation measures as well as SFPUC's Standard Construction Measures, lack an enforcement mechanism and lack clear performance standards for measuring and ensuring the effectiveness of deferred plans—and ultimately do not ensure feasibility (*e.g.*, effectiveness) in mitigating impacts. As detailed throughout Exhibit A, examples of improperly deferred mitigation due to the lack of clear performance standards include the DEIR's inclusion of measures within the Noise Control Plan only if feasible and the failure of the DEIR to identify calculations showing the effectiveness of the measures that may be included within the Noise Control Plan." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.42])

_____

"The DEIR (inclusive of the Initial Study (IS)) improperly relies on SFPUC Standard Construction Measures as mitigation. Many of those measures require additional study which is necessary to adequately analyze the Project impacts. The measures fail to include clear performance standards for measuring and ensuring the effectiveness of the measures in mitigating the accordant potentially significant impacts to a less than significant level. By deferring those studies to after Project approval, the public and decision-makers, including responsible agencies, are deprived of the opportunity to meaningfully comment on and consider the potential impacts of the Project. Examples of improper deferred mitigation due to the absence of clear performance standards include, but are not limited to, deferral of all hazardous materials and

archaeological/historical resources studies until after Project approval. The studies identified in the specific comments below should be completed at this stage of the environmental review and included in a revised and recirculated DEIR." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-2.45])

_____

RESPONSE OC-2

The comments above discuss general requirements applicable to mitigation measures and state that additional analysis and disclosure of the project's impacts are needed (particularly related to noise, hazardous materials, and archeological/historical resources). The comments also state that the Draft EIR's mitigation measures need clear performance standards for measuring and ensuring the effectiveness of deferred plans, and that the Draft EIR relies on SFPUC standard construction measures as mitigation.

CEQA Guidelines section 15126.4(a)(1)(B) states that the development of mitigation measures should not be deferred, but clarifies that the specific details of a mitigation measure may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve the performance standards and that will considered, analyzed, and potentially incorporated into the mitigation measure. A mitigation performance standard is sufficient if it identifies the criteria the agency will apply in determining that the impact will be mitigated. Monitoring can be used as a check on an EIR's determination that an impact will be less than significant. Mitigation measures need not include precise quantitative performance standards, but they must be at least partially effective, even if they cannot mitigate significant impacts to less-than-significant levels.

As discussed below and in Section 10.4, Noise and Vibration, and Section 10.8, Cultural Resources, the Draft EIR's mitigation measures comply with the requirements of CEQA – no improper deferral has occurred. Where appropriate, the Draft EIR's mitigation measures include clear performance standards to help ensure effectiveness in mitigating impacts.

NOISE MITIGATION MEASURES

The Draft EIR does not defer the preparation of technical studies to determine whether potential significant noise impacts could occur. Instead, the Draft EIR identifies potential noise impacts based on calculations performed as documented in Section 3.2, Noise and Vibration. Furthermore, and contrary to statements in Comment O-PGE-2.42, the Draft EIR concludes that construction noise impacts would be significant and unavoidable with mitigation.

As discussed in Response NO-4, Mitigation Measure M-NO-2 identifies methods that would be used to mitigate the impact and sets out standards that the agency commits to meet. The measure lists methods to be included in a construction noise control plan to achieve a performance target of construction activities not resulting in a noise level greater than 90 dBA 1-hour L_{eq}, and 10 dBA above the ambient noise level at noise-sensitive receptors. The mitigation measure specifies that the noise control plan include, but not be limited to, the actions listed. Mitigation Measure M-NO-2 provides a clear list of measures and actions that would control and verify construction noise levels, including monitoring of construction activities to help

ensure performance standards are met. In addition, the mitigation language defines and provides clear steps required in the event a specific control option is determined to be infeasible due to logistical, geotechnical, structural, or other factors. Furthermore, the development and implementation of the noise control plan is to be included in contract specifications, and the plan itself must be submitted to the Environmental Review Officer for approval. Thus, Mitigation Measure M-NO-2 does not improperly defer mitigation and complies with CEQA Guidelines section 15126.4(a)(1)(B) by requiring the plan to be submitted and approved prior to construction, setting quantitative noise limits (e.g., 90 dBA 1-hour L_{eq} and 10 dBA above ambient noise level at noise-sensitive receptors), requiring monitoring and corrective actions, and including detailed implementation procedures.

The Draft EIR includes a discussion of the effectiveness of the measures in the construction noise control plan, as well as the effectiveness of other noise mitigation measures, in the text regarding the significance of the impact after mitigation following each mitigation measure in Draft EIR Section 3.2 (see for example Draft EIR page 3.2-41 for the discussion of the effectiveness of Mitigation Measure M-NO-2). While the methods listed in Mitigation Measure M-NO-2 are known to be effective at reducing noise, CEQA does not require the specific combination of measures (and therefore specific calculations detailing noise levels after mitigation) to be provided in the Draft EIR. Mitigation Measure M-NO-2 requires that the construction noise control plan be prepared by a qualified acoustical engineer and include noise control measures that meet a performance target of construction activities not resulting in a noise level greater than 90 dBA 1-hour L_{eq}, and 10 dBA above the ambient noise level at noise-sensitive receptors. The construction noise control plan is required to be submitted to the Environmental Review Officer for approval prior to construction start.

CULTURAL RESOURCES MITIGATION MEASURES

Comment O-PGE-2.45 related to mitigation deferral specifically references archeological and historical resources, and subsequent related comments addressed more fully in Responses CR-2 and CR-3 state that Mitigation Measures M-CR-1c and M-CR-2b need clear performance standards for measuring and ensuring the effectiveness of the measure. Commenters also state that testing and evaluation of resources must be complete prior to approval of the project.

Mitigation Measure M-CR-1c requires review of new pole placement by qualified professionals to ensure conformance with the Secretary of the Interior's Standards. As stated in CEQA Guidelines section 15064(b)(3), "[g]enerally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource."

As discussed in Draft EIR Appendix A Impact CR-2 (p. 49), destruction of archeological resources would be considered a significant impact. Draft EIR Mitigation Measure M-CR-2b includes detailed contents of a testing plan, which is designed to investigate areas of ground disturbance to avoid significant impacts. Mitigation Measure M-CR-2b also specifies additional requirements that would apply should archeological resources be found during testing, including requirements of Mitigation Measure M-CR-2a, such as an archeological data recovery program, treatment of human remains and funerary objects, and curation. Implementation of Mitigation Measure M-CR-2b would help to ensure a less-than-significant adverse impact by reducing or avoiding the destruction of archeological resources during project construction and by preserving and interpreting noteworthy information represented by the resources encountered.

The commenter is incorrect that testing and evaluation of resources must be completed prior to project approval. As stated in CEQA Guidelines section 15126.4(b)(3)(C), "when data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provisions for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted *prior to any excavation being undertaken*" (emphasis added).

The project's draft Mitigation Monitoring and Reporting Program, which would be adopted in accordance with CEQA Guidelines section 15097(a) if the project is approved and a draft of which is being published concurrent with this response to comments document, identifies the implementation responsibilities, monitoring and reporting responsibilities, and specific completion criteria for each mitigation measure for the project. Implementation of the Mitigation Monitoring and Reporting Program would be made enforceable as a condition of project approval.

STANDARD CONSTRUCTION MEASURES

The Draft EIR does not rely on the SFPUC Standard Construction Measures as mitigation. These measures are referenced in the Draft EIR only in limited context in analysis of Impact HZ-3 on page 227 of Appendix A (Initial Study) to describe how maintenance activities would comply with applicable regulatory requirements. As stated, "[t]his work would be conducted in compliance with the land use covenants, standard construction measures, and regulations described for construction…". Draft EIR Appendix A Section E.18, Hazards and Hazardous Materials, does not include mitigation measures but does include a detailed description of the regulatory requirements applicable to the project or project variant. Consistent with the Court's decision in *Tracy First v. City of Tracy* (2009) 177 Cal.App.4th 912, compliance with relevant regulatory standards can provide a basis for determining that a project would not have a significant CEQA impact.

This page intentionally left blank

10.17 General Comments

The comments and corresponding responses in this section cover general topics, some of which are relevant to and addressed in the Draft EIR. The comment topics relate to:

- GC-1: Permits and Approvals
- GC-2: Public Involvement and Collaboration or Coordination
- GC-3: Support, Opposition, and Opinions Related to the Project
- GC-4: Scope of CEQA Review
- GC-5: Other General Comments

Comment GC-1: Permits and Approvals

This response addresses the following comments, which are quoted below:

A-Brisbane.2, A-Caltrans.2, A-Caltrans.5

"The DEIR acknowledges that lands impacted by the project are within the San Bruno Mountain HCP. Please be advised that any work within planned or unplanned parcels must comply with the operating programs for those respective administrative parcels and/or management units. The City advises consultation with the HCP Plan Operator (San Mateo County Parks) prior to commencement of any work in administrative parcels of the HCP. It is not clear that the Initial Study analysis properly considers the full scope of limitations on activities within each administrative parcel or the HCP procedures to move forward with activities within the HCP." (John Swiecki, AICP, Community Development Director, City of Brisbane [A-Brisbane.2])

"**Encroachment Permit**

Please review Chapter 17 of the Caltrans Project Development Procedures Manual (link) and Ch. 600 of the Caltrans Encroachment Permit manual (link) to be aware of the Caltrans policy on utilities and encroachments, and property rights that PG&E may have within Caltrans' ROW in the various locations where the City will be acquiring physical infrastructure and relocating or upgrading that infrastructure.

Please be advised that any temporary or permanent work including traffic control that encroaches in, under, or over any portion of the State highway ROW requires a Caltrans-issued encroachment permit.

The Office of Encroachment Permits requires 100% complete design plans and supporting documents to review and circulate the permit application package. The review and approval of encroachment projects is managed through the Encroachment Permits Office Process (EPOP) or the Project Delivery Quality

Management Assessment Process (QMAP), depending on project scope, complexity, and completeness of the application. Please use the following resources to determine the appropriate review process:

- TR-0416 Applicant's Checklist (link)
- Caltrans Encroachment Projects Processes – Information Video (link)
- Flowchart, Figure 1.2 in Section 108, Overview of the Encroachment Review Process, of Chapter 100 – The Permit Function, Caltrans Encroachment Permit Manual (link)

The permit approval typically takes less than 60 days, but may take longer depending on the project scope, size, complexity, completeness, compliance with applicable laws, standards, policies, and quality of the permit package submitted. Projects requiring exceptions to design standards, exceptions to encroachment policies, or external agency approvals may need more time to process.

To obtain more information and download the permit application, please visit Caltrans Encroachment Permits (*link*)." (Yunsheng Luo, Branch Chief, Local Development Review, Office of Regional and Community Planning [A-Caltrans.2])

_____

"Lead Agency

As the Lead Agency, the City is responsible for all project mitigation, including any needed improvements to the STN [State Transportation Network]. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures." (Yunsheng Luo, Branch Chief, Local Development Review, Office of Regional and Community Planning [A-Caltrans.5])

_____

RESPONSE GC-1

Comment A-Brisbane.2 notes that the project area includes lands within the San Bruno Mountain Habitat Conservation Plan (HCP) and emphasizes the need for compliance with operating programs and procedures applicable to each administrative parcel or management unit. The comment also recommends consultation with the HCP Plan Operator (San Mateo County Parks) prior to initiating any work within these areas. This comment has been acknowledged.

Regarding Comments A-Caltrans.2 and A-Caltrans.5, the City acknowledges and intends to comply with Caltrans requirements for work within state highway right-of-way. As discussed in Impact TR-2 in Draft EIR Appendix A, Section E.6, Transportation, page 108, the project would not result in permanent changes to the transportation network that would create potentially hazardous conditions or interfere with accessibility. All disturbed areas, including curbs, sidewalks, and roadways, would be restored to existing conditions following construction.

_____

Comment GC-2: Public Involvement and Collaboration or Coordination

This response addresses the following comments, which are quoted below:

A-Brisbane.1, A-CPC-1.1, A-LAFCO.1, A-LAFCO.2, O-PGE-1.1, O-CUE.8

_____

“The City requests to be formally consulted when System Reinforcements and Local Distribution System Separation project components are refined with specific routes and alignments with respect to property and rights-of-way within the City’s jurisdiction. (John Swiecki, AICP, Community Development Director, City of Brisbane [A-Brisbane.1])

_____

“I have more of a question in terms of I -- not necessarily the EIR, but I guess, is how the EIR is going to also impact or the jurisdiction of other cities as well and whether they're also going to provide comment. I'm assuming they're also going to provide comment for the EIR and whether those will be part of the -- the response to the EIR.

So I'm looking forward to that actually, what other counties would look into. So, yeah. So that's my, I guess, rhetorical question.” (Commissioner Imperial, San Francisco Planning Commission [A-CPC-1.1])

_____

“The DEIR states that as part of the Project, SFPUC would provide electric service to customers in San Francisco currently served by PG&E and that PG&E would continue to provide electric service to its customers outside San Francisco. Following the acquisition of power assets, if in the future, SFPUC proposes to provide electrical services to parcels located in San Mateo County, a LAFCo process would be required. Both San Mateo and San Francisco LAFCos should be consulted if electrical service by SFPUC to parcels in San Mateo County is planned.” (Sarah Flamm, San Mateo Local Agency Formation Commission [A-LAFCO.1])

_____

“The maps provided in the Draft EIR in Figure 2-1 Project Areas Overview show the areas impacted by the Project, however they do not offer detailed parcel delineation along the San Francisco-San Mateo County border. To ensure the definiteness and certainty of the proposed service area of the Project, San Mateo LAFCo encourages the City and County to work with the relevant agencies in San Mateo County to identify which parcels in the Project area are within San Mateo County.

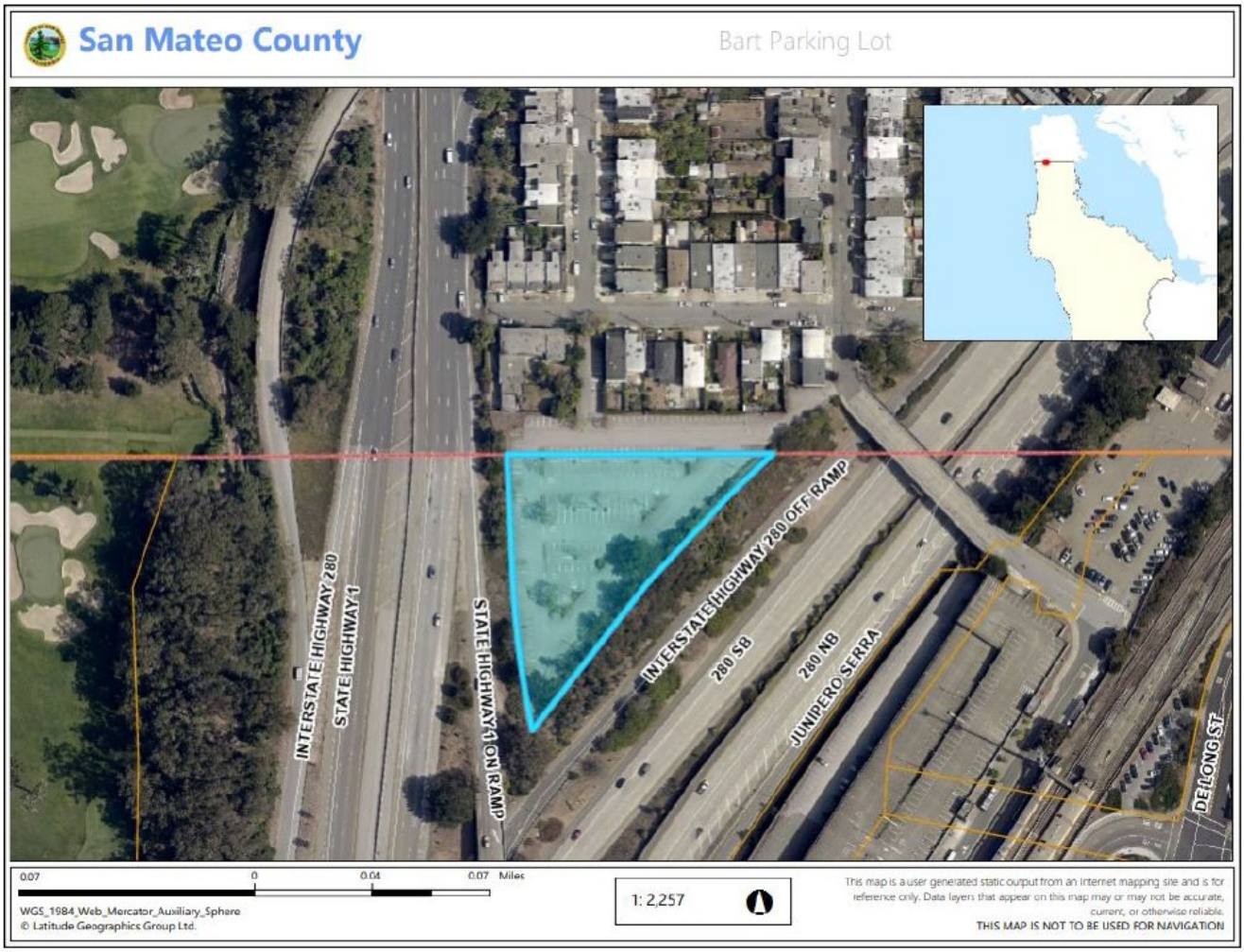
In addition, there are several areas that are not shown in Figure 2-1 regarding how electrical service will be provided. One example of an area on the San Francisco-San Mateo county border where it is unclear as to whom the future power service provider would be is the warehouse space located at 2629 and 2635 Bayshore Hwy (APN 005-340-120 and APN 005-340-110) in the City of Brisbane (see map below). The red line indicates the County border, which splits this warehouse space. The maps contained in the DEIR do not indicate that these parcels are in the Project area and whether SFPUC or PG&E would provide power to this location within San Mateo County.

Figure 1. Warehouse space split between San Francisco and San Mateo Counties



Another area that is not identified in the DEIR is the parking lot owned by the Bay Area Rapid Transit (BART) in the City of Daly City (APN 002-221-010). As shown in Figure 2 below, the northern segment of the parking lot is in San Francisco County and southern part is in San Mateo County. San Mateo LAFCo recommends the addition of clarifying language and exhibits in the Final EIR regarding electrical service to these areas and all areas within the Project area that are located in San Mateo County.

Figure 2. BART parking lot split between San Francisco and San Mateo Counties



San Mateo LAFCo looks forward to reviewing all future environmental documents, including the final EIR, and other referrals related to the Project." (Sarah Flamm, San Mateo Local Agency Formation Commission [A-LAFCO.2])

"Dear Ms. Moore:

Our firm represents Pacific Gas and Electric Company ("PG&E") related to the above referenced project. On behalf of PG&E, we request that the comment period on the Draft Environmental Impact Report for the PG&E Power Acquisition Project (Case No. 2023-005370ENV) ("DEIR") be extended 15 days to May 20, 2025.

The technical nature of the separation work and substation upgrades and the large geographic scope of the proposed project requires significant review and analysis by PG&E's employees in addition to their regular employment duties. PG&E's technical review of the DEIR's proposed electrical grid changes is necessary to determine if there are constraints on the feasibility of the proposed project and the proposed alternatives. The technical review is also required to determine if the proposed components of the project would achieve

required reliability and redundancy standards for the proposed separated San Francisco and San Mateo County systems.

To PG&E's knowledge, a limited 15-day extension to the comment period would not significantly impact the timeline of the project or create any other significant burden on the San Francisco Public Utilities Commission. However, the requested extension would reduce the substantial burden on PG&E's employees who are now diligently reviewing the DEIR. Providing PG&E and the public a 60-day comment period would afford the opportunity for more robust public participation and a more thorough environmental review. Thank you for your consideration." (Christian H. Cebrian, Cox, Castle & Nicholson LLP and others on behalf of PG&E [O-PGE-1.1])

_____

"Moreover, despite this close proximity, the DEIR fails to demonstrate compliance with CEQA's school consultation requirements. There is no indication in the record that the lead agency consulted with the school district having jurisdiction over Bayshore Elementary regarding potential health impacts associated contaminated soil disturbance. CCSF must comply with its consultation obligations before an EIR can be certified." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo, on behalf of the Coalition of California Utility Employees [O-CUE.8])

_____

RESPONSE GC-2

Comment O-CUE.8 asserts that the Draft EIR does not demonstrate compliance with CEQA's school consultation requirements, particularly with respect to potential health impacts from contaminated soil disturbance near Bayshore Elementary School.

In accordance with CEQA Guidelines section 15186, when a project is located within one-quarter mile of a school and involves construction or alteration of a facility that may reasonably be anticipated to emit hazardous air emissions or handle extremely hazardous substances (as defined in Health and Safety Code section 25532(j)), the lead agency must:

1. Consult with the affected school district regarding potential impacts on the school; and
2. Provide written notification to the affected school district at least 30 days prior to certification of the CEQA document.

As discussed in Draft EIR Appendix A Impact HZ-2 (p. 220), the project would not result in significant impacts related to hazardous emissions or use of extremely hazardous materials within one-quarter mile of a school. Draft EIR Impact HZ-3 (Appendix A, Initial Study, p. 222) discusses the potential for the project to release hazardous materials in soil or groundwater during construction.

The City provided written notification of the availability the Draft EIR to the following school districts: Bayshore Elementary School District, San Francisco Unified School District (SFUSD), Brisbane School District, Jefferson Elementary School District, and Jefferson Union High School District.

Other comments above express interest in multi-agency collaboration related to the project. These comments are acknowledged. As discussed in Draft EIR section 1.5.3, the City met with CPUC staff, City of Brisbane planning staff, and City of Daly City planning staff during Draft EIR preparation. Responses to comments received from agencies are included in this response to comments document.

In further response to Comments A-LAFCO.1 and A-LAFCO.2, as stated in the Draft EIR (p. 2-2), the project does not propose to extend SFPUC electric service to customers outside of San Francisco. Figure 2-1 is intended to provide a general overview of the project area and is not required under CEQA to show parcel-level delineation or identify specific service providers for individual parcels. For parcels split by the San Francisco-San Mateo County boundary, the Draft EIR evaluates potential impacts at a program level. The types of separation activities and the geographic areas where work would occur are identified in the Draft EIR, and the foreseeable impacts of these activities are estimated. As discussed in Response PD-2, this level of detail is sufficient for CEQA impact analysis.

As design progresses, the SFPUC would coordinate with relevant San Mateo County agencies and service providers as needed to ensure compliance with applicable regulations. The Draft EIR (e.g., page 1-3) acknowledges that additional environmental review may be warranted in the future as project details are developed. As discussed in Response PD-2, if final project designs are not consistent with the project analyzed in the EIR and could result in additional impacts, subsequent CEQA screening consistent with the CEQA Guidelines may be required. CEQA's subsequent review requirements exist because project details often evolve as more detailed design and field studies become available after approval.

In response to Comment O-PGE-1.1, the request of a 15-day extension of the public comment period for the Draft EIR was acknowledged on April 3, 2025, and the public comment period was extended.[74]

Comment GC-3: Support, Opposition, and Opinions Related to the Project

Response GC-3 addresses the following comments, which are quoted below:

I-Lofrano, I-Mankiewicz

_____

"Please consider this my public comment on the project:

This 600-page EIR is not just adequate, but is too thorough for the magnitude of the issues considered. Stop letting your administrative process be used as a weapon by PG&E (eg, why extend the comment period?) and let's get to the heart of the negotiation. Why does some temporary construction noise get to block a greener and more responsive public power utility for all San Franciscans?" (Sam Mankiewicz [I-Mankiewicz-1])

_____

[74] Lisa Gibson, Environmental Review Officer and Director of Environmental Planning, San Francisco Planning, Letter to Christian Cebrian, Cox, Castle & Nicholson LLP regarding Case No. 2023-005370ENV – PG&E Power Asset Acquisition Project, Request for Extension of Time for Draft EIR Comment Period, April 3, 2025.

“To the SF Planning Commission:

I am writing to OPPOSE "Our City, Our Power", San Francisco’s effort to purchase PG&E’s local electric grid and put it in public hands. Everything the City touches is a mess whether it be homelessness, crime, "war on drugs", Muni, "Non-Profit" bottomless pits – literally everything!! So, as a native San Franciscan who has watched the continued and heartbreaking decline of SF over my entire life, I have ZERO faith that anything the City runs will be a success or a good thing for the citizens of San Francisco – it's just too corrupt and bloated. How on earth, with the City's already huge budget AND deficit, can this even be considered??

"Our City, Our Power" will no doubt result in:

Higher energy price for San Franciscans
Power outages taking longer to restore
More bureaucratic red tape
No real oversight or accountability
Special interest groups, NOT citizens benefitting

This is just another scam designed to sound good but will be just another disaster for San Franciscans. NO!” (Francine Lofrano [I-Lofrano-1])

Response GC-3 also addresses the following comments that are similar to the representative comment quoted below and are not individually listed to avoid repetition:

A-CPC-2.1, A-CPC-4.1, I-Allen, I-Anderson, I-Anonymous, I-Beardsworth, I-Bereznycky, I-Bigos, I-Chadde, I-Chang, I-Chen, I-Clemens, I-Clinton, I-Corliss, I-Darmawi, I-Dunagan, I-Eichelberger, I-Foppe, I-Gaddie, I-Gardner, I-Girling, I-Grassell, I-Gregg, I-Haas, I-Haber, I-Hansen, I-Heisler, I-Hopkins, I-Hrovat, I-Irving, I-Issa, I-Jungreis, I-Kaufman-1, I-Kaufman-2, I-Keller, I-Korda, I-Korolev, I-Landry-Simard, I-Lewis, I-Lin, I-Maffett, I-Mamaniya, I-Martell, I-Moreshell, I-Olexo, I-Reynolds, I-Russo, I-Sage, I-Sarang-Walters, I-Shane, I-Sharee-1, I-Sharee-2, I-Smith Fong, I-Smithly, I-Stanziano, I-Stevens, I-Taylor, I-Teeter, I-Turner, I-Warshell, I-Watkins, I-Weed, I-Whitney, I-Ye

---

“I wanted to add my comment that San Francisco should pursue purchasing PG&E’s assets in San Francisco. PG&E has repeatedly proven to not be a reliable partner for energy stewardship. They’ve been fiscally irresponsible as well. I think San Francisco could do a far better job.” (This comment is representative of the comments listed above, which are similar to this representative comment.)

RESPONSE GC-3

The comments presented above generally express statements of support, opposition, or opinions regarding the project and the EIR. Comments expressing support for or opposition to the project or EIR do not raise specific issues concerning the adequacy or accuracy of the EIR’s discussion of physical impacts. However,

such comments may be considered and weighed by the decision-makers as part of their decision to approve, modify, or disapprove the project.

Comment GC-4: Scope of CEQA Review

This response addresses the following comments, which are quoted below[2]:

O-CUE.4, O-CUE.6, I-Lansing.1, I-Sanders.1

"VI. THE DEIR FAILS TO ANALYZE REASONABLY FORESEEABLE INDIRECT IMPACTS FROM AN INSUFFICIENTLY SIZED OR TRAINED WORKFORCE

A lead agency must consider the reasonably foreseeable indirect environmental consequences of a project's economic or social changes.[75] A physical change to the environment cannot be disregarded simply because it is a secondary result of the project's economic or social effects.[76] Indeed, the CEQA Guidelines state: "Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project."[77]

To ensure safe and reliable electric service in San Francisco, CCSF must maintain a sufficiently sized and properly trained workforce. However, like the PMND before it,[78] the DEIR erroneously assumes that CCSF will be able to hire and retain the necessary personnel to operate and maintain the electric system.

This assumption is unfounded given several well-documented constraints: there is currently a national shortage of line workers; the region faces significant challenges attracting skilled labor due to the high cost of living; and PG&E is committed to retaining its current on-the-ground workforce.[79] Without adequate staffing, CCSF will not be able to respond promptly to system outages or perform timely maintenance, which heightens the risk of equipment failure.[80] This, in turn, could lead to a measurable increase in the frequency and duration of power outages for customers.[81]

The DEIR fails to analyze the potentially significant impacts associated with these risks." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo, on behalf of the Coalition of California Utility Employees [O-CUE.4])

---

[2] Footnotes from quoted comments are indicated by *italicized* text and retain their original footnote number from the comment. Footnotes from response text are not italicized and are numbered in order of appearance in this section.
[75] *CEQA Guidelines § 15064(d)-(e).*
[76] *Id. § 15064(e).*
[77] *Id. § 15064(e).*
[78] *CUE PMND Appeal at pp. 14–18.*
[79] *Id. at pp. 15–17; id., exh. B at pp. 2–3.*
[80] *Id. at p. 17.*
[81] *Ibid.*

"In San Francisco, there are approximately 1,190 permitted backup generators as of 2020.[83] The vast majority of these generators are likely diesel powered given that approximately 90% of the permitted backup generators in BAAQMD utilize diesel fuel.[84] Any increases in generator use would result in a corresponding increase of harmful emissions.[85]" (Andrew J. Graf, Adams Broadwell Joseph & Cardozo, on behalf of the Coalition of California Utility Employees [O-CUE.5])

"To comply with CEQA, the DEIR must address the reasonably foreseeable environmental consequences of inadequate workforce planning, including impacts on outage frequency and duration, and the resulting air quality and health effects from increased generator use." (Andrew J. Graf, Adams Broadwell Joseph & Cardozo, on behalf of the Coalition of California Utility Employees [O-CUE.6])

"First of all, how much would all this cost? How would it be paid? Over what period of time would it be paid? And what is the likelihood that -- or how would it affect the current rates that San Francisco residents pay now for electricity and gas? Thank you." (James Lansing [I-Lansing.1])

"Dear Planning Commissioners,

I write to strongly support the City's pursuit of full public power, and to urge that the Draft Environmental Impact Report (EIR) for the PG&E & TIDA Power Asset Acquisition Project be amended to explicitly address the ongoing power crisis on Treasure Island—one of the most chronically underserved communities in San Francisco's electrical grid system.

Over the past 25+ years, Treasure Island has experienced more than 508 power outages—an average of one every 2–3 weeks. This is not a mere inconvenience. It is a systemic infrastructure failure that:

Endangers the safety and well-being of residents,

Disrupts essential services, and

Undermines equitable access to modern utilities.

LEGAL & STRUCTURAL CONTEXT

Under California Public Utilities Code § 451, PG&E and TIDA is obligated to provide "just and reasonable" utility service. The documented history of outages on Treasure Island fails this standard. San Francisco's Charter and Proposition H (2001) further mandate that the City pursue public power solutions when private utilities fail to serve the public interest.

---

[83] *Ibid.*
[84] *Ibid.*
[85] *Ibid.*

Additionally, the chronic neglect of Treasure Island's infrastructure may invoke federal concerns under 42 U.S.C. § 1983 should residents be subjected to disproportionate harm due to long-standing, unresolved failures in basic services.

RECOMMENDED ACTIONS

I request that the Planning Commission:

Declare Treasure Island a Critical Grid Failure Zone in the Final EIR and recommend that the Board of Supervisors pursue an emergency declaration under SF Admin Code Chapter 7.

Direct SFPUC and relevant agencies to produce a full grid reliability and cost analysis for Treasure Island, with timelines and contingency planning.

Reclassify Treasure Island's infrastructure risk under FEMA Lifeline standards and incorporate it into the PG&E asset transition plan as a Tier 1 priority.

Include Treasure Island as a case study of urgency in the Final EIR, reinforcing the rationale for public power and the moral imperative of intervention.

RELEVANT LINKS AND DATA SOURCES

Treasure Island Outage Tracking: www.treasureislandsfpoweroutages.com

SFPUC Power Division Overview: sfpuc.org/programs/power

EIR Public Info Page: sfplanning.org/environmental-review-documents#pge-power-assets

Planning Commission Meeting – April 17, 2025: sfplanning.org/event/planning-commission-april-17-2025

FINAL NOTE

This moment must serve as a turning point. The PG&E asset acquisition is not just about taking over wires from TIDA also —it's about finally delivering justice, resilience, and reliability to every San Franciscan, especially those who have been left behind." (Barklee Sanders, Technology Consultant [I-Sanders.1])

_____

RESPONSE GC-4

Comments O-CUE.4, O-CUE.5, and O-CUE.6 question whether the Draft EIR correctly assumes the City would be able to hire and retain the necessary personnel to operate and maintain the electrical system because of existing economic constraints affecting workforce availability, and indicate that a lack of qualified workforce could cause more frequent and longer power outages and increased generator use. The economic constraints identified in the comments (national shortage of line workers, high cost of living in the region) presumably would continue to exist regardless of which entity (e.g., PG&E or City and County of San Francisco) owns San Francisco's electrical grid and therefore cannot be attributed to the project. However, active worker training programs exist in San Francisco, such as programs of the Internal Brotherhood of Electrical Workers (IBEW) and the National Electrical Contractors Association San Francisco Join Apprenticeship and Training

Committee. The 2024 total membership of IBEW Local 6 (San Francisco) was approximately 3,000 workers.[2] It would be speculative to assume that such programs would cease training new workers in San Francisco due to the project. While PG&E may intend to retain its existing workforce, basing an environmental impact analysis on the choices of individual workers would also be speculative; for example, it would be speculative to accept the commenters' assertion that the EIR include a discussion of the potential air quality impacts from backup diesel generator use as a result of the choices of individual workers.

Regarding Comment I-Sanders.1, as noted on page 1-16 in Chapter 1, Introduction, of the Draft EIR, the acquisition of Treasure Island's electrical grid is not currently part of the project or project variant and therefore is outside the scope of the environmental review for this project.

Regarding Comment I-Lansing.1, this comment does not address the adequacy or accuracy of the EIR's discussion of physical impacts that require a response per CEQA Guidelines 15088. Additionally, as stated in CEQA Guidelines Section 15131(a), "economic or social effects of a project shall not be treated as significant effects on the environment," unless they result in or contribute to a physical environmental impact.

Comment GC-5: Other General Comments

This response addresses the following comments, which are quoted below:

A-CDFW.7, A-CPC-3.1

"Environmental Data

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNDDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

Environmental Document Filing Fees

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)" (Erin Chappell, Regional Manager, Bay Delta Region, California Department of Fish and Wildlife [A-CDFW.7])

---

[2] https://www.linemancentral.com/unions/san-francisco-

“Let me just briefly start with saying that the thoroughness and confidence of the department's EIRs has always been outstanding.

I am in support of just examining the possibilities of finding an alternative without advertising or making a marketing pitch for either; that's not my role. However, personally speaking, the subject matter itself is extremely complicated, it is highly technical, and it's way above my pay grade. I can only say that what I see, from reading the parts of the DEIR that I did read, felt well-informed. I assume that the technical depths with which things are being examined are also looked at by experts in the field, who will, in written comment, respond to this DEIR. They are not here today, and the -- the draft EIR will shape itself into a final EIR based on the pushback, or the challenges, or the support that the public and experts in the field will lend to this discussion.

Those are my comments, and I'm looking to hear what other commissioners have to say.” (Katherin Moore, Vice President, San Francisco Planning Commission [A-CPC-3.1])

_____

RESPONSE GC-5

Comment A-CDFW.7 includes two key points: (1) a request that any special-status species or sensitive natural communities detected during project surveys be reported to the California Natural Diversity Database (CNDDB), and (2) a reminder that environmental document filing fees are required upon filing of the Notice of Determination (NOD) due to the project’s potential impact on fish and/or wildlife. This comment is acknowledged.

Regarding environmental document filing fees, it is acknowledged that payment of the applicable CDFW CEQA filing fee is required at the time of NOD filing, consistent with California Code of Regulations, title 14, section 753.5, and related statutes.

Comment A-CPC-3.1 expresses general support for the thoroughness and technical quality of the Draft EIR. The commenter notes that the subject matter is complex and highly technical, and expresses confidence that the analysis has been conducted by qualified experts. The comment also acknowledges that the Final EIR will be shaped by public and expert input received during the review process. This comment is acknowledged.

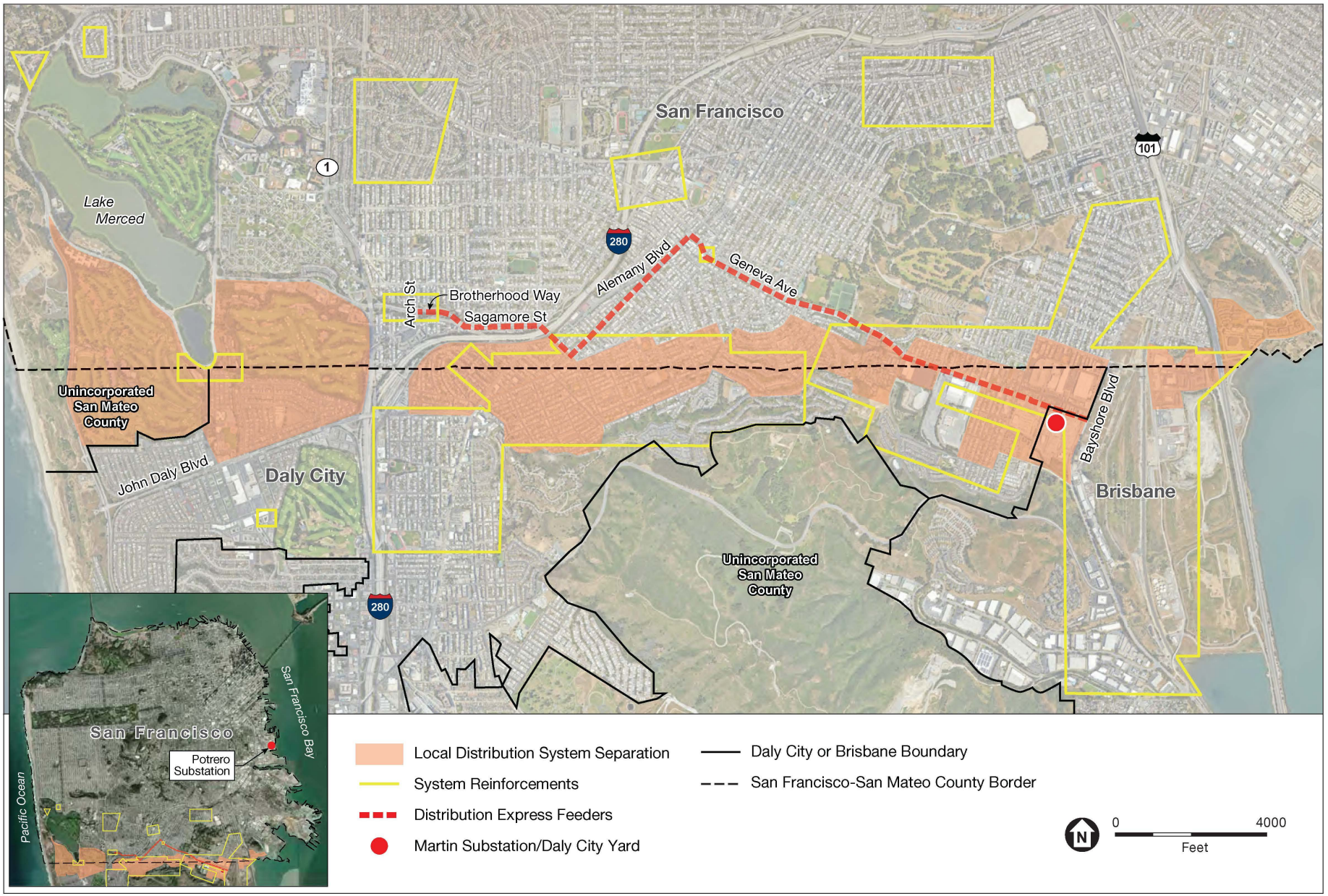
This page intentionally left blank

CHAPTER 11
DRAFT EIR REVISIONS

This chapter presents revisions to the PG&E Power Asset Acquisition Project (project) Draft Environmental Impact Report (Draft EIR), which was published on March 19, 2025. These revisions include both (1) changes made to text, tables, or figures in response to comments on the Draft EIR, as identified in Chapter 10, Responses to Comments; and (2) San Francisco Planning Department (planning department) staff-initiated text changes to correct minor inconsistencies, to add minor information or clarification related to the project, and to provide updated information where applicable in Chapter 8. This chapter includes all revisions by reproducing the relevant excerpt of the Draft EIR in the sequential order by the chapter, section, and page where it appears in the document. Staff-initiated changes to clarify information presented in the Draft EIR are highlighted by an asterisk (*) in the margin to distinguish them from text changes in response to comments. Deletions in text and tables are shown in strikethrough (~~strikethrough~~) and new text is shown in underline (double-underline). None of the revisions results in substantial changes in the analysis or conclusions presented in the Draft EIR. These revisions do not constitute "new information of substantial importance" within the meaning of California Environmental Quality Act (CEQA) Guidelines section 15162(a)(3); therefore, recirculation of the Draft EIR is not required.

11.1 Revisions to the Summary Chapter

*Figure S-1 on Draft EIR page S-5 and Figure S-2 on Draft EIR page S-6 have been revised as shown on the following pages.

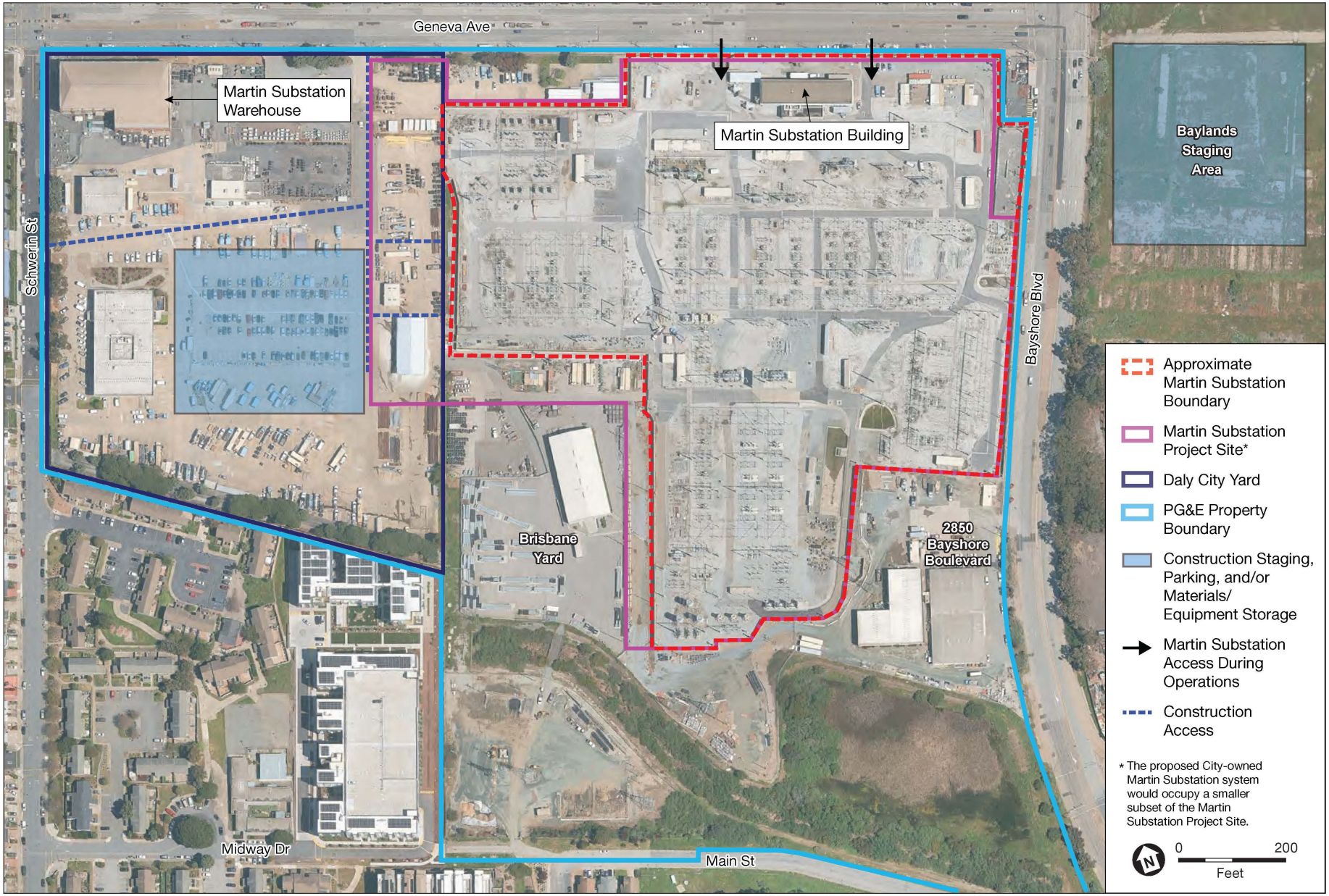


SOURCE: Google Earth Aerial Imagery

PG&E Asset Acquisition Project

Note: The project includes purchase of PG&E's transmission and distribution assets needed for the city to provide reliable electric service to customers in San Francisco, including some assets in San Mateo County. Physical changes would occur at existing PG&E substations, along the distribution express feeders alignment, and at some locations within the areas shaded or outlined in yellow. The project also includes an operations control center and operation and maintenance service yards in southeastern San Francisco.

Revised Figure S-1
Project Areas Overview



SOURCE: SFPUC

PG&E Asset Acquisition Project

Revised Figure S-2

Martin Substation Project Site and Construction Staging Area

*The middle of the first paragraph on Draft EIR page S-7 has been revised as follows:

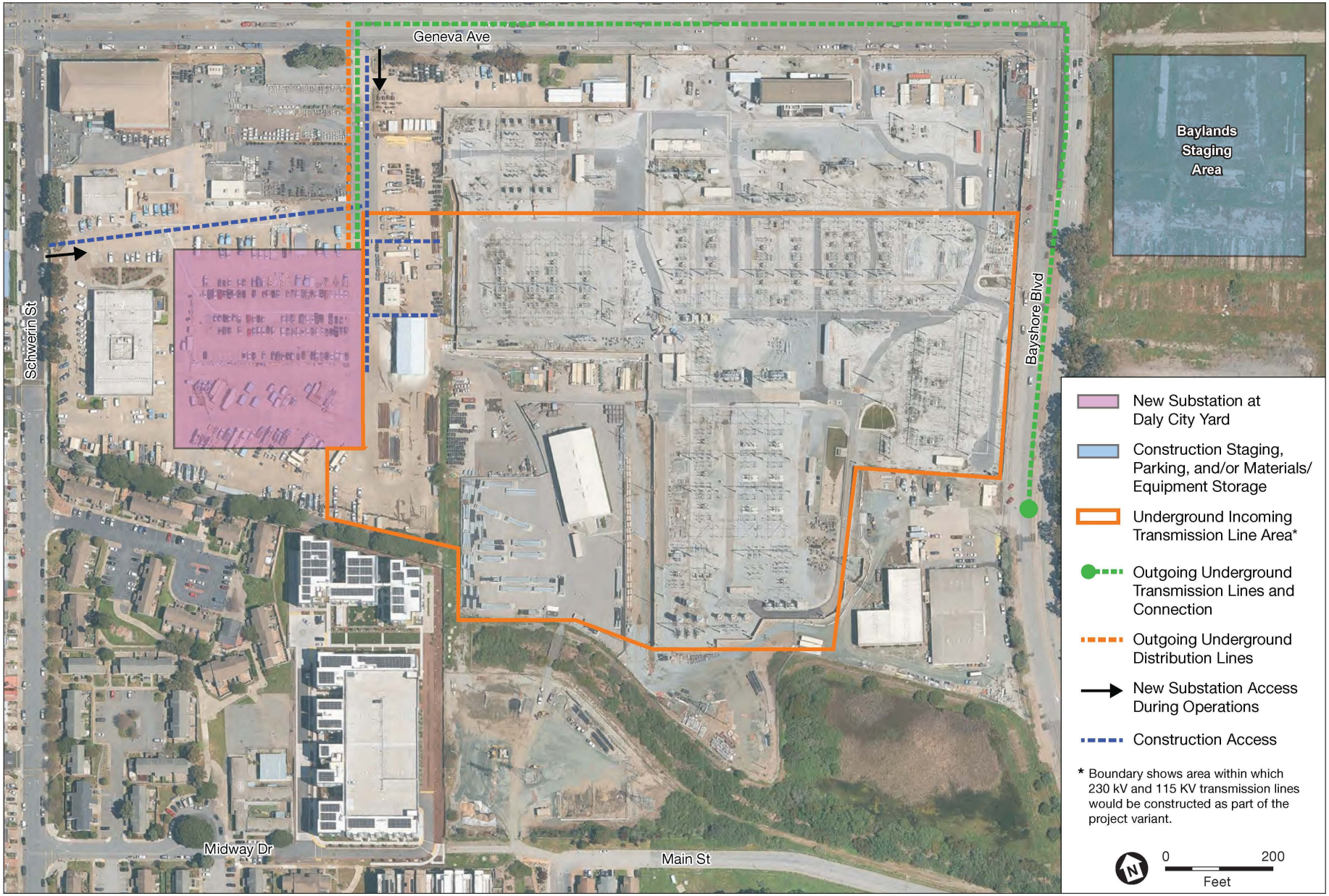
> The total duration of construction would depend on the number of crews working concurrently, and crew deployment timing would be confirmed as project design progresses. Project construction would occur over approximately three years, with an estimated construction period of 2026 to 2028, although construction could occur later depending on the entitlement process.[15] Construction activities would proceed at multiple work areas concurrently, generally with two crews working concurrently on each of the major components (Martin Substation separation, distribution express feeders installation, local distribution separation, and system reinforcements). Due to the limited space at the Martin Substation, the Daly City Yard would serve as the primary staging and laydown area for separation work at the Martin Substation. In addition, an area referred to as the Baylands staging area on the nearby Brisbane Baylands site could be used for temporary construction staging or temporary PG&E parking and materials/equipment storage relocated from the Daly City Yard if development associated with the Baylands Specific Plan has not occurred.

*The last sentence of the second paragraph on Draft EIR page S-7 has been revised as follows:

> Soils excavated within the Martin Substation would be tested for contaminants prior to disposal and, if necessary, excavated spoils would be disposed of at a landfill licensed to accept hazardous waste.

*Draft EIR Figure S-3 (page S-9) has been revised as shown on the following page to include potential staging at Brisbane Baylands.

[15] If work on multiple components proceeds concurrently, construction would take about three years to complete. If some project components are delayed, work could take up to five years. The date of construction start (2026) is an estimate.



SOURCE: ESA, 2023

PG&E Asset Acquisition Project

Revised Figure S-3
New City Substation (Project Variant) at Daly City Yard

*The second bullet on Draft EIR page S-10 has been revised as follows:

- Under the project or project variant, construction at Martin Substation or Daly City Yard would substantially increase noise levels above the 10 dBA over ambient standard for most construction phases, a significant impact, and Mitigation Measure M-NO-2 (Construction Noise Control for the Martin Substation, Daly City Yard Staging, and New City Substation) may not be able to achieve sufficient noise level reductions (Impact NO-2). This would also result in a considerable contribution to cumulative construction noise (a significant cumulative impact). Noise from construction of Martin Substation separation or the new City Substation (project variant) could still exceed thresholds and therefore have a significant cumulative noise impact. (Impact C-NO-1).

*The first bullet on Draft EIR page S-11 has been revised as follows:

- **Noise and Vibration.** Generators used for trenchless construction of the distribution express feeders could temporarily produce sound levels more than 10 dBA above ambient noise levels (Impact NO-2); typical HVAC equipment and exhaust fans, such as that proposed for the operations control center, and transformers at Martin Substation or the new City Substation (project variant) could increase ambient noise by more than the 8 dBA over existing levels at potential operations control center locations, and on Geneva Boulevard and Midway Village, respectively (Impacts NO-3, C-NO-2); and construction of the project or project variant could result in vibration levels that could damage nearby buildings (Impact NO-4).

*The fifth bullet on Draft EIR page S-11 has been revised as follows:

- **Biological Resources.** Construction of the local distribution system separation and system reinforcements could result in adverse impacts on special-status species, wetlands, nesting birds, and bats (Impacts BI-1, and BI-3 through BI-5) and system reinforcements could conflict with the San Bruno Mountain Habitat Conservation Plan (Impact BI-7). Construction of the distribution express feeders and new City Substation (project variant) and use of the Baylands staging area could adversely affect birds (Impact BI-4). Construction of the distribution express feeders and utility work at the operations control center could adversely affect bats (Impact BI-5). Construction could combine with cumulative projects to cause impacts on special-status species and wetlands (Impact C-BI-1).

*Draft EIR Table S-1 (p. S-15) has been revised to reflect refined noise mitigation measures as shown on the following pages.

Table S-1 Summary of Impacts and Mitigation Measures

Impact	Level of Significance prior to Mitigation	Mitigation Measure[19]	Level of Significance After Mitigation
NOISE AND VIBRATION, EIR SECTION 3.2			
Impact NO-2: Construction of the project or project variant would result in a substantial temporary increase in ambient noise.	S	**Mitigation Measure M-NO-1: Construction Noise Control for Generator Operations** (see Impact NO-1) **Mitigation Measure M-NO-2: Construction Noise Control for the Martin Substation, Daly City Yard Staging, and New City Substation.** *This measure applies to: Martin Substation Separation (including Daly City Yard Staging), New City Substation (Project Variant)* The SFPUC shall submit a project-specific construction noise control plan to the Environmental Review Officer (ERO) or the ERO's designee for approval prior to the start of construction for the Martin Substation separation and the new City Substation. The construction noise control plan shall apply to construction activities at the Martin Substation and the new City Substation. The construction noise control plan shall be prepared by a qualified acoustical engineer, with input from the construction contractor, and include noise control measures that meet a performance target of construction activities not resulting in a noise level greater than 90 dBA 1-hour L_{eq}, and 10 dBA above the ambient noise level at noise sensitive receptors (residences, hospitals, convalescent homes, schools, churches, hotels and motels). The SFPUC shall ensure that requirements for the development and implementation of the construction noise control plan are included in contract specifications. The construction noise control plan shall include, but not be limited to the following measures to reduce construction noise levels and meet a performance target of construction activities not resulting in a noise level greater than 90 dBA 1-hour L_{eq}, and 10 dBA above the ambient noise level at noise sensitive receptors: • Use construction equipment that is in good working order, and inspect mufflers for proper functionality; • Select "quiet" construction methods and equipment (e.g., improved mufflers, use of intake silencers, engine enclosures); • Use construction equipment with lower noise emission ratings whenever possible, particularly for air compressors; • Prohibit the idling of inactive construction equipment for more than five minutes; • Locate stationary noise sources (such as compressors) as far from nearby noise sensitive receptors as possible, and muffle such noise sources; • Avoid placing stationary noise-generating equipment (e.g., generators, compressors) within noise-sensitive buffer areas	SUM

Table S-1 Summary of Impacts and Mitigation Measures

Impact	Level of Significance prior to Mitigation	Mitigation Measure[19]	Level of Significance After Mitigation
		(as determined by the acoustical engineer) immediately adjacent to neighbors; • Enclose or shield stationary noise sources from neighboring noise-sensitive properties with noise barriers to the extent feasible; and • Install temporary barriers, barrier-backed sound curtains and/or acoustical panels around working powered impact equipment and, if necessary, around the project site perimeter, where needed. When temporary barrier units are joined together, the mating surfaces shall be flush with each other. Gaps between barrier units, and between the bottom edge of the barrier panels and the ground, shall be closed with material that completely closes the gaps, and dense enough to attenuate noise.; • Where access to alternative sources of power are available, portable diesel engines shall be prohibited. The construction noise control plan shall include the following measures, with input from SFPUC Public Outreach, including notifying the public of construction activities, complaint procedures and monitoring of construction noise levels: • Designation of an on-site construction noise manager for the project; • Notification of neighboring noise sensitive receptors within 300 feet of the project construction area at least 30 days in advance of high-intensity noise-generating activities (e.g., pier drilling, pile driving, and other activities that may generate noise levels greater than 90 dBA at noise sensitive receptors or 100 dBA at commercial receptors) about the estimated duration of the activity; • A procedure for notifying the planning department of any noise complaints within one week of receiving a complaint; • A list of measures for responding to and tracking complaints pertaining to construction noise. Such measures may include the evaluation and implementation of additional noise controls at sensitive receptors; and • Conduct noise monitoring (measurements) at the beginning of major construction phases (e.g., demolition, grading, excavation) and during high-intensity construction activities to determine the effectiveness of noise attenuation measures and, if necessary, implement additional noise control measures. Noise monitoring locations shall be approved in the noise control plan by the planning department. The program shall be set up to alert the construction manager or other designated person(s) when noise levels exceed allowable limits (10 dBA above established ambient levels or 90 dBA).	

Table S-1 Summary of Impacts and Mitigation Measures

Impact	Level of Significance prior to Mitigation	Mitigation Measure[19]	Level of Significance After Mitigation
		If noise levels are found to exceed applicable noise limits due to construction-related activities, corrective action shall be taken, such as moving specific construction activities if feasible, fixing faulty or poorly operating equipment, or installing stationary or portable barriers. The construction noise control plan shall include the following additional measures during pile-driving activities: • When pile driving is to occur within 600 feet of a noise-sensitive receptor, implement "quiet" pile-driving technology (such as pre-drilling of piles, sonic pile drivers, auger cast-in-place, or drilled-displacement, or the use of more than one pile driver to shorten the total pile-driving duration or other applicable methods [only if such measure is preferable to reduce impacts to sensitive receptors]), where feasible in consideration of geotechnical and structural requirements and conditions; and • Where the use of driven impact piles cannot be avoided due to geotechnical and structural requirements and conditions, properly fit impact pile driving equipment with an intake and exhaust muffler and a sound-attenuating shroud, as specified by the manufacturer.	
Impact NO-3: Project or project variant operations would cause a substantial permanent increase in ambient noise levels at noise-sensitive receptors, above levels existing without the project, in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	S	**Mitigation Measure M-NO-3a: Operational Noise Analysis and Attenuation for Stationary Noise Sources** *This measure applies to: Stationary Noise Sources at Martin Substation, New City Substation (Project Variant), and the Operations Control Center* Prior to construction at the Martin Substation, new City Substation (project variant), and operations control center, the SFPUC shall submit documentation to the Environmental Review Officer (ERO) or the ERO's designee, demonstrating with reasonable certainty that the proposed approach to the installation, replacement, or renovation of ~~HVAC~~ stationary source equipment meets the noise ~~limits specified in~~ levels as follows: • Martin Substation: At the northern property plane, southern property plane, and Daly City Yard western property plane, stationary source equipment shall meet the exterior noise standards of section 2909(b) of the San Francisco Police Code (i.e., an 8 dB increase above the ambient noise level at the property plane for noise from commercial or industrial uses~~; and interior noise limits of 55 dBA and 45 dBA for daytime and nighttime hours inside any sleeping or living room in a nearby dwelling unit on a residential property assuming windows open, respectively~~). At the eastern property plane, stationary source equipment shall meet the exterior noise standard of Section 8.28.040 of the Brisbane Municipal Code (i.e., no more than a 10 dBA increase above ambient noise for more than	SUM

Table S-1 Summary of Impacts and Mitigation Measures

Impact	Level of Significance prior to Mitigation	Mitigation Measure[19]	Level of Significance After Mitigation
		10 minutes per hour, no more than a 20 dBA increase above ambient for more than 3 minutes per hour, and not more than a 30 dBA increase above ambient at any point). • New City Substation: At the Daly City Yard's northern, southern, and western property planes, stationary source equipment shall meet the exterior and interior noise standards of section 2909(b) of the San Francisco Police Code. At the Martin Substation eastern property plane, stationary source equipment shall meet the exterior standard of Brisbane Municipal Code Section 8.28.040. • Operations Control Center: At all operation control center property planes, stationary source equipment shall meet the exterior and interior noise standards of section 2909(b) and 2909(d), respectively, of the San Francisco Police Code. Acoustical treatments required to meet the San Francisco Police Code and/or the Brisbane Municipal Code requirements may include but are not limited to: • Enclosing noise-generating mechanical equipment; • Installing relatively quiet models of air handlers, exhaust fans, and other mechanical equipment; • Using mufflers or silencers on equipment exhaust fans; • Optimizing transformer design with low-noise core materials or custom-designed transformer enclosures; • Orienting or shielding equipment to protect noise sensitive receptors (residences, hospitals, convalescent homes, schools, churches, hotels and motels, and sensitive wildlife habitat) to the greatest extent feasible; • Increasing the distance between noise-generating equipment and noise-sensitive receptors; and/or • Placing barriers around the equipment to reduce noise. **Mitigation Measure M-NO-3b: Operational Noise Analysis and Attenuation for Service Yards.** *This measure applies to: Operations and Maintenance Service Yards, if service yard property is within 400 feet of residences and loading operations would occur before 7 a.m.* Prior to occupation and operation of new service yards, the SFPUC shall submit documentation to the Environmental Review Officer (ERO) or the ERO's designee, demonstrating with reasonable certainty that loading operations prior to 7 a.m. within 400 feet of residences can meet the noise limits specified in section 2909 of the San Francisco Police Code (i.e., an 8 dB increase above the ambient noise level at the property plane for noise from commercial or industrial uses; and interior noise limits of 55 dBA and 45 dBA for daytime and nighttime hours inside any sleeping	

Table S-1 Summary of Impacts and Mitigation Measures

Impact	Level of Significance prior to Mitigation	Mitigation Measure[19]	Level of Significance After Mitigation
		or living room in a nearby dwelling unit on a residential property assuming windows open, respectively). Acoustical treatments required to meet the San Francisco Police Code may include but are not limited to: • Enclosing noise-generating stationary mechanical equipment; • Orienting or shielding equipment to protect noise sensitive receptors (residences, hospitals, convalescent homes, schools, churches, hotels and motels) to the greatest extent feasible; • Increasing the distance between noise-generating equipment and noise-sensitive receptors; and/or • Placing barriers around the equipment or along the property boundary to reduce noise.	

*Draft EIR Table S-1 (p. S-22) has been revised to reflect refined noise analysis as shown on the following pages.

Table S-1 Summary of Impacts and Mitigation Measures

Impact	Level of Significance prior to Mitigation	Mitigation Measure[19]	Level of Significance After Mitigation
NOISE AND VIBRATION, EIR SECTION 3.2			
Impact C-NO-1. Construction of the project or project variant, in combination with cumulative projects, would result in a substantial temporary increase in ambient noise levels at noise-sensitive receptors above levels existing without the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, or a substantial temporary increase in ambient noise.	S	**Mitigation Measure M-NO-2: Construction Noise Control for the Martin Substation, Daly City Yard Staging, and New City Substation.** (see Impact NO-2)	SUM

Table S-1 Summary of Impacts and Mitigation Measures

Impact	Level of Significance prior to Mitigation	Mitigation Measure[19]	Level of Significance After Mitigation
Impact C-NO-2: The project or project variant, in combination with cumulative projects, ~~would not~~ could cause a substantial permanent increase in ambient noise levels at noise-sensitive receptors above levels existing without the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	~~LTS~~S	~~No mitigation required.~~ **Mitigation Measure M-NO-3a: Operational Noise Analysis and Attenuation for Stationary Noise Sources** (see Impact NO-3)	~~NA~~ LSM

In response to comments, Mitigation Measure M-AQ-2b in Draft EIR Table S-1 (p. S-25) has been revised to include an additional sentence at the end of the second paragraph under "B. Waivers" as follows:

> ***B. Waivers.***
>
> The environmental review officer (ERO) may waive the requirement of subsection (A)(2) regarding an alternative source of power if an alternative source is limited or infeasible at the project site. If the ERO grants the waiver, the SFPUC must submit documentation that the equipment used for onsite power generation meets the engine requirements of subsection (A)(1).
>
> The ERO may waive the equipment requirements of subsection (A)(1) if a particular piece of Tier 4 Final off-road equipment is technically not feasible, the equipment would not produce the desired emissions reduction because of expected operating modes, or a compelling emergency requires the use off-road equipment that is not Tier 4 compliant. In seeking an exception, the SFPUC shall demonstrate that the project shall use the cleanest piece of construction equipment available and feasible and submit documentation that average daily construction emissions of ROG, NOx, PM2.5 would not exceed 54 pounds per day, and PM10 emissions would not exceed 82 pounds per day. In addition, the SFPUC shall demonstrate that maximum project-level health risks with the use of waivers would not exceed a threshold of 7 in one million for incremental lifetime cancer risk and an annual average PM2.5 concentration of 0.2 mg/m^3.

*Draft EIR Table S-1 starting on page S-29 has been revised to reflect refined cultural resources mitigation measures as shown on the following pages.

Table S-1 Summary of Impacts and Mitigation Measures

Impact	Level of Significance prior to Mitigation	Mitigation Measure[19]	Level of Significance After Mitigation
INITIAL STUDY SECTION E.4, CULTURAL RESOURCES			
Impact CR-1: The project or project variant could cause a substantial adverse change in the significance of a historic architectural resource.	S	**Mitigation Measure M-CR-1a: Martin Substation Historic Resources Setting Protection.** *This measure applies to: Martin Substation separation* Where the project includes placement of new, permanent, aboveground structures, those structures shall be located at a distance that minimizes impacts on the setting of adjacent historic resources. At a minimum, new buildings shall be set back at least 20 feet from any historic resource and at least 30 feet from Geneva Avenue. This measure applies to the Martin Substation separation where a new control building and two switchgear buildings would be installed. Other locations for new aboveground structures near historic resources, if proposed, would be subject to review and approval by San Francisco Planning Department preservation staff to ensure conformance with Secretary of the Interior's Standards for the Treatment of Historic Properties regarding the setting of the historic resource. **Mitigation Measure M-CR-1b: Historic Resources Protection Program.** *This measure applies to: Martin Substation separation, New City Substation (Project Variant), Modifications to Retain PG&E Access to Non-Electrical Facilities at Potrero Substation* To protect historic resources that are adjacent to construction activities (activities such as excavation, trenching, and new building construction), the SFPUC shall protect and avoid damage to onsite and adjacent historic resources. Contract specifications shall be reviewed and approved by San Francisco Planning Department preservation staff prior to the start of construction. Specifications shall include, but not be limited to, the following: • If aerial work would occur above the roofline of adjacent historic buildings and have the potential to cause building damage from falling objects, the roof of the adjacent structure shall be covered to avoid damage. • A buffer zone of 20 feet between historic resources and heavy equipment use and/or staging of equipment and materials shall be established and maintained, if feasible. • If a minimum buffer zone of 20 feet is not possible, barriers or construction monitoring shall be included to ensure no damage to historic resources occurs. • Any damage to historic resources incurred as a result of construction activities shall be immediately reported to the ERO or the ERO's designee, and any damage to the historic resource shall be repaired to match pre-construction conditions per the	LSM

Table S-1 Summary of Impacts and Mitigation Measures

Impact	Level of Significance prior to Mitigation	Mitigation Measure[19]	Level of Significance After Mitigation
		Secretary of the Interior's Standards for the Treatment of Historic Properties in consultation with a qualified historic resources professional and San Francisco Planning Department preservation staff. **Mitigation Measure M-CR-1c: Historic Resources Impact Minimization within Historic Resources and Historic Districts.** *This measure applies to: Local Distribution System Separation (Broderick-Terry Duel site); System Reinforcements (Balboa Terrace Historic District, Ingleside Terrace Historic District; Little Hollywood Historic District)* For project components that would occur within historic resources or historic districts that have distinctive features within the public right-of-way (unusual sidewalk and roadway elements including brick surfacing, brick gutters, gutters lined with former cemetery furniture [broken head and foot stones], granite curbs, cobblestones, railway and streetcar rails, sidewalk lights, street lamps, street furniture, monuments or plaques and/or utility plates), and where these character-defining features appear to be 45 years or older, the SFPUC shall treat such features as potentially character-defining features of their setting. For those locations, historic materials shall be protected in place. Where protection in place is not possible, materials shall be salvaged and reinstalled, or replaced in-kind to match the existing color, texture, material, and character of the feature. For project components that would occur within historic resources or historic districts that have character-defining features related to setting, placement of new poles and/or installation of new electrical or telecommunications equipment shall be in locations that follow established patterns. If maintenance of the current pattern of poles and equipment installation is not possible, locations for new poles, if proposed, would be subject to review and approval by San Francisco Planning Department preservation staff to ensure conformance with Secretary of the Interior's Standards for the Treatment of Historic Properties regarding the setting of the historic resource. **Mitigation Measure M-CR-1d: Historic Resources Impact Minimization for Adaptive Reuse.** *This measure applies to: Operations Control Center* After selection of a proposed building for the operations control center, the SFPUC shall notify the ERO of the selected building. If required based upon ERO and preservation staff review, the SFPUC shall engage a qualified architectural historian to evaluate the historic significance of the operations control center building and provide the relevant historic resource documentation to the ERO. If the building is a historic resource, then the character-	

Table S-1 Summary of Impacts and Mitigation Measures

Impact	Level of Significance prior to Mitigation	Mitigation Measure[19]	Level of Significance After Mitigation
		defining features of the historic resource shall be preserved or reconstructed consistent with Secretary of the Interior's Standards for the Treatment of Historic Properties. The SFPUC shall submit proposed renovation plans to the ERO for review and approval prior to construction to ensure the work conforms to the Secretary of the Interior's Standards for the Treatment of Historic Properties. **Mitigation Measure M-CR-1e: Historic Resources Impact Minimization for Service Yards Improvements.** *This measure applies to: Operations and Maintenance Service Yards within 20 feet of buildings* After selection of proposed service yard locations, the SFPUC shall engage a qualified architectural historian to evaluate the historic significance of buildings on surrounding parcels of the service yards' location. If historic resources are identified on adjacent parcels, then the SFPUC shall incorporate into contract specifications a requirement that the contractor(s) protect and avoid damage to adjacent historic resources. These contract specifications shall be reviewed and approved by the San Francisco Planning Department preservation staff prior to the start of construction. Specifications shall include the following: • If aerial work would occur above the roofline of adjacent historic buildings and would have the potential to cause building damage from falling objects, the roof of the adjacent structure shall be covered to avoid damage. • A buffer zone of 20 feet between historic resources and heavy equipment use and/or staging of equipment and materials shall be established and maintained, if feasible. • If a minimum buffer zone of 20 feet is not possible, barriers or construction monitoring shall be included to ensure no damage to historic resources occurs. • Any damage to historic resources incurred as a result of construction activities shall be immediately reported to the ERO or the ERO's designee, and any damage to the historic resource shall be repaired to match pre-construction conditions per the Secretary of the Interior's Standards for the Treatment of Historic Properties in consultation with a qualified historic resources professional and San Francisco Planning Department preservation staff. **Mitigation Measure M-NO-4a: Protection of Adjacent Buildings/Structures and Vibration Monitoring Construction** (see Impact NO-4) **Mitigation Measure M-NO-4b: Paving Vibration Minimization** (see impact NO-4)	

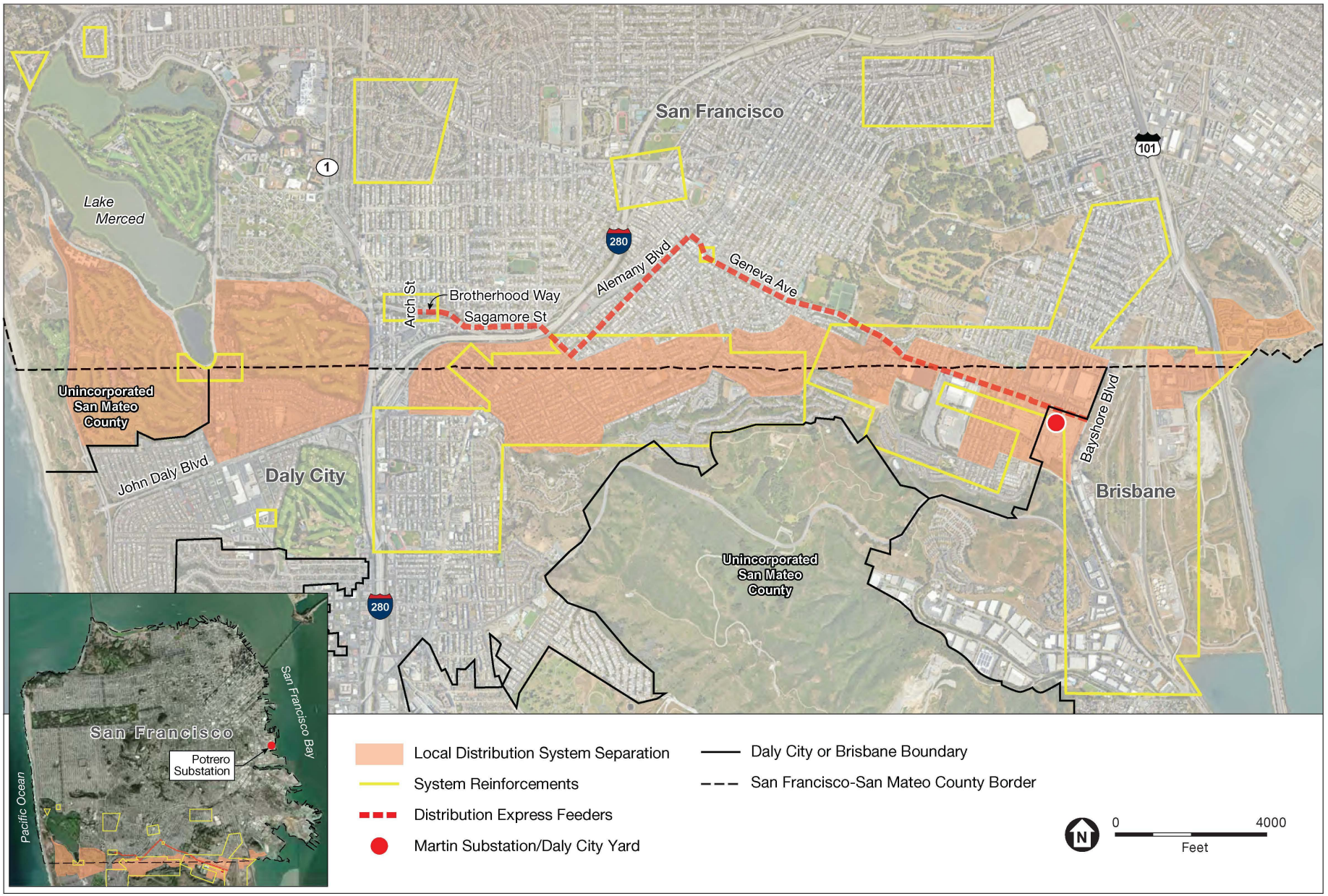
*To correct an error, Impact C-HZ-1 on Draft EIR page S-72 has been revised as follows:

Table S-1 Summary of Impacts and Mitigation Measures

Impact	Level of Significance prior to Mitigation	Mitigation Measure[19]	Level of Significance After Mitigation
INITIAL STUDY SECTION E.18, HAZARDS AND HAZARDOUS MATERIALS			
Impact C-HZ-1: The project or project variant, in combination with cumulative projects, would not have a substantial cumulative impact related to hazards and hazardous materials.	LTS	No mitigation required.	NA

11.2 Revisions to Chapter 2, Project Description

*Figure 2-1 on Draft EIR page 2-4 has been revised as shown on the following page.



SOURCE: Google Earth Aerial Imagery

PG&E Asset Acquisition Project

Note: The project includes purchase of PG&E's transmission and distribution assets needed for the city to provide reliable electric service to customers in San Francisco, including some assets in San Mateo County. Physical changes would occur at existing PG&E substations, along the distribution express feeders alignment, and at some locations within the areas shaded or outlined in yellow. The project also includes an operations control center and operation and maintenance service yards in southeastern San Francisco.

Revised Figure 2-1
Project Areas Overview

*Table 2-2 on Draft EIR page 2-10 has been revised to reflect the installation of two additional revenue meters and one new 60kV breaker, as follows:

Table 2-2 Martin Substation Separation Components

Component[16]	Purpose	Quantity	Excavation for Each Foundation or Trench	
			Maximum Excavation Width and Length (Feet)	Maximum Excavation Depth (Feet)
Transformers (115/12 kV and 115/60 kV)	Reduce voltage to levels safe for grid distribution	3[17]	Width: 44 Length: 44	7
115 kV circuit breakers	Electrical devices designed to automatically open a circuit to prevent damage to components, overheating, and fires	12	Width: 15 Length: 15	7
60kV circuit breaker	Electrical devices designed to automatically open a circuit to prevent damage to components, overheating, and fires	1	Width: 15 Length: 15	7
115 kV control house	Enclosure to house equipment that requires climate control	1	Width: 40 Length: 70	4
Revenue meter and foundations (~~six~~ eight meters, each meter includes three phases, one foundation per phase)	Meter to measure electricity use	~~18~~ 24	Width: 4 Length 4	6
115 kV and 12 kV underground duct banks with cables	Connect new equipment to City and PG&E's grids	1	Width: 5 Length: 3,500	6
Vaults for cable splicing	Connect new equipment to City and PG&E's grids	9	Width: 11 Length: 19	15
12 kV switchgear buildings[18]	Control, protect, and isolate electrical equipment	2	Width: 20 Length: 50	4
Fence	Separate the two utility systems	1	n/a	n/a

n/a = not applicable

[16] The City would establish independent bus sections on existing equipment in the Martin Substation; however, this would not require construction of new components.
[17] Three transformer foundations are proposed as part of the project. The project would relocate one existing transformer at the Martin Substation to a new foundation and would install two new transformers on new foundations.
[18] A switchgear is composed of electrical disconnect switches, fuses, or circuit breakers. It is used to control, protect, and isolate electrical equipment.

*As shown in the following revisions to the first paragraph on Draft EIR p. 2-10, the size of the expanded Martin Substation project site is similar to what was presented in the Draft EIR; this is due to an error in the Draft EIR text:

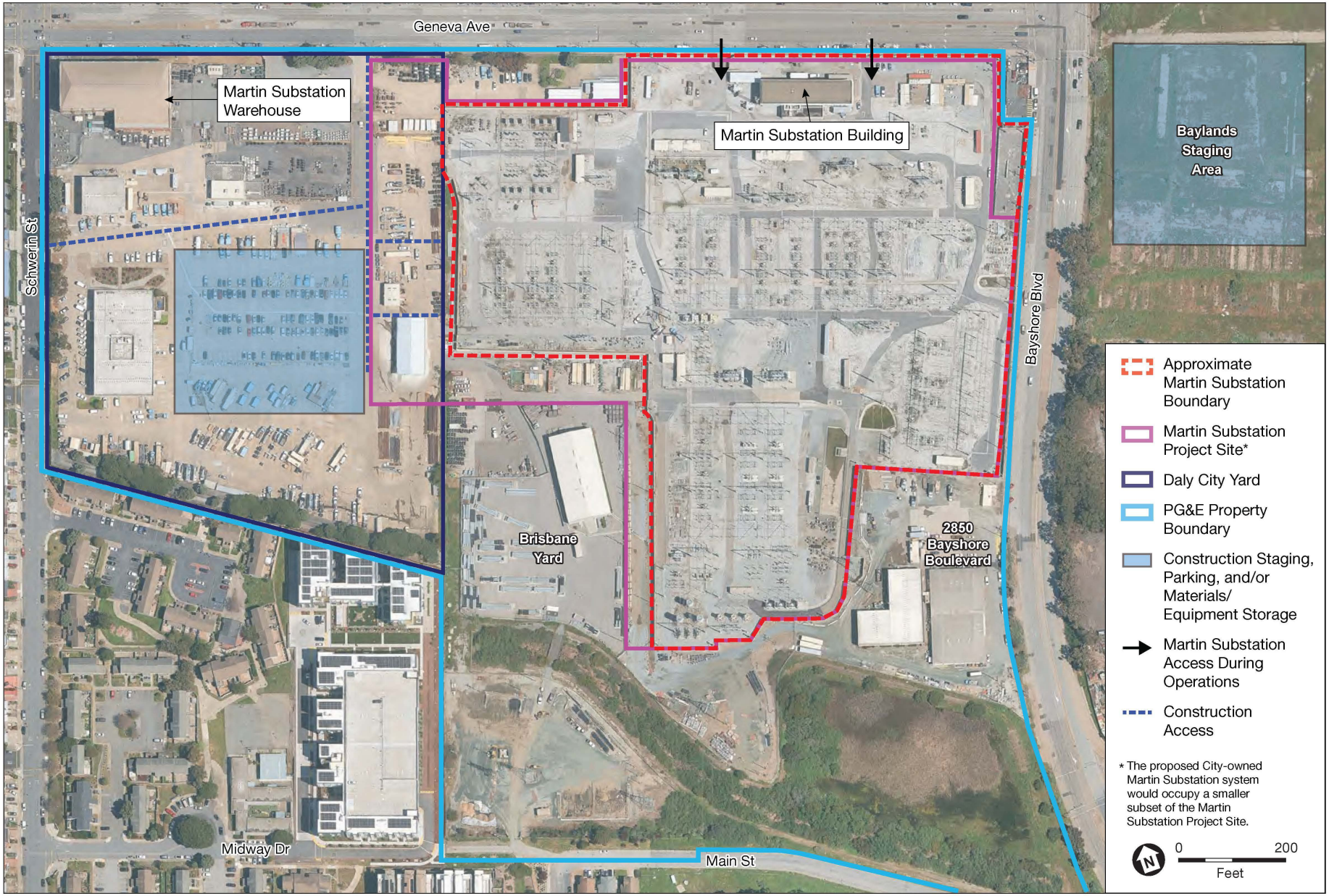
> **Figure 2-2** shows the approximate boundaries of the Martin Substation project site where new, City-owned facilities would be located. The Martin Substation project site in Figure 2-2 is larger than the final City-owned substation because it includes areas for construction work and staging. Precise locations of the new equipment would be determined upon detailed design, but the total space needed for the new equipment is anticipated to be accommodated within the approximately ~~975,000~~ 954,000-square-foot (21.9 acres) bounded area shown in pink in Figure 2-2.

*Figure 2-2 on Draft EIR page 2-11 has been revised to reflect the expanded Martin Substation area and include the Baylands staging area, as shown on the following page.

*The second full paragraph on Draft EIR page 2-12 has been revised as follows:

> *Circuit breakers* (including bus tie breakers) are electrical devices designed to automatically open a circuit to prevent damage to components, overheating, and fires in the event of an overload or short circuit. Circuit breakers can also be used to transfer a line from one bus to another. Twelve 115 kV circuit breakers and one 60 kV circuit breaker would be installed. The breakers are outdoor equipment that would be approximately 8 feet high and located on concrete pads.

*Draft EIR Figure 2-8 (p. 2-28) has been revised as shown on page 11-19 to clarify that system reinforcements would avoid San Bruno Mountain State and County Park and areas within or immediately adjacent to open water bodies (such as the southern portion of Lake Merced, San Francisco Bay, and Brisbane Lagoon).

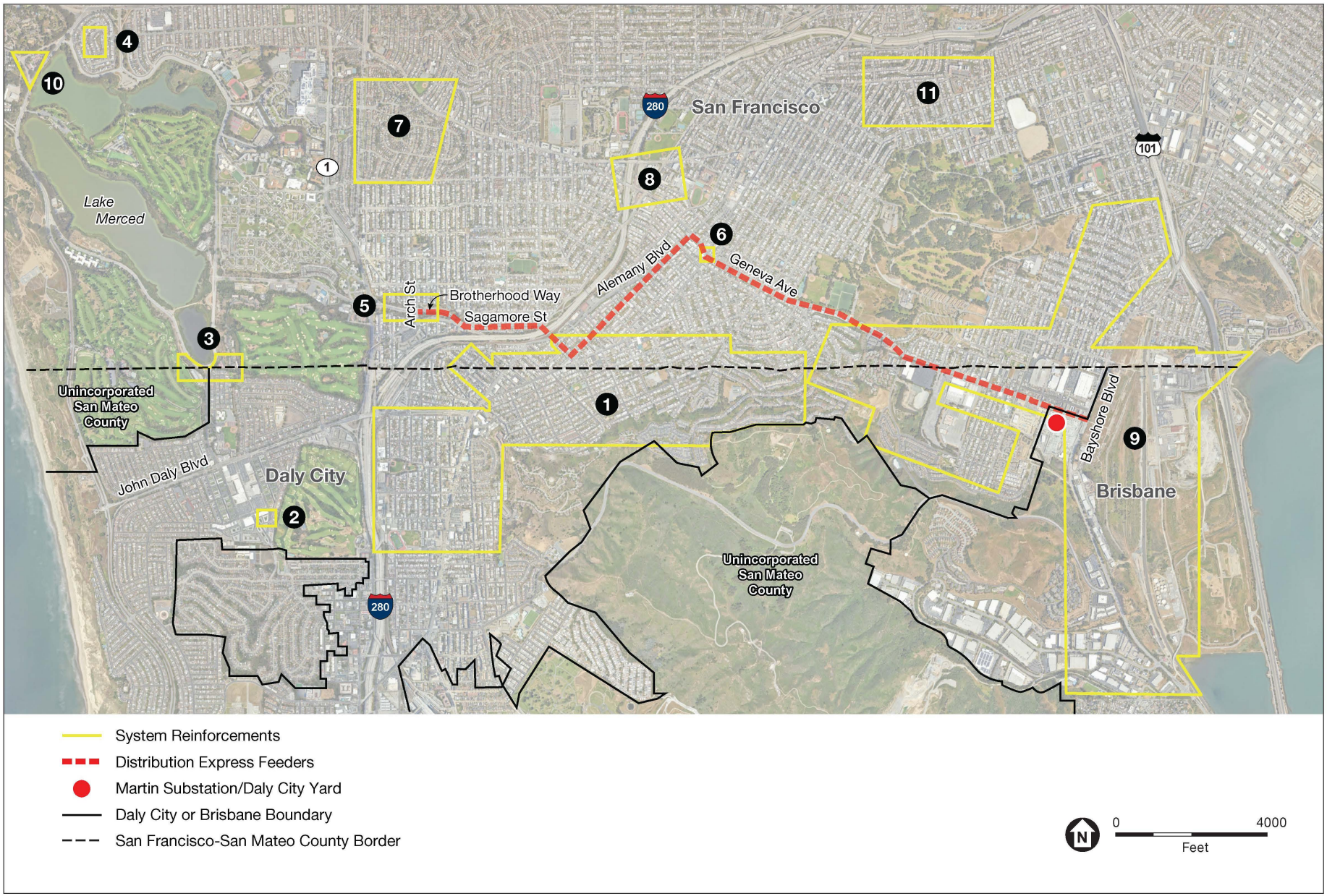


SOURCE: SFPUC

PG&E Asset Acquisition Project

Revised Figure 2-2

Martin Substation Project Site and Construction Staging Area



SOURCE: Google Earth Aerial Imagery

Note: System reinforcement areas shown approximate work areas. System reinforcements along the San Francisco Bay shoreline, Brisbane Lagoon, and near Lake Merced would be completed within or near public road right-of-ways or on existing equipment. No work would be conducted in water.

PG&E Asset Acquisition Project

Revised Figure 2-8
System Reinforcements

*To clarify the equipment to be used at the trenchless construction pits the fourth paragraph on Draft EIR page 2-36 is revised as follows:

> Installation of duct banks at large intersections (e.g., San Jose Avenue) could require horizontal directional drilling or jack-and-bore construction methods. Both methods require pits at both the launching and receiving ends of the bore. The pit dimensions would be approximately 40 feet long, 20 feet wide, and 20 feet deep. Shoring of these pits would require installation of sheet piles using a vibratory pile driver. Each pit would be constructed in approximately five working days. At the receiving pit, a minimum rectangular construction access area approximately 100 feet long by 80 feet wide for equipment staging would be required. The actual construction would entail installation of a steel casing pipe under the roadway, followed by insertion of conduits within the steel casing pipe, exposed at both ends of the excavation. The conduits would then be extended in duct bank trenches as described above.

*Draft EIR Section 2.5.3, Construction Access, Staging, Equipment, and Workforce on page 2-41 has been revised to include the potential use of the Baylands site for construction staging as follows:

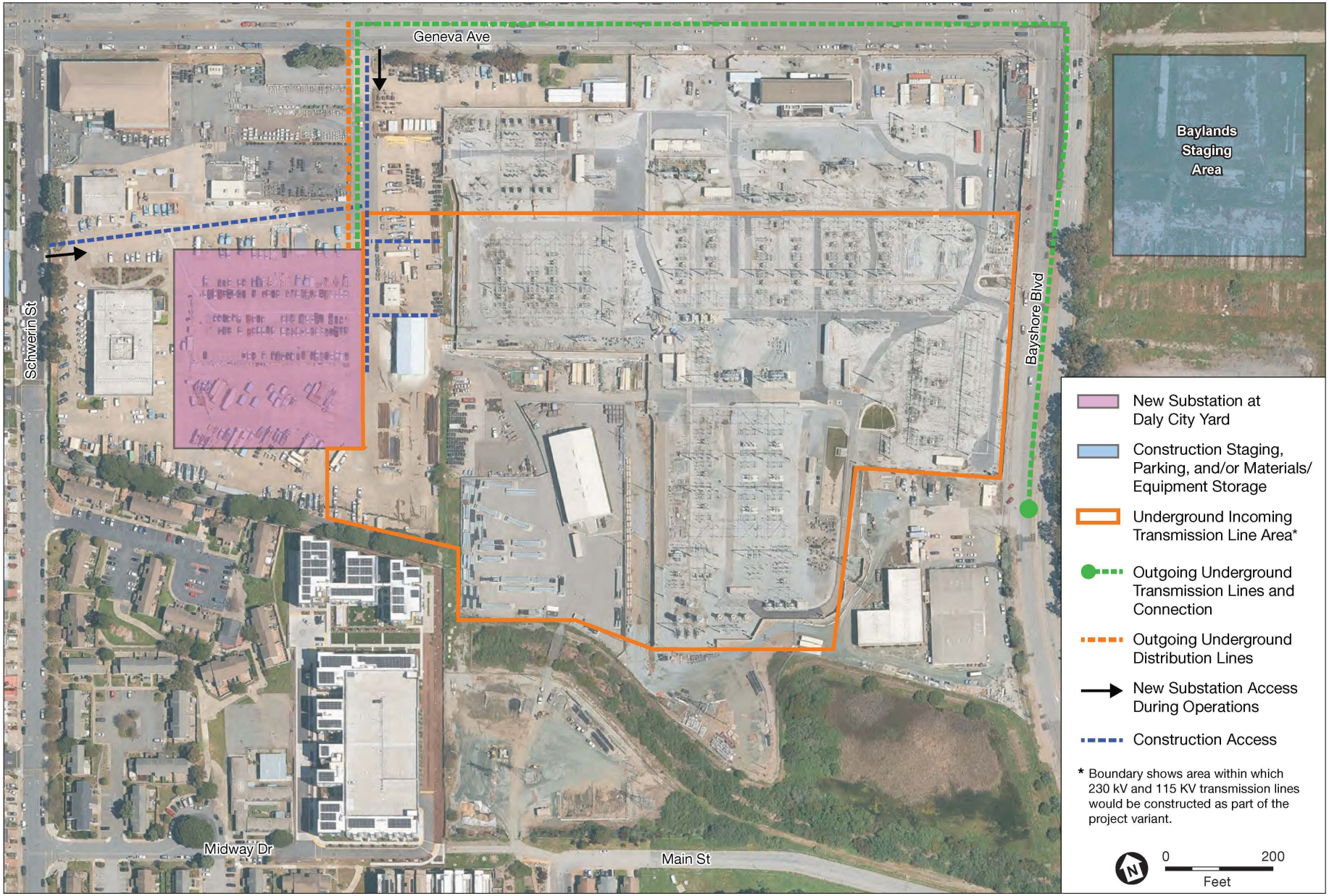
> Due to the limited space at the Martin Substation, the Daly City Yard would serve as the primary staging and laydown area for the project's separation work at the Martin Substation. In addition, an area referred to as the Baylands staging area on the nearby Brisbane Baylands site could be used for temporary construction staging or temporary PG&E parking and materials/equipment storage relocated from the Daly City Yard, as shown in Figure 2-2, if development associated with the Baylands Specific Plan has not occurred. No excavation would be required during staging activities at the Daly City Yard. Vegetation removal and minor site grading, as well as temporary fencing and temporary lighting, may be needed at the Baylands staging area. At the Baylands staging area, lighting is anticipated to be achieved through a power drop from the existing nearby poles or from battery/solar equipment.~~, and the~~ Either area or both areas would support storage of City construction equipment, materials, and stockpiles, and employee parking. Prior to any work or staging at the Daly City Yard, existing trailers and other PG&E equipment would need to be relocated to other areas of the Daly City Yard, Brisbane Yard, ~~or~~ 2850 Bayshore Boulevard, or the Baylands staging area.[40] Upon completion of project construction, PG&E materials/equipment would be relocated back to the Daly City Yard.

In response to comments, the fourth sentence in the first paragraph on Draft EIR page 2-46 has been revised as follows:

> Soils excavated within the Martin Substation would be tested for contaminants prior to disposal and, if necessary, excavated spoils would be disposed of at a landfill licensed to accept hazardous waste.

*Draft EIR Figure 2-11 (page 2-50) has been revised as shown on the following page to include potential staging at Brisbane Baylands.

[40] Based on review of aerial imagery, it is assumed that sufficient space is available for equipment and vehicle storage in the locations listed.



SOURCE: ESA, 2023

PG&E Asset Acquisition Project

Revised Figure 2-11
New City Substation (Project Variant) at Daly City Yard

*The second paragraph of Section 2.7.1, Gas Insulated Switchgear Buildings (Draft EIR page 2-51), has been revised as follows:

> Gas-insulated switchgear is high-voltage equipment in which the major conducting facilities are contained within a sealed environment with a gas (such as ~~SF6, or~~ sulfur hexafluoride gas [SF6]),[53] as the insulating medium. Other commercially available non-SF6 gas alternatives could include mixes of nitrogen and oxygen and certain fluorinated gases.[53a] The inert gas contained within the sealed equipment has two to three times the insulating ability of air, allowing for a compact footprint for the new City Substation. ~~SF6~~ gGas is used to insulate the equipment by filling the equipment with the gas. Assuming SF6 is used, ~~T~~the gas-insulated equipment would include 60 compartments of SF6 gas, with 175 pounds of capacity for each compartment. In addition, up to approximately 880 pounds of SF6 would be stored in canisters within the structure for topping off gas in the equipment as necessary. Storage, use, and disposal of ~~SF6~~insulating gas would comply with local, state, and federal laws and regulations. With the exception of the gas-insulated switchgear, the functions of the individual equipment would be nearly identical to those at an outdoor substation (such as the adjacent PG&E Martin Substation).

*Draft EIR Section 2.7.2, Transformers, on Draft EIR page 2-53 has been revised to add the following to the end of the second paragraph:

> Fire walls, which would be at least 25 feet high and 16 inches thick, would be installed around each transformer.

*Draft EIR Section 2.7.5.3, Construction Access, Staging, Equipment, and Workforce (specific to the project variant), on page 2-55 describing construction of the project variant has been revised as follows:

> Construction of the project variant would use the same equipment as the project, with the addition of pile drivers for switchgear building construction, as shown in **Table 2-14**. Construction staging would occur within the project variant area or at the Baylands staging area shown in Figure 2-11. Existing PG&E parking and materials/equipment storage within the project variant area at the Daly City Yard would be temporarily relocated elsewhere within the Daly City Yard (shown in Figure 2-2), to Brisbane Yard, 2850 Bayshore Boulevard, or the Baylands staging area. Upon completion of project construction, the temporarily relocated PG&E materials/equipment could either remain at the Daly City Yard, Brisbane Yard, or 2850 Bayshore Boulevard, or be moved to one of the new service yards. The anticipated excavation associated with the new City Substation would be approximately 34,980 cubic yards. Combining that amount with the excavation amounts for the remaining project components, excavation associated with the project variant would total approximately 128,900 cubic yards.[59] The volume of soil associated with the new City Substation would generate approximately

[53] SF6 is a colorless, odorless, stable, non-toxic synthetic gas that is heavier than air. It has a low level of flammability and has excellent insulation and arc extinguishing capability. SF6 is used in a wide range of operating environments and voltage levels in the power industry. SF6 is non-combustible and non-flammable. (U.S. Department of Energy, Office of Health, Safety and Security Sulfur Hexafluoride SF6 Awareness, August 2009.)

[53a] U.S. Environmental Protection Agency, Moving Toward SF6-Free High Voltage Circuit Breakers: Considerations for Adopting Vacuum Breaker and Fluorinated Gas Alternative Technologies. 430-R-20-007, undated.

[59] Under the project variant, the new City Substation would be constructed instead of the Martin Substation separation but all other project components would be the same.

2,600 haul truck trips.[60] Hazardous materials handling for the project variant would follow the procedures described for the project in Section 2.5.4.1, Hazardous Materials Handling, above.

*The first three paragraphs of Draft EIR Section 2.7.6, Project Variant Operation, on page 2-56 has been revised as follows:

Operation of the project variant would consist of the same activities described for the project in Section 2.6, Operations and Maintenance; however, the project variant would also include SF6 or other insulating gas storage and use. ~~SF6 g~~Gas would be used as the insulating medium for the new equipment within the City Substation, for both insulation and fault interruption. Assuming SF6 gas is used, it would be contained within a total of 60 compartments surrounding the electrical equipment, each containing approximately 175 pounds of SF6. Electrical equipment is designed to avoid the release of gas into the atmosphere, but small leaks can occur over time. For example, for circuit breakers that use SF6 gas for insulation and interruption, the leakage rate of currently available designs is approximately 0.5 percent per year (or slightly less than 1 pound per year).

The ~~SF6~~ gas pressures in the equipment would be continuously monitored and the equipment would be topped off with gas~~SF6~~ if needed. Extra ~~SF6~~ gas would be stored in small cylinders (less than approximately 110 pounds per cylinder) as part of a "gas cart." A gas cart typically would be stored within the building near the gas-insulated switchgear equipment. For example, if SF6 gas is used, ~~A~~approximately four cylinders per building would be stored onsite in a gas cart, for a total of eight cylinders.

Similar to the project, the new City Substation would not require onsite staff for operation and maintenance. Instead, monitoring and topping off of ~~SF6~~ gas would be conducted by staff deployed from the operations and maintenance service yard.

*The sixth bullet in Draft EIR Section 2.8.2, State Actions and Approvals, on page 2-57, has been revised as follows:

- California Department of Toxic Substances Control (DTSC)
  - Approval of ~~remediation~~ remedial action plan, ~~or~~ removal action workplan~~amendment~~, or soil management plan, and health and safety plan for excavation at the PG&E Daly City Yard, Martin Substation, and Brisbane Yard

In response to comments, the fourth bullet in Draft EIR Section 2.8.2, State Actions and Approvals, on page 2-58, has been revised in response to comments as follows to include a potential transportation permit for excessive loads:

- California Department of Transportation (Caltrans)
  - Encroachment permits, access permits, transportation permits

*The bullets in Draft EIR Section 2.8.3, Local Actions and Approvals, under San Francisco Public Utilities Commission and San Francisco Board of Supervisors on page 2 58, has been revised as follows:

- San Francisco Public Utilities Commission (SFPUC)

[60] Round trips, assuming 18 cubic yards per dump truck.

- Approval of the project, adoption of CEQA findings, including a statement of overriding considerations, and mitigation monitoring and reporting program
- Issuance of a report pursuant to San Francisco Charter section 16.101 (for acquisition of utility property)
- Authorization of bonds or approval of other financing mechanisms
- Approval of real estate transactions

- San Francisco Board of Supervisors
  - Approval of the project, adoption of the CEQA findings and mitigation monitoring and reporting program adopted by the SFPUC
  - Authorization of bonds or approval of other financing mechanisms ~~to issue revenue bonds~~
  - Approval of real estate transactions

11.3 Revisions to Section 3.1, Overview

Table 3.1-3 on Draft EIR pp. 3.1-8 through 3.1-9 has been revised in response to comments and to reflect updated cumulative project information, as follows:

Table 3.1-3 Projects Considered in Cumulative Impact Analysis

Project No. on Map	Project Name (Project Sponsor or Jurisdiction)	Project Description	Construction Dates
4	Brisbane Baylands Specific Plan (Baylands Development Inc./ Brisbane)	The Brisbane Baylands Specific Plan proposes development of up to 2,200 residential units and 7 million square feet of commercial use. The project site comprises approximately 540 acres and is bounded on the north by San Francisco, on the east by the US 101 freeway, and on the west and south by Bayshore Boulevard. Buildout would occur over a 30-year period and involve four distinct activities: demolition and deconstruction, landfill closure and site remediation of the former railyard area, grading for development, and construction of proposed uses and related infrastructure. The specific plan includes an underground transmission line connecting proposed battery storage in the Baylands site to Martin Substation (across Bayshore Boulevard) and the following improvements within Martin Substation: line disconnect switch, line coupling capacitor voltage transformers, and fiber cable and associated protections.	~~Planning~~ Phased Development 2027 through 2042
5	Baylands North, formerly Visitacion Valley Redevelopment Area (Baylands Development Inc./San Francisco)	The Visitacion Valley Redevelopment Area Project is a 46-acre area in the Visitacion Valley neighborhood, comprising approximately 124 parcels. The Visitacion Valley project area includes the former Schlage Lock industrial site, located at the southern border of San Francisco, and the properties fronting Bayshore Boulevard and the Visitacion Valley neighborhood's commercial corridor of Leland Avenue. The project would be constructed over approximately 15 years and involves the demolition of most of the existing vacant buildings on the former	2024 through 2039

Table 3.1-3 Projects Considered in Cumulative Impact Analysis

Project No. on Map	Project Name (Project Sponsor or Jurisdiction)	Project Description	Construction Dates
		Schlage Lock site, environmental remediation of the site, and the construction of a mixed-use residential (1,679 dwelling units), retail and office development (18,000 gross square feet). Phase 1 of the project, at the north end of the site, consists of 574 residential units, one public park, major and minor retail components and stabilization or rehabilitation of the Old Schlage Lock Historical Office Building. Buildings would be up to 85 feet tall.	
6	California High Speed Rail Project (Transbay Joint Powers Authority/Brisbane and San Francisco)	The California High Speed Rail project includes a section of high-speed rail connecting San Francisco to San Jose. Four tracks of the high-speed rail would pass through east Brisbane at the Baylands site, allowing 22 trains to operate daily at speeds up to 110 miles per hour. One of the three Light Maintenance Facilities (LMFs) located along the system to provide regular maintenance and operations for high-speed trains also would be located in east Brisbane. LMFs are where trains are inspected, cleaned, serviced, and stored, providing a service point for any trains in need of emergency repair services. LMFs will also supply trains and crews to the local terminal station at the start of the day. The LMF in Brisbane would be approximately ~~110~~ 45 acres along the rail line. Track modifications associated with the East Brisbane LMF would require relocating the Bayshore Caltrain Station, demolishing and relocating the Tunnel Avenue overpass, widening the bridge crossing Guadalupe Valley Creek in Brisbane, relocating the Brisbane Fire Station and Brisbane Corporation Yard, and other roadway modifications within the Baylands property~~, and relocation control point Geneva~~.	2023 through 2031

*Footnotes 4 and 6 associated with Draft EIR Table 3.1-3 on p. 3.1-22 have been revised as follows:

4. City of Brisbane, Brisbane Baylands Specific Plan~~, NOP – Notice of Preparation of~~ Draft Environmental Impact Report ~~EIR~~, April, 2025. ~~Received February 24, 2020. Available at: https://ceqanet.opr.ca.gov/2006022136/7. Accessed October 24, 2023~~

6. ~~Federal Transit Administration, California High-Speed Rail Authority, Northern California Light Maintenance Facility. Available at: https://hsr.ca.gov/wp-content/uploads/docs/programs/statewide_rail/proj_sections/SanFran_SanJose/LMF_Factsheet.pdf. Accessed October 24, 2023;~~ California High-Speed Rail Authority, Final CEQA Findings of Fact and Statement of Overriding Considerations, San Francisco to San Jose Project Section, August 2022; City of Brisbane, Brisbane Baylands Specific Plan Draft Environmental Impact Report, Chapter 7 Cumulative Effects, April 2025.

*Draft EIR Figure 3.1-1 (p. 3.1-25) has been revised as shown on page 11-26 to clarify that system reinforcements would avoid San Bruno Mountain State and County Park and areas within or immediately adjacent to open water bodies (such as the southern portion of Lake Merced, San Francisco Bay, and Brisbane Lagoon).

This page intentionally left blank

PROJECTS

1 Candlestick Point-Hunters Point Shipyard Phase II
2 Executive Park Subarea Plan – Thomas Mellon Waterfront Residences/150 Executive Park Boulevard
3 Harney-101 Transit Crossing Project
4 Brisbane Baylands Specific Plan
5 Baylands North, formerly Visitacion Valley Redevelopment Area
6 California High Speed Rail Project
7 PG&E Egbert Switching Station Project
8 Midway Village Redevelopment
9 Guadalupe Quarry Redevelopment Project
10 Sunnydale Hope SF Master Plan
11 Pacific Place Retail Conversion
12 Cormorant Battery Storage Facility
13 6225 Mission Street Mixed-Use Building
14 141 3rd Avenue Residential
15 Stonestown Development Project
16 San Francisco State Capital Outlay
17 Parkmerced Project
18 Westlake South Mixed-Use Project/Old Burlington Site
19 Lake Merced West Project - 520 John Muir Drive
20 Vista Grande Drainage Basin Improvement
21 Ocean Beach Climate Change Adaptation Project
22 Biosolids Digesters Facilities Project
23 SEP Power Feed and Primary Switchgear Upgrades
24 SEP Repair and Replacement Treatment Plant Improvement Projects
25 Demolition of the Existing SEP Digesters and Southside Renovation Project
26 Quint-Jerrold Connector Road
27 San Francisco Market (formerly San Francisco Wholesale Produce Market) Expansion
28 Pier 70 Waterfront Site
29 Blue Greenway Project
30 India Basin Mixed-Use Development
31 San Francisco Gateway Project
32 Channel Force Main Intertie
33 City Distribution Division Headquarters Project
34 3433 3rd Street
35 Bay Corridor Transmission and Distribution
36 1399 Marin Transit Service Operations and Maintenance Plan
37 Additional Newcomb Yard Improvements
38 Islais Creek Bridge Project
39 Bayview Caltrain Station
40 Potrero Power Station Mixed-Use Development Project

Cumulative Projects
System Reinforcements
Distribution Express Feeders

Local Distribution System Separation

Southwest Area
Central Area
Southeast Area

N
0 2000
Feet

San Francisco
Brisbane
Daly City
San Francisco Co
San Mateo Co
101
280
35

Geneva Ave
Schwerin St
Daly City Yard
Martin Substation Project Site
Bayshore Blvd
Midway Dr
Main St

SOURCE: ESA, 2023; Google Earth, 2023

PG&E Asset Acquisition Project

Revised Figure 3.1-1
Cumulative Impacts Projects

This page intentionally left blank

11.4 Revisions to Section 3.2, Noise

*Draft EIR Figure 3.2-1 (p. 3.2-7) has been revised as shown on page 11-29 to clarify that system reinforcements would avoid San Bruno Mountain State and County Park and areas within or immediately adjacent to open water bodies (such as the southern portion of Lake Merced, San Francisco Bay, and Brisbane Lagoon).

The first five rows of Table 3.2-3, Existing Noise Environment in the Vicinity of the Project Areas, on Draft EIR pages 3.2-8 to 3.2-10, are revised to remove L90 noise data that is no longer relevant to the noise impact analysis because of legislative changes to the San Francisco Police Code to remove the L90 definition of ambient and replace it with an Leq definition:

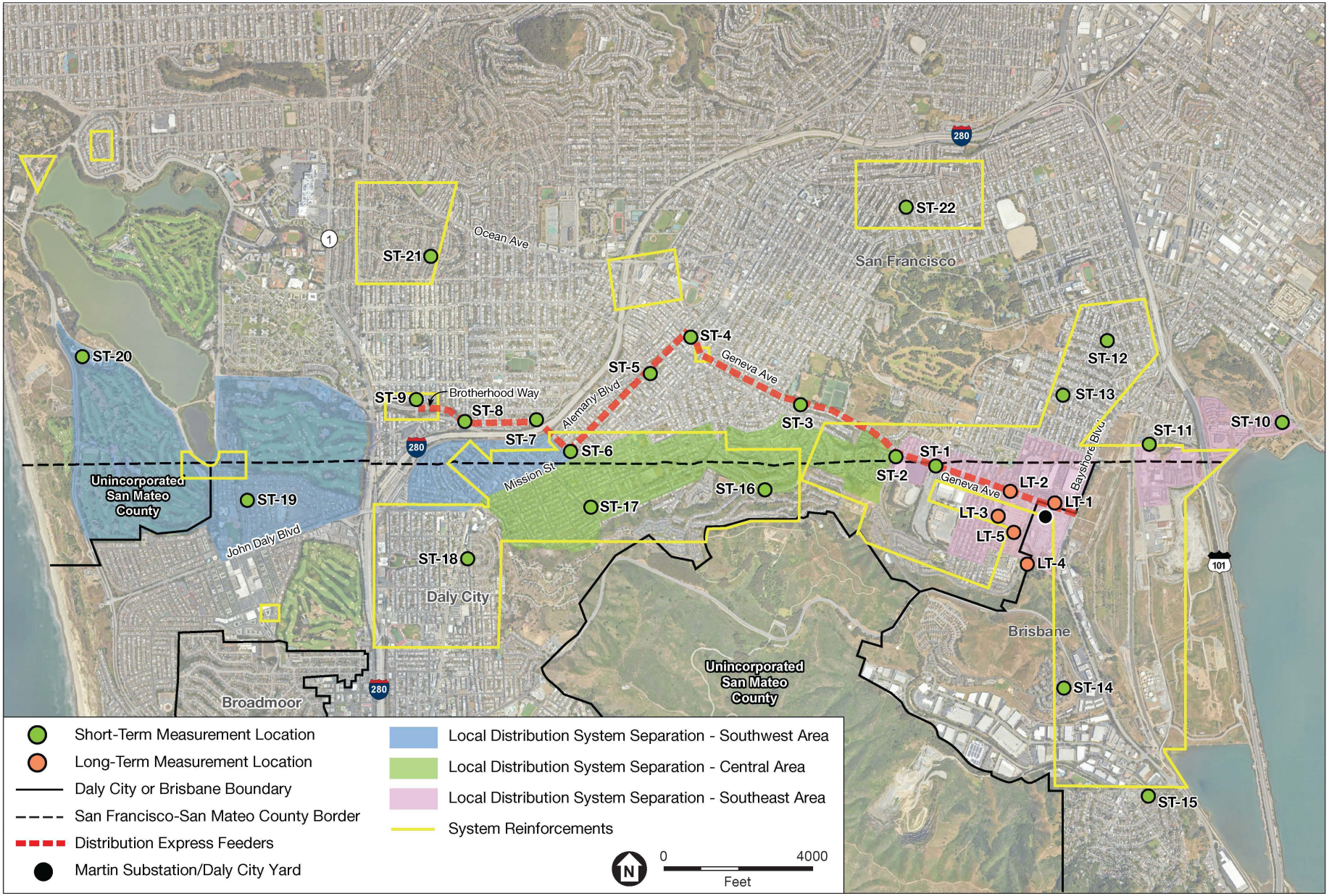
Table 3.2-3 Existing Noise Environment in the Vicinity of the Project Areas

Location[18]	Date and Time Period	Daytime[19] Leq dB	Nighttime[20] Leq dB	~~L90~~	Ldn	Noise Sources
LT-1 3175 Geneva Avenue, at Talbert Street	2/27/24 24-hour measurements	66	64	~~69~~	69	Vehicle and bus traffic on Geneva Avenue
LT-2 2929 Geneva Avenue, at Schwerin Street	2/27/24 24-hour measurements	72	65	~~72~~	71	Vehicle and bus traffic on Schwerin Street and Geneva Avenue
LT-3 792 Schwerin Street, at Otilia Street	2/27/24 24-hour measurements	72	65	~~72~~	71	Vehicle traffic on Schwerin Street and Otilia Street
LT-4 Across 100 Main Street	2/29/24 24-hour measurements	63	57	~~65~~	64	Vehicle traffic on Main Street
LT-5[21] Residences to the south of Daly City Yard (Midway Village)	2/26/24 10:09 a.m. to 10:24 a.m.	51	45[21a]	-	-	Trucks backing up in Daly City Yard and vehicle traffic on Schwerin Street

*New footnote number 21a has been added to draft EIR page 3.2-8 associated with Table 3.2-3:

> [21a] Nighttime Leq is estimated based on the same 6 dBA difference between daytime and nighttime noise levels observed at the closest LT location where 24-hour data was collected (LT-4, across 100 Main Street, which measured 63 dBA Leq during the daytime and 57 dBA Leq during the nighttime). LT-4 and LT-5 are both located in residential areas near the existing Daly City Yard and are influenced by vehicle traffic on local roadways. LT-4 and LT-5 are approximately 900 feet apart.

[18] LT = Long Term. ST = Short Term.
[19] Daytime hours are 7 a.m. to 10 p.m.
[20] Nighttime hours are 10 p.m. to 7 a.m.
[21a] Nighttime Leq is estimated based on the same 6 dBA difference between daytime and nighttime noise levels observed at the closest LT location where 24-hour data was collected (LT-4, across 100 Main Street, which measured 63 dBA Leq during the daytime and 57 dBA Leq during the nighttime). LT-4 and LT-5 are both located in residential areas near the existing Daly City Yard and are influenced by vehicle traffic on local roadways. LT-4 and LT-5 are approximately 900 feet apart.



SOURCE: Appendix E; Google Earth Aerial Imagery

PG&E Asset Acquisition Project

Revised Figure 3.2-1
Noise Monitoring Locations

*On Draft EIR page 3.2-10, Table 3.2-4, Sensitive Receptors within 900 Feet of the Project Components, Receptors Nearest Martin Substation and Daly City Yard, has been revised to update the distance between the new City Substation and Midway Village:

Table 3.2-4 Sensitive Receptors within 900 Feet of the Project Components

Type of Sensitive Receptor	Location[24]	Minimum Distance from Project Area Boundaries	Representative Monitoring Location
RECEPTORS NEAREST MARTIN SUBSTATION AND DALY CITY YARD			
Hotel and Motel Uses	3200 block of Geneva Avenue, Daly City	200/20 feet[25]	LT-1
Single Family Residential	3000 and 3100 blocks of Geneva Avenue, Daly City	150/200 feet[25a]	LT-1, LT-2
Bayshore Elementary School	155 Oriente Street, Daly City	300 feet	LT-3
Midway Village Multi-family Residential	Midway Village on 800 block of Schwerin Street, Daly City	~~150 feet~~ 95 feet	LT-5
Single Family Residential	100 block Main Street, Daly City	400 feet	LT-4

*On Draft EIR page 3.2-10, new footnote number 25a has been added as follows:

[25a] On the east side of the Martin Substation site, construction activities would occur no closer than 115 feet to the substation property line and 200 feet to the property lines on the 3100 block of Geneva Avenue because construction activities would avoid the Martin Substation building. On the west side of the Martin Substation site, only a 40-foot natural gas easement would be avoided. Thus, on the west side of the Martin Substation site, construction activities could occur 40 feet from the substation property line and 150 feet from the property lines on the 3000 and 3100 block of Geneva Avenue.

*On Draft EIR page 3.2-11, Table 3.2-4, Sensitive Receptors within 900 Feet of the Project Components, Receptors Nearest Baylands Staging Site are added to the table as follows:

Table 3.2-4 Sensitive Receptors within 900 Feet of the Project Components

Type of Sensitive Receptor	Location[24]	Minimum Distance from Project Area Boundaries	Representative Monitoring Location
RECEPTORS NEAREST BAYLANDS STAGING SITE			
Hotel and Motel Uses	3200 block of Geneva Avenue, Daly City	350 feet	LT-1
Single Family Residential	3000 and 3100 blocks of Geneva Avenue, Daly City	735 feet	LT-1, LT-2

[24] There are no sensitive receptors within areas of unincorporated San Mateo County within 900 feet of project components.
[25] For the project variant, this distance is reduced to 20 feet from trenching of transmission line on Geneva Avenue.
[25a] On the east side of the Martin Substation site, construction activities would occur no closer than 115 feet to the substation property line and 200 feet to the property lines on the 3100 block of Geneva Avenue because construction activities would avoid the Martin Substation building. On the west side of the Martin Substation site, only a 40-foot natural gas easement would be avoided. Thus, on the west side of the Martin Substation site, construction activities could occur 40 feet from the substation property line and 150 feet from the property lines on the 3000 and 3100 block of Geneva Avenue.

*On Draft EIR page 3.2-17, the following text is added to the end of the discussion of the San Francisco Police Code (Noise Ordinance):

> Prior to July 2025, the City and County of San Francisco defined ambient noise using the L90 metric. In July 2025, the Board of Supervisors of the City and County of San Francisco adopted Ordinance 118-25, which revised the definition of "ambient" in Police Code Section 2901 to mean "the LAeq and LCeq values produced during a minimum ten-minute period".[39a]

*On Draft EIR page 3.2-17 the following footnote is added:

> [39a] San Francisco Police Code section 2900. LAeq is the energy averaged noise level for a specific period using the "A" frequency weighting, which approximates the frequency response of the human ear. LCeq is the energy averaged noise level for a specific period using the "C" frequency weighting, which is most commonly used to evaluate low frequency or very loud (more than 100 dB) noise events. Given the proposed Project does not involve low frequency noise sources and would not result in noise levels of more than 100 dBA at sensitive receptor locations, this EIR uses the LAeq metric to define ambient noise levels.

In response to comments, the discussion of the Brisbane Municipal Code on Draft EIR pages 3.2-19 has been revised as follows:

> Section 8.28.060 of the Brisbane Municipal Code establishes noise exposure limits for hours for site construction. The Brisbane Municipal Code restricts construction hours between 7 a.m. and 7 p.m. Monday through Friday, and 9 a.m. to 7 p.m. on weekends and holidays ~~for development projects~~. The Public Works Director/ City Engineer for the City of Brisbane states that ~~T~~there are no performance standards or limits related to noise applied to construction work performed within the right-of-way under an encroachment permit.[42] Otherwise, construction, alteration, or repair activities are allowed if authorized by a valid city permit by meeting at least one of the following noise limitations:
>
> A. No individual piece of equipment shall produce a noise level exceeding eighty-three (83) dBA at a distance of twenty-five (25) feet from the source thereof. If the device or other source is housed within a structure on the property, the measurement shall be made outside the structure, but at a distance as close to the equipment or source as possible.
>
> B. The noise level at any point outside of the property plane of the project shall not exceed eighty-six (86) dBA.
>
> Brisbane Municipal Code section 8.28.030 establishes exterior and interior noise standards for single- and multi-family residential zoning districts, respectively, shown in **Table 3.2-10**. For single-family residential land uses, exterior ~~N~~noise levels may not be more than 10 dBA above the existing ambient noise level at any receiver for a cumulative period of more than 10 minutes in a given hour, ~~or~~ more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA above the local ambient for any amount of time. ~~for single-family and multi-family residential zoning districts.~~ For multi-family residential land uses, noise levels may not be more than 10 dBA above the local ambient three feet from any wall, floor, or ceiling inside any dwelling unit on the same property, except within the dwelling unit in which the noise source or sources are located, to any receiver for a cumulative period of more than ten minutes in any hour, more than 20 dBA above the local ambient for a cumulative period of more than three minutes in any hour, or more than 30 dBA above the local ambient at any time. It is noted that, as defined by Brisbane Code Section 8.28.020 (A), the local ambient noise level for exterior and interior noise standards shall not be determined to be less than 45 dBA and 35 dBA, respectively.

Brisbane Municipal Code Section 8.28.040 establishes that noise levels may not be more than 10 dBA above the existing ambient level for a cumulative period of more than 10 minutes in a given hour, ~~and may not be~~ more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA for any period of time for commercial and industrial zoning districts.

*On Draft EIR page 3.2-20, Table 3.2-10, Noise Standards of the Brisbane Municipal Code, has been revised to include the following note:

Land Use Type	Duration of Noise in Minutes within an Hour	Noise Standard as dBA increase Above Ambient
Single-Family Residential	Anytime	30
	3 minutes	20
	10 minutes	10
Multi-Family Residential	Anytime	30
	3 minutes	20
	10 minutes	10
Commercial / Industrial	Anytime	30
	3 minutes	20
	10 minutes	10

SOURCE: City of Brisbane Municipal Code Section 8.28.030.

Note: The single- and multi-family residential standards apply to noise generated within a residential district that affects other residential receivers. For multi-family districts, the standard applies inside the affected residential dwelling unit, and the local ambient noise level may not be determined to be less than 35 dBA. The commercial and industrial standards apply to noise generated within a commercial or industrial zoning district that affects any other receiver outside of that district. For all exterior noise standards, the local ambient noise level may not be determined to be less than 45 dBA.

In response to comments, on Draft EIR pages 3.2-22, Table 3.2-11, Noise Ordinances Applicable to the Project or Project Variant, the information related to the City of Brisbane has been revised as follows:

Jurisdiction	Noise Source	Municipal Code	Requirement Summary
Brisbane	Construction	Section 8.28.060. Exceptions allowed via Section 8.28.080	Except where work is performed within the right-of-way under an encroachment permit (which is exempt), construction work must meet at least one of the following noise limitations: A. No individual piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 25 feet from the source B. The noise level at any point outside of the property plane of the project shall not exceed 86 dBA
	Nighttime Construction	Section 8.28.060. Exceptions allowed via Section 8.28.080	Prohibits construction between 7 p.m. and 7 a.m. Monday through Friday and 7 p.m. and 9 a.m. on weekends and holidays.

Jurisdiction	Noise Source	Municipal Code	Requirement Summary
	Operation	Section 8.28.030 and 8.28.040. Exceptions allowed via Section 8.28.080	~~Prohibits n~~Noise produced by any machine or device located in a commercial or industrial district ~~that results~~ shall not generate a noise level that exceeds the local ambient at any exterior receiver by more than 10 dBA for 10 minutes or more, more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA above the local ambient for any amount of time. ~~in a single-family residential zoning district.~~ Noise produced by any machine or device located in a commercial or industrial district shall not generate an interior noise level in residential dwelling units, as measured three feet from any wall, floor, or ceiling inside that dwelling unit, that exceeds the local ambient by more than 10 dBA for 10 minutes or more, more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA for any amount of time.

*On Draft EIR page 3.2-24, Table 3.2-12, Noise and Vibration Analysis Quantitative Criteria, the information related to the City Brisbane has been revised as follows:

QUANTITATIVE CRITERIA APPLIED IN BRISBANE	
Construction Noise	Construction noise is allowed during the hours of 7 a.m. to 7 p.m. weekdays as long as construction meets at least one of the following criteria:[48] • No individual piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 25 feet from the source thereof. • The noise level at any point outside of the property plane of the project shall not exceed 86 dBA. Combined noise levels[49] greater than 90 dBA for residential uses and other noise-sensitive uses and 100 dBA for commercial and industrial land uses, using FTA combined equipment approach Combined noise levels[49] greater than 10 dBA above ambient at residential and other noise-sensitive uses, using FTA combined equipment approach
Operational Noise	~~For single-family residential,~~ Exterior noise levels shall not be more than 10 dBA above ambient at any exterior receiver for a cumulative period of more than 10 minutes per hour, ~~or~~ more than 20 dBA above ambient for more than 3 minutes per hour, or more than 30 dBA above ambient for any amount of time. ~~For multi-family residential,~~ Interior noise levels shall not be more than 10 dBA above ambient 3 feet from any wall, floor, or ceiling in any dwelling unit for a cumulative period of more than 10 minutes per hour, ~~or~~ more than 20 dBA above ambient for more than 3 minutes per hour, or more than 30 dBA above ambient for any amount of time.

[48] Consistent with City of Brisbane practice in planning documents, this analysis focuses on the second criterion.

[49] The analysis calculates noise levels for the two noisiest pieces of equipment expected to be used simultaneously, consistent with the FTA general assessment approach.

QUANTITATIVE CRITERIA APPLIED IN BRISBANE	
	~~For commercial and industrial uses, noise levels shall not be more than 10 dBA above ambient for a cumulative period of more than 10 minutes per hour or more than 20 dBA above ambient for more than 3 minutes per hour.~~

*The second full paragraph on Draft EIR page 3.2-25 has been revised as follows:

> This analysis uses two methods to evaluate impacts from noise generated by construction equipment. First, the analysis compares the estimated construction noise levels to standards established in the local general plans or noise ordinances. Table 3.2-11 summarizes the requirements of San Francisco, Brisbane, and Daly City noise ordinances. As shown in Table 3.2-11, Daly City does not maintain quantitative construction noise standards. Thus, work activities in Daly City are compared against the standards of San Francisco Police Code Section 2907 and 2908, while work activities in Brisbane are compared against the standards of Brisbane Municipal Code Section 8.28.060.

*The third full paragraph on Draft EIR page 3.2-27 has been revised as follows:

> The analysis also evaluates noise from operation of fixed mechanical equipment at the Martin Substation (installed as part of the Martin Substation separation) by comparing the noise levels to either sections 2909 (b) and (d) of the San Francisco Police Code, (as amended in July 2025) or sections 8.28.030 and 8.28.040~~060~~ of the Brisbane Municipal Code (see Tables 3.2-11 and 3.2-12). This is because the new or modified stationary sources at Martin Substation would exist within either Brisbane or Daly City and, as shown in Table 3.2-11, while Brisbane has quantitative criteria for stationary operational noise sources, Daly City does not. It is noted that the City of Brisbane only maintains exterior noise standards for commercial and industrial noise sources. Thus, the application of the Brisbane residential standards to the project's industrial noise sources is a conservative (i.e., likely to overestimate potential noise impacts) application of the Brisbane standards. In locations where equipment could be located in or affect receptors in both Brisbane and Daly City (e.g., north and south of the boundary between Martin Substation and Daly City Yard), the analysis considers the more stringent standard.

*On Draft EIR pages 3.2-29 and 3.2-30, the evaluation of construction noise from Martin Substation Separation and Modifications to Retain PG&E Access to Non-Electrical Facilities at Martin Substation has been revised as follows:

> The Martin Substation separation would reconfigure the existing PG&E-owned Martin Substation by adding or relocating cable terminations, circuit breakers, cable trenches, revenue meters, and transformer locations within the existing substation fence. Modifications to retain PG&E access to gas facilities at the Martin Substation would require similar or quieter equipment as the Martin Substation separation activities. Construction work for both activities (the Martin Substation separation and modification to retain PG&E access to gas facilities) would occur in Brisbane (center and east side of the substation site) and Daly City (westernmost side of the substation site) and are~~is~~ therefore subject to the City of Brisbane noise ordinance and the San Francisco Police Code (because Daly City does not have quantitative construction noise standards). No nighttime construction using heavy equipment would occur during the Martin Substation separation. ~~Modifications to retain PG&E access to gas facilities at the Martin Substation would require similar or quieter equipment as the Martin Substation separation. As shown in Table 3.2-11, construction activities in Brisbane are~~

~~required to meet at least one of two noise limitations: either no individual piece of equipment shall produce a noise level exceeding 83 dBA at 25 feet, or the construction noise level shall not exceed 86 dBA at any point outside of the property plane of the project. Most common construction equipment generate noise in excess of 83 dBA at 25 feet, so this analysis considers whether project construction in Brisbane would exceed 86 dBA at any point outside the property plane.~~

Within Brisbane, ~~N~~noise levels from the Martin Substation separation at the property plane and at the nearest off-site sensitive receptor (3100 Block of Geneva Avenue) were calculated in the Technical Noise Memorandum (Appendix E) to be 77 dBA and 73 dBA, respectively, both of which would be below the City of Brisbane municipal code standard of 86 dBA at the property plane.

Within Daly City, as shown in Table 3.2-13, the only piece of non-impact equipment that would generate noise levels greater than the standard set forth in San Francisco Police Code Section 2907 (80 dBA at a distance of 100 feet) is a concrete saw. Concrete saws are used for relatively detailed short-term demolition work, such as removing concrete from a specific area of a street or sidewalk. Concrete cutting is a ubiquitous activity performed for utility work throughout San Francisco. Concrete saw operations progress at a rate of approximately 8 feet per minute.[55a] Hence, to cut both sides of a trench for the approximately 200-foot lateral length of the site within Daly City, a concrete saw would need to operate for approximately one hour. While use of a concrete saw could generate noise levels in excess of the standard established in the noise ordinance, the limited duration for which it affects a given sensitive receptor does not represent a substantial temporary increase in ambient noise. Given that all construction equipment except the concrete saw would meet the limits specified in the noise ordinance for non-impact equipment and the limited duration of concrete saw use, Martin Substation separation would be expected to comply with the section 2907 standard.

For the reasons described above, ~~Therefore,~~ the Martin Substation separation would not increase noise levels in excess of applicable standards, and the project would have a ***less than significant*** impact.

*On Draft EIR page 3.2-30 the following footnote is added:

[55a] Black Diamond, *How Fast Can I Cut Through Concrete?,* May 3, 2019, https://diamondkingtools.com/blog/how-fast-can-i-cut-through-concrete-feet-per-minute/ accessed December 10, 2024.

*On Draft EIR page 3.2-30, the evaluation of construction noise from staging activities has been revised as follows:

Construction Staging at Daly City Yard and Baylands Staging Area

Due to the limited space at Martin Substation, the Daly City Yard would serve as the primary staging/ laydown area for separation work at Martin Substation. No excavation would be required during staging activities, and the area would support storage of construction equipment, material, and stockpiles, as well as employee parking. Loaders and dump trucks would be the loudest equipment used at the construction staging area during construction. As discussed in Table 3.2-11, the Daly City municipal code does not have any restrictions on construction noise. Therefore, staging activities at the Daly City Yard are evaluated against the daytime construction noise standards in San Francisco

[55a] Black Diamond, *How Fast Can I Cut Through Concrete?,* May 3, 2019, https://diamondkingtools.com/blog/how-fast-can-i-cut-through-concrete-feet-per-minute/ accessed December 10, 2024.

Police Code section 2907, which prohibits noise from any single piece of equipment from exceeding 80 dBA at 100 feet. ~~The Daly City 2030 General Plan states that construction noises are regulated through the environmental review process by the Engineering and Planning Division but does not provide quantitative standards. therefore, staging activities of the project would not conflict with the Daly City noise ordinance or General Plan noise standards, a ***less-than-significant*** impact~~. The Baylands staging area is located in Brisbane across Bayshore Boulevard from Martin Substation. Staging activities at the Baylands staging area are evaluated against the daytime construction noise standards in Brisbane Municipal Code section 8.28.060, which prohibits construction noise from exceeding 86 dBA at any point outside the property plane.

Noise levels from staging activities at a distance of 50 feet were calculated in the Technical Noise Memorandum Updates (Attachment B) to be 77 dBA Leq, which is below the Brisbane Municipal Code and San Francisco Police Code standards. Therefore, staging activities at the Daly City Yard and Baylands staging area would not increase noise levels in excess of applicable noise ordinance standards, a ***less than significant*** impact.

*On Draft EIR Page 3.2-34, the discussion of New City Substation (Project Variant) construction noise levels has been revised as follows:

As a variant of the project, a new, gas-insulated substation (the new City Substation) would be constructed at the Daly City Yard. The components of the project variant would be the same as those of the project except that (1) the project variant would include construction of the new City Substation instead of the separation work at the existing Martin Substation, (2) the distribution express feeders would originate from the new City Substation, and (3) new incoming transmission lines would be installed from the Martin Substation to the new City Substation and outgoing distribution and transmission lines from the new City Substation to the existing distribution and transmission system. The new City Substation and its nearest sensitive receptors to are located in Daly City. Construction of the new City Substation would generally proceed from 7 a.m. to 7 p.m. on weekdays and from 9 a.m. to 7 p.m. on weekends and holidays. As discussed in Table 3.2-11, the Daly City Municipal Code does not include restrictions on construction noise. Therefore, staging activities at the Daly City Yard are evaluated against the daytime construction noise standards in San Francisco Police Code section 2907, which prohibits noise from any single piece of equipment from exceeding 80 dBA at 100 feet. ~~The Daly City municipal code and General Plan provide no quantitative standards for acceptable construction noise levels, therefore, construction activities of the variant would meet the conditions of the Daly City noise ordinance~~ As shown in Table 3.2-13, concrete saws would be the only non-impact construction equipment that would exceed San Francisco Police Code section 2907 limit. Concrete saw operations progress at a rate of approximately 8 feet per minute. Given that all equipment, except the concrete saw, would meet the limit specified in the noise ordinance, and given the generally limited duration of concrete saw use, noise levels resulting from the use of individual pieces of equipment used for construction of the new City Substation (project variant) would not result in a substantial temporary increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, and the impact would be ***less than significant***.

*On Draft EIR page 3.2-36, Table 3.2-14, Summary of Estimated Noise Levels at Sensitive Receptors During Project Construction, has been revised as follows:

Table 3.2-14 Summary of Estimated Noise Levels at Sensitive Receptors During Project Construction

Component	Construction Phase or Activity	Location	Loudest Two Pieces of Equipment	Combined Equipment Noise Level at 50 Feet (dBA Leq)	Distance to Nearest Sensitive Receptor (Feet)[59]	Attenuated Noise Level at Nearest Sensitive Receptor (dBA Leq)	Exceed 90 or 100 dBA Leq at Nearest Sensitive Receptor?[60]
Martin Substation	Site Excavation	Brisbane, Daly City	Concrete Saw/Jack Hammer	~~90~~85	150~~115~~/200[61]	76~~77~~/74[62]	No
					15 (commercial)[62]	96	No
	Staging at Daly City Yard	Daly City	Loader/Dump Truck	~~79~~77	~~350~~150	~~60~~68	No
	Staging at Baylands	Brisbane	Loader/Dump Truck	77	350	60	No
Distribution Express Feeders, Local Distribution System Separation, and System Reinforcements (Linear Underground Construction)	Trenchless Construction: Sheet Pile Driving	San Francisco	Vibratory Pile Driver/Tractor	~~101~~94	15	104	Yes
	Standard Trenching: Trench Opening	San Francisco, Daly City, Brisbane	Concrete Saw/Jack Hammer	~~90~~85	15	96	Yes
	Standard Trenching: Excavation	San Francisco, Daly City, Brisbane	Excavator/Tractor	~~78~~82	15	92	Yes
Operations Control Center, Service Yards	Trench Opening	San Francisco	Concrete Saw/Jack Hammer	~~90~~85	60/15[63]	84/96	Yes
Modifications to Retain Access at Potrero Substation	Trench Opening	San Francisco	Crane/Jack Hammer	82	300	67	No
New City Substation (Project Variant)	Site Excavation	Daly City	Tractor/Impact Pile Driver	~~101~~94	~~200~~95	~~82~~88	No

SOURCES: Appendix E, Noise and Vibration Technical Memorandum, and technical noise memorandum updates (Attachment B).

*On Draft EIR pages 3.2-36, footnote 61, has been revised as follows:

> [61] In the western side of the Martin Substation site, construction activities would occur no closer than 150 feet from the property lines on the 3000 and 3100 Block of Geneva Avenue. In the central and eastern side of the Martin Substation site, construction activities would occur no closer than 200 feet to the property lines on the 3100 Block of Geneva Avenue. ~~Work area would be 115 feet from the property plane and 200 feet from the nearest sensitive receptor (across Geneva Avenue).~~

*The construction noise impact discussion of Martin Substation separation, Modifications to Retain PG&E Access to Non-Electrical Facilities at Martin Substation, and Construction Staging starting on Draft EIR page 3.2-37 has been revised as follows:

> **Table 3.2-15** presents construction noise levels from Martin Substation separation at nearby sensitive receptor locations. Modifications to retain PG&E access to non-electrical facilities at Martin Substation would require similar or quieter equipment as Martin Substation separation, and therefore only the noise levels from the Martin Substation separation are shown. Daytime construction noise levels would result in an increase of greater than 10 dBA over ambient noise levels at the Midway Village residences for all phases, including staging activities at Daly City Yard,[63a] primarily because the existing ambient noise levels in this area are low. Additionally, the site excavation phase of Martin Substation separation has the potential to exceed 10 dBA above ambient at residences on the 3100 block of Geneva Avenue. Increases at all other sensitive receptors would be less than 10 dBA.[64] Because construction noise from Martin Substation separation and construction staging at Daly City Yard could result in an increase of greater than 10 dBA over existing levels at Midway Village residences, **Mitigation Measure M-NO-2 (Construction Noise Control for the Martin Substation, Daly City Yard Staging, and New City Substation**), is identified to reduce temporary increases in noise levels.

*On Draft EIR page 3.2-37, Mitigation Measure M-NO-2 has been clarified to indicate it applies to Daly City Yard staging activities, as follows:

> **Mitigation Measure M-NO-2: Construction Noise Control for the Martin Substation, Daly City Yard Staging, and New City Substation**
>
> *This measure applies to: Martin Substation Separation (including Daly City Yard Staging), New City Substation (Project Variant)*

In response to comments, the following bullet has been added to Draft EIR Mitigation Measure M-NO-2 as the third bullet on Draft EIR page 3.2-38 (i.e., the ninth bullet in the mitigation measure):

- Where access to alternative sources of power are available, portable diesel engines shall be prohibited.

*On Draft EIR pages 3.2-39 and 3.2-40, Table 3.2-15, Summary of Construction Noise Levels for the Martin Substation Separation Compared to Temporary Substantial Increase Over Ambient Noise Threshold, has been revised as follows:

[63a] Noise levels from construction staging activities are shown in Table 3.2-14.
[64] As shown in Table 3.2-14, the nearest commercial receptor would be exposed to noise levels less than 100 dBA and therefore is not considered sensitive.

Table 3.2-15 Summary of Construction Noise Levels for the Martin Substation Separation Compared to the Temporary Substantial Increase Over Ambient Noise Threshold

Nearest Offsite Sensitive Receptor	Distance to Receptor (feet)[65]	Existing Monitored Daytime Noise Level (dBA Leq)	Construction Phase	Loudest Two Noise Sources	Estimated Construction Noise Level (dBA Leq)	Resultant Noise Level (Existing + Construction) (dBA Leq)	Increase over Existing (dBA Leq)	Exceed 10 dBA Above the Ambient Noise Level?[66]
Residences at Midway Village (LT-5)	~~460~~ 280	51	Site Excavation	Jack Hammer/ Concrete Saw	~~65~~ 70	~~65~~ 70	~~+14~~ +19	**Yes**
			Concrete Foundations	Tractor/ Generator	~~65~~ 67	~~65~~ 67	~~+14~~ +16	**Yes**
			Backfill and Grading	Tractor/ Generator	~~65~~ 67	~~65~~ 67	~~+14~~ +16	**Yes**
			Placement of Facilities	Jack Hammer/ Generator	~~64~~ 68	~~64~~ 68	~~+13~~ +17	**Yes**
			Equipment and Gate Installation	Jack Hammer/ Tractor	~~63~~ 69	~~63~~ 69	~~+12~~ +18	**Yes**
Residences at 3100 Block of Geneva Avenue (LT-1)	150/200	66	Site Excavation	Jack Hammer/ Concrete Saw	76/73	76.4/74	+10.4/+8	**Yes**/No
			Concrete Foundations	Tractor/ Generator	73/70	73/~~74~~ 72	~~+8~~ +7/+6	No
			Backfill and Grading	Tractor/ Generator	73/70	73/~~74~~ 72	~~+8~~ +7/+6	No
			Placement of Facilities	Jack Hammer/ Generator	74/72	74/73	+8/+7	No
			Equipment and Gate Installation	Jack Hammer/ Tractor	75/~~70~~ 72	76/73	+9.5/+7	No

[65] The approximate distances are measured from the nearest edge of the construction activity to the nearest sensitive receptor property line.
[66] **Bolded** values exceed the 10 dBA over ambient criterion during daytime hours.

Table 3.2-15 Summary of Construction Noise Levels for the Martin Substation Separation Compared to the Temporary Substantial Increase Over Ambient Noise Threshold

Nearest Offsite Sensitive Receptor	Distance to Receptor (feet)[65]	Existing Monitored Daytime Noise Level (dBA Leq)	Construction Phase	Loudest Two Noise Sources	Estimated Construction Noise Level (dBA Leq)	Resultant Noise Level (Existing + Construction) (dBA Leq)	Increase over Existing (dBA Leq)	Exceed 10 dBA Above the Ambient Noise Level?[66]
Residences at 800 Block of Schwerin Street (LT-3)	~~820~~ 660	72	Site Excavation	Jack Hammer/ Concrete Saw	~~60~~ 64	~~72~~ 73	~~<1~~ +1	No
			Concrete Foundations	Tractor/ Generator	~~58~~ 60	72	<1	No
			Backfill and Grading	Tractor/ Generator	~~58~~ 60	72	<1	No
			Placement of Facilities	Jack Hammer/ Generator	~~59~~ 61	72	<1	No
			Equipment and Gate Installation	Jack Hammer/ Tractor	~~60~~ 62	72	<1	No
Residences at 100 Block of Main Street (LT-4)	~~850~~ 400	63	Site Excavation	Jack Hammer/ Concrete Saw	~~61~~ 67	~~65~~ 69	~~+2~~ +6	No
			Concrete Foundations	Tractor/ Generator	~~60~~ 64	~~65~~ 67	~~+2~~ +4	No
			Backfill and Grading	Tractor/ Generator	~~60~~ 64	~~65~~ 67	~~+2~~ +4	No
			Placement of Facilities	Jack Hammer/ Generator	~~59~~ 65	~~65~~ 67	~~+2~~ +4	No
			Equipment and Gate Installation	Jack Hammer/ Generator	~~57~~ 66	~~64~~ 68	~~+1~~ +5	No

SOURCES: Appendix E, Noise and Vibration Technical Memorandum, and technical noise memorandum updates (Attachment B).

*On Draft EIR page 3.2-41, the discussion of construction staging activity increase in ambient noise levels and related significance conclusions for the Martin Substation Separation, Modifications to Retain PG&E Access to Non-Electrical Facilities at Martin Substation, and Construction Staging have been revised as follows:

> **Significance after Mitigation:** This measure would implement a construction noise control plan to include all feasible measures to meet a performance target of construction activities not resulting in a noise level greater than 10 dBA above the ambient noise level at noise sensitive receptors. These methods include: enclosing or shielding stationary noise sources from neighboring noise-sensitive properties with noise barriers and installation of temporary barriers, barrier-backed sound curtains and/or acoustical panels around working powered impact equipment and, if necessary, around the project site perimeter; and locating stationary noise-producing equipment as far from noise-sensitive receptors as possible.[67] Construction noise may, at times, still exceed ~~90 dBA 1-hour Leq or~~ 10 dBA above the ambient noise level, given the existing low ambient levels at the Midway Village receptors. While this mitigation measure would substantially reduce the intensity of construction noise, due to the 33-month duration of construction activity and low existing ambient noise levels, the construction noise impact of Martin Substation separation would be ***significant and unavoidable with mitigation***.
>
> ~~Due to the limited space at Martin Substation, the Daly City Yard would serve as the primary staging/laydown area for separation work at the Martin Substation. No excavation would be required during staging activities, and the area would support storage of construction equipment, material, and stockpiles, and employee parking. Prior to any work or staging at the Daly City Yard, existing trailers and other PG&E equipment would need to be relocated. The noise level generated during staging activities would be 60 dBA Leq, approximately 9 dBA over the existing ambient noise level at the nearest sensitive receptor (Midway Village) located approximately 350 feet from the Daly City Yard.[68] Construction staging activity noise levels would could, therefore, not result in an increase of greater than 10 dBA over existing noise levels at the nearest receptors.~~
>
> ~~For these reasons, the impact of construction staging on ambient noise levels would be ***less than significant***.~~

*On Draft EIR Page 3.2-45, the discussion of the new City Substation (Project Variant) increase in ambient noise levels during construction has been revised as follows:

> Construction of the new City Substation (project variant) would include activities similar to those of the Martin Substation separation, with the addition of pile driving during site excavation and preparation, which is estimated to occur over a 15-week period. **Table 3.2-16** shows the noise levels that would be generated during the five primary phases of construction for the new City Substation. As shown in Table 3.2-16, the estimated noise levels generated by construction of the new City Substation (project variant) would range from ~~70 to 82~~76 to 88 dBA Leq at the nearest sensitive receptors. Construction noise levels would not exceed the 90 dBA criteria for daytime construction noise at a residential receptor or 100 dBA at a commercial receptor but would result in an increase of greater than 10 dBA over existing noise levels at the Midway Village receptors for all construction phases. **Mitigation Measure M-NO-2 (Construction Noise Control for the Martin Substation, Daly**

[67] Federal Highway Administration, Keeping the Noise Down, Highway Traffic Noise Barriers, February 2001, https://www.fhwa.dot.gov/Environment/ noise/noise_barriers/design_construction/keepdown.pdf, accessed on October 4, 2024

[68] ~~Refer to Table 16 of Appendix E, Noise and Vibration Technical Memorandum.~~

City Yard Staging, and New City Substation) is identified to reduce temporary increases in noise levels. However, pile driving for the project variant would substantially increase noise levels well beyond the 10 dBA over ambient standard and the ambient noise level is low; therefore mitigation to achieve a ~~21~~27 dBA reduction would likely not be feasible. In addition, while the duration of pile driving would be limited to one construction phase, noise level exceedances would also occur during all subsequent phases (total duration of 26 months). Therefore, with implementation of this measure, this construction noise impact of the new City Substation (project variant) over a 26 month period would be ***significant and unavoidable with mitigation***.

*The source for Draft EIR Table 3.2-16 (page 3.2-46), Exterior Noise at Offsite Sensitive Uses from Construction of the New City Substation (Project Variant), has been revised to include Attachment E, Air Quality Supporting Documentation, as shown:

Source: Appendix E, Noise and Vibration Technical Memorandum, and technical noise memorandum updates (Attachment B).

*On Draft EIR page 3.2-46, Table 3.2-16, Exterior Noise at Offsite Sensitive Uses from Construction of the New City Substation (Project Variant), has been revised as shown on the following page.

Table 3.2-16 Exterior Noise at Offsite Sensitive Uses from Construction of the New City Substation (Project Variant)

Nearest Offsite Sensitive Receptor	Distance to Receptor (feet)[74]	Existing Monitored Daytime Noise Level (dBA Leq)	Construction Phase	Loudest Two Noise Sources	Estimated Construction Noise Level (dBA Leq)	Resultant Noise Level (Existing + Construction) (dBA Leq)	Increase over Existing (dBA Leq)	Exceed 10 dBA Above the Ambient Noise Level?[75]
Residences at Midway Village (LT-5)	~~200~~ 95	51	Site Excavation and Preparation	Tractor/ Pile Driver	~~82~~ 88	~~82~~ 88	~~+31~~ +37	**Yes**
			Concrete Foundations	Tractor/ Generator	~~70~~ 76	~~70~~ 76	~~+19~~ +25	**Yes**
			Backfill and Grading	Tractor/ Generator	~~70~~ 76	~~70~~ 76	~~+19~~ +25	**Yes**
			Placement of Facilities	Jack Hammer/ Generator	~~71~~ 77	~~71~~ 77	~~+20~~ +26	**Yes**
			Equipment and Gate Installation	Tractor/ Generator	~~70~~ 76	~~70~~ 76	~~+19~~ +25	**Yes**
Bayshore Elementary School (LT-3)	300	72	Site Excavation and Preparation	Tractor/ Pile Driver	79	80	+8	No
			Concrete Foundations	Tractor/ Generator	66	73	+1	No
			Backfill and Grading	Tractor/ Generator	66	73	+1	No
			Placement of Facilities	Jack Hammer/ Generator	68	74	+2	No
			Equipment and Gate Installation	Tractor/ Generator	66	73	+1	No

Source: Appendix E, Noise and Vibration Technical Memorandum, and technical noise memorandum updates (Attachment B).

[74] The approximate distances are measured from the nearest edge of the construction activity to the nearest sensitive -receptor property line.
[75] **Bolded** values exceed the 10 dBA over ambient criterion during daytime hours.

*The first paragraph under "Summary" on Draft EIR page 3.2-47 has been revised as follows:

> Construction activities could increase noise levels in excess of 10 dBA over ambient for work conducted for the Martin Substation separation, the new City Substation (project variant), and generator use to maintain dewatering at trenchless construction pits associated with the distribution express feeders. Implementation of **Mitigation Measure M-NO-2 (Construction Noise Control for the Martin Substation, Daly City Yard Staging, and New City Substation)** and **Mitigation Measure M-NO-1 (Construction Noise Control for Generator Operations)** would reduce temporary increases in noise levels.

In response to comments, on Draft EIR page 3.2-48 and 3.2-49, the discussion of operational noise impacts for Martin Substation Separation is revised as follows:

> Two new transformers installed as part of the Martin Substation separation would emit noise during operation. In addition, one existing transformer at the substation would be relocated within the substation footprint. Transformer noise consists of two components: a pure-tone or "hum" noise and noise from cooling fans.[76] The California General Plan Guidelines[77] contains a table of recommended adjustments to standards for land use noise compatibility. For noisy urban residential communities near relatively busy roads or industrial areas, such as Geneva Avenue, a -5 dBA correction is recommended (i.e., when evaluating whether a noise source would increase ambient noise levels, reduce the estimated noise of the new source by 5 dBA), while for sources with a "pure tone character," a +5 dBA correction is recommended. Because these two conditions cancel out each adjustment, no adjustment is warranted to analyze the transformer noise associated with the project to determine compliance with the relevant noise criteria. Based on the type of transformers proposed, each transformer could generate a noise level up to ~~55~~77 dBA at 3.3 feet (1 meter), or approximately 72 dBA at 6 feet;[78] when combined, two transformers would generate noise levels of ~~58~~ approximately 75 dBA at 6 feet.[79] Although transformer noise levels could vary by time of day and season, these noise levels are assumed to be worst-case equivalent noise levels (Leq) for transformer operations. The existing transformer that would be relocated within the substation footprint would be moved to a different area and would not substantially combine with noise levels from the two newly installed transformers.
>
> All sensitive receptors within 900 feet of Martin Substation are located in Daly City; however, ~~. As stated in Table 3.2-12, the City of Daly City does not have quantitative operational noise standards. Because~~ the new or modified stationary sources at Martin Substation would exist within either Brisbane or Daly City., ~~,~~ As stated in Section 3.2.4.1, this ~~the~~ analysis ~~applies the City of Brisbane~~ evaluates Martin Substation transformer noise levels against either the standards.~~[80]~~ of the San Francisco Police Code or the City of Brisbane Municipal Code (see Table 3.2-12), except in cases where equipment could be in both Brisbane and Daly City, (e.g., north and south of the boundary

[76] Substation transformers would include cooling fans that would operate approximately five hours each day between May 1 and October 31.

[77] Governor's Office of Planning and Research, State of California 2017 General Plan Guidelines, Appendix D: Noise Element Guidelines, Page 375, 2017. This document is available online at: http://opr.ca.gov/docs/OPR_Appendix_D_final.pdf.Accessed October 6, 2024.

[78] National Electrical Manufacturers Association. 2019. NEMA Standards Publication TR 1-2013 (R2019) Transformers, Step Voltage Regulators and Reactors.

[79] OMNI calculator, sound pressure distance attenuation calculator. Available at: https://www.omnicalculator.com/physics/distance-attenuation

[80] ~~This analysis conservatively applies the most stringent standard of Section 8.28.030 of the Brisbane Municipal Code (greater than 10 dBA above local ambient to any receiver for more than 10 minutes in any hour). Noise from transformers is assumed to be steady-state (more than 10 minutes in a given hour). This standard is consistent with the San Francisco Police Code Section 2909 (c) standard which is the same standard regardless of the duration in an hour.~~

between Martin Substation and Daly City Yard), in which case the this analysis evaluates Martin Substation transformer noise levels against the more stringent standard, as follows:

- At the northern property plane, southern property plane, and Daly City Yard western property plane, Martin Substation stationary source equipment shall meet the exterior noise standards of section 2909(b) of the San Francisco Police Code (i.e., an 8 dBA increase above the ambient Leq noise level at the property plane for noise from commercial or industrial uses; and interior noise limits of 55 dBA and 45 dBA for daytime and nighttime hours inside any sleeping or living room in a nearby dwelling unit on a residential property assuming windows open, respectively).
- At the eastern property plane, Martin Substation stationary source equipment shall meet the exterior noise standard of Section 8.28.040 of the Brisbane Municipal Code (i.e., no more than a 10 dBA increase above ambient noise for more than 10 minutes per hour, no more than a 20 dBA increase above ambient for more than 3 minutes per hour, and not more than a 30 dBA increase above ambient at any point).

With regards to exterior standards along the northern property plane, the San Francisco Police Code standard (no more than +8 dbA increase above the existing ambient noise level at any point outside the property plane, as defined using the Leq metric), is more ~~The most~~ stringent than~~restriction of~~ the Brisbane Municipal Code, which prohibits noise produced by any machine, animal or device or any combination of same, in any commercial or industrial zoning district from generating a noise level more than 10 dBA above the local ambient to any receiver for a cumulative period of more than 10 minutes in any hour, more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA above the local ambient for any amount of time (i.e., the Brisbane code standard is not in effect until noise levels increase by 10 dBA, whereas the Police Code standard is in effect when noise levels increase by 8 dBA or more). Therefore, stationary operational activities that meet the exterior San Francisco Police Code standard would also meet the exterior Brisbane standard.

With regard to interior noise levels, as noted in Section 3.2.4.2, the City of Brisbane does not maintain interior noise standards for commercial and industrial noise sources, but does establish interior noise standards for multi-family dwelling units. Thus, this analysis evaluates Martin Substation transformer noise levels against the allowable level of interior noise by both the standards of the San Francisco Police Code Section 2909(d) and the City of Brisbane's residential zoning district standards (see Table 3.2-12).

Exterior Noise

The exact location of new transformers on the Martin Substation site is currently unknown; however, newly installed transformers would be no closer than 40 feet from the substation's northern property line (Geneva Avenue), 280 feet from the substation's southern property plane (Midway Village), 6 feet from the substation's eastern property plane (near 7 Mile House Restaurant/Bayshore Boulevard), and 585 feet from the Daly City Yard's western property plane (Schwerin Street;~~, but for the purposes of this noise analysis it is assumed to be no closer than 6 feet to the property line at Geneva Avenue~~ refer to revised Figure 2-2). These distances assume transformers are set back 40 feet from the northern property line to avoid an existing utility line easement, but operate at the southern, eastern, and western edges of the Martin Substation area with only a minimum six-foot setback from the substation boundary. ~~The ambient L90 noise level recorded at the northern property line (LT-2) was 48 dBA.~~ The existing daytime and nighttime ambient noise levels (dBA Leq) at these locations,

the estimated noise level that would be produced by the new Martin Substation transformers, and the resulting total combined existing plus transformer noise levels at the property plane locations are summarized in **Table 3.2-16a**.

As shown in Table 3.2-16a, the potential operation of transformers at the Martin Substation would not increase ambient noise levels above applied standards at the northern, southern, or western property planes during daytime or nighttime conditions. In addition, the new transformers would not increase ambient noise levels above applied standards at the eastern property plane during daytime conditions; however, the operation of transformers could increase ambient noise levels by 11 dBA during nighttime conditions at the eastern property plane, which is considered a potentially significant impact.

~~Assuming the two proposed transformers would operate at 58 dBA at a distance of 6 feet, the transformer noise level at receptors at a distance of 6 feet from the closest property line of Martin Substation to the north would be 58dBA. Therefore, transformer noise from the project would not exceed 10 dBA over the ambient noise level at the closest property line.~~ It is noted that the above estimates assume continuous use of transformer cooling fans, even when supplemental cooling may not be required (e.g., cooling is less likely during late night and early morning periods, wintertime). Realistically, the use of cooling fans should only be required when both electricity demand and ambient temperatures are high, which is anticipated to be approximately 5 hours a day during afternoon and early evening periods from approximately May 1 to October 31. Thus, actual transformer noise levels are anticipated to be lower than estimated in Table 3.2-16a. Regardless, with implementation of **Mitigation Measure M-NO-3a (Operational Noise Analysis and Attenuation for Stationary Noise Sources)**, which requires setbacks, barriers, and/or other transformer noise control features to ensure compliance with San Francisco Police Code Section 2909(b) and Brisbane Municipal Code Section 8.28.030, the impact of operational transformer noise at the Martin Substation would be ***less than significant with mitigation***. For example, while each transformer would be up to 20 feet tall, it is anticipated that transformers would be located behind 25-foot-tall, 16-inch-thick fire walls (refer to Draft EIR Chapter 2, Project Description, page 2-12) that would shield the transformers and serve to block the direct transmission of noise from the transformers to the property plane and sensitive receptors located beyond the property plane. However, the impact analysis does not assume that such walls are part of the project but that they would be implemented as mitigation. These walls are estimated to provide a minimum 15 dBA reduction in transformer noise levels immediately outside the fire wall, a minimum of 10 dBA of attenuation at distances up to 100 feet outside the fire wall, and between 7 to 9 dBA of attenuation at distances between 100 and 300 feet outside the fire wall.[80a] To be compliant with relevant noise standards, the mitigation measures would need to reduce the transformer noise levels by at least 1 dBA. Therefore, a combination of setbacks, barriers, and other control measures required by Mitigation Measure M-NO-3a would be sufficient to reduce transformer noise to levels that comply with the San Francisco Police Code's exterior noise standard.

[80a] In general, a noise barrier limits the direct transmission of sound waves through the barrier and requires soundwaves to travel over the barrier to reach a receptor. The longer a diffracted sound wave must travel to go over the barrier and reach a receptor (as compared to the path of direct transmission through the barrier) the more effective the barrier is. As a barrier gets farther away from a source or a receptor, diffraction diminishes and barrier effectiveness decreases. The specific reduction realized at property planes and sensitive receptor locations would depend on the distance between the fire wall and property plane, the distance between the fire wall and receptor location, and the elevation of the receptor with respect to the transformer and fire wall.

Table 3.2-16a Martin Substation Separation Operational Transformer Noise Levels

Property Plane and Representative Noise Environment	Transformer Distance to Property Plane (feet)[a]	Martin Substation Total New Transformer Noise Level (dBA Leq)[b]	Existing Ambient Noise Level (dBA Leq)[c]	Existing Plus Project Noise Level (dBA Leq)	Total Change in Ambient Noise Level (dBA Leq)	Applicable Standard (dBA Leq)[d]	Standard Exceeded?
North – Geneva Avenue (LT-1)	40	58.3	66.0 (daytime)/ 64.0 (nighttime)	66.7 (daytime)/ 65.0 (nighttime)	+0.7 (daytime)/ +1.0 (nighttime)	+8 above ambient	No
North – Geneva Avenue (LT-2)	40	58.3	72.0 (daytime)/ 65.0 (nighttime)	72.2 (daytime)/ 65.8 (nighttime)	+0.2 (daytime)/ +0.8 (nighttime)	+8 above ambient	No
South – Midway Village (LT-5)	280	41.4	51.0 (daytime)/ 45.0 (nighttime)	51.5 (daytime)/ 46.6 (nighttime)	+0.5 (daytime)/ +1.6 (nighttime)	+8 above ambient	No
East – Bayshore Boulevard (LT-1)	6	74.8	66.0 (daytime)/ 64.0 (nighttime)	75.4 (daytime)/ 75.2 (nighttime)	+9.4 (daytime)/ **+11.2 (nighttime)**	+10 above ambient[e]	No (daytime)/ **Yes (nighttime)**
West – Schwerin Street (LT-3)	585	35.0	72.0 (daytime)/ 65.0 (nighttime)	72.0 (daytime)/ 65.0 (nighttime)	0.0	+8 above ambient	No

SOURCES: Technical Noise Memorandum Updates (Attachment B)

NOTES:

a. Transformers would be set back at least 40 feet from the northern property plane due to an existing natural gas easement. All other transformers were assumed to have a six-foot setback from the substation boundary.
b. Total transformer noise is for two transformers.
c. The representative noise environment is based on the closest LT monitoring data listed in Table 3.2-3. The nighttime ambient Leq noise level for Midway Village and the southern Daly City Yard property line (LT-5) is based on measurements at LT-4 as explained in Table 3.2-3.
d. Refer to Table 3.2-12. The +8 dBA Leq standard is from SF Police Code Section 2909(b). The +10 dBA Leq standard is from Brisbane Municipal Code Section 8.28.030. This standard is applied for a cumulative 10 minute period in any hour.
e. The Brisbane Municipal Code also sets +20 dBA and +30 dBA above ambient standards that would not be exceeded by the project.

Interior Noise

With respect to the daytime and nighttime interior noise thresholds for operational noise, unshielded transformer noise is estimated to attenuate to 41.3 dBA Leq at the closest Midway Village residential building exterior, located 285 feet from potential transformers, and to 46.6 dBA Leq at the nearest residential building exterior on Geneva Avenue, located 155 feet from potential transformers. Given that buildings attenuate noise by at least 15 dBA with windows open, interior transformer noise would be reduced to approximately 26 dBA inside Midway Village dwelling units and approximately 32 dBA inside Geneva Avenue dwelling units. Thus, the project ~~also~~ would not result in an interior noise level at the nearest residence in excess of the San Francisco Police Code's (Section 2909(d)) daytime (55 dBA) or nighttime (45 dBA) standards. The project also would not result in an interior noise level at the nearest residence in excess of the applied standards of Brisbane Municipal Code Section 8.28.030, because, even in the worst case, the interior noise level of (32 dBA) would be less than the minimum interior ambient noise level of 35 dBA used in the Brisbane code to evaluate compliance with its noise standards. The operational noise impact of the Martin Substation separation would, therefore, be ***less than significant.***

Footnote 78 on Draft EIR page 3.2-48 has been revised to read:

[78] ~~National Electrical Manufacturers Association. 2019. NEMA Standards Publication TR 1-2013 (R2019) Transformers, Step Voltage Regulators and Reactors.~~ Institute of Electrical and Electronics Engineers (IEEE) Guide for Audible Sound of Liquid-Immersed Power Transformers, Standard C57.136-2023 and SFPUC.

Footnote 80a has been added on Draft EIR pages 3.2-48 and 3.2-49:

[80a] In general, a noise barrier limits the direct transmission of sound waves through the barrier and requires soundwaves to travel over the barrier to reach a receptor. The longer a diffracted sound wave must travel to go over the barrier and reach a receptor (as compared to the path of direct transmission through the barrier) the more effective the barrier is. As a barrier gets farther away from a source or a receptor, diffraction diminishes and barrier effectiveness decreases. The specific reduction realized at property planes and sensitive receptor locations would depend on the distance between the fire wall and property plane, the distance between the fire wall and receptor location, and the elevation of the receptor with respect to the transformer and fire wall.

In response to comments, Mitigation Measure M-NO-3a on Draft EIR page 3.2-49 and 3.2-50 is revised as follows:

Mitigation Measure M-NO-3a: Operational Noise Analysis and Attenuation for Stationary Noise Sources

This measure applies to: Stationary Noise Sources at Martin Substation, New City Substation (Project Variant) and the Operations Control Center

Prior to construction at the Martin Substation, new City Substation (project variant), and operations control center, the SFPUC shall submit documentation to the Environmental Review Officer (ERO) or the ERO's designee, demonstrating with reasonable certainty that the proposed approach to the installation, replacement, or renovation of ~~HVAC~~ stationary source equipment meets the noise levels ~~limits specified in~~as follows:

- Martin Substation: At the northern property plane, southern property plane, and Daly City Yard western property plane, stationary source equipment shall meet the exterior noise standards of section 2909(b) of the San Francisco Police Code (i.e., an 8 dBA increase above the ambient Leq noise level at the property plane for noise from commercial or industrial uses~~; and interior noise~~

~~limits of 55 dBA and 45 dBA for daytime and nighttime hours inside any sleeping or living room in a nearby dwelling unit on a residential property assuming windows open, respectively~~). At the eastern property plane, stationary source equipment shall meet the exterior noise standard of Section 8.28.040 of the Brisbane Municipal Code (i.e., no more than a 10 dBA increase above ambient noise for more than 10 minutes per hour, no more than a 20 dBA increase above ambient for more than 3 minutes per hour, and not more than a 30 dBA increase above ambient at any point).

- New City Substation: At the Daly City Yard's northern, southern, and western property planes, stationary source equipment shall meet the exterior and interior noise standards of section 2909(b) of the San Francisco Police Code. At the Martin Substation eastern property plane, stationary source equipment shall meet the exterior standard of Brisbane Municipal Code Section 8.28.040.
- Operations Control Center: At all operation control center property planes, stationary source equipment shall meet the exterior and interior noise standards of section 2909(b) and 2909(d), respectively, of the San Francisco Police Code.

Acoustical treatments required to meet the San Francisco Police Code and/or the Brisbane Municipal Code requirements may include but are not limited to:

- Enclosing noise-generating mechanical equipment;
- Installing relatively quiet models of air handlers, exhaust fans, and other mechanical equipment;
- Using mufflers or silencers on equipment exhaust fans;
- Optimizing transformer design with low-noise core materials or custom-designed transformer enclosures;
- Orienting or shielding equipment to protect noise sensitive receptors (residences, hospitals, convalescent homes, schools, churches, hotels and motels, and sensitive wildlife habitat) to the greatest extent feasible;
- Increasing the distance between noise-generating equipment and noise-sensitive receptors; and/or
- Placing barriers around the equipment to reduce noise.

Significance after Mitigation: Less than significant.

In response to comments, on Draft EIR page 3.2-51 and 3.2-52, the discussion of operational noise impacts for the new City Substation (Project Variant) has been revised as follows:

NEW CITY SUBSTATION (PROJECT VARIANT)

Proposed above-ground components at the new City Substation, which would be located at Daly City Yard, include two switchgear buildings, four 115 kV and two 230 kV transformers, and new transmission and distribution lines. Of the proposed equipment, only the six new transformers would emit noise during operations. Based on the type of transformers proposed, each transformer could generate

noise levels up to ~~55~~77 dBA at 1 meter (3.3 feet), or 72 dBA at 6 feet.[84] When combined, six transformers would generate noise levels of ~~63~~80 dBA at 6 feet. As explained previously, although transformer noise levels could vary, this analysis assumes transformer noise levels are worst-case equivalent noise levels (Leq).

All receptors within 900 feet of the Daly City Yard are located in Daly City. As explained in section 3.2.4.2, ~~B~~because the City of Daly City does not have quantitative operational noise standards, the City and County of San Francisco's thresholds are applied for assessing impacts of the operational noise from stationary sources within Daly City. San Francisco Police Code section 2909(b) generally prohibits fixed mechanical equipment noise and music in excess of 8 dBA above the ambient noise level from commercial or industrial sources. San Francisco Police Code section 2909 (d) restricts interior noise to 45 dBA between 10 p.m. and 7 a.m. and 55 dBA between 7 a.m. and 10 p.m. These are the absolute maximum allowable levels of interior noise produced by any combination of mechanical device(s) under one ownership or use originating from outside the dwelling unit.

Exterior Noise

~~The proposed footprint of the new City Substation would be approximately 200 feet from the closest property line of the Daly City Yard to the south. The ambient L90 noise level measured near the southern Daly City Yard property line (LT-5) was 41dBA. At this distance transformer noise at the southern property line would be reduced to 30 dBA. The transformer noise would increase the existing ambient noise level by less than 1 dB during operations. Therefore, transformer noise from the new City Substation (project variant) would not exceed 8 dBA over the ambient noise level at the closest property plane.~~

The exact location of new transformers at the new City Substation is currently unknown; however, newly installed transformers would be no closer than 365 feet from the Daly City Yard's northern property line (Geneva Avenue), 101 feet from the yard's southern property plane (Midway Village), 1,200 feet from the eastern property plane on Bayshore Boulevard, and 245 feet from the yard's western property plane (Schwerin Street; refer to revised Figure 2-2). These distances assume transformers operate with only a minimum six-foot setback from the substation area boundary. The existing daytime and nighttime ambient noise levels (dBA Leq) at these locations, the estimated noise level that would be produced by the new City Substation transformers, and the resulting total combined existing plus transformer noise levels at the property plane locations are summarized in **Table 3.2-16b**.

As shown in Table 3.2-16b, the potential operation of transformers at the new City Substation would not increase ambient noise levels at the northern, eastern, or western property planes by more than 8 dBA during daytime or nighttime conditions. In addition, the new transformers would not increase ambient noise levels by more than 8 dBA at the southern property plane during daytime conditions; however, the operation of transformers could increase ambient noise levels by 11 dBA during nighttime conditions at the southern property plane, which is considered a potentially significant impact.

[84] ~~National Electrical Manufacturers Association. 2019. NEMA Standards Publication TR 1-2013 (R2019) Transformers, Step Voltage Regulators and Reactors.~~ Institute of Electrical and Electronics Engineers (IEEE) Guide for Audible Sound of Liquid-Immersed Power Transformers, Standard C57.136-2023, and SFPUC.

Table 3.2-16b New City Substation Operational Transformer Noise Levels

Property Plane and Representative Noise Environment	Transformer Distance to Property Plane (feet)[a]	New City Substation Total New Transformer Noise Level (dBA Leq)[b]	Existing Ambient Noise Level (dBA Leq)[c]	Existing Plus Project Noise Level (dBA Leq)	Total Change in Ambient Noise Level (dBA Leq)	Applicable Standard (dBA Leq)[d]	Standard Exceeded?
North – Geneva Avenue (LT-1)	365	43.9	66.0 (daytime)/ 64.0 (nighttime)	66.0(daytime)/ 64.0 (nighttime)	0.0	+8 above ambient	No
North – Geneva Avenue (LT-2)	365	43.9	72.0 (daytime)/ 65.0 (nighttime)	72.0 (daytime)/ 65.0 (nighttime)	0.0	+8 above ambient	No
South – Midway Village (LT-5)	101	55.1	51.0 (daytime)/ 45.0 (nighttime)	56.5 (daytime)/ 55.5 (nighttime)	+5.5 (daytime)/ **+10.5 (nighttime)**	+8 above ambient	No (daytime)/ **Yes (nighttime)**
East – Bayshore Boulevard (LT-1)	1,200	33.6	66.0 (daytime)/ 64.0 (nighttime)	66.0 (daytime)/ 64.0 (nighttime)	0.0	+8 above ambient	No
West – Schwerin Street (LT-3)	245	47.4	72.0 (daytime)/ 65.0 (nighttime)	72.0 (daytime)/ 65.1 (nighttime)	0.0 (daytime) + 0.1 (nighttime)	+8 above ambient	No

SOURCES: Technical Noise Memorandum Updates (Attachment B)

NOTES:

a. Transformers were assumed to have a minimum six-foot setback from the substation boundary.
b. Total transformer noise is for six transformers.
c. The representative noise environment is based on the closest LT monitoring data listed in Table 3.2-3. The nighttime ambient Leq noise level for Midway Village and the southern Daly City Yard property line (LT-5) is based on measurements at LT-4 as explained in Table 3.2-3.
d. Refer to Table 3.2-12. The +8 dBA Leq standard is from SF Police Code Section 2909(b).

It is noted that the above estimates assume continuous use of transformer cooling fans, even when supplemental cooling may not be required (e.g., cooling is less likely during late night and early morning periods, wintertime). Realistically, the use of cooling fans should only be required when both electricity demand and ambient temperatures are high, which is anticipated to be approximately 5 hours a day during afternoon and early evening periods from approximately May 1 to October 31. Thus, actual transformer noise levels are anticipated to be lower than estimated in Table 3.2-16b.

With implementation of **Mitigation Measure M-NO-3a (Operational Noise Analysis and Attenuation for Stationary Noise Sources)**, which requires setbacks, barriers, and/or other transformer noise control features to ensure compliance with San Francisco Police Code section 2909, the impact of operational transformer noise at the new City Substation would be ***less than significant with mitigation.*** For example, while each transformer would be up to 20 feet tall, transformers are anticipated to be located behind 25-foot-tall, 16-inch-thick fire walls that would shield the transformers and serve to block the direct transmission of noise from the transformers to the property plane and sensitive receptors located beyond the property plane. However, the impact analysis does not assume that such walls are part of the project but that they would be implemented as mitigation. These walls are estimated to provide a minimum 15 dBA reduction in transformer noise levels immediately outside the fire wall, a minimum of 10 dBA of attenuation at distances up to 100 feet outside the fire wall, and between 7 to 9 dBA of attenuation at distances between 100 and 300 feet outside the fire wall. To be compliant with relevant noise standards, the mitigation measures would need to reduce the transformer noise levels by at least 3 dBA. Therefore, as discussed above for the Martin Substation, a combination of setbacks, barriers, and other control measures required by Mitigation Measure M-NO-3a would be sufficient to reduce transformer noise to levels that comply with the San Francisco Police Code's exterior noise standard.

Interior Noise

~~Exterior t~~Transformer noise of ~~30~~ 55 dBA Leq at the southern property plane 101 feet away ~~also~~ would be substantially the same at the nearest building façade located 106 feet away. New City substation transformer noise levels would not result in an interior noise level at the nearest residence in excess of the San Francisco Police Code's 55 dBA daytime and 45 dBA nighttime interior noise criteria because buildings would attenuate noise by at least 15 dBA with windows open. Therefore, the operational interior noise impact of the new City Substation would be ***less than significant***.

*Footnote 84 on Draft EIR page 3.2-51 has been revised to read:

[84] ~~National Electrical Manufacturers Association. 2019. NEMA Standards Publication TR 1-2013 (R2019) Transformers, Step Voltage Regulators and Reactors.~~ Institute of Electrical and Electronics Engineers (IEEE) Guide for Audible Sound of Liquid-Immersed Power Transformers, Standard C57.136-2023, and SFPUC.

The first paragraph under "Summary" on Draft EIR page 3.2-53 has been revised as follows:

With implementation of **Mitigation Measure M-NO-3a (Operational Noise Analysis and Attenuation for Stationary Noise Sources)**, which requires ~~HVAC~~ enclosures or other modifications to ensure compliance with San Francisco Police Code section 2909, the impact of operational noise from the transformers at Martin Substation or the new City Substation (project variant) and from the operations control center would be less than significant.

*On Draft EIR page 3.2-54, Table 3.2-17, Vibration Levels from Construction Equipment at Martin Substation, has been revised as follows:

Equipment[91]	Approximate Peak Particle Velocity (PPV; inches per second)			Estimated Peak Particle Velocity (PPV) at Offsite Structures (inches per second)		
	At 8 Feet (Martin Substation Building)	At 25 Feet (Reference)	At 60 Feet	At 150/200 Feet (Geneva Avenue Residences)	At 290 Feet (Midway Village)	At ~~500~~ 360 Feet (~~Midway Village/~~ Martin Substation Warehouse)
Vibratory Roller (12 ton)	0.249	0.067	0.026	0.009/0.007	0.005	~~0.002~~ 0.004
Jack Hammer	0.123	0.035	0.013	0.005/0.004	0.002	~~0.001~~ 0.002

SOURCE: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual* (September 2020); Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual* (2018); Appendix E, Noise and Vibration Technical Memorandum

*On Draft EIR page 3.2-55, the discussion of vibration impacts on buildings has been revised as follows:

> As shown in Table 3.2-17, the maximum vibration level at offsite structures would be well below the most stringent criteria of 0.25 in/sec PPV for historic structures. However, there are two onsite historic structures, one within the Martin Substation yard (Martin Substation building) and one within the Daly City Yard (Martin Substation warehouse). Under the project, construction work at Martin Substation could occur adjacent to the Martin Substation building, while the Martin Substation warehouse would be located approximately 360 feet~~more than 500 feet~~ from work areas for the Martin Substation. Use of a vibratory roller within 8 feet of the Martin Substation building could exceed 0.25 in/sec PPV and result in building damage at the Martin Substation building. Equipment operations for construction staging at the Daly City yard would primarily consist of loaders, forklifts and trucks and would not include vibration-generating equipment. Implementation of **Mitigation Measure M-NO-4a (Protection of Adjacent Buildings/Structures and Vibration Monitoring During Construction)** would reduce the potential for damage to the Martin Substation building should work occur within 8 feet of the building, and the impact would be ***less than significant with mitigation***.

*On Draft EIR page 3.2-61, the discussion of groundborne vibration levels associated with the construction of the new City substation (project variant) has been revised as follows:

> Site preparation for the new City Substation at the Daly City Yard would include pile driving. Other construction activities would include the use of compaction equipment (vibratory rollers), jackhammers, and loaded haul trucks. These construction activities have the potential to generate low levels of groundborne vibration. With respect to pile driving, the nearest off-site structures would be ~~200~~approximately 105 feet away south of the project variant site (at Midway Village) and sufficiently distant to avoid potential structural impacts (see Table 3.2-18, which indicates vibration levels from pile driving would be less than 0.25 inches per second at a distance of 60 feet). Two onsite structures are present within the Daly City Yard, the closest of which is a modern industrial/ commercial building approximately 70 feet from the proposed substation footprint. At this distance, vibrations from pile driving would be reduced to 0.21 in/sec PPV and therefore would be below all Caltrans vibration criteria for modern buildings. The footprint of the new City Substation would be approximately 200 feet from the Martin Substation warehouse which would be sufficiently distant to

avoid a vibration level of 0.25 in/sec PPV applicable to historic structures and therefore pile driving would not result in excessive groundborne vibration.

*The second paragraph of the discussion of cumulative construction noise impacts on Draft EIR page 3.2-62 has been revised as follows:

> Martin Substation separation construction or construction of the new City Substation (project variant) could occur concurrently with the following cumulative projects within 900 feet of sensitive receptors affected by work at Martin Substation or Daly City Yard: Baylands North, Midway Village Redevelopment, Brisbane Baylands Specific Plan, and Cormorant Battery Storage Facility. Construction activities under the proposed project combined with construction of these cumulative projects have the potential to result in a combined temporary increase in ambient noise. Construction of multiple projects consecutively could increase the duration of construction noise levels that would be 10 dBA above the ambient noise level or 90 dBA at sensitive receptors or above standards presented in Table 3.2-12. Depending on the intensity of construction noise levels, the frequency at which construction noise exceeds criteria, the frequency of overlapping construction activities, and the duration of activity, noise from Martin Substation separation or the new City Substation along with cumulative project construction activities could be a significant cumulative impact. The project or project variant would make a cumulatively considerable contribution to a significant cumulative impact related to construction noise. As discussed in Impact NO-2, implementation of **Mitigation Measure M-NO-2 (Construction Noise Control for the Martin Substation, Daly City Yard Staging, and New City Substation)** would reduce the project's contribution to substantial noise increases during Martin Substation separation, but would not reduce the noise from construction of the project or new City Substation (project variant) to less-than-significant levels. Therefore, the project or project variant's contribution to the cumulative construction noise impact would also be ***significant and unavoidable with mitigation***.

*The impact conclusion statement for Impact C-NO-2 on Draft EIR page 3.2-63 has been revised as follows:

> **Impact C-NO-2: The project or project variant, in combination with cumulative projects, ~~would not~~ could cause a substantial permanent increase in ambient noise levels at noise-sensitive receptors above levels existing without the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (*Less than Significant with Mitigation*)**

In response to comments, on Draft EIR page 3.2-64, the second paragraph of the discussion of cumulative impacts from stationary source noise at the Martin Substation and the new City substation (project variant) has been revised as follows:

> As discussed in the project-level analysis, new transformers at Martin Substation and the new City substation (project variant) could result in more than an 8 dBA increase in exterior ambient noise levels at the nearest property plane. The project's noise sources could combine with increases in exterior noise levels from other cumulative projects, although the exact level of the combined increase would depend on factors such as actual ambient noise levels, noise source contributions, and development patterns. Nonetheless, the project or project variant in combination with cumulative projects could result in cumulative exterior ambient noise level increases, which would be a potentially significant cumulative impact. Implementation of Mitigation Measure M-NO-3a

would reduce the contribution of the project or project variant to significant cumulative noise impacts by incorporating setbacks, barriers, and/or other transformer noise control measures that minimize transformer noise ~~contribute minimally~~ to the surrounding noise environment. ~~Because transformers are predicted to contribute 30 dBA or less to existing ambient noise levels at the most highly impacted receptors in an area where the existing noise level currently exceeds 60 dBA,~~ With the implementation of Mitigation Measure M-NO-3a, operational transformer noise from Martin Substation or the New City Substation would not contribute considerably to cumulative operational noise sources associated with cumulative development listed in Table 3.1-3 and this impact would be ***less than significant with mitigation***.

11.5 Revisions to Section 3.3, Air Quality

In response to comments, the following text has been added to Draft EIR page 3.3-17 after the paragraph on automobile fuel efficiency standards:

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS

California Code of Regulations Title 8, Division 1, Chapter 4, Subchapter 4 Construction Safety Orders apply to construction work in California. As required in Section 1528, whenever harmful dusts, fumes, mists, vapors, or gases exist or are produced in the course of employment in quantities giving rise to harmful exposure of employees, such hazards shall be controlled by removing the employees from exposure to the hazard, by limiting the daily exposure of employees to the hazard, or by application of engineering controls. Whenever such controls are not practicable or fail to achieve full compliance, respiratory protective equipment shall be provided. Employees exposed to hazardous substances must be protected as required by Group 16 of the General Industry Safety Orders (8 California Code of Regulations Section 5144), which in part (d) specifies that respirators provided to construction workers must be appropriate for the respiratory hazard(s) to which the worker is exposed, and workplace and user factors that affect respirator performance and reliability.

In response to comments, the following text has been added to Draft EIR page 3.3-21 after the paragraph on regulation of odors:

CITY OF BRISBANE MUNICIPAL CODE

Section 15.01.510 of the Brisbane Municipal Code addresses fugitive dust emissions from the movement of earth materials either within, to, or from construction sites and requires the implementation of dust control measures in accordance with the Bay Area Air Quality Management District CEQA Guidelines and any additional measures that the city engineer deems to be necessary and appropriate. As determined by the city engineer, a water truck is required to be continuously present onsite to assure maximum control.

*Footnote 49 on Draft EIR page 3.3-21 has been revised as follows:

[49] Bay Area Air Quality Management District, California Environmental Quality Act Air Quality Guidelines, Appendix A Significance Thresholds Justification Report, April 2023, http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines; San Francisco Planning, Air Quality and Greenhouse Gas Analysis Guidelines, February 2025, http://citypln-m-extnl.sfgov.org/SharedLinks.aspx?accesskey=93af2e83a6fbd4bdc0f723a4e8944a88e47913849571b13e940a9b21971f2f83&VaultGUID=A4A7DACD-B0DC-4322-BD29-F6F07103C6E0, accessed February 18, 2025.

*An error was found in the analysis of the mass emissions and health risks associated with Martin Substation separation. The error was related to the emissions database used to summarize criteria air pollutant emissions and calculate health risks. The last sentence of the first paragraph on Draft EIR page 3.3-35 has been revised to reference the additional supporting documentation as follows:

> Detailed tables showing unmitigated emissions by project component and construction year are included in Appendix F and Attachment E.

*Footnote 83 on Draft EIR page 3.3-35 has been revised as follows:

> [83] Emissions estimated using methods consistent with CalEEMod® version 2022.1. Unmitigated construction emissions are presented in Appendix F, Tables 12a, 12b, 14a and 14b and Attachment E, Air Quality Supporting Documentation.

*The source for Draft EIR Table 3.3-7 (pages 3.3-35 and 3.3-36) has been revised to include Attachment E, Air Quality Supporting Documentation, as shown:

> SOURCE: Appendix F, Air Quality Technical Memorandum and Health Risk Assessment Tables 12a, 12b, 14a and 14b and Attachment E, Air Quality Supporting Documentation.

*To correct an unintentional calculation error related to Martin Substation separation, Draft EIR Table 3.3-7 (pages 3.3-35 and 3.3-36) has been revised as follows:

Table 3.3-7 Unmitigated Construction Emissions for the Project and Project Variant

Construction Year	Average Daily Construction Criteria Pollutant Emissions (pounds per day)[83]			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
PROPOSED PROJECT – RAIL TRANSPORT				
Year 1[84]	6.7 ~~5.9~~	**66** ~~**59**~~	2.1 ~~1.8~~	1.9 ~~1.7~~
Year 2	4.6 ~~3.7~~	40 ~~32~~	1.4 ~~1.1~~	1.3 ~~1.0~~
Year 3	1.9 ~~1.4~~	16 ~~12~~	0.57 ~~0.41~~	0.52 ~~0.37~~
Significance Thresholds	*54*	*54*	*82*	*54*
Exceeds Threshold?	No	**Yes**	No	No
PROPOSED PROJECT – TRUCK TRANSPORT				
Year 1	6.7 ~~5.9~~	**66** ~~**59**~~	2.1 ~~1.8~~	1.9 ~~1.7~~
Year 2	4.6 ~~3.6~~	39 ~~31~~	1.4 ~~1.1~~	1.3 ~~1.0~~
Year 3	1.9 ~~1.3~~	16 ~~12~~	0.55 ~~0.39~~	0.51 ~~0.36~~
Significance Thresholds	*54*	*54*	*82*	*54*
Exceeds Threshold?	No	**Yes**	No	No

[83] Emissions estimated using methods consistent with CalEEMod® version 2022.1. Unmitigated construction emissions are presented in Appendix F, Tables 12a, 12b, 14a and 14b and Attachment E, Air Quality Supporting Documentation.
[84] The analysis uses 2026 as Year 1 of construction.

Table 3.3-7 Unmitigated Construction Emissions for the Project and Project Variant

Construction Year	Average Daily Construction Criteria Pollutant Emissions (pounds per day)[83]			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
PROJECT VARIANT – RAIL TRANSPORT				
Year 1	8.4	**84**	2.6	2.4
Year 2	4.0	37	1.2	1.1
Year 3	0.93	8.3	0.27	0.25
Significance Thresholds	*54*	*54*	*82*	*54*
Exceeds Threshold?	No	**Yes**	No	No
PROJECT VARIANT – TRUCK TRANSPORT				
Year 1	8.2	**82**	2.5	2.3
Year 2	3.9	36	1.2	1.1
Year 3	0.93	8.3	0.27	0.25
Significance Thresholds	*54*	*54*	*82*	*54*
Exceeds Threshold?	No	**Yes**	No	No

SOURCE: Appendix F, Air Quality Technical Memorandum and Health Risk Assessment Tables 12a, 12b, 14a and 14b and Attachment E, Air Quality Supporting Documentation.

ABBREVIATIONS:

CalEEMod = California Emissions Estimator Model; $PM_{2.5}$ = PM less than 2.5 microns in diameter; PM_{10} = PM less than 10 microns in diameter; ROG = reactive organic gases; NOx = nitrogen oxides

Bold values show exceedance of the applicable threshold.

In response to comments, the following sentence has been added to the end of the second paragraph under "B. Waivers" on Draft EIR page 3.3-37:

> In addition, the SFPUC shall demonstrate that maximum project-level health risks with the use of waivers would not exceed a threshold of 7 in one million for incremental lifetime cancer risk and an annual average $PM_{2.5}$ concentration of 0.2 µg/m^3.

*The first full sentence of the paragraph on Draft EIR page 3.3-38 has been revised to reference additional supporting documentation as follows:

> Detailed tables showing mitigated emissions by project component and construction year are included in Appendix F and Attachment E.

*Footnote 86 on Draft EIR page 3.3-38 has been revised as follows:

> [86] Emissions estimated using methods consistent with CalEEMod® version 2022.1. Unmitigated construction emissions are presented in Appendix F, Tables 13a, 13b, 15a and 15b and Attachment E, Air Quality Supporting Documentation.

*The source for Draft EIR Table 3.3-8 (page 3.3-38) has been revised to include Attachment E, Air Quality Supporting Documentation, as shown:

> SOURCE: Appendix F, Air Quality Technical Memorandum and Health Risk Assessment Tables 13a, 13b, 15a and 15b and Attachment E, Air Quality Supporting Documentation.

*To correct a calculation error related to Martin Substation separation, Draft EIR Table 3.3-8 (page 3.3-38) has been revised as follows:

Table 3.3-8 Mitigated Construction Emissions for the Proposed Project and Variant

Construction Year	Average Daily Construction Criteria Pollutant Emissions (pounds per day)[86]			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
PROPOSED PROJECT – RAIL TRANSPORT				
Year 1[87]	1.8 ~~1.6~~	39 ~~36~~	0.29 ~~0.26~~	0.29 ~~0.26~~
Year 2	1.2 ~~1.0~~	21 ~~18~~	0.17 ~~0.14~~	0.17 ~~0.14~~
Year 3	0.52 ~~0.40~~	8.4 ~~7.0~~	0.084 ~~0.064~~	0.082 ~~0.062~~
Significance Thresholds	*54*	*54*	*82*	*54*
Exceeds Threshold?	No	No	No	No
PROPOSED PROJECT – TRUCK TRANSPORT				
Year 1	1.8 ~~1.6~~	38 ~~36~~	0.28 ~~0.25~~	0.27 ~~0.24~~
Year 2	1.14 ~~0.94~~	20 ~~17~~	0.15 ~~0.12~~	0.15 ~~0.11~~
Year 3	0.49 ~~0.37~~	7.8 ~~6.4~~	0.067 ~~0.047~~	0.067 ~~0.046~~
Significance Thresholds	*54*	*54*	*82*	*54*
Exceeds Threshold?	No	No	No	No
VARIANT – RAIL TRANSPORT				
Year 1	2.5	51	0.49	0.47
Year 2	1.1	22	0.21	0.20
Year 3	0.22	4.8	0.031	0.031
Significance Thresholds	*54*	*54*	*82*	*54*
Exceeds Threshold?	No	No	No	No
VARIANT – TRUCK TRANSPORT				
Year 1	2.3	49	0.37	0.36
Year 2	1.0	20	0.15	0.14
Year 3	0.22	4.8	0.031	0.031
Significance Thresholds	*54*	*54*	*82*	*54*
Exceeds Threshold?	No	No	No	No

SOURCE: Appendix F, Air Quality Technical Memorandum and Health Risk Assessment Tables 13a, 13b, 15a and 15b and Attachment E, Air Quality Supporting Documentation.

ABBREVIATIONS:

CalEEMod = California Emissions Estimator Model; $PM_{2.5}$ = PM less than 2.5 microns in diameter; PM_{10} = PM less than 10 microns in diameter; ROG = reactive organic gases; NOx = nitrogen oxides

Bold values show exceedance of the applicable threshold.

[86] Emissions estimated using methods consistent with CalEEMod® version 2022.1. Unmitigated construction emissions are presented in Appendix F, Tables 13a, 13b, 15a and 15b and Attachment E, Air Quality Supporting Documentation.

[87] The analysis uses 2026 as Year 1 of construction.

*The source for Draft EIR Table 3.3-10 (page 3.3-41) has been revised to include Attachment E, Air Quality Supporting Documentation, as shown:

> SOURCE: Table 20a of Appendix F, Air Quality Technical Memorandum and Health Risk Assessment and Attachment E, Air Quality Supporting Documentation.

*To correct an unintentional calculation error related to Martin Substation separation, Draft EIR Table 3.3-10 (page 3.3-41) has been revised as follows:

Table 3.3-10 Martin Substation/Variant - Unmitigated Construction Health Risks at MEI Outside San Francisco

Sensitive Receptor Type	Unmitigated Construction Health Risks		
	Lifetime Excess Cancer Risk (chances per million)	Chronic Hazard Index (unitless)	Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)
MARTIN SUBSTATION (PROJECT)			
Martin Substation Construction Health Risk	8.3 ~~1.9~~	0.0133 ~~0.0031~~	0.062 ~~0.015~~
Construction Year[90]	--	Year 2~~1~~ (2027~~2026~~)	Year 2~~1~~ (2027~~2026~~)
MEI Location (UTMx, UTMy)	(552096, 4173294)	(552236, 4173174)	(552236, 4173174 ~~4173194~~)
Receptor Type	Residential	Offsite worker	Offsite worker
Applicable Significance Threshold	*10.0*	*1.0*	*0.3*
Significant?	No	No	No
NEW CITY SUBSTATION (PROJECT VARIANT)			
Variant Construction Health Risk	**13**	0.026	0.12
Construction Year[87] [90]	--	Year 1 (2026)	Year 1 (2026)
MEI Location	(552096, 4173294)	(552236, 4173174)	(552236, 4173174)
Receptor Type	Residential	Offsite worker	Offsite worker
Applicable Significance Threshold	*10.0*	*1.0*	*0.3*
Significant?	**Yes**	No	No

SOURCE: Table 20a of Appendix F, Air Quality Technical Memorandum and Health Risk Assessment and Attachment E, Air Quality Supporting Documentation.

ABBREVIATIONS:

UTM = Universal Transverse Mercator; UTMx = eastward-measured distance; UTMy = northward-measured distance; $PM_{2.5}$ = fine particulate matter less than 2.5 micrometers in aerodynamic diameter; $\mu g/m^3$ = micrograms per cubic meters

Bold values show exceedance of the applicable threshold.

*The source for Draft EIR Table 3.3-11 (page 3.3-42) has been revised to include Attachment E, Air Quality Supporting Documentation, as shown:

> SOURCE: Table 20a of Appendix F, Air Quality Technical Memorandum and Health Risk Assessment and Attachment E, Air Quality Supporting Documentation.

[90] The air quality analysis assumes that construction starts in 2026. A later construction start date would result in lower emissions due to lower emissions factors for construction equipment and vehicles in response to increasingly stringent regulatory requirements.

*To correct an unintentional calculation error related to Martin Substation separation, Draft EIR Table 3.3-11 (page 3.3-42) has been revised as follows:

Table 3.3-11 Martin Substation/Variant - Unmitigated Construction Health Risks at MEI within San Francisco

Sensitive Receptor Type	Unmitigated Construction Health Risks		
	Lifetime Excess Cancer Risk (chances per million)	Chronic Hazard Index (unitless)	Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)
MARTIN SUBSTATION (PROJECT)			
Martin Substation Construction Health Risk	0.44 ~~0.10~~	<0.001	0.0022 ~~0.0013~~
Construction Year[91]	--	Year 2~~1~~ (2027~~2026~~)	Year 1 (2026)
MEI Location (UTMx, UTMy)	(552400~~552380~~, 4173640)	(552520~~552460~~, 4173640)	(552460~~552400~~, 4173640~~4173680~~)
Receptor Type	Residential	Offsite Worker	Offsite Worker ~~Residential~~
Existing Health Risk at MEI (2020)	59	--	10
Meets APEZ Criteria?	Yes	--	Yes
Applicable Significance Threshold	*7.0*	--	*0.2*
Significant?	No	--	No
NEW CITY SUBSTATION (PROJECT VARIANT)			
Variant Construction Health Risk	0.65	<0.001	0.0051
Construction Year ~~[88]~~[91]	--	Year 1 (2026)	Year 1 (2026)
MEI Location	(552380, 4173640)	(552460, 4173640)	(552460, 4173640)
Receptor Type	Residential	Offsite worker	Offsite worker
Existing Health Risk at MEI (2020)	59	--	10
Meets APEZ Criteria?	Yes	--	Yes
Applicable Significance Threshold	*7.0*	--	*0.2*
Significant?	No	--	No

SOURCE: Table 20b and Table 23 of Appendix F, Air Quality Technical Memorandum and Health Risk Assessment and Attachment E, Air Quality Supporting Documentation.

ABBREVIATIONS:

UTM = Universal Transverse Mercator; UTMx = eastward-measured distance; UTMy = northward-measured distance; $PM_{2.5}$ = fine particulate matter less than 2.5 micrometers in aerodynamic diameter; $\mu g/m^3$ = micrograms per cubic meters

[91] The air quality analysis assumes that construction starts in 2026. A later construction start date would result in lower emissions due to lower emissions factors for construction equipment and vehicles in response to increasingly stringent regulatory requirements.

*The source for Draft EIR Table 3.3-13 (page 3.3-45) has been revised to include Attachment E, Air Quality Supporting Documentation, as shown:

> SOURCE: Table 21a of Appendix F, Air Quality Technical Memorandum and Health Risk Assessment and Attachment E, Air Quality Supporting Documentation.

*To correct an unintentional calculation error related to Martin Substation separation, Draft EIR Table 3.3-13 (page 3.3-45) has been revised as follows:

Table 3.3-13 Martin Substation/Variant - Mitigated Construction Health Risks at MEI Outside San Francisco

Sensitive Receptor Type	Mitigated Construction Health Risks		
	Lifetime Excess Cancer Risk (chances per million)	Chronic Hazard Index (unitless)	Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)
MARTIN SUBSTATION (PROJECT)			
Martin Substation Construction Health Risk	0.88 ~~0.18~~	<0.001	0.0078 ~~0.0023~~
Construction Year[95]	--	Year 2~~1~~ (2027~~2026~~)	Year 2~~1~~ (2027~~2026~~)
MEI Location (UTMx, UTMy)	(552096, 4173294)	(552236, 4173174)	(552236, 4173194)
Receptor Type	Residential	Offsite worker	Offsite worker
Applicable Significance Threshold	*10.0*	*1.0*	*0.3*
Significant?	No	No	No
NEW CITY SUBSTATION (VARIANT)			
Variant Construction Health Risk	1.5	0.0027	0.015
Construction Year ~~92~~95	--	Year 1 (2026)	Year 1 (2026)
MEI Location	(552096, 4173294)	(552236, 4173174)	(552236, 4173174)
Receptor Type	Residential	Offsite worker	Offsite worker
Applicable Significance Threshold	*10.0*	*1.0*	*0.3*
Significant?	No	No	No

SOURCE: Table 21a of Appendix F, Air Quality Technical Memorandum and Health Risk Assessment and Attachment E, Air Quality Supporting Documentation.

ABBREVIATIONS:

UTM = Universal Transverse Mercator; UTMx = eastward-measured distance; UTMy = northward-measured distance; $PM_{2.5}$ = fine particulate matter less than 2.5 micrometers in aerodynamic diameter; $\mu g/m^3$ = micrograms per cubic meters

*The source for Draft EIR Table 3.3-14 (page 3.3-46) has been revised to include Attachment E, Air Quality Supporting Documentation, as shown:

> SOURCE: Table 21b and Table 23 of Appendix F, Air Quality Technical Memorandum and Health Risk Assessment and Attachment E, Air Quality Supporting Documentation.

[95] The air quality analysis assumes that construction starts in 2026. A later construction start date would result in lower emissions due to lower emissions factors for construction equipment and vehicles in response to increasingly stringent regulatory requirements.

*To correct an unintentional calculation error related to Martin Substation separation, Draft EIR Table 3.3-14 (page 3.3-46) has been revised as follows:

Table 3.3-14 Martin Substation/Variant - Mitigated Construction Health Risks at MEI within San Francisco

Sensitive Receptor Type	Mitigated Construction Health Risks		
	Lifetime Excess Cancer Risk (chances per million)	Hazard Index (unitless)	Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)
MARTIN SUBSTATION (PROJECT)			
Martin Substation Construction Health Risk	0.050 ~~0.014~~	<0.001	0.0011 ~~0.001~~
Year[96]	--	Year 1 (2026)	Year 1 (2026)
MEI Location[97] (UTMx, UTMy)	(552380, 4173640)	(552460, 4173640)	(552400~~552520~~, 4173680~~4173800~~)
Receptor Type	Residential	Offsite worker	Residential ~~Offsite worker~~
Existing Health Risk at MEI (2020)	59.1	--	11.65
Meets APEZ Criteria?	Yes	--	Yes
Applicable Significance Threshold	*7.0*	--	*0.2*
Significant?	No	--	No
NEW CITY SUBSTATION (VARIANT)			
Variant Construction Health Risk	0.09	<0.001	0.0022
Year[~~93~~96]	--	Year 1 (2026)	Year 1 (2026)
MEI Location[~~94~~97] (UTMx, UTMy)	(552380, 4173640)	(552460, 4173640)	(552400, 4173680)
Receptor Type	Residential	Offsite worker	Residential
Existing Health Risk at MEI (2020)	59.1	--	10.43
Meets APEZ Criteria?	Yes	--	Yes
Applicable Significance Threshold	*7.0*	--	*0.2*
Significant?	No	--	No

SOURCE: Table 21b and Table 23 of Appendix F, Air Quality Technical Memorandum and Health Risk Assessment and Attachment E, Air Quality Supporting Documentation.

ABBREVIATIONS:

UTM = Universal Transverse Mercator; UTMx = eastward-measured distance; UTMy = northward-measured distance; $PM_{2.5}$ = fine particulate matter less than 2.5 micrometers in aerodynamic diameter; $\mu g/m^3$ = micrograms per cubic meters

[96] The air quality analysis assumes that construction starts in 2026. A later construction start date would result in lower emissions due to lower emissions factors for construction equipment and vehicles in response to increasingly stringent regulatory requirements.

[97] The $PM_{2.5}$ MEIs for the mitigated project and mitigated project variant within San Francisco are different from the MEIs for the unmitigated scenario. In the mitigated scenarios, in which Tier 4 Final engines are used in offroad equipment, construction-related on-road mobile sources would influence the maximum $PM_{2.5}$ concentration more than would occur in the unmitigated scenarios.

*The description of the Cormorant Battery Storage Facility on Draft EIR page 3.3-49 has been revised as follows:

> **Cormorant Battery Storage Facility:** This cumulative project site is located approximately 2,000 feet and 2,800 feet ~~north~~west of the variant and Martin Substation sites, respectively.

*The source for Draft EIR Table 3.3-16 (pages 3.3-50 and 3.3-51) has been revised to include Attachment E, Air Quality Supporting Documentation, as shown:

> SOURCE: Appendix F, Air Quality Technical Memorandum and Health Risk Assessment and Attachment E, Air Quality Supporting Documentation

*To correct an unintentional calculation error related to Martin Substation separation, Draft EIR Table 3.3-16 (pages 3.3-50 and 3.3-51) has been revised as follows:

Table 3.3-16 Martin Substation/Variant - Unmitigated Cumulative Health Risks at MEIs Within San Francisco

Source	Risk Assumption	Cumulative Health Risks	
		Lifetime Excess Cancer Risk (chances per million)	Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)
AT MARTIN SUBSTATION MEI IN SAN FRANCISCO (PROJECT)			
Martin Substation	Estimated	0.44 ~~0.10~~	0.0022 ~~0.0013~~
Distribution Express Feeders	Hypothetical locations of maximum impacts	7.5	0.14
Loal Distribution System Separation		5.4	0.072
System Reinforcements		5.8	0.085
Rail		0.050	<0.001
Emergency Generator		1.7	0.0023
Employee Vehicle Trips		0.37	0.021
Unmitigated Project Total (Project Contribution)[100]		21	0.33
San Francisco Citywide Background Risk		62 ~~59~~	10
Existing Citywide Background Risk Meets APEZ criteria?		No	Yes
Cumulative (Existing + Unmitigated Project) Risk[101]		83 ~~80~~	11
Cumulative Significance Thresholds		*100*	*10*
Exceeds Cumulative Significance Thresholds?		No	Yes
Threshold for Contribution to Cumulative Impact		*n/a*[102]	*0.2*
Unmitigated Project Contribution Significant?		n/a[~~99~~102]	**Yes**

[100] The total existing plus project (or project variant) conservatively combines the cancer risk and $PM_{2.5}$ concentration from all components of the project (or variant). The maximum health risks from linear components (Distribution Express Feeders, Local Distribution System Separation, and System Reinforcements), rail, emergency generator, and employee vehicle trips were used in the sum, conservatively assuming that MEIs from each component would be located at the same location. In reality, there is little likelihood that all MEIs from different components would be co-located.
[101] Totals may not sum due to rounding.
[102] Unmitigated cumulative lifetime excess cancer risk is not significant. Hence, project and project variant contributions are not evaluated.

Table 3.3-16 Martin Substation/Variant - Unmitigated Cumulative Health Risks at MEIs Within San Francisco

Source	Risk Assumption	Cumulative Health Risks	
		Lifetime Excess Cancer Risk (chances per million)	Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)
AT NEW CITY SUBSTATION MEI IN SAN FRANCISCO (PROJECT VARIANT)			
New City Substation (Project Variant)	Estimated	0.65	0.0051
Distribution Express Feeders	Hypothetical locations of maximum impacts	7.5	0.14
Loal Distribution System Separation		5.4	0.072
System Reinforcements		5.8	0.085
Rail		0.050	<0.001
Emergency Generator		1.7	0.0023
Employee Vehicle Trips		0.37	0.021
Unmitigated Project Variant Total (Project Variant Contribution)[103]		22	0.33
San Francisco Citywide Background Risk		59	10
Existing Citywide Background Risk Meets APEZ criteria?		No	Yes
Cumulative (Existing + Unmitigated Project Variant) Risk[104]		81	11
Cumulative Significance Thresholds		*100*	*10*
Exceeds Cumulative Significance Thresholds?		No	Yes
Threshold for Contribution to Cumulative Impact		*n/a*[99][102]	*0.2*
Unmitigated Project Variant Contribution Significant?		n/a[99][102]	**Yes**

SOURCE: Appendix F, Air Quality Technical Memorandum and Health Risk Assessment and Attachment E, Air Quality Supporting Documentation.
ABBREVIATIONS:
$PM_{2.5}$ = fine particulate matter less than 2.5 micrometers in aerodynamic diameter; $\mu g/m^3$ = micrograms per cubic meters; n/a = not applicable
NOTES:
Bold values show exceedance of the applicable threshold.

*The source for Draft EIR Table 3.3-17 (pages 3.3-52 to 3.3-53) has been revised to include Attachment E, Air Quality Supporting Documentation, as shown:

SOURCE: Tables 23 and 25 of Appendix F, Air Quality Technical Memorandum and Health Risk Assessment and Attachment E, Air Quality Supporting Documentation.

[103] The total existing plus project (or project variant) conservatively combines the cancer risk and $PM_{2.5}$ concentration from all components of the project (or variant). The maximum health risks from linear components (Distribution Express Feeders, Local Distribution System Separation, and System Reinforcements), rail, emergency generator, and employee vehicle trips were used in the sum, conservatively assuming that MEIs from each component would be located at the same location. In reality, there is little likelihood that all MEIs from different components would be co-located.
[104] Totals may not sum due to rounding.

*To correct an unintentional calculation error related to Martin Substation separation, Draft EIR Table 3.3-17 (pages 3.3-52 to 3.3-53) has been revised as follows:

Table 3.3-17 Martin Substation/Variant - Mitigated Cumulative Health Risks at MEIs Within San Francisco

Source	Risk Assumption	Cumulative Health Risks	
		Lifetime Excess Cancer Risk (chances per million)	Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)
AT MARTIN SUBSTATION MEI IN SAN FRANCISCO (PROJECT)			
Martin Substation	Estimated	0.050 ~~0.014~~	0.0011 ~~0.001~~
Distribution Express Feeders	Hypothetical locations of maximum impacts	2.7	0.089
Local Distribution System Separation		0.56	0.019
System Reinforcements		1.0	0.031
Rail		0.050	<0.001
Emergency Generator		1.7	0.0023
Employee Vehicle Trips		0.37	0.021
Mitigated Project Total (Project Contribution)[105]		6.4	0.16
San Francisco Citywide Background Risk[106]		59	10 ~~12~~
Existing Citywide Background Risk Meets APEZ criteria?		No	Yes
Cumulative (Existing + Mitigated Project) Risk[107]		65.1	11 ~~12~~
Cumulative Significance Thresholds		*100*	*10*
Exceeds Cumulative Significance Thresholds?		No	Yes
Threshold for Contribution to Cumulative Impact		*n/a*[108]	*0.2*
Mitigated Project Contribution Significant?		n/a[105][108]	No

[105] The total risk for the mitigated project (or mitigated project variant) conservatively combines the cancer risk and $PM_{2.5}$ concentration from all components of the project (or project variant). The maximum mitigated health risks from linear components (Distribution Express Feeders, Local Distribution System Separation, and System Reinforcements), rail, emergency generator, and employee vehicle trips were used in the sum, conservatively assuming that MEIs from each component would be located at the same location. In reality, there is little likelihood that all MEIs from different components would be co-located. Therefore, the total mitigated project and mitigated project variant risks reported in this table are conservative.

[106] The Martin Substation MEIs for $PM_{2.5}$ within San Francisco for both the mitigated project and mitigated project variant are different from the $PM_{2.5}$ MEIs for the unmitigated scenarios for the project and project variant and therefore the San Francisco Citywide Background Risk values presented in this table (3.3-17) differ from the San Francisco Citywide Background Risk values presented in Table 3.3-16.

[107] Totals may not sum due to rounding.

[108] Unmitigated cumulative lifetime excess cancer risk is not significant. Hence, project and project variant contributions are not evaluated.

Table 3.3-17 Martin Substation/Variant - Mitigated Cumulative Health Risks at MEIs Within San Francisco

Source	Risk Assumption	Cumulative Health Risks	
		Lifetime Excess Cancer Risk (chances per million)	Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)
AT NEW CITY SUBSTATION MEI IN SAN FRANCISCO (PROJECT VARIANT)			
New City Substation (Project Variant)	Estimated	0.09	0.0022
Distribution Express Feeders	Hypothetical locations of maximum impacts	2.7	0.089
Local Distribution System Separation		0.56	0.019
System Reinforcements		1.0	0.031
Rail		0.050	<0.001
Emergency Generator		1.7	0.0023
Employees Vehicle Trips		0.37	0.021
Mitigated Project Variant Total (Project Variant Contribution)[109]		6.4	0.16
San Francisco Citywide Background Risk[110]		59	10
Existing Citywide Background Risk Meets APEZ criteria?		No	Yes
Cumulative (Existing + Mitigated Variant) Risk[111]		65	11
Cumulative Significance Thresholds		*100*	*10*
Exceeds Cumulative Significance Thresholds?		No	Yes
Threshold for Contribution to Cumulative Impact		*n/a*[112]	*0.2*
Mitigated Variant Contribution Significant?		n/a[~~109~~112]	No

SOURCE: Tables 23 and 25 of Appendix F, Air Quality Technical Memorandum and Health Risk Assessment and Attachment E, Air Quality Supporting Documentation.

ABBREVIATIONS:

$PM_{2.5}$ = fine particulate matter less than 2.5 micrometers in aerodynamic diameter; $\mu g/m^3$ = micrograms per cubic meters; n/a = not applicable

NOTES:

Bold values show exceedance of the applicable threshold.

[109] The total risk for the mitigated project (or mitigated project variant) conservatively combines the cancer risk and $PM_{2.5}$ concentration from all components of the project (or project variant). The maximum mitigated health risks from linear components (Distribution Express Feeders, Local Distribution System Separation, and System Reinforcements), rail, emergency generator, and employee vehicle trips were used in the sum, conservatively assuming that MEIs from each component would be located at the same location. In reality, there is little likelihood that all MEIs from different components would be co-located. Therefore, the total mitigated project and mitigated project variant risks reported in this table are conservative.

[110] The Martin Substation MEIs for $PM_{2.5}$ within San Francisco for both the mitigated project and mitigated project variant are different from the $PM_{2.5}$ MEIs for the unmitigated scenarios for the project and project variant and therefore the San Francisco Citywide Background Risk values presented in this table (3.3-17) differ from the San Francisco Citywide Background Risk values presented in Table 3.3-16.

[111] Totals may not sum due to rounding.

[112] Unmitigated cumulative lifetime excess cancer risk is not significant. Hence, project and project variant contributions are not evaluated.

*The source for Draft EIR Table 3.3-18 (page 3.3-54) has been revised to include Attachment E, Air Quality Supporting Documentation, as shown:

> SOURCE: Appendix F, Air Quality Technical Memorandum and Health Risk Assessment, Tables 24 and 26 and Attachment E, Air Quality Supporting Documentation.

*To correct an unintentional calculation error related to Martin Substation separation, Draft EIR Table 3.3-18 (page 3.3-54) has been revised as follows:

Table 3.3-18 Martin Substation/Variant - Unmitigated Cumulative Health Risks at MEI Outside San Francisco

Source	Cumulative Health Risks		
	Lifetime Excess Cancer Risk (chances per million)	Chronic HI (unitless)	Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)
AT MARTIN SUBSTATION MEI OUTSIDE SAN FRANCISCO (PROJECT)			
Martin Substation	8.3 ~~1.9~~	0.0133 ~~0.0031~~	0.062 ~~0.0151~~
Distribution Express Feeders	7.5	0.018	0.14
Local Distribution System Separation	5.4	0.013	0.072
System Reinforcements	5.8	0.014	0.085
Rail	0.050	<0.001	<0.001
Total Unmitigated Project Risks[113]	27 ~~21~~	0.059 ~~0.049~~	0.36 ~~0.32~~
Background Stationary Sources	22	0.13	0.0
Background Roadway Sources	13	0.022	0.16
Background Railway Sources	6.0	0.0021	0.010
Total Background Risk[~~110~~113]	41	0.15	0.17
Cumulative (Unmitigated Project + Background) Risk[~~110~~113]	68 ~~62~~	0.21 ~~0.20~~	0.53 ~~0.48~~
Cumulative Significance Threshold	*100*	*10.0*	*0.8*
Significant?	No	No	No
AT NEW CITY SUBSTATION MEI OUTSIDE SAN FRANCISCO (PROJECT VARIANT)			
New City Substation (Project Variant)	13	0.026	0.122
Distribution Express Feeders	7.5	0.018	0.14
Local Distribution System Separation	5.4	0.013	0.072
System Reinforcements	5.8	0.014	0.085
Rail	0.050	<0.001	<0.001
Total Unmitigated Variant Risks[~~110~~113]	32	0.072	0.42
Background Stationary Sources	22	0.13	0.0
Background Roadway Sources	13	0.022	0.16
Background Railway Sources	6.0	0.0021	0.010

[113] Totals may not sum due to rounding.

Table 3.3-18 Martin Substation/Variant - Unmitigated Cumulative Health Risks at MEI Outside San Francisco

Source	Cumulative Health Risks		
	Lifetime Excess Cancer Risk (chances per million)	Chronic HI (unitless)	Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)
Total Background Risk ~~110~~113	41	0.154	0.17
Cumulative (Background + Unmitigated Variant) Risk ~~110~~113	73	0.23	0.59
Cumulative Significance Threshold	*100*	*10.0*	*0.8*
Significant?	No	No	No

SOURCE: Appendix F, Air Quality Technical Memorandum and Health Risk Assessment, Tables 24 and 26 and Attachment E, Air Quality Supporting Documentation.

ABBREVIATIONS: $PM_{2.5}$ = fine particulate matter less than 2.5 micrometers in aerodynamic diameter; $\mu g/m^3$ = micrograms per cubic meters

NOTES:

Bold values show exceedance of the applicable threshold.

11.6 Revisions to Chapter 5, Alternatives

*The second bullet on Draft EIR page 5-3 regarding noise has been revised as follows:

- Under the project or project variant, construction at Martin Substation or Daly City Yard would substantially increase noise levels above the 10 dBA over ambient standard for most construction phases, a significant impact, and Mitigation Measure M-NO-2 (Construction Noise Control for the Martin Substation, Daly City Yard Staging, and New City Substation) may not be able to achieve sufficient noise level reductions (Impact NO-2). This would also result in a considerable contribution to cumulative construction noise (a significant cumulative impact). Noise from construction of Martin Substation separation or the new City Substation (project variant) could still exceed thresholds and therefore have a significant cumulative noise impact. (Impact C-NO-1).

11.7 Revisions to Chapter 6, EIR Preparation

*The fourth and fifth bullets in Section 6.1, EIR Authors, on Draft EIR page 6-1 have been revised as follows:

- Preservation Planners: Justin Greving, M.A. Architectural History, meets the Secretary of the Interior's Professional Qualification Standards for Architectural History; Allison Vanderslice, M.A. Cultural Resources Management, meets the Secretary of the Interior's Professional Qualification Standards for Architectural History and Archaeology
- Planner/Archeologists: Allison Vanderslice, M.A. Cultural Resources Management, meets the Secretary of the Interior's Professional Qualification Standards for Architectural History and Archaeology; Kari Hervey-Lentz, M.A. Cultural Resources Management, meets the Secretary of the Interior's Professional Qualifications Standards for History and Archeology

*The first and tenth bullets under Environmental Science Associates on Draft EIR page 6-2 have been revised as follows:

- Project Director: Janna Scott, Alisa Moore
- Noise: Chris Sanchez, Chris Dugan

11.8 Revisions to Appendix A, Initial Study Section D. Summary of Environmental Effects

* On page 15 of Draft EIR Appendix A, in Section D. Summary of Environmental Effects, the box for Mandatory Findings of Significance has been checked to reflect that the project could potentially result in adverse physical effects to this environmental resource.

11.9 Revisions to Appendix A, Initial Study Section E.2 Aesthetics

*The first paragraph on page 21 of Draft EIR Appendix A, in Section E.2 Aesthetics, Impact AE-1, has been revised to read:

> New electrical equipment at the Martin Substation (for the proposed project) such as transformers, circuit breakers, a control house, switchgear buildings, perimeter fencing, and new overhead lines/ transitions and utility poles would be visible from scenic vistas. However, given the maximum height of the new equipment (up to 25 feet tall), the new electrical equipment would not block, interrupt, or diminish the dominance of San Francisco Bay, the east bay hills, San Bruno Mountain, or mid-range hilltop parks visible in the scenic vistas that include the Martin Substation.

11.10 Revisions to Appendix A, Initial Study Section E.4 Cultural Resources

*To clarify the methods used in the Draft EIR's identification of historic architectural resources, Draft EIR Appendix A page 31 et seq. has been revised as follows:

> ***Inventory of Architectural Resources***
>
> Identification of Historical Resources
>
> Identification of historical resources within the project area included an initial identification of known resources as presented in the Property Information Map (PIM) maintained by the City and County of San Francisco.[32a] PIM is a publicly available database maintained by the Planning Department and referenced to by preservation staff because it provides a comprehensive record of the historic resource status of every parcel in the City and County of San Francisco. PIM includes information about past historic resource surveys conducted by the Planning Department and other organizations, California

[32a] The PIM can be accessed online at https://sfplanninggis.org/pim/. PIM includes details regarding the current historical status of a parcel as well as links to prior studies, context statements, environmental documents, and/or permits that may be associated with the property and/or surrounding neighborhood.

Register and National Register designations for individual properties and historic districts, local article 10 and 11 individual properties and historic districts, and previous historic resource evaluations conducted as part of environmental review. This information was then verified by San Francisco Planning Department staff and presented in a memorandum-to-file dated January 29, 2025.[32b]

Additional identification efforts were then undertaken by the consultant team and included a records search of the project area at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) located at Sonoma State University. The NWIC maintains the official CHRIS records of previous cultural resources studies and recorded cultural resources in the project area. The records search included a review of previous studies, records, and maps on file at the NWIC, and included a review of the State of California Office of Historic Preservation Historic Properties Directory with summary information from the National Register, Registered California State Landmarks, California Historic Points of Interest, Archaeological Determinations of Eligibility, and California Inventory of Historical Resources (March 1976). The purpose of the records search was to determine whether known cultural resources have been recorded in the project area; assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby cultural resources; and develop a context for the identification and preliminary evaluation of cultural resources. The consultant team also reviewed the Built Environment Resource Directory (BERD) for San Francisco and San Mateo counties, the list of City and County of San Francisco Article 10 Landmarks (and associated landmarking ordinances), and past environmental documents that had project sites that overlapped with this project.

Additional guidance on historical resource identification was provided by the following prior energy infrastructure documentation that have contextual information about the history of PG&E and energy distribution in San Francisco:[32c]

- Polly Seddon Allen, Matt Walker, and Iris Eschen (Cardno), *Pacific Gas and Electric Company Historic-Era Electrical Infrastructure Management Plan,* prepared for Pacific Gas and Electric, 2020.[32c]
- John Gordon Turnbull (Page & Turnbull), *National Register Nomination: Pacific Gas & Electric Company General Office Building and Annex*, 1995.[32d]
- Fredric C. Divine Associates Architects, *National Register Nomination: Pacific Gas and Electric Company Substation J*, 1986.[32e]
- City and County of San Francisco, *Landmark Ordinance 266-91: The Path of Gold Light Standards (LM 200)*, June 1991.[32f]
- City and County of San Francisco, *Landmark Ordinance 210-77: The Jessie Street Substation (LM 87)*, May 1977.[32g]

[32b] Greving, Justin, Senior Preservation Planner, San Francisco Planning Department, Memorandum to File Re: Pacific Gas and Electric Company (PG&E) Power Asset Acquisition Project (2023-005370ENV), to Julie Moore, Principal Environmental Planner, San Francisco Planning Department, January 29, 2025.
[32c] Allen et al., *Pacific Gas and Electric Company Historic-Era Electrical Infrastructure Management Plan*, April 2020.
[32d] Turnbull, John Gordon (Page & Turnbull), *National Register Nomination: Pacific Gas & Electric Company General Office Building and Annex,* 1995.
[32e] Fredric C. Divine Associates Architects, *National Register Nomination: Pacific Gas and Electric Company Substation J,* 1986.
[32f] City and County of San Francisco, *Landmark Ordinance 266-91: The Path of Gold Light Standards (LM 200),* June 1991.
[32g] City and County of San Francisco, *Landmark Ordinance 210-77: The Jessie Street Substation (LM 87),* May 1977.

> Copies of these documents have been added to the EIR references which are available upon request at the San Francisco Planning Department and are available online (tinyurl.com/PGEPowerAssetEIR).
>
> For those historical resources that could be affected by components of the project or project variant where locations were known (project-level components), the consultant team conducted site visits to record existing conditions and verify the accuracy of prior documentation.

In response to comments, information regarding the potential of the electrical distribution system to be considered as a potential historic resource has been added to Draft EIR Appendix A page 31 ahead of Table 1, as follows:

> **Table 1** presents the historic architectural resources identified by San Francisco Planning Department staff in the vicinity of the project areas.[33] While portions of the existing power distribution system, including those components that would be modified as part of the local distribution system separation and system reinforcements, may be more than 45 years of age, no parts of the system that would be altered by these components of the project are considered to be historical resources for the purposes of CEQA. This approach follows guidance provided by PG&E for the evaluation and management of electrical power infrastructure as presented in the *Pacific Gas and Electric Company Historic-Era Electrical Infrastructure Management Plan*. This guidance explains that PG&E's distribution lines are the most ubiquitous and physically expansive component of the entire PG&E electrical infrastructure. Because the majority of this infrastructure is carried on standardized wood poles that have a life span of less than 50 years, and other related components (conductor, insulators, and transformers) are replaced on an ongoing basis, it does not have the potential to communicate significance.[33a]

*Draft EIR Appendix A pages 31 and 32 have been revised to include the following footnotes:

> [32a] The PIM can be accessed online at https://sfplanninggis.org/pim/. PIM includes details regarding the current historical status of a parcel as well as links to prior studies, context statements, environmental documents, and/or permits that may be associated with the property and/or surrounding neighborhood.
> [32b] Greving, Justin, Senior Preservation Planner, San Francisco Planning Department, Memorandum to File Re: Pacific Gas and Electric Company (PG&E) Power Asset Acquisition Project (2023-005370ENV), to Julie Moore, Principal Environmental Planner, San Francisco Planning Department, January 29, 2025.
> [32c] Allen et al., *Pacific Gas and Electric Company Historic-Era Electrical Infrastructure Management Plan*, April 2020.
> [32d] Turnbull, John Gordon (Page & Turnbull), *National Register Nomination: Pacific Gas & Electric Company General Office Building and Annex,* 1995.
> [32e] Fredric C. Divine Associates Architects, *National Register Nomination: Pacific Gas and Electric Company Substation J,* 1986.
> [32f] City and County of San Francisco, *Landmark Ordinance 266-91: The Path of Gold Light Standards (LM 200),* June 1991.
> [32g] City and County of San Francisco, *Landmark Ordinance 210-77: The Jessie Street Substation (LM 87),* May 1977.
> [33a] Allen et al., Pacific Gas and Electric Company Historic-Era Electrical Infrastructure Management Plan, prepared for Pacific Gas and Electric, April 2020, p. 5-20.

[33] Greving, Justin, Senior Preservation Planner, San Francisco Planning Department, Memorandum to File Re: Pacific Gas and Electric Company (PG&E) Power Asset Acquisition Project (2023-005370ENV), to Julie Moore, Principal Environmental Planner, San Francisco Planning Department, January 29, 2025.
[33a] Allen et al., Pacific Gas and Electric Company Historic-Era Electrical Infrastructure Management Plan, prepared for Pacific Gas and Electric, April 2020, p. 5-20.

*The description of the Martin Substation Building on Draft EIR Appendix A page 33 has been revised as follows:

> The Martin Substation building has been determined to be eligible for listing in the California Register under Criteria 1 (events) and 3 (distinctive characteristics, work of a master or high artistic value).[34a, 34b] Although the substation was previously identified as a historic district, some of the contributors to the district are no longer extant, including the Martin Substation Pump House (also referred to as the Martin Substation Security Station), and the Martin Substation Transformer Handling House. The Martin Substation building is the only extant structure in the historic district. The Martin Substation building is located in the northern portion of the Martin Substation project site, near Geneva Avenue.

*Text edits have been made to Draft EIR Appendix A page 33 to add the following citations:

> [34a] Maniery, Mary L., and Cindy L. Baker, PAR Environmental Services, Inc., *California Register of Historic Resources Evaluation for the Martin Transformer Handling House and Pump House at 3150 Geneva Avenue, in Brisbane, San Francisco County, California,* prepared for Pacific Gas and Electric Company, revised July 10, 2008.
> [34b] Urbano, Becky, Environmental Science Associates, California Department of Parks and Recreation 523 Update Form: Martin Substation Warehouse (Building 4176), October 2024.

*The description of 186 Leland Avenue on Draft EIR page 36 has been revised as follows:

> The building at 186 Leland Avenue has been determined individually eligible for listing in the California Register as part of the 2015 Neighborhood Commercial Corridors Survey.[45a]

*The description of 501 Cambridge Street on Draft EIR page 36 has been revised as follows:

> The former Home of the Good Shepherd School was designed by noted architect Henry A. Milton. In 2005, it was determined eligible for listing in the National Register through the Section 106 process. It is listed on the California Register.[48a]

*Text edits have been made to Draft EIR Appendix A page 36 to add the following citations:

> [45a] Cisneros, Stephanie, San Francisco Planning Department, *Historic Resource Evaluation Response: 186, 196, 198 Leland Avenue,* June 2018.
> [48a] City and County of San Francisco, *Property Information Map: 501 Cambridge Street,* https://sfplanninggis.org/pim/, accessed December 2024.

In response to comments, Draft EIR Appendix A page 37 et seq. (prior to "Impact Discussion") has been revised to include additional legal definitions related to historical resources as follows:

> ***REGULATORY FRAMEWORK***
>
> **NATIONAL REGISTER OF HISTORIC PLACES**
>
> The National Register is the nation's master inventory of cultural resources worthy of preservation. It is administered by the National Park Service, which is represented at the state level by the State

[45a] Cisneros, Stephanie, San Francisco Planning Department, *Historic Resource Evaluation Response: 186, 196, 198 Leland Avenue,* June 2018.
[48a] City and County of San Francisco, *Property Information Map: 501 Cambridge Street,* https://sfplanninggis.org/pim/, accessed December 2024.

Historic Preservation Officer (SHPO). The National Register includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archeological, or cultural significance at the federal, state, or local level. Resources that are listed in or have been found by the SHPO to be eligible for listing in the National Register are called *historic properties*.

Under the National Historic Preservation Act (NHPA), a property is considered significant if it meets the NHPA listing criteria in 36 CFR 60.4, which read as follows:

> The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and
>
> (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> (b) that are associated with the lives of persons significant in our past; or
>
> (c) that embody the characteristics of a type, period, or method of construction, or that represent works of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> (d) that have yielded, or may be likely to yield, information important in prehistory or history.

Although there are exceptions, certain kinds of resources are not usually considered for listing in the National Register: religious properties, moved properties, birthplaces and graves, cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

In addition to meeting at least one of the four criteria, a property or district must retain *integrity*, meaning that it must have the ability to convey its significance through the retention of seven aspects, or qualities, that in various combinations define integrity. These seven aspects are location, design, setting, materials, workmanship, feeling, and association.

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES

The *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Secretary of the Interior's Standards) were published and codified as 36 CFR 68 in 1995 and updated in 2017.[51a] The Secretary of the Interior's Standards for rehabilitation have been adopted by local government bodies across the country, including the City and County of San Francisco, for reviewing proposed work on historic properties under local preservation ordinances. The Secretary of the Interior's Standards provide a useful analytical tool for understanding and describing the potential impacts of changes to historic resources and are used to inform CEQA review. Developed by the National Park Service for reviewing certified rehabilitation tax credit projects, the rehabilitation standards provide guidance for reviewing work on historic properties. The rehabilitation standards are as follows:

[51a] U.S. Department of the Interior, National Park Service (Kay D. Weeks and Anne E. Grimmer), *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstruction Historic Buildings*, revised 2017, https://www.nps.gov/orgs/1739/secretary-standards-treatment-historic-properties.htm, accessed January 27, 2025.

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale, and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Conformance with all rehabilitation standards does not determine whether a project would cause a substantial adverse change in the significance of a historical resource under CEQA. Rather, projects that comply with the standards benefit from a regulatory presumption that they would have a less-than-significant adverse impact on a historic resource. Projects that do not comply with the rehabilitation standards may or may not cause a substantial adverse change in the significance of a historic resource and would require further analysis to determine whether the historic resource would be "materially impaired" by the project under CEQA Guidelines section 15064.5(b).

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA is the principal statute governing environmental review of projects in California. To be considered a historic resource, a property must generally be at least 50 years old; when acting as the CEQA lead agency, the planning department uses a threshold of 45 years. A *historical resource* is

defined in CEQA Guidelines section 15064.5 as a cultural resource (i.e., a built-environment resource, archeological resource, or human remains) that meets at least one of the following criteria:

- A resource listed in, or determined by the State Historical Resources Commission to be eligible for listing in, the California Register.
- A resource included in a local register of historical resources, as defined in Public Resources Code section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of Public Resources Code section 5024.1(g). Such a resource shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Such a resource may be considered to be a historical resource, provided that the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register.

The fact that a resource is not listed in or determined to be eligible for listing in the California Register, not included in a local register of historical resources (pursuant to Public Resources Code section 5020.1[k]), or not identified in a historical resources survey (meeting the criteria in Public Resources Code section 5024.1[g]) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code section 5020.1(j) or 5024.1.

Therefore, under the CEQA Guidelines, even if a resource is neither included in any federal, state, or local register nor identified in a qualifying historic resources survey, a lead agency may still determine that the resource is a historic resource for the purposes of CEQA if there is substantial evidence supporting such a determination. The lead agency must consider the resource historically significant if it finds that the resource meets the criteria for listing in the California Register.

CEQA requires a lead agency to determine whether a project would have a significant effect on important historic resources or unique archeological resources. The CEQA Guidelines note that if a resource is neither a unique archeological resource nor a historic resource, the effects of the project on that resource shall not be considered a significant effect on the environment. Projects that comply with the Secretary of the Interior's Standards benefit from a regulatory presumption under CEQA that they would have a less-than-significant impact on a historic resource. Projects that do not comply with the Secretary of the Interior's Standards may or may not cause a substantial adverse change in the significance of a historic resource and must be subject to further analysis to assess whether they would result in material impairment of a historic resource's significance.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register, administered by the California Office of Historic Preservation, is the authoritative guide to historical and archeological resources that are significant within the context of California's history. The eligibility criteria for inclusion in the California Register are based on and

correspond to the National Register criteria. Under CEQA, certain resources are determined to be automatically included in the California Register, including California properties that are formally eligible for or listed in the National Register. These resources are considered historical resources by the San Francisco Planning Department for the purposes of CEQA. The criteria used for determining eligibility for listing in the California Register closely parallel those developed by the National Park Service for the National Register but also include relevance to California history. To be eligible for listing in the California Register as a historical resource, a resource must meet at least one of the following criteria (Public Resources Code section 5024.1[c]):

- **Criterion 1 (Event):** Resources that are associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California.
- **Criterion 2 (Person):** Resources that are associated with the lives of persons important to history.
- **Criterion 3 (Design/Construction):** Resources that embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values.
- **Criterion 4 (Information Potential):** Resources or sites that have yielded or have the potential to yield information important in prehistory or history.

In addition, to be considered eligible for listing in the California Register, a historical resource must possess integrity. Consideration of integrity for evaluation of California Register eligibility closely follows the seven aspects of integrity that apply to the National Register (listed above).

Resources that are eligible for the California Register may also be eligible for the National Register.

*Draft EIR Appendix A page 37 has been revised to include the following footnote:

[51a] U.S. Department of the Interior, National Park Service (Kay D. Weeks and Anne E. Grimmer), *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstruction Historic Buildings*, revised 2017, https://www.nps.gov/orgs/1739/secretary-standards-treatment-historic-properties.htm, accessed January 27, 2025.

In response to comments, Draft EIR Appendix A page 37 et seq. has been revised as follows:

IMPACT DISCUSSION

This section analyzes impacts of the proposed project on historical resources. It describes the methods used to determine the impacts of the proposed project and lists the criteria used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany the discussion of each identified significant impact.

SIGNIFICANCE CRITERIA

The proposed project would have a significant impact on historical resources if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines section 15064.5, including those resources listed in article 10 or article 11 of the San Francisco Planning Code.

A *substantial adverse change* is defined by CEQA Guidelines section 15064.5 as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired." The significance of a historical resource is "materially impaired," according to CEQA Guidelines section 15064.5(b)(2), when a project "demolishes or materially alters in an adverse manner those physical characteristics" of the resource that do any of the following:

(A) Convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register.

(B) Account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of Public Resources Code section 5024.1(g), unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant.

(C) Convey its historical significance and justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

Potential impacts on historical resources are assessed by identifying any activities (during either construction or operation) that could affect resources that have been identified as historical resources for the purposes of CEQA. Once a resource has been identified, it then must be determined whether the proposed project would "cause a substantial adverse change in the significance" of the resource, as described above. As such, in accordance with CEQA Guidelines section 15064.5(b)(2), the following analysis considers the potential for the proposed project to materially impair the significance of a historical resource by causing direct or indirect changes to the physical characteristics of the resource that convey its historical significance. Mitigation of impacts on historical resources may involve avoiding the resource, revising the project to minimize the effect, or, where avoidance or minimization is not feasible, documenting the resource. However, as noted above, documentation may not reduce impacts on a historical resource to a less-than-significant level.

For all historical resources identified within the project area, an analysis of potential direct and indirect impacts was undertaken by the City and County of San Francisco. This analysis was based on component-specific construction and operations information and varied by component. Components for which location information was known were analyzed at a project level. Those for which location information was not yet known were analyzed at a programmatic level.

All historical resource identification and analysis was completed by professionals meeting the Secretary of the Interior's professional qualification standards for history, architectural history, or archeology as appropriate.

In response to comments, the second paragraph on page 38 of Draft EIR Appendix A has been revised to read:

> Some of the construction work for the Martin Substation separation could also occur near the Martin Substation building, even if the proposed buildings are sited away from the building. The use of cranes or other large equipment could accidentally damage the Martin Substation building during construction. **Mitigation Measure M-CR-1b (Historic Resources Protection Program)** would require the SFPUC to implement measures that protect and avoid damage to onsite and adjacent historic resources, including at the Martin Substation. This mitigation measure requires review for conformance to the Secretary of the Interior's Standards to ensure adequate protections have been implemented to limit inadvertent damage as a result of construction, and if required, new construction is sufficiently differentiated from the original historical resource, and that new construction is compatible in size and detail with the Martin Substation.

In response to comments, Mitigation Measure M-CR-1a: Martin Substation Historic Resources Setting Protection, Draft EIR Appendix A page 38, first non-bulleted paragraph has been revised to:

> Other locations for new aboveground structures near historic resources, if proposed, would be subject to review and approval by San Francisco Planning Department preservation staff to ensure conformance with Secretary of the Interior's Standards for the Treatment of Historic Properties regarding the setting of the historic resource.

In response to comments, Mitigation Measure M-CR-1c: Historic Resource Impact Minimization within Historic Resources and Historic Districts, pages 42 through 43 of Draft EIR Appendix A, second paragraph has been revised to:

> For project components that would occur within historic resources or historic districts that have character-defining features related to setting, placement of new poles and/or installation of new electrical or telecommunications equipment shall be in locations that follow established patterns. If maintenance of the current pattern of poles and equipment installation is not possible, locations for new poles, if proposed, would be subject to review and approval by San Francisco Planning Department preservation staff to ensure conformance with Secretary of the Interior's Standards for the Treatment of Historic Properties regarding the setting of the historic resource.

In response to comments, Mitigation Measure M-CR-1d: Historic Resource Impact Minimization for Adaptive Reuse, page 44 of Draft EIR Appendix A, has been revised to:

> After selection of a proposed building for the operations control center, the SFPUC shall notify the ERO of the selected building. If required based upon ERO and preservation staff review, the SFPUC shall engage a qualified architectural historian to evaluate the historic significance of the operations control center building and provide the relevant historic resource documentation to the ERO. If the building is a historic resource, then the character-defining features of the historic resource shall be preserved or reconstructed consistent with Secretary of the Interior's Standards for the Treatment of Historic Properties. The SFPUC shall submit proposed renovation plans to the ERO for review and approval prior to construction to ensure the work conforms to the Secretary of the Interior's Standards for the Treatment of Historic Properties.

In response to comments, the following text has been added to the end of the first paragraph on Draft EIR Appendix A page 46:

> The records search included a review of previous studies, records, and maps on file at the NWIC, as well as a review of the Archaeological Determinations of Eligibility (updated 2012). The purpose of the records search was to determine whether known archeological resources have been recorded in the project area; assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby cultural resources; and develop a context for the identification and preliminary evaluation of archaeological resources. Specific locational information on archeological resources is confidential according to applicable state regulations (Government Code section 6250 et seq. and section 6254 et seq).
>
> The Cultural Resources Review memorandum additionally included a review of historical topographic and land use maps from 1861, 1864, 1869, 1870, 1884, 1895, 1905, 1911, 1915, 1926, and 1927. The memorandum also included a review of archeological archival information on file at the planning department including documented archeological resources, archeological investigation reports and previous preliminary archeological review memorandums, nearby historical and modern natural water sources, cut and fill landscape change analysis, and the Native American archeological sensitivity model regarding surface, buried, and submerged sensitivity was also considered in the analysis.

*The cumulative historic resources impact discussion in Impact C-CR-1 for Martin Substation Separation, Modifications to Retain PG&E Access to Non-Electrical Facilities, Distribution Express Feeders, and New City Substation (project variant) on Draft EIR Appendix A page 66 has been revised as follows:

> Cumulative projects that could affect historic resources at Martin Substation and Potrero Substation include:
>
> - **PG&E Egbert Switching Station Project** –The project includes a transmission line across Geneva Avenue near the Martin Substation.
> - **Brisbane Baylands Specific Plan –** The specific plan includes an underground transmission line connecting proposed battery storage in the Baylands site to Martin Substation (across Bayshore Boulevard) and the following improvements within Martin Substation: line disconnect switch, line coupling capacitor voltage transformers, and fiber cable and associated protections.
> - **Cormorant Battery Storage Facility** – A line with above- and underground sections would connect the battery storage facility to Martin Substation. The underground portion of the line would transition to overhead at a riser at the southwest corner of the Daly City Yard.
> - **Potrero Power Station Mixed-Use Development Project** – Includes demolition of contributors to the Third Street Industrial District, including Station A building, which is located approximately 200 feet away from the Potrero Substation.
>
> The first ~~two~~ three projects would install overhead or underground equipment in or near the Martin Substation site but would not construct additional buildings near Martin Substation building. Therefore, the project or project variant in combination with cumulative projects would not result in a substantial cumulative impact on historic architectural resources at Martin Substation (***less than significant***)…

11.11 Revisions to Appendix A, Initial Study Section E.6 Transportation and Circulation

*The first full paragraph on Draft EIR Appendix A page 112 has been revised as follows:

> Some cumulative projects, including the Harney-U.S. 101 Transit Crossing Project, PG&E Egbert Switching Station Project, Midway Village Redevelopment, and the Pacific Place Retail Conversion project would be completed prior to initiation of construction of the project or project variant, and therefore would not overlap with construction of the project or project variant. ~~The Brisbane Baylands Specific Plan is currently in the planning stages and because environmental review and project approvals would take multiple years to complete, construction is not expected to overlap with the near-term construction (i.e., 2026 to 2028) of the project or project variant. Furthermore,~~ Phased construction of the Brisbane Baylands development within the 570 acre site would occur over a period of many years beginning in 2027. The Transbay Downtown Rail Extension project, Guadalupe Quarry Redevelopment project, 141 Third Avenue Residential project, Stonestown Development project, Future State 2035 San Francisco State University Campus Vision Plan, Parkmerced project, Westlake South Mixed-Use Project, and the Ocean Beach Climate Change Adaptation project would not overlap spatially with the project or project variant work areas. As a result, construction of these cumulative projects would not combine with the less-than-significant construction-related transportation impacts of the project or project variant.

*The last bullet on Draft EIR Appendix A page 112 has been revised as follows:

- Construction of the **Martin Substation separation** under the proposed project (33 months construction duration) or the **new City Substation (project variant)** (26 months construction duration) could partially overlap with construction of the Cormorant Battery Storage Facility project and, depending on phasing, the Brisbane Baylands Specific Plan. The Cormorant Battery Storage Facility project would be located to the west of the Martin Substation and Daly City Yard and would therefore not overlap in location; however, the battery storage facility project includes an overhead connection to the existing Martin Substation through the Daly City Yard. The Cormorant Battery Storage Facility is expected to be substantially completed by 2026 and operational in mid 2026, and therefore only limited construction overlap is anticipated to occur. Similarly, while construction of the Brisbane Baylands Specific Plan would primarily occur at the Baylands site, east of Martin Substation, the specific plan includes an underground transmission line connecting the Baylands to Martin Substation along with equipment installation at Martin Substation. Any construction overlap of the connections to the existing Martin Substation as part of the Cormorant Battery Storage Facility Project or the Brisbane Baylands Specific Plan would be coordinated with project or project variant construction as part of the construction management plan, and therefore conflicts between construction activities that could affect the transportation network would not occur. No other cumulative projects would overlap with project or project variant construction within the Martin Substation or the Daly City yard, and no other cumulative projects would overlap with construction within Geneva Avenue and Bayshore Boulevard as part of the New City Substation construction activities.

11.12 Revisions to Appendix A, Initial Study Section E.9 Greenhouse Gas Emissions

The second paragraph on Draft EIR Appendix A page 123 has been revised to include the following:

> **New City Substation (Project Variant) SF_6 Emissions**
> The new City Substation (project variant) would include gas-insulated equipment~~.~~ that contains ~~S~~sulfur hexafluoride (SF_6) gas or other commercially available non-SF_6 gas alternatives such as mixes of nitrogen and oxygen and certain other fluorinated gases. While construction of SF6 gas-insulated equipment could be completed before phase-out dates specified in relevant regulations adopted to reduce GHG emissions (2028 to 2031), if construction occurs after the relevant phase-out date, other commercially available non-SF6 gas-insulated equipment would be used at the new City Substation (project variant). For a conservative analysis of GHG emissions, it is assumed that gas insulated equipment at City Substation would be SF_6, which has a very high global warming potential. SF_6 is a human-generated fluorinated GHG that has a much higher heat-absorption potential than CO_2 and is used in the electrical sector to insulate electrical switchgear equipment and for fault protection by filling the equipment with the gas. SF_6 gas has 23,900 times the global warming potential of CO_2.[157] If SF6 is used, ~~O~~operation of the new City Substation would include the use of approximately 10,500 pounds of SF_6 within a total of 60 175-pound capacity compartments that would surround the electrical equipment. In addition, approximately 880 pounds of SF6 gas would be stored in gas canisters onsite. Typical gas-insulated electrical equipment is designed to avoid the release of gas into the atmosphere, but small leaks could occur over time. Storage containers are designed to prevent the release of SF6 or other insulating gas. The leakage rate of currently available designs for circuit breakers that use SF_6 gas for insulation and interruption is approximately 0.5 percent per year. Therefore, the new City Substation would result in the release of up to 569 metric tons of CO_2e per year (from~~of~~ SF_6) to the atmosphere.

11.13 Revisions to Appendix A, Initial Study Section E.13 Utilities and Service Systems

*The first two paragraphs of Impact C-UT-1, on Draft EIR Appendix A page 145, have been revised as follows:

> Construction of the project or project variant is expected to begin in 2026 and end in 2028. This would overlap with construction of many projects in Table 3.1-3, Projects Considered in Cumulative Impact Analysis, in EIR Section 3.1, Overview, including the following: Candlestick Point-Hunters Point Shipyard Phase II, Baylands North, Midway Village Redevelopment, Brisbane Baylands Specific Plan, Transbay Downtown Rail Extension, Sunnydale Hope SF Master Plan, Cormorant Battery Storage Facility, Stonestown Development Project, Future State 2035 San Francisco State University Campus Vision Plan, Parkmerced Project, Lake Merced West Project, Vista Grande Drainage Basin Improvement, and Ocean Beach Climate Change Adaptation Project. The geographic scope for potential cumulative utilities and service systems impacts consists of the project areas and the service areas of regional service and utility providers.

[157] California Air Resources Board, 2024. GHG Global Warming Potentials. Available online: https://ww2.arb.ca.gov/ghg-gwps. Accessed October 9, 2024.

Proposed underground construction includes some over-excavation to account for potential utility conflicts and would relocate utilities within the same trench. Of the cumulative projects listed above, some could require excavation within Martin Substation or in the same roadways as the project or project variant. Same as the project, the cumulative projects would be required to by law to contact USA North, which would notify utility providers in the vicinity of the planned excavations. Each provider would be responsible for marking the location of its underground utilities to avoid damage. Therefore, with compliance with existing laws regarding utility location, the project in combination with other cumulative projects would not result in a significant cumulative impact related to relocation or construction of new facilities (***less than significant***).

11.14 Revisions to Appendix A, Initial Study Section E.14 Public Services

*The first paragraph under "Construction Impacts – All Project Components" in Impact C-PS-1, on Draft EIR Appendix A page 150, has been revised as follows:

Construction of the project or project variant is expected to begin in 2026 and end in 2028, which would overlap with construction of most projects in Table 3.1-3, Projects Considered in Cumulative Impact Analysis, in EIR Section 3.1, Overview. These include Candlestick Point-Hunters Point Shipyard Phase II, Baylands North, Midway Village Redevelopment, Brisbane Baylands Specific Plan, Transbay Downtown Rail Extension, Sunnydale Hope SF Master Plan, Stonestown Development Project, Future State 2035 San Francisco State University Campus Vision Plan, Parkmerced Project, Lake Merced West Project, Vista Grande Drainage Basin Improvement, and Ocean Beach Climate Change Adaptation Project. During construction, the project or project variant could result in the need for law enforcement, fire protection, or emergency medical services response services. Cumulative projects could result in the same need for police, fire, and emergency services during construction, from the same public service providers that serve the project areas. The potential increase in demand for police, fire, and emergency services during construction of the project and cumulative projects would be temporary.

11.15 Revisions to Appendix A, Initial Study Section E.15 Biological Resources

In response to comments, the following text has been added following the first paragraph on Draft EIR Appendix A (Initial Study) page 159:

Bees

Several bees were evaluated for their potential to occur within the project area, including Crotch's bumble bee (*Bombus crotchii;* candidate for listing as endangered under California Endangered Species Act [CESA]), western bumble bee (*B. occidentalis*; candidate for listing as endangered under CESA), and obscure bumble bee (*B. caliginosus*; no formal or informal protection status). Crotch's bumble bee inhabits a limited climatic range that is hotter and dryer than the coastal climate of the project area and there are no occurrence records for this species on the San Francisco Peninsula

north of Palo Alto.[225a] The current understood range for western bumble bee is concentrated in mountainous areas north and east of Sacramento and west of the Nevada border, and north of Chico, with few observations in the Inner Coast Range.[225b] Considering the current understood range and collective occurrence data from several sources which track bees nationwide, Crotch's bumble bee and western bumble bee are not expected to occur in the project area.

Obscure bumble bee is considered extant in San Francisco and San Mateo counties. This species is understood to occupy coastal shrubland and grassland areas from Santa Barbara County north to Washington state. Obscure bumble bee nests underground in abandoned rodent burrows, and above ground in tufts of grass, rock piles, cavities in dead trees, and in abandoned bird nests. Because obscure bumble bee is considered extant within counties overlapping the project area and there are multiple recent records for this species within San Francisco near the project area, including records of a verified sighting of obscure bumble bee on bee plant (*Scrophularia* sp.) in a native shrub restoration area located on the east shore of East Lake (Merced) from 2021,[225c] this species is considered to have a moderate[225d] potential to occur in portions of the project area that provide suitable foraging and nesting habitat.

Portions of the project area where obscure bumble bee would be expected to forage or nest include vegetated areas near Lake Merced, grasslands of San Bruno Mountain State and County Park, undeveloped grasslands between the park lands and Bayshore Boulevard, grasslands at Icehouse Hill east of Bayshore Boulevard, and within private residential properties. Obscure bumble bee is not expected to forage or nest within the project area where vegetation is heavily managed through mechanical or chemical methods, such as at golf courses.

*The following footnotes have been added to Draft EIR Appendix A (Initial Study) page 159:

[225a] Environmental Science Associates (ESA), 2026. Memorandum: Evaluation of Special-Status Bees within the City of San Francisco's Pacific Gas and Electric Company Power Asset Acquisition Project Area. Prepared for the City and County of San Francisco. January 2026.
[225b] California Department of Fish and Wildlife. 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, June 6, 2023. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline.
[225c] Environmental Science Associates (ESA), 2026. Memorandum: Evaluation of Special-Status Bees within the City of San Francisco's Pacific Gas and Electric Company Power Asset Acquisition Project Area. Prepared for the City and County of San Francisco. January 2026.
[225d] Moderate Potential indicates species not observed during field investigations but have some (medium) probability for occurrence based on habitats present on site. Some documented occurrences of species occur in the general region.

[225a] Environmental Science Associates (ESA), 2026. Memorandum: Evaluation of Special-Status Bees within the City of San Francisco's Pacific Gas and Electric Company Power Asset Acquisition Project Area. Prepared for the City and County of San Francisco. January 2026.
[225b] California Department of Fish and Wildlife. 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, June 6, 2023. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline.
[225c] Environmental Science Associates (ESA), 2026. Memorandum: Evaluation of Special-Status Bees within the City of San Francisco's Pacific Gas and Electric Company Power Asset Acquisition Project Area. Prepared for the City and County of San Francisco. January 2026.
[225d] Moderate Potential indicates species not observed during field investigations but have some (medium) probability for occurrence based on habitats present on site. Some documented occurrences of species occur in the general region.

The following text has been added prior to the discussion of Operation Impacts on Draft EIR Appendix A (Initial Study) page 167:

Obscure Bumble Bee

The obscure bumble bee is not formally protected by the state or identified as a species of special concern by CDFW. Obscure bumble bee is considered vulnerable[230a] and therefore potentially rare, defined under CEQA as a species whose survival and reproduction in the wild is in immediate jeopardy or it is likely to be in danger of extinction within the foreseeable future throughout all or a significant portion of its range.[230b] Because of the species' potential rarity, and moderate potential to occur within the project area based on local sightings, the following discussion considers whether the project or project variant could substantially reduce the number or restrict the range of obscure bumble bee.

Vegetation- and ground-disturbing activities related to the local distribution system separation and system reinforcements would involve construction trenching, installation of new utility pole foundations, and tree trimming or other vegetation removal to access existing vaults and other electrical infrastructure. These activities may be necessary in the grassy median between the road and perimeter trail surrounding Lake Merced, in grassland and scrub habitat south of John Muir Drive and bordering the Olympic Club golf course, and in grassland habitat at Icehouse Hill. No ground disturbance or vegetation removal is proposed within the City of Daly City's easement within San Bruno Mountain State and County Park; project work in this location would be limited to vehicle, equipment, and pedestrian access to existing electrical infrastructure bordering the park.

Vegetation removal and ground disturbance activities associated with the local distribution system separation and system reinforcements could directly affect obscure bumble bee foraging habitat or nests located underground or in vegetation being trimmed or removed. Removal of obscure bumble bee forage alone is not expected to result in a significant impact on the species because the project would require so little vegetation removal to support system reinforcements and the local distribution system separation. Ground disturbance and vegetation removal in suitable nest locations could crush or damage active nests, risking mortality of occupants, including obscure bumble bee queens. However, the inadvertent mortality of individuals resulting from project implementation is not expected to substantially affect the viability of the species population or constrict the population's range because the project locations where suitable habitat is present are relatively small and are adjacent to relatively large expanses of protected land (i.e., Lake Merced Park, San Bruno Mountain State and County Park) where obscure bumble bees have been observed. Substantial suitable habitat for this species exists on nearby San Bruno Mountain, where it has been documented and is afforded long-term protection under the San Bruno Mountain Habitat Conservation Plan. Additionally, the project or project variant would not substantially increase development in coastal grassland or shrubland because new development is likely limited to utility poles. Therefore, it is likely that obscure bumble bees from the adjacent protected areas would reoccupy locations temporarily disturbed by project activities. As a result, while individual obscure bumble bees may be encountered during project activities, the project or project variant are not expected to substantially reduce the species' population, restrict its range, or affect its long-term viability. Therefore, the project or project variant would not result in a population-level impact under CEQA. The impact of the project or project variant on obscure bumble bee would be ***less than significant***.

[230a] Refer to Attachment C.
[230b] CEQA Guidelines Section 15380(b)-(d).

The following footnotes have been added to Draft EIR Appendix A (Initial Study) pages 167-168:

[230a] Refer to Attachment C.
[230b] CEQA Guidelines Section 15380(b)-(d).

11.16 Revisions to Appendix A, Initial Study Section E.16 Geology and Soils

*The first paragraph of Impact C-GE-1, on Draft EIR Appendix A page 197, has been revised as follows:

The entire Bay Area is a seismically active region with a high risk of seismic hazards and a wide variety of geologic conditions. Nevertheless, the geographic scope of potential geology and soils impacts is restricted to the project areas and the immediate vicinity because related risks of potential substantial adverse effects are relatively localized or area-specific. As a result, the geographic scope of potential cumulative impacts for these resources includes the project areas and immediately adjacent areas. In order to have a cumulative impact, adverse geologic impacts would have to occur at the same time and in the same location or similar conditions of the project or project variant. Cumulative projects within the geographic scope include the Vista Grande Drainage Basin Improvement, Westlake South Mixed-Use, 6225 Mission Street Mixed-Use Building, Sunnydale Hope SF Master Plan, Cormorant Battery Storage Facility, Pacific Place Retail Conversion, Egbert Switching Station Project, Midway Village Redevelopment, Brisbane Baylands Specific Plan, and Baylands North (for descriptions of these projects refer to Table 3.1-3, Projects Considered in Cumulative Impact Analysis, in Draft EIR Section 3.1, Overview).

*The first paragraph of Impact C-GE-2, on Draft EIR Appendix A page 198, has been revised as follows:

The geographic scope of impacts on a unique paleontological resource is generally localized and site-specific, encompassing the cumulative project sites and immediate vicinity where activities could disturb the same potential fossils, primarily within Pleistocene-aged Colma and Merced formations. As discussed in Impact GE-5, project-related excavation could encounter the Colma and Merced formations, and these geologic units have moderate paleontological sensitivity based on the identification of several vertebrate fossils in similarly aged sediments in the area. Cumulative projects including the Vista Grande Drainage Basin Improvement, Westlake South Mixed-Use, 6225 Mission Street Mixed-Use Building, Sunnydale Hope SF Master Plan, Cormorant Battery Storage Facility, Pacific Place Retail Conversion, Egbert Switching Station Project, Midway Village Redevelopment, Brisbane Baylands Specific Plan, and Baylands North could include excavation within the same geologic units adjacent to the project or project variant. If there are paleontological resources that extend across excavation boundaries of the project and these other cumulative projects, the projects could result in the loss of paleontological resources, a potentially significant cumulative impact. The project or project variant could have a cumulatively considerable contribution to a significant cumulative impact on paleontological resources. However, with implementation of Mitigation Measure M-GE-5 (Inadvertent Discovery of Paleontological Resources During Construction), the project or project variant would effectively reduce or avoid damage to or loss of paleontological resources, and the project or project variant's contribution to this significant cumulative impact would be ***less than significant with mitigation***.

11.17 Revisions to Appendix A, Initial Study Section E.18 Hazards and Hazardous Materials

*Footnote 282 on Draft EIR Appendix A page 210 has been revised as follows:

> [282] Items ~~h), i), j) and k)~~ in this checklist ~~are topics~~ is identified in the California Public Utilities Commission's *Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments* (2019) and ~~are~~ is not included on San Francisco Environmental Planning's environmental checklist, which is a modified version of the CEQA Guidelines Appendix G checklist. Refer to Draft EIR Section 1.5.3 for additional information.

In response to comments, to clarify the applicability of state regulations and local requirements, Draft EIR Appendix A pages 217-218 have been revised as follows:

> Excavation within 500 feet of open or closed hazardous materials sites or within mapped Maher Ordinance areas could encounter contamination and without proper management, could expose workers to contamination or release contaminated soil or groundwater into the environment.
>
> Consistent with federal Occupational Safety and Health Administration regulations (29 CFR 1910.120) and California Occupational Safety and Health Administration regulations (8 CCR Section 5192), the SFPUC would be required to prepare a health and safety plan that addresses the potential to encounter workplace hazards, including hazardous substances in soil or groundwater, for project or project variant construction in San Francisco and San Mateo counties. The health and safety plan must be site-specific and be prepared by a qualified professional.
>
> Under title 22 of the California Code of Regulations section 66261.20, et seq., excavated soil and groundwater are classified as a hazardous waste for offsite disposal purposes if either exhibit the characteristics of ignitability, corrosivity, reactivity, or toxicity. Title 22 of the California Code of Regulations, division 4.5, article 3, section 66261.24 also defines toxic waste as material containing certain substances at concentrations above thresholds specified in the code.
>
> Consistent with the California Code of Regulations title 22, division 4.5, chapter 12, section 66262.11 (Hazardous Waste Determination)~~Hazardous Waste Control Act~~, in all project locations, the SFPUC would ~~also~~ be required to identify and manage hazardous soil and groundwater and identify appropriate disposal methods. Implementation of a health and safety plan and hazardous soil and groundwater management consistent with these requirements would reduce the risk of creating a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials or reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
>
> Additional local requirements in San Francisco Health Code article 22A would apply to project construction that involves disturbance of more than 50 cubic yards of soil, in locations that are bayward of the historic high tide line, have been zoned or used for industrial purposes, are located within 150 feet of an elevated highway, have soil or groundwater contamination, or are within 100 feet of a known or suspected underground storage tank (i.e., ~~construction~~ within Maher Ordinance areas, shown in Appendix J) in San Francisco, which would further limit the potential for release of hazardous soil or groundwater. Article 22A of the San Francisco Health Code requires that a qualified professional prepare a site history report ~~(commonly referred to as a phase I environmental site~~

~~assessment)~~ to determine whether hazardous substances ~~may~~ could be present on the site at levels that exceed health risk levels or other applicable standards established by California Environmental Protection Agency, the regional water board, and DTSC. The site history report must include results of a permit records search investigating the history of permitted uses on the site, as well as any known or discovered unpermitted uses or activities on the site. ~~If~~ Unless the site history report finds that there is no information that hazardous substances could be present in the soil or groundwater at concentrations exceeding the California Department of Toxic Substances Control or Regional Water Quality Control Board health risk levels, ~~hazardous substances may be present on the site at levels that exceed health risk levels or other applicable standards,~~ the SFPUC ~~may~~ would ~~be required to~~ prepare a plan that meets the substantive requirements of the health code (e.g., site mitigation plan) and implement the plan for treating, containing, or removing the hazardous materials ~~conduct soil and/or groundwater sampling and analysis under a work plan approved by the health department. Where such analysis reveals the presence of hazardous substances in excess of state or federal standards, preparation of a site mitigation plan describing the methods that will be implemented to handle and dispose of contaminated materials~~ to prevent impacts to public health and the environment during construction ~~would be required~~. Specific requirements for sites located on City-owned land would be coordinated with the health department, pursuant to Article 22A.17 of the health code.

~~The~~A site mitigation plan must contain measures to mitigate potential risks to the environment and to protect construction workers, nearby residents, workers, and/or pedestrians from potential exposure to hazardous substances and underground structures during soil excavation and grading activities. ~~The~~A site mitigation plan must also contain procedures for initial response to unanticipated conditions such as discovery of underground storage tanks, sumps, or pipelines during excavation activities. Specified construction procedures at a minimum must comply with building code section 106A.3.2.6.3 and health code article 22B related to construction dust control; and San Francisco Public Works Code section 146 et seq. concerning construction site runoff control. Additional measures would typically include notification, field screening, and worker health and safety measures to comply with Cal/OSHA requirements. The health department would require discovered underground storage tanks to be closed pursuant to article 21 of the health code and comply with applicable provisions of chapters 6.7 and 6.75 of the California Health and Safety Code (commencing with section 25280) and its implementing regulations. The closure of any underground storage tank must also be conducted in accordance with a permit from the San Francisco Fire Department.

The Brisbane Municipal Code also establishes requirements applicable to activities within Brisbane city limits. Brisbane Municipal Code Section 13.06.142 requires that any person "delivering, hauling, disposing, storing, discharging or otherwise handling hazardous materials or potentially polluting substances, solid or liquid, such as, but not limited to the following: fuel oil, gasoline, solvents, industrial liquids or fluids, milk, grease trap and catch-basin wastes, oil or petroleum wastes, shall immediately clean up any such spilled materials or substances to prevent such materials or substances becoming a hazard to health or safety or, directly or indirectly, permitting such materials or substances to enter the city's storm sewer system."

In compliance with state~~,and~~ federal, and local regulations~~, and health code article 22A~~, the SFPUC would assess the potential for site contamination prior to construction and would handle potential

soil and/or groundwater contamination in accordance with all applicable regulatory requirements and through coordination with the health department, as required. Thus, the project or project variant would not result in a significant hazard to the public or environment from the release of contaminated soil and/or groundwater.

In response to comments, Draft EIR Appendix A page 223 has been revised to add the following text after the fourth bullet to further detail the role of DTSC in cleanup activities at the Martin Substation and Daly City Yard:

DTSC has extensive authority to require cleanup of hazardous wastes or other corrective measures. Pursuant to California Health and Safety Code title 45 section 78000 et seq., when DTSC has determined that a release of hazardous materials has occurred, DTSC has the authority to undertake planning, legal, fiscal, economic, engineering, architectural, and other studies or investigations that are necessary or appropriate to plan and direct response actions to address the hazardous materials release. DTSC, or, if appropriate, the regional board, is the state agency with sole responsibility for ensuring that required action in response to a hazardous substance release or threatened release at a listed site is carried out in compliance with the procedures, standards, and other requirements identified in relevant sections of the Health and Safety Code, and shall, as appropriate, coordinate the involvement of interested or affected agencies in the response action. DTSC has specialized technical expertise and its authority and requirements are designed specifically to prevent the release of contaminants into the environment.

Pursuant to the Health and Safety Code, DTSC is responsible for overseeing the evaluation and cleanup of contaminated properties throughout California, including brownfields, sites where voluntary agreements are in place, State Superfund sites, military facilities, school construction and expansion projects, and corrective action and tiered permitted facilities.[301a]

A "land use restricted site" is a property where DTSC has placed limits or requirements on future use of the property due to varying levels of cleanup possible, practical, or necessary at the site. DTSC maintains and makes publicly available a list of land use restricted sites. The DTSC cleanup program list identifies sites under DTSC oversight where land use restrictions are active.[301b] The Martin Substation and Daly City Yard sites are on the DTSC cleanup program list. As discussed below, the DTSC has overseen cleanup and containment activities designed since 1991 to protect the public and the environment from contaminants at the Martin Substation and Daly City Yard.

*The following footnotes have been added to Draft EIR Appendix A page 223:

[301a] California Department of Toxic Substances Control, Site Mitigation & Restoration Program, available online https://dtsc.ca.gov/site-mitigation/, accessed January 23, 2026.
[301b] California Department of Toxic Substances Control, Land Use Restriction Sites, available online https://dtsc.ca.gov/land-use-restriction-sites/, accessed January 23, 2026.

[301a] California Department of Toxic Substances Control, Site Mitigation & Restoration Program, available online https://dtsc.ca.gov/site-mitigation/, accessed January 23, 2026.
[301b] California Department of Toxic Substances Control, Land Use Restriction Sites, available online https://dtsc.ca.gov/land-use-restriction-sites/, accessed January 23, 2026.

*The third full paragraph on page 224 of Draft EIR Appendix A, in Section E.18 Hazards and Hazardous Materials, Impact HZ-3, has been revised to read:

> The existing land use covenants, operations and maintenance agreement, and soil management plan requirements, discussed below, ~~would~~ apply to ~~proposed~~ activities at the Martin Service Center ~~(including Martin Substation separation or construction of the new City Substation [project variant])~~.

In response to comments, Draft EIR Appendix A page 226 et seq. has been revised as follows to further detail the regulatory requirements applicable to work at Martin Substation and Daly City Yard:

> During ground disturbance at the Martin Substation or Daly City Yard, including excavation for new structures and utilities, if proper precautions are not implemented the public (including students and staff at nearby schools as well as occupants of offsite residences and developments on adjacent parcels) could be exposed to chemicals of concern through inhalation of airborne dust, contact with accumulated dust, and contaminated runoff, potentially resulting in adverse health effects. In addition, if not properly handled, contaminated groundwater could be released into the environment. However, ~~F~~for the Martin Substation separation or the new City Substation (project variant), the SFPUC would not be allowed to conduct any activities currently prohibited by the existing land use covenants (including disturbing soil below the existing pavement) without DTSC approval. Land use covenants "run with the land," meaning they automatically apply to activities by future landowners.[306a] If a land use or land use control is proposed that differs from filed land use restrictions, California Health and Safety Code section 25220 requires that the proponent apply to DTSC for a variance from the land use restrictions (for temporary activities) or secure an updated land use covenant (for long-term changes), based on coordination with DTSC and as detailed further in Attachment D. DTSC typically requires parties to enter into a voluntary oversight agreement to administer DTSC's review of land use covenant variances and other technical work associated with a site. For this project or the project variant, the City would enter a voluntary oversight agreement with DTSC and either would implement the requirements of the land use covenants, soil management plan, and operations and maintenance agreement, or would obtain a land use covenant variance to construct the Martin Substation separation or new City Substation. In either case, DTSC oversight and written authorization of activities affecting the remedy would be required. If a land use covenant variance is required, then the City would apply for and obtain a land use covenant variance prior to project construction.[306b] As required under California Health and Safety Code section 25223(c), the land use covenant application would document that the variance, if granted, would not create or

[306a] Land use covenants of this type run with the land pursuant to Civil Code section 1471 and/or Health and Safety Code sections 25202.5, 25355.5, or 25395.99 and shall continue in perpetuity unless modified or terminated in accordance with applicable law. (22 CCR Section 67391.1(d)).

[306b] As discussed in greater detail in Attachment D, under Health and Safety Code section 25220, the sole explicit trigger for a land use covenant variance is when a project proposes "*a land use that differs from filed land use restrictions on the property*." The proposed Martin Substation separation or new City Substation (project variant) would not result in a change in land use, as either site would continue to be used for utility purposes, and would involve construction activities that may temporarily affect existing remedy components. The 1995 and 2002 land use covenants applicable to the site do not categorically prohibit construction or utility activities, but instead restrict specific actions such as alterations to the existing cap or interceptor trench "without written approval by the Department [DTSC]." However, DTSC indicated during an August 19, 2025, meeting with CDIM, the SFPUC, and the San Francisco Planning Department that a variance may be required, citing the adjacent Midway Housing Development as precedent. The Midway Housing Development proponents submitted a land use covenant variance application for implementation of a remedial action plan amendment, including penetration and reconstruction of the cap, as well as for a proposed change in site uses to residential and childcare, which directly conflicted with recorded restrictions. The variance was therefore driven by both a change in land use and by remedy modifications associated with that change. Accordingly, two regulatory pathways are available for implementation of the proposed project or project variant.

increase significant present or future hazards to public health. In its review of the variance application, DTSC is required under California Code of Regulations title 22, section 67390.2 to consider both the factors affecting the potential for movement of waste constituents away from the site through air, water or soil, and the factors affecting the potential for exposure of any population within 2,000 feet of the wastes.

Due to the extent of ground disturbance, DTSC would require the City to prepare either a project-specific soil management plan, a removal action workplan, or an updated remedial action plan for the project or project variant. The process for each of these options is described below. Each option would require DTSC review and approval.

- **Project-Specific Soil Management Plan**. If DTSC determines that the Martin Substation separation project or new City Substation falls within the assumptions and remedy of the existing approved remedial action plan, the project would be implemented through existing approval pathways (i.e., preparation of a project-specific soil management plan or soil management plan addendum to address the specific construction scope and requirements under the framework of the existing 2017 program-level soil management plan). The 2017 program-level soil management plan lists[306c] additional items that DTSC would expect to see in project-specific plans, including information for best management practices regarding stockpile management, stormwater runoff, odor suppression, and dust and noise mitigation and monitoring; a plan for dewatering, groundwater storage, analysis, and disposal; and a project-specific health and safety plan applicable to construction workers that includes procedures for containing accidental releases during work activities and contingencies for when unknown or unexpected contamination is encountered. Unless otherwise specified by DTSC, imported soil would also be required to meet the requirements of the 2017 soil management plan, which states that any soil imported onto the site for use as backfill would be subject to the same screening levels as soil reused onsite. Soil may be reused at the site only if analytical results from its composite soil sample analysis are below the commercial/industrial screening criteria These criteria are based on DTSC-Modified Screening Levels 2 (DTSC-SLs) established by DTSC in the Human Health Risk Assessment (HHRA) Note 3, and Environmental Screening Levels 3 (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (RWQCB) for screening for environmental concerns at sites with contaminated soil and groundwater.
- **Removal Action Workplan**. If DTSC determines that the Martin Substation separation or new City Substation (project variant) constitutes a removal action outside the assumptions of the existing approved remedial action plan and the total removal cost associated with the removal action is less than $2 million, the DTSC may require preparation and implementation of a Removal Action Workplan (RAW) under Health and Safety Code section 79225[306d] The RAW must present and evaluate existing site conditions, establish appropriate cleanup goals, evaluate alternatives, and identify a recommended workplan alternative that is protective of human health and the environment.[306e] The contents of the RAW must also include implementation details, a sampling

[306c] Haley & Aldrich, Soil Management Plan Pacific Gas and Electric Company Martin Service Center/Daly City MGP, 3004 Geneva Avenue, Daly City California, June 2017. Page 14.
[306d] A removal action workplan is one of two types of cleanup documents that may be prepared for a cleanup site pursuant to California Health and Safety Code sections 79195 and 79225.
[306e] California Department of Toxic Substances Control, Removal Action Work Plan (RAW) Quick Reference Guide, available online https://dtsc.ca.gov/removal-action-work-plan-raw-quick-reference-guide/, accessed January 23, 2026.

and analysis plan, a health and safety plan to ensure the health and safety of workers and the public, and long-term stewardship (operations and maintenance) requirements.[306f]

- **Updated Remedial Action Plan.** The other cleanup plan allowed under California Health and Safety Code section 79195 et. seq. is a remedial action plan. If DTSC determines that the project or project variant constitutes a removal action outside the assumptions of the existing approved remedial action plan and would cost more than $2 million, then an updated remedial action plan would be prepared to re-evaluate risks to human health and the environment, and to compare and select revised remedial alternatives. DTSC would also require preparation and implementation of a remedial design and implementation plan (RDIP) specifying measures to be implemented during construction to provide for protection of public health, including nearby schools and other sensitive receptors. ~~The SFPUC would be required to notify DTSC and secure approval by the DTSC of the health and safety plan and soil management plan prior to activity that could affect the caps or interceptor trench. The health and safety plan and soil management plan would include specific practices related to soil handling, disposal, and site safety, among other considerations. The SFPUC would enter into an agreement with DTSC for DTSC review of the proposed soil management plan and health and safety plan. All work must comply with the *Guidelines for Excavations at Former Manufactured Gas Plant Sites* or comparable excavation guideline approved by DTSC.~~[307] The ~~site health and safety~~ remedial design and implementation plan would include measures such as the following ~~ensure that appropriate work procedures and personal protective equipment would be used so that construction workers and the public would not be exposed to contaminants in soil and groundwater~~ based on project scope:

- Detailed excavation, soil handling, and disposal plans;
- Groundwater management and dewatering protocols, including containerization, sampling, and discharge/treatment/disposal requirements;
- Air monitoring and dust control measures, including implementation of a Community Air Monitoring Program in which monitoring results can trigger immediate response including dust suppression and odor control measures (e.g., increased watering frequency, application of soil binders, covering of stockpiles or haul trucks, foam or misting agents);
- Vapor intrusion control measures for new occupied structures;
- Health and Safety Plan requirements for workers;
- Contingency procedures for unexpected conditions or materials; and
- Any additional measures deemed necessary by the DTSC.

~~The soil management plan would include provisions for the safe and lawful disposal of soil generated from construction activities, including requirements for treatment of extracted groundwater. Excavated soil must be analyzed for contamination and impacted soil must be disposed of at an appropriate landfill, in accordance with state and federal regulations. Groundwater extraction from dewatering of the excavations could result in contaminated water that would require appropriate handling and disposal. Contaminated water could be disposed of into the sanitary sewer in accordance with the~~

[306f] California Department of Toxic Substances Control, Removal Action Work Plan (RAW) Quick Reference Guide, available online https://dtsc.ca.gov/removal-action-work-plan-raw-quick-reference-guide/, accessed January 23, 2026.
[307] PG&E and DTSC,1995. Covenant to Restrict Use of Property, Daly City Yard. March 23.

~~requirements of the Bayshore Sanitary District or it would require on-site treatment to remove contaminants prior to disposal in accordance with a NPDES permit. The DTSC may require additional measures it deems necessary to protect the health of the public in the community.~~ The remedial design and implementation plan and all subordinate plans would require DTSC approval that the proposed construction activities and uses would be protective of public health and the environment prior to implementation. The DTSC would also provide oversight of construction to verify compliance with the approved plans and permit conditions.

~~As stated in the land use covenant, the residual contamination at the PG&E Martin Service Center does not present an unacceptable threat to human safety or the environment provided the restrictions of the covenant are implemented. The City and its contractor must comply with the provisions of the covenant, specifically procedures for soil management and health and safety, as well as all regulations related to hazardous waste storage, handling, transportation, and disposal.~~ With required compliance via one of the three options outlined above, all of which require DTSC review and approval, impacts associated with construction activities on a hazardous waste site would not result in adverse effects to people or the environment.

Summary

As outlined above, recorded covenants restrict development and impose requirements for ground-disturbing activities at the Martin Substation separation site or the new City Substation (project variant) site, where known hazardous contamination has historically occurred. Remedial actions have been previously undertaken and continue to be maintained at this site to protect ~~in order to ensure the protection of~~ public health and the environment. Stringent requirements for excavation in this area are specified in the recorded land use covenants ~~for excavation in this area~~. Although commercial and industrial uses are permitted, excavation or other activities that could alter the effectiveness of the existing remedy ~~this area is subject to land use restrictions, commercial and industrial uses are permitted, and excavation is allowed if performed in accordance with relevant plans (e.g., soil management plan and health and safety plan), relevant treatments (e.g., caps) at the site are protected, and~~ may not proceed without DTSC approval. DTSC would determine whether a project-specific soil management plan, or a removal action workplan or updated remedial action plan pursuant to California Health and Safety Code section 79205-79215 would be required for the project or project variant. DTSC approval would be required for any of the three options and, as discussed above, DTSC has specialized technical expertise and its authority and requirements are intended specifically to minimize risks to human health and the environment, such as during project or project variant implementation. ~~the oversight agency is notified in advance and approves the work~~. For construction work at this site, SFPUC would comply with relevant covenants, associated plans, and all applicable local, state, and federal regulations related to hazardous materials, as discussed above. ~~Because the project or project variant would comply with all relevant~~ With implementation of the regulatory requirements identified above concerning the handling, use, and storage of hazardous materials, the project or project variant would not create a significant hazard to the public or the environment. The impact would be ***less than significant***.

*The following footnotes have been added to Draft EIR Appendix A beginning on page 226:

[306a] Land use covenants of this type run with the land pursuant to Civil Code section 1471 and/or Health and Safety Code sections 25202.5, 25355.5, or 25395.99 and shall continue in perpetuity unless modified or terminated in accordance with applicable law. (22 CCR Section 67391.1(d)).

[306b] As discussed in greater detail in Attachment D, under Health and Safety Code section 25220, the sole explicit trigger for a land use covenant variance is when a project proposes "*a land use that differs from filed land use restrictions on the property*." The proposed Martin Substation separation or new City Substation (project variant) would not result in a change in land use, as either site would continue to be used for utility purposes, and would involve construction activities that may temporarily affect existing remedy components. The 1995 and 2002 land use covenants applicable to the site do not categorically prohibit construction or utility activities, but instead restrict specific actions such as alterations to the existing cap or interceptor trench "without written approval by the Department [DTSC]." However, DTSC indicated during an August 19, 2025, meeting with CDIM, the SFPUC, and the San Francisco Planning Department that a variance may be required, citing the adjacent Midway Housing Development as precedent. The Midway Housing Development proponents submitted a land use covenant variance application for implementation of a remedial action plan amendment, including penetration and reconstruction of the cap, as well as for a proposed change in site uses to residential and childcare, which directly conflicted with recorded restrictions. The variance was therefore driven by both a change in land use and by remedy modifications associated with that change. Accordingly, two regulatory pathways are available for implementation of the proposed project or project variant.

[306c] Haley & Aldrich, Soil Management Plan Pacific Gas and Electric Company Martin Service Center/Daly City MGP, 3004 Geneva Avenue, Daly City California, June 2017. Page 14.

[306d] A removal action workplan is one of two types of cleanup documents that may be prepared for a cleanup site pursuant to California Health and Safety Code sections 79195 and 79225.

[306e] California Department of Toxic Substances Control, Removal Action Work Plan (RAW) Quick Reference Guide, available online https://dtsc.ca.gov/removal-action-work-plan-raw-quick-reference-guide/, accessed January 23, 2026.

[306f] California Department of Toxic Substances Control, Removal Action Work Plan (RAW) Quick Reference Guide, available online https://dtsc.ca.gov/removal-action-work-plan-raw-quick-reference-guide/, accessed January 23, 2026.

In response to comments, Draft EIR Appendix A page 227 ("Operation Impacts") has been revised as follows to further detail the regulatory requirements applicable to the project or project variant that would avoid exposing workers to hazardous vapors:

> The project would involve operations and maintenance of the new electricity system infrastructure in the Martin Substation or, under the project variant, at Daly City Yard. Operations activities would include occasional worker access to electrical equipment within enclosed structures at the site (e.g., control house). Without proper precautions, workers could be exposed to hazardous vapors in enclosed areas. However, for the Martin Substation separation or new City Substation (project variant), the SFPUC would not be allowed to conduct any activities currently prohibited by the existing land use covenants (including excavation or other activities that could alter the effectiveness of the existing remedial remedy) without DTSC approval of a project-specific soil management plan, a removal action workplan, or an updated remedial action plan (RAP) for the project or project variant. In the plan, the DTSC would specify the type of vapor intrusion control system to be constructed and operated; typical measures include installation of passive or active sub-slab depressurization systems, placement of vapor barriers or engineered membranes beneath building slabs, elevation of structures above grade, and ventilation enhancements or pressure control systems in enclosed spaces. A new land use covenant or operations and maintenance agreement specified by DTSC would specify how the vapor intrusion control system would operate and how maintenance activities could occur. Maintenance activities such as repairing and replacing installed equipment could entail repairs that would require temporary excavations to access this facility and could encounter hazardous materials in soil and/or groundwater. ~~This work~~ Operations and maintenance activities would be conducted in compliance with the land use covenants, standard construction measures, and regulations described for construction, and thus would not result in significant hazard to the public or environment from potential releases of contaminated soil or groundwater. The impact would be ***less than significant***.

*To correct an error, Impact C-HZ-1 on Draft EIR Appendix A page 230 has been revised as follows:

> *Impact C-HZ-1:* The project or project variant, in combination with cumulative projects, would not have a substantial cumulative impact related to hazards and hazardous materials.

*The first paragraph in Impact C-HZ-1 on Draft EIR Appendix A page 230 has been revised as follows:

> The geographic scope for cumulative impacts related to hazards encompasses the project areas and areas within 500 feet because the effects of typical hazardous materials releases are generally localized. As a result, cumulative impacts typically do not occur unless the cumulative projects are in close proximity to one another. The cumulative projects within and surrounding the project area are listed in Table 3.1-3.

*The first paragraph following "Excessive Shock Hazards" beginning on Draft EIR Appendix A page 231 has been revised as follows:

> Cumulative projects would be required to comply with state and federal regulations regarding worker exposure to electric shock hazards during construction, same as the project. While most projects in Table 3.1-3 would include new electrical lines, the PG&E Egbert Switching Station, Brisbane Baylands Specific Plan, and the Cormorant Battery Storage Facility projects are the only cumulative projects that include electrical lines used for transmission, with voltages higher than existing distribution lines in the area, near project or project variant higher voltage equipment. These ~~two~~ three projects overlap with the project or project variant within Martin Substation and Daly City Yard, and therefore the area where cumulative exposure to shock hazards could occur would be within Martin Substation or Daly City Yard. The Martin Substation is closed to the public and would remain closed and fenced under the project or project variant. Operations and maintenance activities in this area would be subject to the same federal and state Occupational Safety and Health Administration regulations identified in Impact HZ-5 for construction and operation. Therefore, compliance with existing regulations would reduce the risk of cumulative impacts related to excessive electric shock hazard, and the project or project variant in combination with cumulative projects would not result in a significant cumulative impact related to excessive electric shock hazards ***(less than significant)***.

This page intentionally left blank

ATTACHMENT A
DRAFT EIR COMMENTS

PAGE INTENTIONALLY BLANK

City of Brisbane
50 Park Place
Brisbane, CA 94005-1310
(415) 508-2120

5/6/2025

Julie Moore
Principal Environmental Planner
Environmental Planning Division
San Francisco Planning Department
49 South Van Ness Avenue, Suite 1400, San Francisco, CA 94103

Sent via email to CPC.PGEPowerAssetsEIR@sfgov.org

Re: PG&E Power Asset Acquisition Project Draft Environmental Impact Report

Dear Ms. Moore,

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the PG&E Power Asset Acquisition Project. The City of Brisbane has the following comments:

1. The City requests to be formally consulted when System Reinforcements and Local Distribution System Separation project components are refined with specific routes and alignments with respect to property and rights-of-way within the City's jurisdiction. — 1 - GC-2

2. The DEIR acknowledges that lands impacted by the project are within the San Bruno Mountain HCP. Please be advised that any work within planned or unplanned parcels must comply with the operating programs for those respective administrative parcels and/or management units. The City advises consultation with the HCP Plan Operator (San Mateo County Parks) prior to commencement of any work in administrative parcels of the HCP. It is not clear that the Initial Study analysis properly considers the full scope of limitations on activities within each administrative parcel or the HCP procedures to move forward with activities within the HCP. — 2 - GC-1

3. Impact Analysis and Mitigation Measures

   a. Mitigation Measure M-BI-3a: Restoration of Freshwater Emergent Marsh Wetlands. Mitigation measure to prepare a Wetland Restoration and Mitigation Monitoring Plan is noted. This work should be coordinated with implementation of the Baylands Specific Plan, which is described in the DEIR for the Baylands Specific Plan available here on the City's website: https://www.brisbaneca.org/baylands/page/2025-draft-eir. — 3 - BI-3

   b. Noise Impacts:

      i. Commercial sensitive receptors are excluded at or under construction noise levels of 100 dBA. The City notes that the 7 Mile House, a valued Brisbane restaurant with outdoor dining areas, directly abuts the Martin Substation site and a 100 dBA threshold may not be appropriate to adequately analyze impacts to commercial sensitive receptors. — 4 - NO-1

      ii. Page 3.2-19: Various corrections are required to the DEIR's description of City of Brisbane regulations under Brisbane Municipal Code Chapter 8.28. The corrected statements are included below: — 5 - NO-6

         a) "There are no performance standards or limits related to noise that are applied to construction work performed within the public right-of-way under an encroachment permit."

         b) "Brisbane Municipal Code section 8.28.030 and section 8.28.040 establish exterior noise standards shown in Table 3.2-10."

c) "Noise levels may not be more than 10 dBA above the existing ambient noise level for a cumulative period of more than 10 minutes in a given hour, or more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA above the local ambient for any amount of time for single-family and multi-family residential zoning districts."

d) "Section 8.28.040 establishes that noise levels may not be more than 10 dBA above the existing ambient level for a cumulative period of more than 10 minutes in a given hour, and may not be more than 20 dBA above the ambient level for more than 3 minutes per hour, or more than 30 dBA for any period of time for commercial and industrial zoning districts."

e) Table 3.2-11: Update table to add BMC Section 8.28.040 under "Municipal Code" for "Operation" noise sources, which are subject to both Section 8.28.030 and 8.23.040 of the BMC. These operational standards are accurately captured in the preceding Table 3.2-10.

5 - NO-6 cont.

c. Air Quality Impacts: The summary of applicable regulations in Section 3.3.3.3 and the analysis of air quality impacts doesn't acknowledge City of Brisbane regulations for dust control in BMC Ch. 15.01, Section 15.01.510 (defers to BAAQMD CEQA guidelines, plus additional provisions for water truck to be present on-site at all times)

6 - AQ-5

d. Cumulative Analysis: The description of the California High Speed Rail (HSR) project does not reflect the agreement between HSR and the City of Brisbane of August 31, 2024. This agreement is detailed on the City of Brisbane's website here: https://www.brisbaneca.org/city-attorney/page/california-high-speed-rail-authority-and-city-brisbane-reach-settlement. Additionally, Chapters 3, 7 and 8 of the Draft EIR for the Baylands Specific Plan addresses the modified HSR project in detail.

7 - CP-1

4. Alternatives

a. Alternative D: Baylands Substation. The City of Brisbane objects to the inclusion of this alternative and the impact analysis provided in the DEIR for the following reasons:

i. The impact analysis doesn't acknowledge conflicts with Brisbane General Plan designation for residential land use in the proposed substation location. A substation is not compatible with residential land uses.

ii. The impact analysis does not acknowledge the Baylands Specific Plan presently under consideration by the City of Brisbane which would also pose a land use conflict.

8 - AL-2

Thank you for considering the City's comments. Should you have any questions, please contact Principal Planner Julia Ayres at jayres@brisbaneca.org or (415) 508-2129.

Sincerely,

John Swiecki

John Swiecki, AICP
Community Development Director

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

DISTRICT 4
OFFICE OF REGIONAL AND COMMUNITY PLANNING
P.O. BOX 23660, MS–10D | OAKLAND, CA 94623-0660
www.dot.ca.gov

May 5, 2025

SCH #: 2023060769
GTS #: 04-SF-2022-00403
GTS ID: 25248
Co/Rt/Pm: Various

Julie Moore & Monica Huggins, Senior Planners
City and County of San Francisco
49 S Van Ness Ave
San Francisco, CA 94103

Re: Pacific Gas and Electric Company (PG&E) Power Asset Acquisition Project – Draft Environmental Impact Report (DEIR)

Dear Julie Moore & Monica Huggins:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the PG&E Power Asset Acquisition Project. The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities. The following comments are based on our review of the March 2025 DEIR.

Please note this correspondence does not indicate an official position or approval by Caltrans on this project and is for informational purposes only.

Project Understanding
The proposed project involves the City and County of San Francisco (the City) purchasing PG&E owned electrical transmission and distribution assets in San Francisco and San Mateo County that are needed to provide electricity service to customers within the city. The City will own, operate, and maintain the electricity grid in San Francisco after the acquisition. The proposed project could require encroachment permit from Caltrans.

Hydrology
Due to the extensive work proposed and the general description of the proposed work in and around State Routes 1, 82 and 101, the following comments are general.

- All proposed developments will need to adhere to the C3 requirements of the Municipal Regional Permit (MRP) to ensure post-project surface flows, due to rainfall, to/from State routes will match or be less than pre-project surface flows. 1 - HY-1

- All proposed developments will need to ensure there are no changes in existing drainage patterns to/from State routes or facilities.
- Any existing drainage easements, maintenance agreements or other access agreements with PG&E which will or could affect Caltrans or the City's ability to access and maintain drainage or other State-owned facilities will need to be reviewed by legal professionals and Right-of-Way (ROW) staff to ensure State facilities can be properly maintained.
- All proposed development plans will need to show how surface flows are intercepted, stored and conveyed to State facilities and demonstrate that all drainage flows to State facilities are adequately contained within City or State drainage systems. A drainage report for each proposed development is suggested. Any floodplain impacts must be documented and mitigated.

1 - HY-1 cont.

Encroachment Permit

Please review Chapter 17 of the Caltrans Project Development Procedures Manual (*link*) and Ch. 600 of the Caltrans Encroachment Permit manual (*link*) to be aware of the Caltrans policy on utilities and encroachments, and property rights that PG&E may have within Caltrans' ROW in the various locations where the City will be acquiring physical infrastructure and relocating or upgrading that infrastructure.

Please be advised that any temporary or permanent work including traffic control that encroaches in, under, or over any portion of the State highway ROW requires a Caltrans-issued encroachment permit.

The Office of Encroachment Permits requires 100% complete design plans and supporting documents to review and circulate the permit application package. The review and approval of encroachment projects is managed through the Encroachment Permits Office Process (EPOP) or the Project Delivery Quality Management Assessment Process (QMAP), depending on project scope, complexity, and completeness of the application. Please use the following resources to determine the appropriate review process:

- TR-0416 Applicant's Checklist (*link*)
- Caltrans Encroachment Projects Processes – Information Video (*link*)
- Flowchart, Figure 1.2 in Section 108, Overview of the Encroachment Review Process, of Chapter 100 – The Permit Function, Caltrans Encroachment Permit Manual (*link*)

2 - GC-1

The permit approval typically takes less than 60 days, but may take longer depending on the project scope, size, complexity, completeness, compliance with applicable laws, standards, policies, and quality of the permit package submitted. Projects

requiring exceptions to design standards, exceptions to encroachment policies, or external agency approvals may need more time to process.

To obtain more information and download the permit application, please visit Caltrans Encroachment Permits (*link*).

2 - GC-1 cont.

Cultural Resources

Should construction activities within Caltrans' ROW take place in relation to this project, these mitigation measures shall be implemented if there is an archaeological discovery. If there is an inadvertent archaeological or burial discovery within Caltrans' ROW, please immediately contact the Caltrans Office of Cultural Resource Studies at (510) 847-1977. A staff archaeologist will evaluate the finds within one business day after contact. Caltrans requires review of any potential data recovery plans within Caltrans' ROW.

3 - CR-3

Construction-Related Impacts

Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, please visit Caltrans Transportation Permits (*link*).

Prior to construction, coordination may be required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the State Transportation Network (STN).

4 - TR-1

Equitable Access

If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

Lead Agency

As the Lead Agency, the City is responsible for all project mitigation, including any needed improvements to the STN. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

5 - GC-1

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Marley Mathews, Associate Transportation Planner, via LDR-D4@dot.ca.gov. For future early coordination opportunities or project referrals, please visit Caltrans LDR website (*link*) or contact LDR-D4@dot.ca.gov.

Sincerely,

YUNSHENG LUO
Branch Chief, Local Development Review
Office of Regional and Community Planning

c: State Clearinghouse

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

April 30, 2025

Julie Moore, Senior Planner
City and County of San Francisco
49 South Van Ness Avenue #1400
San Francisco, CA, 94103
Julie.Moore@sfgov.org

Subject: PG&E Power Asset Acquisition Project, Draft Environmental Impact Report, SCH No. 2023060769, San Francisco and San Mateo Counties

Dear Julie Moore:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a Draft Environmental Impact Report (EIR) from the City and County of San Francisco (City) for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's Lake and Streambed Alteration (LSA) regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

(CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

California Endangered Species Act and Native Plant Protection Act

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA or Native Plant Protection Act (NPPA), either during construction or over the life of the Project. Under CESA, take is defined as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill." Issuance of an ITP is subject to CEQA documentation. If the Project will impact CESA or NPPA listed species, early consultation with CDFW is encouraged, as significant modification to the Project and mitigation measures may be required to obtain an ITP. Issuance of an ITP is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. Fully protected species may not be taken or possessed at any time (Fish and Game Code, §§ 3511, 4700, 5050, and 5515).

CEQA requires a Mandatory Finding of Significance if a Project is likely to substantially impact threatened or endangered species (Pub. Resources Code, §§ 21001(c), 21083, and CEQA Guidelines §§ 15380, 15064, 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code, § 2080 et. seq.

Lake and Streambed Alteration

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et seq., for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank (including associated riparian or wetland resources); or deposit or dispose of material where it may pass into a river, lake, or stream. Work within ephemeral streams, drainage ditches, washes, watercourses with a subsurface flow, and floodplains are generally subject to notification requirements. In addition, infrastructure installed beneath such aquatic features, such as through hydraulic directional drilling, is also generally subject to notification requirements. Any impacts to the mainstems, tributaries and floodplains or associated riparian habitat would likely require an LSA Notification. CDFW, as a responsible agency under CEQA, will consider the draft EIR for the Project. CDFW may not execute a final LSA Agreement until it has complied with CEQA as the Responsible Agency.

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

Raptors and Other Nesting Birds

CDFW has authority over actions that may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections protecting birds, their eggs, and nests include §§ 3503 (regarding unlawful take, possession or needless destruction of the nests or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). Migratory birds are also protected under the federal Migratory Bird Treaty Act.

Fully Protected Species

Fully protected species, such as California Ridgway's rail (*Rallus obsoletus obsoletus,* formerly California clapper rail) or California black rail (*Laterallus jamaicensis coturniculus*) may not be taken or possessed at any time and no licenses or permits may be issued for their take except as follows:

- Take is for necessary scientific research;
- Efforts to recover a fully protected, endangered, or threatened species, live capture and relocation of a bird species for the protection of livestock, or
- They are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (Fish & G. Code, §§ 3511, 4700, 5050, & 5515).

Specified types of infrastructure projects may be eligible for an incidental take permit for unavoidable impacts to fully protected species if certain conditions are met (Fish & G. Code §2081.15). Project proponents should consult with CDFW early in the project planning process.

PROJECT DESCRIPTION SUMMARY

Proponent: City and County of San Francisco

Objective: The City is proposing to purchase Pacific Gas and Electric (PG&E) owned electrical transmission and distribution assets in San Francisco and San Mateo County that are needed to provide electricity service to customers within San Francisco. After acquisition of assets, the City would own, operate and maintain the electricity grid in San Francisco, most of which is currently owned by PG&E. The project does not include the purchase of PG&E's natural gas facilities.

The change in ownership itself would not result in physical changes to the environment requiring environmental review; however, construction would be needed to physically

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

separate PG&E's existing electric system into two separate systems (generally divided along the San Francisco/San Mateo County border), to allow both systems to be safely, reliably, and independently operated by the City and PG&E. The City would provide electricity service to city customers; PG&E would continue to provide electricity service to its customers outside of San Francisco. The EIR focuses on these areas where physical changes to the environment would occur as a result of the Project.

The portion of the Project requiring new construction or modifications to existing facilities would primarily be in the southern portion of San Francisco and along the county border in the northern portions of the cities of Brisbane and Daly City. The City would modify the existing Martin Substation (or construct a new substation, which is analyzed in the draft EIR as a new substation variant), construct new underground express distribution feeders, and modify the existing distribution infrastructure. The distribution express feeders alignment would be approximately 3.8 miles long and generally installed within streets, sidewalks, and other publicly owned land. It would extend from near Arch Street in the west, south to Brotherhood Way and Sagamore Street, east along Sickles Avenue, northeast along Huron Avenue and Alemany Boulevard, and southeast along Geneva Avenue to the Martin Substation in Brisbane. Disconnecting and connecting distribution lines between overhead poles and underground vaults could occur either above- or below-ground, and would be performed in small, discontinuous areas generally located near the county border.

Location: Cities of Brisbane, Daly City, San Francisco, in San Francisco and San Mateo Counties.

Timeframe: Construction associated with the Project would take approximately three years after the purchase and transfer of the assets.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

I. Project Description and Related Impact Shortcoming

Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or U.S. Fish and Wildlife (USFWS)?

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

COMMENT 1: Riparian Delineation and Setbacks

Issue: The draft EIR describes existing conditions within the Project area and states that "although riparian habitat is present around Impound Lake, it was not identified within the limits of the project areas," concluding that no impacts on riparian communities would occur with implementation of the project. However, on page 155 of the Initial Study (DEIR Appendix A), under the "Wetlands and Other Waters" section in the review of potential impacts to biological resources, the draft EIR states that "an aquatic resources delineation to identify the boundaries of aquatic resources under the jurisdiction of [the] federal and state regulatory agencies was not conducted for the project or project variant." Further, cursory review of the Project area reveals the presence of creeks adjacent to Lake Merced and within Visitacion Valley near Brisbane Lagoon.

Per CEQA Guidelines section 15125 (a), EIRs must include descriptions of the physical environmental conditions in the vicinity of the Project, and this environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant, the purpose of which is to give the public and decision makers the most accurate and understandable picture practically possible of the Project's likely near-term and long-term impacts. The draft EIR does not provide sufficient information on the location and extent of aquatic resources and their associated riparian areas within the Project area and inhibits meaningful review of potential significant impacts of development within the Project area. 1 - BI-3

Specific impact, why impact would occur, and evidence impact would be significant: Riparian vegetation, and associated floodplains, provide many essential benefits to stream and aquatic species habitat (Moyle 2002, CDFW 2007). Development within or adjacent to riparian zones can result in fragmentation of riparian habitat and decreases in native species abundance and biodiversity (Davies et al. 2001, CDFW 2007). Riparian buffers help keep pollutants from entering adjacent waters, benefiting species who rely on those waters for habitat and drinking water. Narrow riparian buffers are considerably less effective in minimizing the effects of adjacent development than wider buffers (Castelle et al. 1992, Brosofske et al. 1997, Dong et al. 1998, Kiffney et al. 2003, Moore et al. 2005).

Riparian habitats also contribute to bank stability and provide flood protection. Development can modify natural streamflow patterns by increasing the magnitude and frequency of high flow events and storm flows (Hollis 1975, Konrad and Booth 2005). Riparian habitat and adjacent wetlands and floodplains are critical to lessening these impacts because they store and meter floodwaters, recharge groundwater aquifers, trap sediment, filter pollution, help minimize erosion, lessen peak flow velocities, and protect against storm surges. In doing so, they protect

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

adjacent upland, down-stream, and coastal properties from loss and damage during flooding and help maintain surface and groundwater during summer months.

Recommendation 1: CDFW recommends the draft EIR include sufficient information to facilitate meaningful review of potentially significant impacts of Project development within any streams and riparian habitat. Specifically, CDFW recommends conducting aquatic resources delineations and habitat assessments to determine the locations, extent, and vegetation composition of riparian areas in the Project area and include this information in detailed map depictions in the draft EIR. The following site-specific mitigation measure is recommended for inclusion in the draft EIR to protect riparian areas:

1 - BI-3 cont.

Recommended Riparian Setback Mitigation Measure: Prior to Project development in the vicinity of streams, wetlands, or other aquatic areas, an agency-approved qualified biologist shall conduct habitat surveys to identify riparian boundaries and determine the size of site-specific buffers necessary to protect riparian areas. Consideration for appropriate riparian buffer widths shall depend on site-specific characteristics such as the area and type of habitat to be buffered, the presence of habitat for sensitive species and their potential habitat use, site topography, slope, slope stability, and soils present at a particular site.

Would the Project have a substantial adverse effect, either directly or through habitat modifications on any specied identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS?

COMMENT 2: Impact Uncertainty

Issue: The draft EIR includes a table on Construction Assumptions for the Project (Table 2-10), which summarizes construction duration, necessary equipment, and estimated volume and depth of soil to be excavated for specific Project construction activities, such as “System Reinforcements,” which would involve excavation of 35,100 cubic yards of soil to a maximum depth of 15 feet. The draft EIR also includes a figure (Figure 2 of the Biological Resources Technical Memorandum in Appendix H), depicting the “Reinforcement Boundary” within the Project extent, along with mapped sensitive resource habitats. The extent of the Reinforcement Boundary spans areas that provide habitat for sensitive species, such as grasslands and scrub at San Bruno Mountain, aquatic habitat in and adjacent to Lake Merced, and salt marsh wetlands in and adjacent to Brisbane Lagoon. It is unclear whether and to what extent “System Reinforcements” as described in Table 2-10 of the draft EIR would occur within the “Reinforcement Boundary” depicted in Figure 2. Comments 3-6 of this letter are included based on the assumption that System Reinforcements would occur within the mapped Reinforcement Boundary.

2 - PD-1

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

Recommendation 2: CDFW recommends the EIR include sufficient information to facilitate meaningful review of potentially significant impacts of Project development in habitats with sensitive resources. Specifically, CDFW recommends clarifying the location and extent of impacts of Project activities, specifically System Reinforcements, within sensitive habitat, and including this information in a detailed map, along with details on impact acreage. CDFW also recommends the Lead Agency consider the recommendations provided in Comments 3-6, which address species-specific concerns relating to ground-disturbance and Project construction within the Project Reinforcement Boundary.

2 - PD-1 cont.

COMMENT 3: Special-Status Plants

Issue: Appendix H of the draft EIR identifies the potential for special-status plant species to occur within the Project area, including San Francisco lessingia (*Lessingia germanorum*), and states that "there is one occurrence of this species within Harding Park near Lake Merced approximately 0.5 miles from the Project area and one occurrence on the west side of San Bruno Mountain approximately 0.2 miles from the Project area," and that the occurrence at San Bruno Mountain is likely extant. The draft EIR, however, does not provide avoidance, minimization or mitigation measures to address potential temporary or permanent impacts to special-status plant species due to Project activities.

Specific impact, why impact would occur, and evidence impact would be significant: San Francisco lessingia is a plant species listed as endangered under the California Endangered Species Act (CESA), and has a California Rare Plant Rank (CRPR) of 1B.1. Plants with a CRPR of 1B are rare throughout their range, endemic to California, and are seriously or fairly threatened. Most plants that are ranked 1B have declined significantly over the last century. The additional threat rank of 0.1 indicates that over 80 percent of their occurrences are threatened.

The conservation of special-status native plants is essential to maintaining biodiversity in the California Bay Area. Native plants are better adapted to the local environment, allowing them to grow more efficiently, require less maintenance, and provide habitat resources for other native species (Berthon et al. 2020). Industrial land development is a leading threat to endangered plant communities, causing resource depletion through direct habitat replacement and increased input of pollutants into the environment (Czech et al. 2000). Limited distribution and small population sizes of special-status plants can increase the difficulty in species detection, and robust survey efforts are imperative to determine whether plant species protected under the CESA and NPPA occur within the Project area. Robust and timely survey efforts are a necessary first step in avoiding take of listed species.

3 - BI-2

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

If any special-status plants, including San Francisco lessingia, occur within or adjacent to Project sites and would be directly or indirectly impacted by Project development, the Project may result in a substantial reduction in the number or restriction in the range of endangered, rare, or threatened species, a mandatory finding of significance pursuant to CEQA Guidelines section 15065, subdivision (a).

Recommendation 3: CDFW recommends the EIR incorporate the following mitigation measure to avoid, minimize, and mitigate potential impacts on special-status plants.

> **Recommended Special-Status Plant Mitigation Measure:** A qualified biologist shall conduct botanical surveys prior to construction at all Project sites where suitable habitat occurs (e.g., not composed of hardscape or ornamental vegetation), Surveys shall be conducted during the appropriate blooming period forall special-status plants that have the potential to occur at or adjacent to each site where plants could be directly and/or indirectly impacted. Surveys shall be conducted following CDFW's Protocol for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities (https://wildlife.ca.gov/Conservation/SurveyProtocols#377281280-plants) and include checking reference sites for target special-status plant species. Per this protocol, more than one year of surveys may be necessary if, for example, lack of rain inhibits growth of annual plants. If any special-status plant species are observed, the Project shall fully avoid direct and indirect impacts to all individuals and provide an avoidance plan to CDFW and obtain CDFW written approval of the plan. If full avoidance is not possible, Project activities may not commence until the Project has consulted with CDFW and obtained CDFW's written approval prior to the start of construction, which may include salvaging topsoil, transplanting and monitoring individuals, compensatory habitat mitigation, or other measures, based on the life history of the species and other relevant factors.

3 - BI-2 cont.

COMMENT 4: Crotch's Bumble Bee

Issue: The draft EIR does not identify potential impacts to Crotch's bumble bee (*Bombus crotchii*, CBB). The current range of CBB encompasses the Project area, and proposed Project activities could impact bumble bees if they are present on-site. The draft EIR does not include avoidance, minimization or mitigation measures to protect potential CBB that may occur within the Project area.

Specific impacts, why they may occur and be potentially significant: CBB is a candidate species under CESA and therefore should be considered a threatened, endangered, or rare species under CEQA pursuant to CEQA Guidelines section 15380. Many bumble bee species, including CBB, once common in the western

4 - BI-1

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

United States, have undergone a dramatic decline in both distribution and abundance and are now extirpated from much of their historic ranges. Many bumble bees are threatened with extinction due primarily to reductions in habitat from urbanization, intensive agriculture, and invasive species introductions.

Bumble bees, including CBB, are found in a wide variety of natural, agricultural, urban and rural habitats, and require suitable nesting and overwintering sites as well as availability of nectar and pollen from floral resources (Hatfield et al. 2018). Potential nest habitat utilized from late February to late October includes underground abandoned small mammal burrows, perennial bunch grasses and/or thatched annual grasses, brush piles, old bird nests, dead trees, or hollow logs. Overwintering sites are utilized from November through early February by mated queens in self-excavated hibernacula, and could be present in soft, disturbed soil, sand, well-drained or loose soils, under leaf litter or other debris with ground cover requisites such as barren areas, tree litter, and bare patches within short grass in areas lacking dense vegetation. Any near-surface or subsurface ground disturbance within Project sites could result in the direct take of bumble bee colonies or overwintering queens. Bumble bees are generalist foragers, and do not depend on any one flower type, often visiting native and non-native flowering plants alike to collect the pollen and nectar resources needed to sustain their colonies and provision nest cells. Vegetation removal, including removal of any flowering plants within the Project area, could impact bumble bee habitat.

4 - BI-1 cont.

If CBB are injured or killed, or their habitat is removed as a result of Project development, the Project may result in a substantial reduction in the number or restriction in the range of a threatened species or endangered species, a Mandatory Finding of Significance pursuant to CEQA Guidelines section 15065, subdivision (a)(1).

Recommendation 4: CDFW recommends the EIR provide an assessment of the potential for the Project to impact CBB, and to incorporate the following mitigation measure to avoid, minimize, and mitigate potential impacts on CBB.

Recommended Crotch's Bumble Bee Mitigation Measure: CBB habitat assessments shall be performed in Project sites that may provide suitable CBB habitat and that could be impacted by Project development. The habitat assessment shall be conducted by a qualified biologist knowledgeable with the life history and ecological requirements of CBB, and include all areas of suitable overwintering, nesting, and foraging habitats within 100 feet of proposed work areas.

In areas with potential CBB habitat, pre-construction surveys for CBB individuals shall be conducted by a qualified biologist between March to August. Surveys

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

shall include a minimum of three survey efforts, over a three-day period within a temperature range of 15 degrees Celsius and 30 degrees Celsius. If the qualified biologist suspects CBB detection or occupancy, CDFW shall be consulted immediately. CBB survey results shall be considered valid for one year at a given site, but additional surveys shall be performed prior to ground-disturbing activities at the discretion of the qualified biologist in consultation with CDFW. If surveys document the presence of CBB within Project sites, the City shall consult with CDFW prior to construction to determine if a CESA ITP authorization is required.

Further, if CBB are detected during surveys, the qualified biologist shall identify the location of all nests in or adjacent to Project sites. If nests are identified, a minimum 45-foot no-disturbance buffer zones shall be established around nests. The qualified biologist shall expand buffer zones as necessary to prevent disturbance and avoid take.

Bumble bee floral resources shall be mitigated at a 3:1 ratio for any permanent impacts to CBB habitat. Floral resources shall be replaced as close to their original location as is feasible. If active CBB nests have been identified and floral resources cannot be replaced within 600 feet of their original location, floral resources shall be planted in the most centrally available location relative to identified nests. This location shall be no more than 4,900 feet (1.5-kilometers) from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests.

4 - BI-1 cont.

COMMENT 5: California Ridgway's Rail and California Black Rail

Issue: The draft EIR depicts a portion of the Project area as occurring adjacent to northern coastal salt marsh habitat that supports populations of California Ridgway's rail (CRRA) and California black rail (BLRA). The drafty EIR identifies CRRA as occurring in the vicinity of the Project area and states that although the "area is unlikely to support breeding habitat for this species, [it] may provide temporary foraging habitat." The draft EIR, however, does not include analysis of the potential for Project development to impact CRRA or BLRA, nor does it include measures to avoid, minimize or mitigate potentially significant impacts to CRRA or BLRA.

Specific impact, why impact would occur, and evidence impact would be significant: CRRA is a state and federally endangered and state fully protected species, and BLRA is a state threatened and state fully protected species. These species are at great conservation risk and are experiencing serious population declines or range retractions. Project activities could include impacts such as generation of noise, groundwork, and operation and movement of equipment and workers that would have the potential to disturb CRRA or BLRA foraging, roosting, and nesting. Direct mortality of CRRA or BLRA could occur through nest

5 - BI-2

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

abandonment, loss of potential foraging habitat resulting in reduced reproductive success (loss or reduced health or vigor of eggs or young), inadvertent entrapment or entrainment, or impingement.

If CRRA or BLRA are injured or killed, or their habitat is removed as a result of Project development, the Project may result in a substantial reduction in the number or restriction in the range of a threatened species or endangered species, a Mandatory Finding of Significance pursuant to CEQA Guidelines section 15065, subdivision (a)(1).

Recommendation 5: CDFW recommends the EIR provide an assessment of the potential for the Project to impact CRRA and BLRA, and incorporate the following mitigation measure to avoid, minimize, and mitigate potential impacts on these species.

Recommended CRRA and BLRA Mitigation Measure: A CDFW and USFWS approved biologist shall conduct protocol-level surveys of CRRA and BLRA in all suitable habitats adjacent to the Project using the 2017 California Clapper Rail Survey Protocol to determine where CRRA or BLRA are present in each year of construction (Wood et al. 2017). CDFW staff are available to collaborate to incorporate calls of BLRA into the protocol to ensure that both species are sufficiently surveyed.

If CRRA or BLRA are found in suitable habitat near the Project site, appropriate buffers shall be incorporated to avoid and minimize impacts to CRRA and BLRA. A 700-foot no-work buffer shall be implemented between construction activities and any current-year breeding CRRA and BLRA detections if construction cannot be avoided during the rail breeding season (January 15- August 31 for CRRA, February 1- August 31 for BLRA). If establishing a 700-foot buffer around breeding rail detections is not feasible, noise reducing modifications to equipment as well as portable acoustic barriers/blankets placed near noise sources may be appropriate to reduce auditory and visual impacts to breeding rails. Note that these noise reduction features may be appropriate regardless of time of year to minimize impacts to foraging rails as well. A qualified avian biologist shall advise and support buffer establishment in consultation with CDFW.

Fully protected species such as CRRA and BLRA may not be taken or possessed at any time. In the event a fully protected species is found within or adjacent to the Project site, an agency-approved qualified biologist shall implement an appropriate no-disturbance buffer and allow the individual to leave the Project site of its own volition. The qualified biologist shall also be on-site during all Project activities to ensure that fully protected species are not being disturbed by Project activities.

5 - BI-2 cont.

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

COMMENT 6: California Red-Legged Frog

Issue: California Red-Legged Frog (*Rana draytonii*, CRLF) has the potential to occur within the Project area, but the draft EIR does not adequately discuss or evaluate to what extent direct and/or indirect impacts to CRLF individuals or their habitat may result due to Project activities. The draft EIR states that "there is potentially suitable habitat at Lake Merced and Visitacion Creek Marsh for CRLF." Currently the draft EIR does not include sufficient avoidance, minimization (and potentially mitigation) measures to offset potentially significant impacts to CRLF. Specifically, the draft EIR does not include location-specific habitat delineations to determine if buffers can be developed to avoid CRLF breeding and upland habitat. Overall, the draft EIR does not provide sufficient information to facilitate a meaningful review of potentially significant impacts to CRLF due to Project construction.

Specific impact, why impact would occur, and evidence impact would be significant: CRLF is a species listed as threatened under the Federal Endangered Species Act (ESA) and is a California Species of Special Concern. CRLF requires a variety of habitats, including aquatic breeding habitat and upland dispersal habitat. Construction and/or maintenance activities in suitable habitat has the potential to result in direct and indirect take of CRLF. Project development could injure or kill CRLF if they occur on-site, potentially resulting in a substantial reduction of their populations. Indirect take may occur due to upland habitat loss and degraded site suitability for CRLF to complete all stages of their life cycle.

6 - BI-2

CRLF breeding sites occur in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons. (USFWS 2002). Upland dispersal habitat includes nearly any area within one to two miles of a breeding site that stays moist and cool through the summer, such as aquatic habitat in pools of slow-moving streams, perennial or ephemeral ponds, and sheltering habitat in and amongst rocks, small mammal burrows, logs, densely vegetated areas, and even man-made structures (i.e., culverts, livestock troughs, spring-boxes, and abandoned sheds) (USFWS 2017). CRLF populations throughout the State have experienced ongoing and drastic declines and many have been extirpated (Thomson et al. 2016). Habitat loss from growth of cities and suburbs, mining, overgrazing by cattle, invasion of nonnative plants, impoundments, water diversions, stream maintenance for flood control, degraded water quality, and introduced predators such as bullfrogs are the primary threats to the species (Thomson et al. 2016, USFWS 2017).

Delineations of CRLF habitat components by a qualified expert are necessary to determine the size of suitable buffers to be implemented prior to construction in areas where CRLF may occur. Buffers should include migration corridors, breeding

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

and non-breeding habitat, as well as adjacent land necessary to protect these areas. The design of protected areas and size of construction buffers are often developed under the assumption that only the most sedentary CRLF individuals can or need to be protected, without consideration for individuals that disperse across long distances (Fellers and Kleeman 2007). CRLF have been documented to disperse up to one mile. Far-dispersing individuals provide genetic diversity to distant breeding sites and thus aid the survival of small, disparate populations. Establishing appropriately sized construction buffers and protected areas that consider both short- and long-range CRLF dispersal is essential to protect CRLF individuals, populations, and habitat.

CRLF are federally listed as a threatened species and therefore are considered to be a threatened or endangered species pursuant to CEQA Guidelines section 15380. Therefore, CRLF are injured or killed, or their habitat is removed as a result of the Project, the Project may result in a substantial reduction in the number or restriction in the range of a threatened species or endangered species, which is considered a Mandatory Finding of Significance pursuant to CEQA Guidelines section 15065, subdivision (a)(1).

6 - BI-2 cont.

Recommendation 6: CDFW recommends the EIR include additional information to facilitate meaningful review and understanding of Project impacts on CRLF habitat and populations. Specifically, the EIR should describe the extent of temporary and permanent impacts that would occur to CRLF breeding and/or upland habitat within site-specific Project construction boundaries. The EIR should also incorporate the results of site-specific habitat delineations performed by a qualified professional.

> **Recommended CRLF Mitigation Measure:** The Project shall be designed to avoid impacts to CRLF individuals and habitat. Protocol-level surveys for CRLF individuals and habitat shall be performed by an agency-approved qualified biologist prior to construction in or adjacent to potentially suitable CRLF aquatic and/or upland habitat, including wetlands, riparian areas, grasslands near ponds/wetlands, or other sensitive habitat, following survey protocols approved by USFWS and CDFW. An agency-approved qualified biologist, in consultation with USFWS and CDFW, shall determine appropriate, site-specific buffers to protect CRLF breeding and upland habitat prior to conducting grading or other construction activities.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural

7 - GC-5

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNDDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

7 - GC-5

CONCLUSION

CDFW appreciates the opportunity to comment on the draft EIR to assist the City in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Shannon Husband, Environmental Scientist at (707) 337-1364 or Shannon.Husband@wildlife.ca.gov; or Wesley Stokes, Senior Environmental Scientist (Supervisory), at Wesley.Stokes@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Stacy Sherman for Erin Chappell
692D021D81CA4F7...

Erin Chappell
Regional Manager
Bay Delta Region

ec: Office of Planning and Research, State Clearinghouse, Sacramento
Craig Weightman, CDFW Bay Delta Region – Craig.Weightman@wildlife.ca.gov

REFERENCES

Berthon, K., Thomas, F., and Bekessy S. 2020. The role of 'nativeness' in urban greening to support animal biodiversity. Landscape and Urban Planning 205 (2021) 103959.

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

Brosofske, K.D., J. Chen, R.J. Naiman, and J.F. Franklin. 1997. Harvesting effects on microclimatic gradients from small streams to uplands in western Washington. Ecological Applications 7:1188-1200.

Castelle, A.J., C. Conolly, M. Emers, E.D. Metz, S. Meyer, M. Witter, S. Mauermann, T. Erickson, and S.S. Cooke. 1992. Wetlands buffers use and effectiveness. Adolfson Associates, Inc., Shorelands and Coastal Zone Management Program, Washington Department of Ecology, Olympia, WA. Pub. No. 92-10.

CDFW. 2007. California wildlife: conservation challenges. California Department of Fish and Game, Sacramento, CA.

Czech, Brian & Krausman, Paul & Devers, Patrick. (2000). Economic Associations Among Causes of Species Endangerment in the United States. Bioscience. 50. 10.1641/0006-3568(2000)050[0593:EAACOS]2.0.CO;2.

Davies, K.F., C. Gascon, and C.R. Margules. 2001. Habitat fragmentation: consequences, management, and future research priorities. Pages 81-97 in: M.E. Soule and G. H. Orians, (eds.) Conservation Biology: Research Priorities for the Next Decade. Island Press, Washington, DC.

Dong, J., J. Chen, Brosofske, K.D., and R.J. Naiman, 1998. Modeling air temperature gradients across managed small streams in western Washington. Journal of Environmental Management 53:309-321.

Fellers, G.M. and Kleeman, P.M. 2007. California Red-Legged Frog (*Rana draytonii*) Movement and Habitat Use: Implications for Conservation. Journal of Herpetology, Vol. 41 (2), pp. 271-281.

Hatfield, R., S. Jepsen, S. F. Jordan, M. Blackburn, and A. Code. 2018. A petition to the state of California Fish and Game Commission to list the Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and western bumble bee (*Bombus occidentalis occidentalis*) as endangered under the California Endangered Species Act. Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and Center for Food Safety. Sacramento, CA. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=161902&inline.

Kiffney, P. M., J. S. Richardson, and J. P. Bull. 2003. Responses of periphyton and insects to experimental manipulation of riparian buffer width along forest streams. Journal of Applied Ecology 40:1060-1076.

Docusign Envelope ID: 810ABCDB-6344-4670-86AD-13C5CF8C6BC3

Moore, R. D., D. L. Spittlehouse, and A. Story. 2005. Riparian microclimate and stream temperature response to forest harvesting: a review. Journal of the American Water Resources Association 41:813-834.

Moyle P.B. 2002. Inland fishes of California. University of California Press. Berkeley, CA.

Thompson, R.C., A.N. Wright, and H.B. Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press and California Department of Fish and Wildlife.

U.S. Fish and Wildlife Service. 2002. Recovery Plan for the California Red-legged Frog (Rana aurora draytonii). U.S. Fish and Wildlife Service, Portland, Oregon. viii + 173 pp.

U.S. Fish and Wildlife Service. 2017. Species Account for California Red-legged frog. December 2017. Zweifel, R. G. 1955. Ecology, distribution, and systematics of frogs of the Rana boylii group. University of California Publications in Zoology 54 (4):207–292. https://www.fws.gov/sacramento/es_species/Accounts/Amphibians Reptiles/ca_red_legged_frog/

Those are my comments, and I'm looking to hear what other commissioners have to say.

Commissioner Imperial.

COMMISSIONER IMPERIAL: I have more of a question in terms of I -- not necessarily the EIR, but I guess, is how the EIR is going to also impact or the jurisdiction of other cities as well and whether they're also going to provide comment. I'm assuming they're also going to provide comment for the EIR and whether those will be part of the -- the response to the EIR. 1-GC-2

So I'm looking forward to that actually, what other counties would look into. So, yeah. So that's my, I guess, rhetorical question.

COMMISSIONER MOORE: Commissioner Williams.

COMMISSIONER WILLIAMS: Thank you.

Thank you for the presentation. I didn't -- unfortunately, I didn't have a real opportunity to look through the EIR like I would have liked to, but just the notion of being free of PG&E for just -- just, you know, understanding the history of PG&E and some of the tragedies that have happened while I've grown up here.

And, you know, having said all that, you know, obviously there's a viability, you know, how -- and I think folks will be interested in, you know, what -- is this really a reality. But I will say that I am in

support of San Francisco being in control of its own power. I think that could be a positive thing, especially if our rates go down, you know, which I think everyone's concerned with.

And so that's about all I have to say, but thank you again for your presentation. I know this has been something that's been ongoing for many years. I've heard it in, you know, in the news, and I've known that different supervisors and the City have brought all of this forward, and so -- yeah, so I'm interested in hearing more and learning more and -- and thank you.

COMMISSIONER MOORE: Commissioner McGarry.

COMMISSIONER MCGARRY: I'd agree with my fellow commissioners. I look forward to listening to all the professionals as we go forward because, as Commissioner Williams just said, our ability to get free of PG&E is a glorious thought, and there is a bad history, there is a bad feeling, there is -- my neighbors, nobody's happy with PG&E. And when --when they actually have to come and do work, they can't do it. The crews are actually from out of state. You know?

So anything we can do to bring that home, put people to work building San Francisco. Apparently, we don't have the land, so Brisbane is as close as we'll get, and the structures there. But yes, I look forward

1 - GC-3

to hearing how we can get to, basically, our own power because Hetch Hetchy is ours to begin with. So, thank you.

COMMISSION SECRETARY IONIN: If there's no further comment, commissioners, we can move on to item 8.

(Whereupon the hearing on agenda item #7 was adjourned at 3:10 p.m.)

---oOo---

1 - GC-3 cont.

Again, I rely on your goodwill, your judgment and your passion for the City to help facilitate this. Thank you very much.

COMMISSION SECRETARY IONIN: Okay. Final last call for public comment.

Seeing none, public comment is closed and this matter is now before you, commissioners.

COMMISSIONER MOORE: Let me just briefly start with staying that the thoroughness and confidence of the department's EIRs has always been outstanding.

I am in support just examining the possibilities of finding an alternative without advertising or making a marketing pitch for either; that's not my role. However, personally speaking, the subject matter itself is extremely complicated, it is highly technical and it's way above my pay grade. I can only say that what I see, reading, for those parts of the DEIR that I read, they felt well informed and assume that the technical depths with which things are being examined are also looked at by experts in the field, who will, in written comment, comment on this DEIR. They are not here today, and the -- ultimately, the draft EIR will shape itself into a final EIR based on the pushback, or the challenges, or the support that the public and experts in the field will lend to this discussion.

1 - GC-5

Those are my comments, and I'm looking to hear what other commissioners have to say.

Commissioner Imperial.

COMMISSIONER IMPERIAL: I have more of a question in terms of I -- not necessarily the EIR, but I guess, is how the EIR is going to also impact or the jurisdiction of other cities as well and whether they're also going to provide comment. I'm assuming they're also going to provide comment for the EIR and whether those will be part of the -- the response to the EIR.

So I'm looking forward to that actually, what other counties would look into. So, yeah. So that's my, I guess, rhetorical question.

COMMISSIONER MOORE: Commissioner Williams.

COMMISSIONER WILLIAMS: Thank you.

Thank you for the presentation. I didn't -- unfortunately, I didn't have a real opportunity to look through the EIR like I would have liked to, but just the notion of being free of PG&E for just -- just, you know, understanding the history of PG&E and some of the tragedies that have happened while I've grown up here.

And, you know, having said all that, you know, obviously there's a viability, you know, how -- and I think folks will be interested in, you know, what -- is this really a reality. But I will say that I am in

1 - GC-5 cont.

Those are my comments, and I'm looking to hear what other commissioners have to say.

Commissioner Imperial.

COMMISSIONER IMPERIAL: I have more of a question in terms of I -- not necessarily the EIR, but I guess, is how the EIR is going to also impact or the jurisdiction of other cities as well and whether they're also going to provide comment. I'm assuming they're also going to provide comment for the EIR and whether those will be part of the -- the response to the EIR.

So I'm looking forward to that actually, what other counties would look into. So, yeah. So that's my, I guess, rhetorical question.

COMMISSIONER MOORE: Commissioner Williams.

COMMISSIONER WILLIAMS: Thank you.

Thank you for the presentation. I didn't -- unfortunately, I didn't have a real opportunity to look through the EIR like I would have liked to, but just the notion of being free of PG&E for just -- just, you know, understanding the history of PG&E and some of the tragedies that have happened while I've grown up here.

1 - GC-3

And, you know, having said all that, you know, obviously there's a viability, you know, how -- and I think folks will be interested in, you know, what -- is this really a reality. But I will say that I am in

support of San Francisco being in control of its own power. I think that could be a positive thing, especially if our rates go down, you know, which I think everyone's concerned with.

And so that's about all I have to say, but thank you again for your presentation. I know this has been something that's been ongoing for many years. I've heard it in, you know, in the news, and I've known that different supervisors and the City have brought all of this forward, and so -- yeah, so I'm interested in hearing more and learning more and -- and thank you.

1 - GC-3 cont.

COMMISSIONER MOORE: Commissioner McGarry.

COMMISSIONER MCGARRY: I'd agree with my fellow commissioners. I look forward to listening to all the professionals as we go forward because, as Commissioner Williams just said, our ability to get free of PG&E is a glorious thought, and there is a bad history, there is a bad feeling, there is -- my neighbors, nobody's happy with PG&E. And when --when they actually have to come and do work, they can't do it. The crews are actually from out of state. You know?

So anything we can do to bring that home, put people to work building San Francisco. Apparently, we don't have the land, so Brisbane is as close as we'll get, and the structures there. But yes, I look forward

STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

May 16, 2025

Julie Moore, Principal Environmental Planner
City and County of San Francisco
San Francisco Planning
49 South Van Ness Avenue, Suite 1400
San Francisco, California 94103
Submitted via email to CPC.PGEPowerAssetsEIR@sfgov.org

Subject: Comments on the Draft Environmental Impact Report for the City and County of San Francisco's PG&E Power Asset Acquisition Project

Reference: Case No. 2023-005370ENV, State Clearinghouse No. 2023060769

Dear Ms. Moore:

The Energy Division of the California Public Utilities Commission (CPUC) herein submits its comments on the City and County of San Francisco's (City) Draft Environmental Impact Report (DEIR) for the City's PG&E Power Asset Acquisition Project.

The California Constitution grants CPUC with the authority to regulate public utilities to ensure that safe and reliable utility service and infrastructure is provided at reasonable rates to all in California, with a commitment to environmental enhancement and a healthy California economy. Public Utilities Code (PUC) Section 851 requires that a public utility shall not sell, lease, assign, mortgage, or otherwise dispose of, or encumber the whole or any part of its line, plant, system, or other property necessary or useful in the performance of its duties to the public, or any franchise or permit or any right thereunder, or by any means whatsoever, directly or indirectly, merge or consolidate its line, plant, system, or other property, or franchises or permits or any part thereof, without first having either secured an order from the California Public Utilities Commission authorizing it to do so. PUC Section 851 applies to involuntary changes in ownership pursuant to Senate Bill 550 (2019 Hill).

Because the City's proposed PG&E Power Asset Acquisition Project (Project) would entail (1) the purchase ("acquisition") of Pacific Gas and Electric Company (PG&E)-owned electrical transmission and distribution assets ("Assets") located in San Francisco and San Mateo counties that are needed to provide electric service to customers within San Francisco, and (2) other transactions and physical changes necessary for the City to own, operate, and maintain the electricity grid in San Francisco ("separation") (DEIR, at page ES-1), the Project is subject to PUC Section 851.

STATE OF CALIFORNIA

PUBLIC UTILITIES COMMISSION

PUC Section 853(d) requires that the CPUC maintain all of its oversight and review responsibilities subject to the California Environmental Quality Act (CEQA) as follows:

> (d) It is the intent of the Legislature that transactions with monetary values that materially impact a public utility's rate base should not qualify for expedited advice letter treatment pursuant to this article. It is the further intent of the Legislature that the commission maintain all of its oversight and review responsibilities subject to the California Environmental Quality Act, and that public utility transactions that jurisdictionally require a review by the commission, as the lead agency, under the act should not qualify for expedited advice letter treatment pursuant to this article. An advice letter may be filed for transactions by the public utility if the lead agency has completed the appropriate review under the California Environmental Quality Act for the transaction, and the commission is the responsible agency under the act. The advice letter shall be subject to approval by resolution voted upon by the commission.

The City's proposed transaction does not qualify for advice letter treatment by the CPUC. Therefore, CPUC must make CEQA findings for the proposed transaction. The City's DEIR is not currently adequate for the CPUC's use for the following reasons:

1. The City's EIR only analyzes the following project components at the program level, whereas the CPUC will require an analysis of these components at the project level:

   - Local Distribution System Separation (Section 2.4.3);
   - System Reinforcements Associated with Distribution System Separation (Section 2.4.4);
   - Other Separation Components (Section 2.4.6)

   Specifically, an analysis of these project components is required on a project-level to adequately evaluate impacts on utilities and service systems. Design details will be required for these components including the exact planned disposition of all existing poles, towers, lines, and other equipment (e.g., such as transformers); proposed new poles, towers, lines, and equipment; areas of disturbance; methods of construction; and the proposed timing and schedule for all improvements. These details and power flow analyses will also be required for all proposed changes to PG&E's subtransmission and transmission system as well (all infrastructure >50 kilovolts).[1] As the DEIR noted, power flow analyses will be required for these proposed project

1 - PD-2

[1] CPUC considers all infrastructure rated 50 kilovolts or less as "distribution," whereas infrastructure between 50 and 200 kV is considered subtransmission (e.g., power lines) and greater than 200 kV is transmission (e.g., transmission lines) (CPUC General Order 131-E).

components to demonstrate the proposed changes to electrical service both within the City's service territory and outside of the City's service territory. The power flow analyses must consider current and future forecasted load and must evaluate performance under normal system conditions, single contingency conditions, and double contingency conditions for each alternative including the no project, the proposed project, and other project alternatives. 1 - PD-2 cont.

2. In PG&E's December 2017 Proponent's Environmental Assessment submitted to the CPUC for the Egbert Switching Station-Martin Substation Expansion Project Certificate of Public Convenience and Necessity (CPCN) application (A.17-12-021), Figure 2.3-3 (at page 2-7) indicates that the area supplied by the Martin Substation could differ substantially from the area assumed to be supplied by the Martin Substation in the City's EIR. Specifically, a large area assumed to be supplied by the Martin Substation in the City's EIR, appears to be supplied by the Daly City and Serramonte Substations. This discrepancy should be reconciled to ensure that the proposed local distribution separation components, system reinforcement components, and other separation components would not adversely affect the electrical service provided by the Daly City and Serramonte Substations. 2 - PD-1

3. A project-level analysis of impacts of all project components on the reliability and resiliency of the electrical service to areas south of the proposed City's service territory is required, including impacts of the Project on electrical service provided by the Transbay Cable to areas south of the proposed City's service territory (e.g., Daly City, South Bay area etc.). 3 - PD-1

4. Details on the disposition of any of PG&E's spare transformers to the City are required as well as an impact analysis on reliability and resiliency associated with this disposition. 4 - PD-1

5. An analysis of the project impacts on telecommunications service and gas service is required. Gas infrastructure is dependent upon electrical service. In addition, telecommunications equipment is often attached to electrical power poles and towers or could be co-located with substations. An analysis of the project impacts on this infrastructure would be required to adequately analyze impacts on utilities and service systems. 5 - UT-1

6. Evaluation of the historical significance of the existing PG&E electrical system components would be required in a historic-era built environment survey report. 6 - CR-2

7. The City would need to include details regarding all infrastructure upgrades needed to make PG&E's separated system operational. 7 - PD-1

We appreciate the opportunity to review the City's DEIR. Please contact me at michelle.wilson@cpuc.ca.gov or (415) 696-7371 with any questions.

STATE OF CALIFORNIA
PUBLIC UTILITIES COMMISSION

Sincerely,



Michelle Wilson
Program and Project Supervisor
CEQA and FERC Branch, Energy Division
California Public Utilities Commission

cc:

Elaine Sison-Lebrilla, Program Manager, CEQA and FERC Branch, Energy Division
Molly Sterkel, Interim Director, Office of Electricity Supply, Planning, & Costs
Leuwam Tesfai, Deputy Executive Director for Energy and Climate Policy
Jason Reiger, Legal Division

Department of Toxic Substances Control

Yana Garcia
Secretary for
Environmental Protection

Katherine M. Butler, MPH, Director
8800 Cal Center Drive
Sacramento, California 95826-3200
dtsc.ca.gov

Gavin Newsom
Governor

SENT VIA ELECTRONIC MAIL

May 9, 2025

Julie Moore
Principal Environmental Planner
San Francisco Planning Department
49 South Van Ness Avenue #1400
San Francisco, CA 94103
Julie.Moore@sfgov.org

RE: DRAFT ENVIRONMENTAL IMPACT REPORT FOR PG&E POWER ASSET ACQUISITION PROJECT DATED MARCH 19, 2025, STATE CLEARINGHOUSE NUMBER 2023060769

Dear Julie Moore,

The Department of Toxic Substances Control (DTSC) reviewed the Draft Environmental Impact Report (DEIR) for PG&E Power Asset Acquisition Project (Project). The City and County of San Francisco (City) is proposing to purchase Pacific Gas and Electric Company (PG&E) owned electrical transmission and distribution assets in San Francisco and San Mateo County that are needed to provide electricity service to customers within the city. After the City completes its acquisition of the Assets, the City would own, operate, and maintain the electricity grid in San Francisco. This project does not include the purchase of PG&E's natural gas facilities; thus, PG&E would continue providing natural gas services to customers in San Francisco. The change in ownership would not result in physical changes to the environment requiring environmental review; however, construction would be needed to physically separate PG&E's existing electric system into two separate systems (generally divided along the San Francisco/San Mateo county border), to allow both systems to be safely, reliably, and independently

operated by the City and PG&E. DTSC recommends and requests consideration of the following comments:

1. Appendix A, Initial Study, Section E.18 Hazards and Hazardous Materials, Page 226. The Initial Study finds that "Groundwater extraction from dewatering of the excavations could result in contaminated water that would require appropriate handling and disposal. Contaminated water could be disposed of into the sanitary sewer in accordance with the requirements of the Bayshore Sanitary District or it would require onsite treatment to remove contaminants prior to disposal in accordance with a NPDES permit."
2. DTSC reiterates that significant polycyclic aromatic hydrocarbon (PAH) and volatile organic compound (VOC) contamination exists within the groundwater beneath OU-2 of the PG&E Martin Service Station site. As such, a groundwater management plan should be prepared alongside the soil management plan discussed in the body of the EIR. The groundwater management plan should include containerization of potentially impacted groundwater collected during dewatering activities and the chemicals the wastewater would be analyzed for prior to disposal. DTSC recommends that the analytical program include the following analytes:

    a) Total Oil and Grease and Non-polar Oil and Grease by EPA Method 1664 with silica gel treatment.

    b) Benzene, toluene, ethylbenzene, and o-, m- and p-xylenes (BTEX) by EPA Method 8260.

    c) PAHs by EPA Method 8270C

    d) Nine metals, total (not dissolved) concentrations: arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), silver (Ag), and zinc (Zn) by EPA 6010.

    e) Sulfide and pH by EPA Test Method 9030 series and 9040B, respectively.

1 - HZ-2

3. DTSC recommends that all imported soil and fill material should be tested to assess any contaminants of concern meet screening levels as outlined in DTSC's Preliminary Endangerment Assessment Guidance Manual. Additionally, DTSC advises referencing the DTSC Information Advisory Clean Imported Fill Material Fact Sheet if importing fill is necessary. To minimize the possibility of introducing contaminated soil and fill material there should be documentation of the origins of the soil or fill material and, if applicable, sampling be conducted to ensure that the imported soil and fill material are suitable for the intended land use. The soil sampling should include analysis based on the source of the fill and knowledge of prior land use. Additional information can be found by visiting DTSC's Human and Ecological Risk Office (HERO) webpage.

2 - HZ-2

DTSC would like to thank you for the opportunity to comment on the DEIR for PG&E Power Asset Acquisition Project. Thank you for your assistance in protecting California's people and environment from the harmful effects of toxic substances. If you have any questions or would like clarification on DTSC's comments, please respond to this letter or via our CEQA Review email for additional guidance.

Sincerely,

Tamara Purvis

Tamara Purvis
Associate Environmental Planner
HWMP - Permitting Division – CEQA Unit
Department of Toxic Substances Control
Tamara.Purvis@dtsc.ca.gov

cc: (via email)

Governor's Office of Land Use and Climate Innovation
State Clearinghouse
State.Clearinghouse@opr.ca.gov

Sue Chau
Project Applicant
San Francisco Public Utilities Commission
SChau@sfwater.org

Monica Huggins
Planner Technician II
San Francisco Planning Department
monica.huggins@sfgov.org

Karen Lancelle
Consultant
ESA
KLancelle@esassoc.com

Jared Wilson
Project Manager
SMRP-Berkeley Office
Department of Toxic Substances Control
Jared.Wilson@dtsc.ca.gov

Marikka Hughes, P.G.
Branch Chief
SMRP – Bay Area Cleanup
Department of Toxic Substances Control
Marikka.Hughes@dtsc.ca.gov

Dave Kereazis
Associate Environmental Planner
HWMP-Permitting Division – CEQA Unit
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

Scott Wiley
Associate Governmental Program Analyst
HWMP - Permitting Division – CEQA Unit
Department of Toxic Substances Control
Scott.Wiley@dtsc.ca.gov

SAN MATEO LAFCO
LOCAL AGENCY FORMATION COMMISSION
455 COUNTY CENTER, 2ND FLOOR • REDWOOD CITY, CA 94063-1663 • PHONE (650) 363-4224 • FAX (650) 363-4849

April 29, 2025

Sent Via Email to CPC.PGEPowerAssetsEIR@sfgov.org

Julie Moore, Planner
City and County of San Francisco
49 South Van Ness Ave, Suite 1400
San Francisco, CA 94103

Subject: PG&E Power Asset Acquisition Project Draft Environmental Impact Report

Dear Julie Moore,

Thank you for the opportunity to comment on the PG&E Power Asset Acquisition Project Draft Environmental Impact Report (DEIR).

The Local Agency Formation Commission (LAFCo) is a state mandated agency established in every county to oversee the boundaries of cities and special districts. Amongst the purposes of San Mateo LAFCo is to encourage the efficient provision of government services amongst San Mateo County's 20 cities, 21 independent special districts, and the 33 active county and city governed special districts.

The DEIR for the PG&E Power Asset Acquisition Project (Project) states that The City and County of San Francisco proposes (1) the purchase of Pacific Gas and Electric Company (PG&E)-owned electrical transmission and distribution assets located in San Francisco and San Mateo counties that are needed to provide electric service to customers within San Francisco, and (2) other transactions and physical changes necessary for the City to own, operate, and maintain the electricity grid in San Francisco. The San Francisco Public Utilities Commission (SFPUC) would be responsible for the continued operations and maintenance of the acquired electrical transmission and distribution system and new infrastructure.

San Mateo LAFCo offers two comments to the PG&E Power Asset Acquisition Project Draft EIR:

1. The DEIR states that as part of the Project, SFPUC would provide electric service to customers in San Francisco currently served by PG&E and that PG&E would continue to provide electric service to its customers outside San Francisco. Following the acquisition of power assets, if in the future, SFPUC proposes to provide electrical services to parcels located in San Mateo County, a LAFCo process would be required. Both San Mateo and San Francisco LAFCos should be consulted if electrical service by SFPUC to parcels in San Mateo County is planned. 1 - GC-2

2. The maps provided in the Draft EIR in Figure 2-1 Project Areas Overview show the areas impacted by the Project, however they do not offer detailed parcel delineation along the San Francisco-San Mateo County border. To ensure the definiteness and certainty of the proposed service area of the Project, San Mateo LAFCo encourages the City and County to work with the relevant agencies in 2 - GC-2

COMMISSIONERS: RAY MUELLER, CHAIR, COUNTY ▪ VIRGINIA CHANG KIRALY, VICE CHAIR, SPECIAL DISTRICT ▪ KATI MARTIN, SPECIAL DISTRICT ▪ DEBBIE RUDDOCK, CITY▪ STEPHEN RAINALDI, CITY ▪ JACKIE SPEIER, COUNTY ▪ ANN DRAPER, PUBLIC
ALTERNATES: KATHRYN SLATER-CARTER, SPECIAL DISTRICT ▪ GREG WRIGHT, CITY ▪ VACANT, PUBLIC ▪ NOELIA CORZO, COUNTY
STAFF: ROB BARTOLI, EXECUTIVE OFFICER ▪ SARAH FLAMM, MANAGEMENT ANALYST ▪ TIM FOX, LEGAL COUNSEL▪ DIANE ESTIPONA, CLERK

San Mateo County to identify which parcels in the Project area are within San Mateo County.

In addition, there are several areas that are not shown in Figure 2-1 regarding how electrical service will be provided. One example of an area on the San Francisco-San Mateo county border where it is unclear as to whom the future power service provider would be is the warehouse space located at 2629 and 2635 Bayshore Hwy (APN 005-340-120 and APN 005-340-110) in the City of Brisbane (see map below). The red line indicates the County border, which splits this warehouse space. The maps contained in the DEIR do not indicate that these parcels are in the Project area and whether SFPUC or PG&E would provide power to this location within San Mateo County.

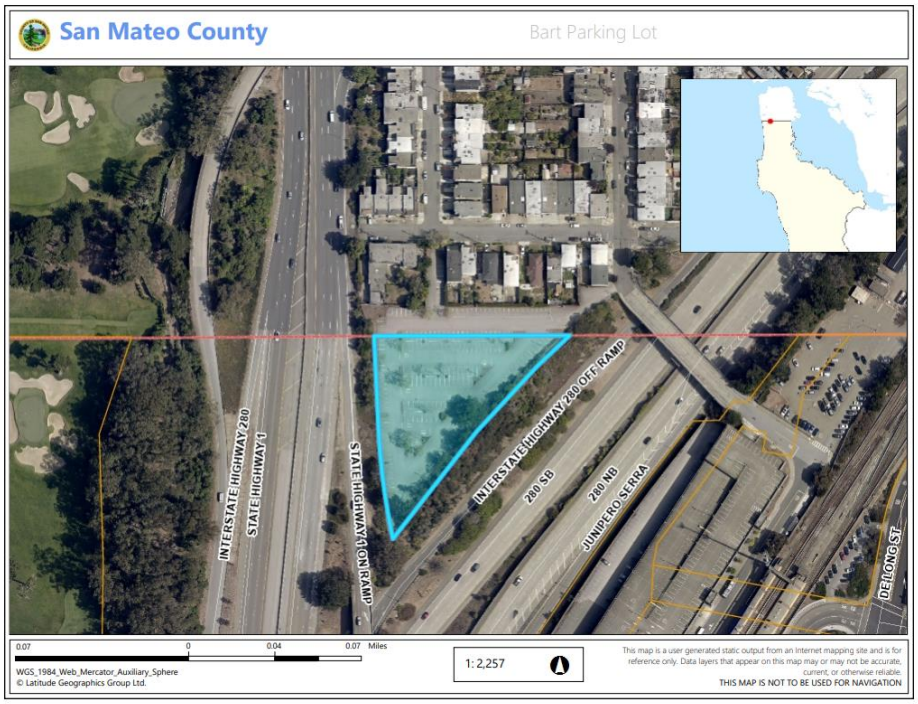
Figure 1. Warehouse space split between San Francisco and San Mateo Counties



Another area that is not identified in the DEIR is the parking lot owned by the Bay Area Rapid Transit (BART) in the City of Daly City (APN 002-221-010). As shown in Figure 2 below, the northern segment of the parking lot is in San Francisco County and southern part is in San Mateo County. San Mateo LAFCo recommends the addition of clarifying language and exhibits in the Final EIR regarding electrical service to these areas and all areas within the Project area that are located in San Mateo County.

2 - GC-2 cont.

Figure 2. BART parking lot split between San Francisco and San Mateo Counties



2 - GC-2 cont.

San Mateo LAFCo looks forward to reviewing all future environmental documents, including the final EIR, and other referrals related to the Project.

Sincerely,

Sarah Flamm,
Management Analyst
sflamm@smcgov.org

CC: County of San Mateo
City of Brisbane
City of Daly City
San Francisco LAFCo

From:	Moore, Julie (CPC)
To:	CPC.PGEPowerAssetsEIR
Subject:	FW: PG&E Power Asset Acquisition Project
Date:	Monday, May 05, 2025 8:52:24 AM
Attachments:	image001.png

Julie Moore
Principal Environmental Planner
Environmental Planning Division
San Francisco Planning Department
49 South Van Ness Avenue, Suite 1400, San Francisco, CA 94103
Direct: 628.652.7566 | www.sfplanning.org
San Francisco Property Information Map

From: Stephanie Shakofsky <sshakofsky@thebaylands.com>
Sent: Friday, May 02, 2025 12:46 PM
To: Moore, Julie (CPC) <julie.moore@sfgov.org>; Chau, Sue (PUC) <SChau@sfwater.org>
Subject: PG&E Power Asset Acquisition Project

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Can you please let me know if the public comment period has been extended for your Draft EIR PG&E Power Asset Acquisition Project San Francisco Planning Case No. 2023-005370ENV (State Clearinghouse No. 2023060769)? I see in the original posting that public comment period ends May 5, 2025. Has this extended and where on your website would the public find current and up-to-date information regarding this project? Thank you in advance. 1 - GC-2

Stephanie Shakofsky | Senior Vice President of Government Affairs
Baylands Development, Inc.
www.thebaylands.com | sshakofsky@thebaylands.com | Direct: 415.484.1813

ADAMS BROADWELL JOSEPH & CARDOZO
A PROFESSIONAL CORPORATION

KEVIN T. CARMICHAEL
CHRISTINA M. CARO
THOMAS A. ENSLOW
KELILAH D. FEDERMAN
RICHARD M. FRANCO
ANDREW J. GRAF
TANYA A. GULESSERIAN
DARION N. JOHNSTON
RACHAEL E. KOSS
AIDAN P. MARSHALL
ALAURA R. McGUIRE
ISABEL TAHIR

Of Counsel
DANIEL L. CARDOZO
MARC D. JOSEPH

ATTORNEYS AT LAW
601 GATEWAY BOULEVARD, SUITE 1000
SOUTH SAN FRANCISCO, CA 94080-7037
TEL: (650) 589-1660
FAX: (650) 589-5062
agraf@adamsbroadwell.com

SACRAMENTO OFFICE
520 CAPITOL MALL, SUITE 350
SACRAMENTO, CA 95814-4721
TEL: (916) 444-6201
FAX: (916) 444-6209

May 19, 2025

Via E-Mail and U.S. Mail

Julie Moore
San Francisco Planning
City and County of San Francisco
49 South Van Ness Avenue, Suite 1400
San Francisco, California 94103
CPC.PGEPowerAssetsEIR@sfgov.org
julie.moore@sfgov.org

Re: **Comments of the Coalition of California Utility Employees on the Draft Environmental Impact Report for the PG&E Power Asset Acquisition Project (Case No. 2023-005370ENV; SCH No. 2023060769)**

Dear Ms. Moore:

We write on behalf of the Coalition of California Utility Employees (CUE) to comment on the Draft Environmental Impact Report (DEIR) prepared by the City and County of San Francisco (CCSF) Planning Department pursuant to the California Environmental Quality Act[1] (CEQA) for the Pacific Gas & Electric (PG&E) Power Asset Acquisition Project (Case No. 2023-005370ENV) (Project).[2]

After careful review, it is clear that the DEIR fails to comply with CEQA's procedural and substantive requirements, as it does not adequately disclose, analyze, or mitigate the Project's environmental impacts. CUE urges CCSF to correct the significant deficiencies identified in this letter by revising the DEIR and recirculating it for public review and comment. Doing so is essential to ensure full compliance with CEQA and guarantee that the Project's environmental impacts are

[1] Pub. Res. Code § 21000 *et seq.*
[2] San Francisco Planning, Draft Environmental Impact Report: PG&E Power Asset Acquisition Project (Case No. 2023-005370ENV) (Mar. 19, 2025) (hereinafter "DEIR"), *available at* https://citypln-m-extnl.sfgov.org/SharedLinks.aspx?accesskey=5dc4cfce6be2a655145613242de28a959645225d8dd1d76994e0c7429911b344&VaultGUID=A4A7DACD-B0DC-4322-BD29-F6F07103C6E0.

printed on recycled paper

accurately assessed, feasible alternatives are meaningfully evaluated, and effective mitigation measures are properly implemented.

I. INTRODUCTION

CCSF proposes to acquire certain electrical assets from PG&E that are necessary for the provision of electric service to all end-users in San Francisco.[3] As part of the transfer, the electric grid assets that CCSF intends to acquire must be physically separated from PG&E's electric grid.[4] This separation would require the following components: reconfiguration of the existing PG&E-owned Martin Substation, construction of new underground distribution express feeders, reconfiguration and separation of distribution lines on overhead poles and in underground vaults, system reinforcements, and modifications to facilities acquired by CCSF to ensure PG&E maintains access to non-electrical infrastructure, such as gas utility equipment, that is not part of the acquisition.[5] PG&E would also need to undertake additional activities to ensure it is able to provide safe and reliable customer service to its customers outside of San Francisco.

In addition to the separation infrastructure, CCSF will require the following supporting facilities to operate and maintain the newly acquired system: an operations control center, operations and maintenance service yards, materials and equipment storage, and telecommunications equipment.[6] The precise locations and specifications for these supporting facilities have not yet been determined.[7]

As part of the DEIR, CCSF is also evaluating a project variant that would eliminate the need to reconfigure the existing substation.[8] Under this alternative, CCSF would construct a new City Substation at PG&E's Daly City Yard, which is adjacent to the Martin Substation.[9] The components of the project variant would be the same as those of the proposed project except that a new substation would be constructed instead of the separation work at the existing substation, the distribution express feeders would originate from the new substation, new incoming transmission lines from the existing substation would be installed, and new

[3] *Id.* at pp. S-3, 2-1.
[4] *Id.* at p. 2-2.
[5] *Id.* at pp. 2-6 to 2-29.
[6] *Id.* at pp. 1-12, 2-29 to 2-30.
[7] *Id.* at pp. 2-8 to 2-10, 2-27
[8] *Id.* at p. 2-20.
[9] *Id.* at pp. 2-49 to 2-57.

printed on recycled paper

outgoing transmission and distribution lines from the new substation to the existing transmission and distribution system would be installed.[10]

This DEIR is not the first environmental review conducted for the proposed Project. In January 2022, CCSF published a Preliminary Mitigated Negative Declaration (PMND) concluding that the Project would not have a significant effect on the environment.[11] However, CUE appealed that determination, as reflected in the letter attached hereto as **Attachment A**.[12] PG&E also filed a separate appeal challenging the same determination.[13] In response, CCSF determined that an EIR is required for the proposed Project.[14]

We reviewed the DEIR, its technical appendices, and available reference documents with the assistance of our technical experts, including air quality and hazards expert, James J. Clark, Ph.D., and noise and vibration expert, Deborah Jue. Their comments and qualifications are attached hereto as **Attachment B**[15] and **Attachment C**,[16] respectively. The technical comments and all references are incorporated by reference as if fully set forth herein. CCSF must respond to each expert's comments separately and fully.

---

[10] *Id.* at pp. S-8, 2-49 to 2-57.
[11] San Francisco Planning, Preliminary Mitigated Negative Declaration: PG&E Power Asset Acquisition Project (Jan. 5, 2022) (hereinafter "PMND"), *available at* https://files.ceqanet.opr.ca.gov/275219-1/attachment/1rEiQZseqJSYw2IAqhcnEbkHBSnwaUs-FB0z1QgRmmxvtCQ1P_6ekJC1g1vXVPdKw9Yjl3A0DGxm4yx90.
[12] Letter to Lisa Gibson, City and County of San Francisco from Andrew J. Graf, Adams Broadwell Joseph & Cardozo re: Appeal of Preliminary Mitigated Negative Declaration for the PG&E Power Asset Acquisition Project (Case No. 2019-017272ENV; SCH No. 2022010066) (Mar. 7, 2022) (hereinafter "CUE PMND Appeal").
[13] Letter to Lisa Gibson, San Francisco Planning from Christian H. Cebrian, Cox Castle Nicholson re: Case No. 2019-017272ENV – Appeal and Basis of Appeal of PG&E Power Asset Acquisition Project Preliminary Mitigated Negative Declaration and Related Appeal Determination of No Significant Effect on the Environment (Mar. 7, 2022).
[14] Letter to Barbara Hale, San Francisco Public Utilities Commission from Lisa Gibson, San Francisco Planning re: Appeals of PG&E Power Asset Acquisition Project Preliminary Mitigated Negative Declaration Case No. 2019-017272ENV (July 8, 2022).
[15] Letter to Andrew J. Graf, Adams Broadwell Joseph & Cardozo from James J. Clark, Clark & Associates Environmental Consulting, Inc. re: Comments on the Draft Environmental Impact Report (DEIR) for PG&E Power Asset Acquisition Project, City and County of San Francisco, Case No. 2023-005370ENV (May 16, 2025) (hereinafter "Clark Comments").
[16] Letter to Andrew J. Graf, Adams Broadwell Joseph & Cardozo from Deborah Jue, Wilson Ihrig re: PG&E Power Asset Acquisition Draft EIR, Comments on Noise and Vibration Analysis (May 16, 2025) (hereinafter "Jue Comments").

printed on recycled paper

Based on our review and that of our technical experts, we conclude the DEIR fails to comply with CEQA. As explained more fully below, the DEIR (1) improperly analyzes some Project components at a program-level, (2) contains an inadequate project description, (3) fails to adequately describe the environmental setting, and (4) fails to adequately disclose, analyze, and mitigate all potentially significant air quality, noise, and hazard impacts. CCSF cannot approve the Project until all these errors and omissions are remedied in a revised DEIR that is recirculated for public review.

II. STATEMENT OF INTEREST

CUE is a coalition of labor unions whose members work at nearly all electric utilities in California, both investor-owned and publicly owned. The unions include the International Brotherhood of Electrical Workers Local 1245, whose members work at PG&E. CUE and its members are concerned with projects that can result in serious environmental harm without providing countervailing economic benefits such as decent wages and benefits. CEQA provides a balancing process whereby economic benefits are weighed against significant impacts to the environment.[17] Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for industry to expand in San Francisco and the Bay Area, and by making it less desirable for businesses to locate and people to live and recreate in the city and surrounding areas. Continued degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduce future employment opportunities.

The individual representatives of CUE, including Hunter Stern and Roberto Balistreri, and the members of the affiliated labor organizations, including Damien Padilla, live, work, recreate and/or raise their families in San Francisco and in the surrounding Bay Area. They would be directly affected by the Project's environmental and health and safety impacts. Individual members may also work on the Project itself. They would be the first in line to be exposed to any health and safety hazards which may be present on the Project site. They each have a personal interest in protecting the Project area from unnecessary, adverse environmental and public health impacts. It is in this spirit we offer these comments.

[17] Pub. Res. Code § 21081; *Citizens for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 171.

printed on recycled paper

III. LEGAL BACKGROUND

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an EIR.[18] The EIR is the very heart of CEQA, serving as the primary mechanism through which a public agency evaluates the environmental consequences of its actions.[19] "The foremost principle in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language."[20]

CEQA serves two core purposes. First, CEQA is designed to inform decisionmakers and the public about the potential, significant environmental effects of a project.[21] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'"[22] The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."[23]

Second, CEQA directs public agencies to avoid or reduce environmental damage when "feasible" by requiring consideration of environmentally superior alternatives and adoption of all feasible mitigation measures.[24] The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced."[25] If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment

---

[18] *See e.g.*, Pub. Res. Code § 21100.
[19] *Dunn-Edwards v. Bay Area Air Quality Management Dist.* (1992) 9 Cal.App.4th 644, 652.
[20] *Communities for a Better Environment v. Cal. Res. Agency* (2002) 103 Cal. App.4th 98, 109.
[21] Pub. Res. Code § 21061; 14 Cal. Code Regs. ("CEQA Guidelines") §§ 15002(a)(1), 15003(b)-(e); *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 517 ("[T]he basic purpose of an EIR is to provide public agencies and the public in general with detailed information about the effect [that] a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.").
[22] *Citizens of Goleta Valley v. Bd. of Supervisors ("Goleta II")* (1990) 52 Cal.3d 553, 564.
[23] *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs*. (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.
[24] CEQA Guidelines § 15002(a)(2) and (3); *see also Berkeley Jets*, 91 Cal.App.4th at 1354; *Goleta II*, 52 Cal.3d at 564.
[25] CEQA Guidelines § 15002(a)(2).

printed on recycled paper

where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns."[26]

A public agency commits prejudicial abuse of discretion when its actions or decisions do not substantially comply with the requirements of CEQA.[27] The agency abuses its discretion if it does not proceed in the manner required by law or if its decision is not supported by substantial evidence.[28]

Claims of procedural error or informational inadequacies in an EIR are questions of law subject to independent (de novo) review by the courts.[29] An EIR is inadequate as a matter of law where (1) the EIR omits information required by law and (2) the omission precludes informed decision-making by the lead agency or informed participation by the public.[30] "[T]he existence of substantial evidence supporting the agency's ultimate decision on a disputed issue is not relevant when one is assessing a violation of the information disclosure provisions of CEQA."[31]

An EIR must disclose the analytic route the agency traveled from evidence to action, and failure to do so amounts to a procedural error—not a factual one.[32] If an EIR lacks analysis or omits the magnitude of an environmental impact, the issue is "not a substantial evidence question" – rather, the courts review the issue de novo.[33] In other words, a conclusory discussion of an environmental impact that an EIR deems significant may be held to be inadequate as a matter of law "without reference to substantial evidence," even where mixed questions of law and fact are involved.[34] Only where factual questions *predominate* is a more deferential standard warranted.[35]

---

[26] Pub. Res. Code § 21081; CEQA Guidelines § 15092(b)(2)(A)-(B).
[27] Pub. Res. Code §§ 21168, 21168.5.
[28] *Sierra Club,* 6 Cal.5th at 512; *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 426.
[29] *Sierra Club*, 6 Cal.5th at 512-13; *see also Laurel Heights Improvement Assoc. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 392, fn. 5; *Woodward Park Homeowners Assoc., Inc. v. City of Fresno* (2007) 150 Cal.App.4th 683, 705.
[30] *Madera Oversight Coal., Inc. v. County of Madera* (2011) 199 Cal.App.4th 48, 76-77.
[31] *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 82, quoting *Assn. of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1392.
[32] *Sierra Club*, 6 Cal.5th at 513 quoting *Topanga Assn. for a Scenic Community v. City of L.A.* (1974) 11 Cal.3d 506, 515.
[33] *Sierra Club*, 6 Cal.5th at 514.
[34] *Ibid.*; *see also Save the Hill Group v. City of Livermore* (2022) 76 Cal.App.5th 1092, 1103-04.
[35] *Sierra Club*, 6 Cal.5th at 514, 516 (emphasis added).

printed on recycled paper

The substantial evidence standard applies to an agency's substantive factual conclusions, findings or determinations.[36] Substantial evidence means "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached."[37] Substantial evidence includes facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts,[38] but it does not include argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment.[39]

Importantly, "the reviewing court is not to uncritically rely on every study or analysis presented by a project proponent in support of its position. A clearly inadequate or unsupported study is entitled to no judicial deference."[40] CEQA does not permit courts to defer to inadequate or unsupported analysis. A failure to comply with CEQA's substantive requirements is presumptively prejudicial, requiring decertification of any EIR and recission of any approval adopted in reliance on it.[41]

IV. THE DEIR FAILS TO CONDUCT A PROJECT-LEVEL ANALYSIS FOR ALL PROJECT COMPONENTS

The DEIR analyzes some project components at a "project level" and others at a "program level." For example, the Martin Substation separation, distribution express feeders, modifications to retain PG&E access to non-electrical facilities, and a new City Substation are analyzed at the project level.[42] Whereas, the local distribution system separation, system reinforcements, operations and maintenance service yards, and remaining components are analyzed at the program level.[43]

1 - PD-2

The DEIR claims that specific locations and equipment for program-level components cannot be determined at this time because "uncertainty remains

[36] Pub. Res. Code § 21168.
[37] CEQA Guidelines § 15384(a).
[38] *Id.* § 15384(b).
[39] *Id.* § 15384(a).
[40] *Berkeley Jets*, 91 Cal.App.4th at 1355.
[41] *North Coast Rivers Alliance v. Kawamura* (2015) 243 Cal.App.4th 647, 671; *Neighbors for Smart Rail v. Exposition Metro Line Construction Auth.* (2013) 57 Cal.4th 439, 463; *Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1073.
[42] DEIR at pp. S-3 to S-4, 2-5 to 2-8.
[43] *Id.* at pp. S-3 to S-4, 2-5 to 2-8.

printed on recycled paper

regarding the exact locations of the distribution system separation, system reinforcements, and other separation components."[44] Specific locations and equipment would be determined based on the location of existing equipment and available facilities, site conditions, and load flow analysis.[45]

Under CEQA, a program EIR is prepared for a series of actions that can be characterized as one large project.[46] Such actions may be related geographically, constitute logical parts in the chain of contemplated actions, or be adopted in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program.[47] A program EIR may also cover individual activities authorized under the same statutory or regulatory framework and involving generally similar environmental effects that can be mitigated through similar means.[48] A program EIR is distinct from a project-level EIR, which addresses a specific project and must include detailed, site-specific analysis.[49] While all EIRs must address the same elements, the degree of specificity required depends on the nature and scope of the activity being analyzed.[50]

1 - PD-2 cont.

Regardless of the EIR type, CEQA mandates that the analysis be sufficiently detailed to enable informed decision-making.[51] Labeling an EIR as a "program EIR" does not lessen the analytical burden.[52] The lead agency must disclose all that it reasonably can, and any claim that further specificity is infeasible must be supported by substantial evidence.[53]

CCSF lacks substantial evidence to support its assertion that it is infeasible to identify and analyze all locations and equipment necessary to provide safe and reliable electric service to customers in San Francisco. First, CCSF had more than

---

[44] *Id.* at p. 2-9.
[45] DEIR at p. 2-8 to 2-9.
[46] CEQA Guidelines § 15168(a).
[47] *Ibid.*
[48] *Ibid.*
[49] *In re Bay-Delta Programmatic Envt'l Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1169; *Center for Biological Diversity v. Department of Conserv.* (2019) 36 Cal.App.5th 210, 230; *North Coast Rivers Alliance v. Kawamura* (2015) 243 Cal.App.4th 647,664; *Town of Atherton v. California High-Speed Rail Auth.* (2014) 228 Cal.App.4th 314, 344.
[50] CEQA Guidelines § 15146.
[51] *Cleveland Nat'l Forest Found. v. San Diego Ass'n of Gov'ts* (2017) 17 Cal.App.5th 413, 426.
[52] *Ibid.*
[53] *Id.* at p. 440; see generally *Center for Biological Diversity v. Department of Conserv.* (2019) 36 Cal.App.5th 210, 231.

printed on recycled paper

5 years to develop a site-specific separation plan.[54] This extended period undermines any argument that it did not have a reasonable opportunity to identify the necessary infrastructure or conduct the required analysis. CEQA does not excuse delay or lack of effort, it demands proactive and good faith environmental review.[55] A failure to analyze environmental impacts after such a prolonged timeframe indicates not infeasibility, but an unwillingness to engage in the level of disclosure CEQA mandates.

Second, CCSF's own prior conduct demonstrates that preparation of a site-specific separation plan is not only feasible, but within its capabilities. For example, in connection with the earlier PMND, CCSF identified proposed distribution and separation work that would occur along the border between San CCSF and San Mateo County, and provided environmental analysis of their impacts.[56] Having previously produced this information in a formal CEQA document, CCSF cannot now credibly argue that the same type of granular analysis is infeasible. The record thus contains affirmative evidence that contradicts CCSF's current position, further weakening any claim of infeasibility.

Third, CEQA does not permit deferral of environmental analysis when the impacts are foreseeable and capable of being evaluated at the time of the EIR.[57] The identification of specific locations and equipment necessary to provide electric service is not speculative. It is an integral and foreseeable part of the project. Courts have repeatedly held, deferring analysis of known impacts to a later date violates CEQA's core purposes of informed decision-making and public participation.[58] CCSF cannot lawfully postpone site-specific review simply because it prefers not to commit to details at this time.

Finally, granting credence to CCSF's infeasibility claim would effectively reward the agency's failure to engage in diligent planning. CEQA does not allow a lead agency to avoid environmental review by delaying project development to the point where it can argue that specifics are unavailable. Agencies are expected to

1 - PD-2 cont.

[54] DEIR at p. 1-11 ("The SFPUC submitted a public project application for the project to the planning department on September 19, 2019, initiating the environmental review process.")
[55] CEQA Guidelines §§ 15144, 15151; *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376; *California Oak Found. v. Regents of Univ. of Cal.* (2010) 188 Cal.App.4th 227, 269; *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 428.
[56] *See generally* PMND at p. 6-28.
[57] *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 428.
[58] *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 516.

printed on recycled paper

conduct a thorough analysis based on the best available data and must not create infeasibility by their own inaction.[59]

The DEIR must be revised to include a project-level analysis of all components of the Project to ensure that all potentially significant environmental impacts are properly disclosed, thoroughly analyzed, and effectively mitigated, as required by CEQA.

1 - PD-2 cont.

V. THE PROJECT DESCRIPTION IS INADEQUATE

A. The DEIR Fails to Describe Necessary Construction Activities for PG&E to Make Its Grid Whole

CEQA defines a "project" as "the whole of an action" that may result in either a direct physical environmental change or a reasonably foreseeable indirect change.[60] A legally adequate EIR must provide a complete and accurate project description of the project in order to ensure that all potential environmental impacts – both direct and indirect – are fully identified, evaluated and disclosed.[61] The term "project" encompasses the entire proposed activity that is subject to agency approval, not merely those components undertaken by a single project proponent.[62]

While the DEIR describes the physical activities that CCSF proposes to undertake to physically separate its grid from PG&E's grid, it omits a description and analysis of the foreseeable and necessary actions that PG&E must implement for it to maintain a safe and reliable electric system following separation.[63] These activities are an integral part of the overall project and fall squarely within CEQA's definition of "the whole of an action." By failing to describe or analyze the operational and infrastructure changes required by PG&E, the DEIR impermissibly excludes a foreseeable component of the Project that could result in significant environmental effects.

As a result, the DEIR underrepresents the Project's true scope and fails to disclose the full range and severity of its potentially significant environmental and

2 - PD-1

[59] CEQA Guidelines § 15144; *Rodeo Citizens Ass'n v. County of Contra Costa* (2018) 22 Cal.App.5th 214, 226.
[60] CEQA Guidelines § 15378.
[61] *City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438, 1454.
[62] CEQA Guidelines § 15378(c); *City of Long Beach v. City of Los Angeles* (2018) 19 Cal.App.5th 465, 477.
[63] Clark Comments at pp. 16-17.

printed on recycled paper

public health impacts. CEQA requires a comprehensive analysis of the combined activities necessary to achieve the proposed grid separation, including those undertaken by both CCSF and PG&E, to provide decisionmakers and the public with a full understanding of the environmental consequences.

2 - PD-1 cont.

B. The DEIR Fails to Accurately Describe the Project

An EIR's project description must accurately describe a finite project.[64] The adequacy of the project description is directly tied to the adequacy of the EIR's environmental analysis. Where the project description is vague, incomplete, or inaccurate, the resulting environmental analysis will necessarily be flawed, undermining the EIR's fundamental purpose.[65]

1. *The New City Substation Is Not Accurately Described*

The DEIR does not accurately describe the proposed City Substation. CCSF intends to use sulfur hexafluoride (SF_6) gas as the insulation medium for the new substation.[66] Although SF_6 is commonly used in electric transmission and distribution equipment, it has extremely high global warming potential. Over a 100-year period, SF_6 is 22,800 times more effective at trapping infrared radiation than an equivalent amount of carbon dioxide.[67]

The DEIR relies on an outdated version of the applicable regulations.[68] In 2021, the California Air Resources Board amended its regulations to phase out the acquisition of SF_6 gas-insulated equipment, significantly altering the legal and regulatory landscape governing its use.[69] The DEIR's reliance on superseded regulations undermines the adequacy of its project description and environmental analysis.

3 - PD-4

CEQA requires that an EIR reflect a "good faith effort at full disclosure" and be prepared with "the best information reasonably available" at the time of publication.[70] An agency cannot rely on outdated or superseded information when

[64] *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 199.
[65] *Laurel Heights Improvement Ass'n v. Regents of the Univ. of Cal.* (1988) 47 Cal.3d 376.
[66] DEIR at p. 2-51; *id.*, appen. A, Initial Study at p. 123.
[67] California Air Resources Board, Proposed Amendments to the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear: Resolution 20-28 (Sept. 24, 2020) p. 2, *available at* https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2020/sf6/finalres2028.pdf.
[68] DIER, appen. A, Initial Study at p. 123, fn. 158.
[69] 17 Cal. Code Regs. § 95350 *et seq.*
[70] CEQA Guidelines §§ 15144, 15151.

printed on recycled paper

more current, credible, and authoritative data is available. By failing to incorporate these regulatory updates, the DEIR does not accurately assess the Project's compliance obligations or environmental impacts. This omission is not merely a technical defect but fundamentally impairs the EIR's ability to inform decisionmakers and the public about the Project's feasibility, risks, and alternatives, particularly with respect to air quality and greenhouse gas emissions.

2. *The Construction Staging and Laydown Areas Are Not Identified for the Project Variant*

The DEIR states that the Daly City Yard would serve as the primary staging and laydown area for separation work at the Martin Substation.[71] However, it does not identify a staging and laydown area for the new City Substation.

The establishment and operation of a construction staging and laydown area can present a range of potentially significant environmental impacts depending upon the location. Site preparation, including vegetation removal and grading, can disturb soil and increase erosion, resulting in sediment-laden runoff that may adversely affect nearby water bodies. Air quality impacts may arise from the operation of diesel-powered equipment and the generation of fugitive dust, potentially contributing to regional nonattainment conditions under applicable air district thresholds. Noise from staging activities can disturb surrounding residential areas and sensitive wildlife habitats, particularly if operations occur during early morning or nighttime hours.

The DEIR states that existing materials and equipment in the Daly City Yard must be relocated to accommodate construction of the new City Substation,[72] yet it fails to specify the types of materials or equipment involved. Moreover, the DEIR assumes that the Daly City Yard, Brisbane Yard, or 2850 Bayshore Boulevard have adequate capacity to store these materials and equipment during separation work at the Martin Substation,[73] but it does not assess whether these areas can accommodate the existing inventory or support necessary construction staging and laydown operations for the new City Substation.

These omissions impede a meaningful evaluation of potential environmental impacts associated with relocation and laydown activities, including possible soil disturbance, hazardous material handling, or localized increases in noise and air

3 - PD-4 cont.

[71] DEIR at pp. S-7, 2-41.
[72] *Id.* at pp. S-8, 2-53 to 2-54.
[73] *Id.* at p. 2-41.

printed on recycled paper

emissions. As such, the DEIR fails to provide a full and accurate project description under CEQA, rendering its analysis legally deficient.

3 - PD-4 cont.

VI. THE DEIR FAILS TO ANALYZE REASONABLY FORESEEABLE INDIRECT IMPACTS FROM AN INSUFFICIENTLY SIZED OR TRAINED WORKFORCE

A lead agency must consider the reasonably foreseeable indirect environmental consequences of a project's economic or social changes.[74] A physical change to the environment cannot be disregarded simply because it is a secondary result of the project's economic or social effects.[75] Indeed, the CEQA Guidelines state: "Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project.[76]

To ensure safe and reliable electric service in San Francisco, CCSF must maintain a sufficiently sized and properly trained workforce. However, like the PMND before it,[77] the DEIR erroneously assumes that CCSF will be able to hire and retain the necessary personnel to operate and maintain the electric system. This assumption is unfounded given several well-documented constraints: there is currently a national shortage of line workers; the region faces significant challenges attracting skilled labor due to the high cost of living; and PG&E is committed to retaining its current on-the-ground workforce.[78] Without adequate staffing, CCSF will not be able to respond promptly to system outages or perform timely maintenance, which heightens the risk of equipment failure.[79] This, in turn, could lead to a measurable increase in the frequency and duration of power outages for customers.[80]

4 - GC-4

The DEIR fails to analyze the potentially significant impacts associated with these risks. For example, the DEIR does not evaluate the air quality and health consequences from increased reliance on diesel backup generators during outages.[81] As the frequency and duration of outages increase, many electricity customers will

[74] CEQA Guidelines § 15064(d)-(e).
[75] *Id.* § 15064(e).
[76] *Id.* § 15064(e).
[77] CUE PMND Appeal at pp. 14-18.
[78] *Id.* at pp. 15-17; *id.*, exh. B at p. 2-3.
[79] *Id.* at p. 17.
[80] *Ibid.*
[81] *Id.* at p. 17-18; *id.*, exh. C.

printed on recycled paper

turn to backup generation.[82] In San Francisco, there are approximately 1,190 permitted backup generators as of 2020.[83] The vast majority of these generators are likely diesel powered given that approximately 90% of the permitted backup generators in BAAQMD utilize diesel fuel.[84] Any increases in generator use would result in a corresponding increase of harmful emissions.[85] 5 - GC-4

To comply with CEQA, the DEIR must address the reasonably foreseeable environmental consequences of inadequate workforce planning, including impacts on outage frequency and duration, and the resulting air quality and health effects from increased generator use. 6 - GC-4

VII. THE HAZARDS ANALYSIS IS DEFICIENT

A. Potential Impacts from Hazardous Construction Emissions Within One-Quarter Mile of an Existing School Are Not Disclosed or Analyzed

An EIR cannot be certified for any project involving the construction of a facility within one-quarter mile of a school that might reasonably be anticipated to emit hazardous air emissions that may pose a health or safety hazard to persons who would attend or would be employed at the school unless the lead agency has consulted with the school district having jurisdiction regarding the potential impact and the school district has been given written notification of the project not less than 30 days prior to the EIR's certification.[86] The statute defines "hazardous air emissions" to include emissions of toxic air contaminant identified by the California Air Resources Board (CARB) or the local air district, which include benzene, cadmium, arsenic, nickel, and lead.[87] These requirements apply to both construction-related and operational emissions. 7 - AQ-1

The DEIR acknowledges the historic presence of contaminated soil and groundwater at the Project site, including total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), cyanide, and metals (including arsenic, cadmium, chromium, lead, nickel, and mercury).[88] It also identifies 33 schools within a quarter mile of the Project areas,

[82] *Id.* at p. 18; *id*., exh. C.
[83] *Ibid.*
[84] *Ibid.*
[85] *Ibid.*
[86] Pub. Res. Code § 21151.4(a).
[87] *Id.* § 21151.4(b)(2).
[88] DEIR, appen. A, Initial Study at pp. 222-26.

printed on recycled paper

including Bayshore Elementary, which is located only 80 feet from the Daly City Yard.[89]

The health risk assessment (HRA) prepared in support of the air quality analysis cannot be used to support the conclusion that impacts from soil and groundwater contamination are less than significant. While the health risk assessment evaluates emissions from construction equipment and truck transport of contaminated soil,[90] it does not assess the potential risks associated with exposure to volatile emissions coming from the soil for VOCs or exposure to fugitive dust emissions from soil for non-VOCs.[91] Given the site's known contamination and close proximity to multiple schools, including one directly adjacent to the Project site, the failure to analyze such risks renders the DEIR legally inadequate.

7 - AQ-1 cont.

Moreover, despite this close proximity, the DEIR fails to demonstrate compliance with CEQA's school consultation requirements. There is no indication in the record that the lead agency consulted with the school district having jurisdiction over Bayshore Elementary regarding potential health impacts associated contaminated soil disturbance. CCSF must comply with its consultation obligations before an EIR can be certified.

8 - GC-2

B. Potential Vapor Intrusion Impacts from Known Soil and Groundwater Contamination at the Martin Substation and Daly City Yard Are Not Disclosed or Analyzed

The DEIR is legally deficient because it fails to adequately identify, disclose, and analyze potential vapor intrusion arising from known vapor-forming chemicals present at the Project site.[92] An EIR must provide a full and accurate disclosure of all potentially significant environmental impacts, including those related to hazardous materials contamination.[93] This obligation extends to reasonably foreseeable risks posed by volatile chemicals in subsurface soils or groundwater that may migrate into overlying structures, posing a threat to indoor air quality and human health

9 - HZ-3

[89] DEIR, appen. E at p. 23; Id., appen. A, Initial Study at pp. 221-22.
[90] DEIR, appen. B.
[91] Clark Comments at p. 15.
[92] *Id.* at pp. 13-16.
[93] Pub. Res. Code § 21061; CEQA Guidelines § 15126.2(a).

printed on recycled paper

The DEIR acknowledges the historic presence of TPH and VOCs in the soil and groundwater at the Project site.[94] However, it fails to assess the potential for these contaminants to migrate in vapor form because of the proposed ground-disturbing activities.[95] This omission is especially concerning given the volatile nature of these chemicals and the well-established pathways through which vapor intrusion into can occur in enclosed structures.[96]

Notably, CCSF's environmental consultant concedes that no vapor evaluation has been conducted for the Project site.[97] The consultant also acknowledges that construction of any new occupied structures will require further assessment of vapor intrusion potential in accordance with applicable guidance issued by DTSC and SWRCB.[98] Such evaluations may ultimately necessitate implementation of vapor intrusion mitigation measures[99]. Yet, despite this acknowledgement, the DEIR does not include any site-specific vapor intrusion modeling, indoor air sampling, or even preliminary screening-level risk analysis consistent with regulatory standards.[100] The consultant further notes that existing remedial action plans for the site do not address vapor intrusion mitigation.[101]

By failing to address this foreseeable risk, the DEIR deprives decisionmakers and the public of critical information necessary to evaluate the project's health and safety impacts. CEQA requires that an EIR analyze not only direct effects, but also reasonably foreseeable indirect environmental consequences of a project.[102] Vapor intrusion is both foreseeable and potentially significant, particularly given the proposed construction and future occupancy of new buildings.[103] The DEIR's failure to evaluate this risk renders its analysis incomplete and legally inadequate under CEQA.

9 - HZ-3 cont.

[94] DEIR, appen A., Initial Study at p.
[95] Clark Comments at p. 13.
[96] *Ibid.*
[97] *Id.*at p. 16; *see also* Memorandum to Karen Lancelle, Environmental Science Associates et al., from Scott Bourne, CDIM Engineering et al. re: Technical Memorandum, Site Management Requirements, PG&E Martin Service Center, PG&E Power Asset Acquisition Project, Brisbane and Daly City, California (Aug. 5, 2024) p. 8 (hereinafter "ESA Memo").
[98] ESA Memorandum at p. 8.
[99] *Ibid.*
[100] Clark Comments at p. 13.
[101] ESA Memo at p. 8.
[102] CEQA Guidelines § 15378.
[103] Clark Comments at pp. 13-16.

printed on recycled paper

C. Compliance with Regulatory Standards Governing Soil and Groundwater Contamination Is Not Adequately Analyzed

Compliance with applicable regulatory standards may support a finding that a project will not result in significant environmental impacts.[104] However, such a conclusion must be based on a project-specific analysis that demonstrates how compliance will effectively avoid or reduce those impacts.[105] While adherence to specific laws, regulations, or permit requirements can, in some cases, constitute adequate mitigation under CEQA, reliance on regulatory compliance is only appropriate where substantial evidence shows that compliance will, in practice, reduce the impact below a level of significance.[106] This determination requires a detailed analysis of both anticipated environmental impact and the effectiveness of the regulatory measure, considered in the context of applicable performance standards and oversight mechanisms.[107]

10 - HZ-2

1. *Existing Land Use Controls Are Not Adequate*

The DEIR acknowledges that the Martin Service Center, including the Martin Substation and Daly City Yard, is subject to significant soil and groundwater contamination resulting from historical operation of a manufactured gas plant.[108] While the DEIR references existing land use covenants (LUCs), operations and maintenance agreements, and soil management plan requirements as applicable to proposed activities – such as Martin Substation separation or new City Substation construction – it concludes that these controls are sufficient to prevent unacceptable risks to human health or the environment.[109] However, this conclusion is unsupported and overly reliant on existing controls that were developed for a different land use context than the disturbance scenario required for Project construction.[110]

These institutional and engineering controls were designed to manage residual contamination under existing site conditions and ongoing operations, not for the scale and intensity of ground-disturbing activities proposed under the

[104] *Tracy First v. City of Tracy* (2009) 177 Cal.App.4th 912.
[105] *Save Our Capitol! v. Department of Gen. Servs.* (2023) 87 Cal.App.5th 655, 696; *Californians for Alternatives to Toxics v. Department of Food & Agric.* (2005) 136 Cal.App.4th 1.
[106] CEQA Guidelines § 15126.4(a)(1)(B); see *Save Our Capitol! v. Department of Gen. Servs.* (2023) 87 Cal.App.5th 655, 687-88, 699.
[107] Tiburon Open Space Comm. v. County of Marin (2022) 78 Cal.App.5th 700, 763.
[108] DEIR, appen. A, Initial Study at p. 222.
[109] DEIR, appen. A, Initial Study at p. 226.
[110] Clark Comments at pp. 7-8.

printed on recycled paper

Project.[111] Activities such as excavation, grading, utility trenching, demolition, or pile driving could disturb contaminated soils, create new exposure pathways, or mobilize contaminants into air, surface water, or groundwater.[112] The DEIR does not evaluate these specific risks or assess whether existing mitigation measures are adequate to address them.[113]

In particular, the DEIR fails to provide a construction-phase risk assessment or analyze the potential for increased human or environmental exposure during intrusive activities. For example, excavation in areas with known contamination could result in the release of VOCs into the air, increasing inhalation risks for construction workers and adjacent sensitive receptors.[114] Similarly, deep foundation work could breach existing contamination barriers or create preferential pathways for contaminant migration into groundwater or nearby stormwater systems.[115] These are foreseeable impacts that are not examined in the DEIR but warrant a thorough evaluation under CEQA.

10 - HZ-2 cont.

Additionally, the DEIR does not clarify whether the existing soil management plan is sufficiently detailed or tailored to address Project-specific activities. A soil management plan prepared for routine operations and maintenance activities may not contain protocols necessary for managing large-scale earthwork, off-haul of contaminated soils, dewatering, or other construction-phase environmental management needs.[116] Without an updated, project-specific soil management plan or confirmation that the existing plan addresses the full range of Project activities, the DEIR's reliance on it is inadequate.

In sum, while the presence of existing environmental controls is relevant, the DEIR improperly assumes that these measures are sufficient without demonstrating that they are capable of mitigating risks associated with the proposed construction. The DEIR must include a detailed, project-specific evaluation of potential hazardous materials impacts, and it should commit to appropriate mitigation measures, including an updated soil management plan, construction health and safety plan, and regulatory agency oversight, as necessary.

[111] *Ibid.*
[112] *Id.* at pp. 7-8, 11-12.
[113] *Id.*at pp. 11-12.
[114] *Ibid.*
[115] *Ibid.*
[116] *Ibid.*

printed on recycled paper

2. *Compliance with the Land Use Covenant Variance Process Is Not Disclosed or Analyzed*

The DEIR acknowledges that the Daly City Yard is subject to a LUC, and the entire Martin Substation site is further restricted by a separate LUC.[117] Both LUCs expressly prohibit any grading, excavation or construction activities that could adversely affect operation or maintenance of the cap.[118] The Daly City Yard cap includes the concrete parking lot, building foundations, and a constructed cap over the berm and the Schwerin Street Strip.[119] The other cap includes the Brisbane Yard and Brisbane Yard Annex.[120]

Martin Substation separation would require excavation of 7,930 cubic yards of soil and a maximum depth of 15 feet,[121] some of which could occur in the capped area. Construction of the new City Substation would require excavation of 34,980 cubic yards and a maximum depth of 15 feet,[122] all of which would occur in the capped area. Because grading, excavation, and construction activities in capped areas are necessary to implement the Project, CCSF would need to obtain a LUC variance from DTSC.

Health and Safety Code § 25223 establishes the criteria for obtaining a variance from a LUC related to hazardous or extremely hazardous waste. Under this provision, the applicant bears the burden of demonstrating that the proposed variance will not cause or allow any of the following: (1) the creation or increase of significant present or future hazards to public health, (2) a significant diminution of the ability to mitigate any significant potential or actual hazard to public health, and (3) a long-term increase in the number of humans or animals exposed to significant hazards that affect the health, well-being, or safety of the public.[123]

11 - HZ-2

---

[117] DEIR, appen. A, Initial Study at p. 224.
[118] Clark Comments at pp. 7-11; DEIR, appen. A, Initial Study at p. 224; see also Department of Toxic Substances Control, EnviroStor, PG&E – Martin Service Daly City Yard (41360100), https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=41360100 (last visited May 19, 2025); Department of Toxic Substances Control, EnviroStor, PG&E – Maritn Service OU-2 and Levison (41360093), https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=41360093 (last visited May 19, 2025).
[119] DEIR, appen. A, Initial Study at pp. 223-24.
[120] *Ibid*.
[121] *Id.*at p. 2-10, 2-44.
[122] *Id.*at p. 2-56.
[123] Health & Safety Code § 25223(c).

printed on recycled paper

In evaluating whether a variance is appropriate, DTSC must consider substantial evidence related to the specific risks posed by the site.[124] This includes:

(1) **Hazardous characteristics** of the waste that caused the land to be restricted, such as, but not limited to, toxicity, reactivity, corrosivity, flammability, persistence, bioaccumulation, and infectiousness;[125]

(2) **Potential for waste migration** through environmental media – air, water, or soil – based on factors such as the quantity, physical state, volatility, solubility, soil-binding characteristics, as well as site-specific characteristics like permeability, geology, hydrology, flood risk and terrain;[126] and

(3) **Potential for population exposure** within a 2,000-foot radius, considering factors like containment, accessibility, groundwater and surface water use, wells, existing and potential land uses, sensitive environmental receptors, and critical habitats.[127]

11 - HZ-2 cont.

The DEIR fails to mention or describe DTSC's variance process, much less to evaluate whether the project could meet the specific criteria required for a variance under Health & Safety Code § 25223. The DEIR does not assess the hazardous characteristics of the waste, site-specific migration potential, or exposure risks to nearby populations.[128] Nor does it provide substantial evidence demonstrating that compliance with DTSC's variance process would reduce potential impacts to a less than significant level. Absent this analysis, the DEIR's reliance on future regulatory compliance as a basis for finding the impact less than significant is unsupported and legally inadequate.

The existence of a regulatory program does not, by itself, constitute substantial evidence that impacts will be less than significant or mitigated to a level of insignificance. CEQA requires the lead agency to provide evidence that such compliance is reasonably certain to occur and will, in fact, achieve the performance standard of reducing the impact to below the threshold of significance. The DEIR's omission of any reference to DTSC's variance process and its failure to analyze the

[124] 22 Cal. Code Regs. § 67390.2.
[125] *Id.* § 67390.2(b)(1).
[126] *Id.* § 67390.2(b)(2).
[127] *Id.* § 67390.2(b)(3).
[128] Clark Comments at pp. 7-12.

printed on recycled paper

likelihood or effectiveness of compliance renders its conclusions speculative and insufficient. 11 - HZ-2 cont.

D. Mitigation Measure M-AQ-2a Does Not Adequately Prevent Migration of Contaminated Soils to Sensitive Receptor Locations

Although the DEIR acknowledges the presence of contaminated soil and groundwater, it fails to identify any mitigation measures specifically designed to reduce impacts associated with the potential migration of contaminated soil during construction activities. To the extent CCSF relies on Mitigation Measure M-AQ-2a to address these impacts, the proposed mitigation is not sufficient. M-AQ-2 requires implementation of basic best management practices (BMPs) for controlling construction-related fugitive dust emissions.[129] These BMPs include watering exposed surfaces, covering haul trucks, removing visible mud and dirt track-out, imposing vehicle speed limits, completing paving as soon as possible, suspending of construction during high winds, washing vehicles and equipment, treating unpaved roads, and maintain a complaint hotline.[130]

While such measures may be appropriate for controlling nuisance dust from clean soils, they are not adequate for protecting public health and the environment when the dust originates from soil known to contain hazardous substances.[131] First, the measure does not include enhanced protocols specifically tailored to hazardous dust, such as the use of soil binders or chemical stabilizers, application of impermeable tarps over excavated areas, or negative air pressure containments systems in high-risk zones.[132] These are widely accepted practices for construction in contaminated areas but are omitted entirely from the DEIR's proposed mitigation measures.[133] 12 - HZ-2

Second, there is no requirement for real-time air monitoring of particulate matter or hazardous constituents during soil-disturbing activities.[134] In addition, the current remedial action plan governing the Martin Substation site does not include community air monitoring.[135] Without air monitoring, the Project cannot

[129] DEIR at p. 3.3-34.
[130] *Ibid.*
[131] Clark Comments at p. 12.
[132] *Ibid.*
[133] *Ibid.*
[134] *Ibid.*
[135] *Ibid.*

printed on recycled paper

demonstrate that mitigation is effective or protect onsite workers and nearby receptors from exposure to dust from disturbance of contaminated soils.[136]

Third, watering twice daily may reduce dust generation by approximately 61%, but increasing the frequency to three times per day can achieve up to 81% reduction.[137] The DEIR does not explain why a higher standard of control is not required in a setting with recognized contamination risks.[138]

In sum M-AQ-2a is inadequate for the site's contamination context and fails to meet CEQA's requirement that mitigation measures be fully enforceable and capable of substantially reducing significant impacts. Additional, contamination-specific mitigation measures must be developed in consultation with the appropriate regulatory agencies to ensure that fugitive emissions of hazardous dust are effectively controlled, monitored, and mitigated throughout all phases of Project construction.

12 - HZ-2 cont.

VIII. THE AIR QUALITY ANALYSIS IS DEFICIENT

A. Acute Health Impacts from Diesel Particulate Matter Exposure Are Not Analyzed

The DEIR evaluates cancer risks associated with diesel particulate matter (DPM),[139] but it fails to assess acute, non-cancer health impacts. This is a significant omission. Since the Office of Environmental Health Hazard Assessment (OEHHA) last evaluated health impacts of DPM in 1998, new research has been published regarding the acute effects of short-term DPM exposure, particularly on the respiratory system. Notably, Canada has established an acute reference exposure level for DPM of 10 µg/m^3 to protect against short-term adverse respiratory effects.[140] Although OEHHA has not yet adopted an acute reference exposure level for DPM, this does not relieve the lead agency of its obligation under CEQA to evaluate all reasonably foreseeable health risks, including acute exposures.[141]

13 - AQ-1

---

[136] *Ibid.*
[137] *Ibid.*
[138] *Ibid.*
[139] DEIR at p. 3.3-26, 3.3-40.
[140] Canada, Human Health Risk Assessment for Diesel Exhaust, (March 4, 2016) p. 11, *available at* http://publications.gc.ca/collections/collection_2016/sc-hc/H129-60-2016-eng.pdf.
[141] CEQA Guidelines § 15064(b).

printed on recycled paper

The DEIR fails to evaluate potential acute health risks associated with short-term exposure to DPM during construction activities. This omission is particularly concerning given that construction workers and nearby sensitive receptors may experience elevated, short-duration exposures to diesel emissions from heavy-duty construction equipment. An analysis of acute DPM impacts from Project construction is necessary to determine whether the Project could result in significant, short-term health effects, particularly for construction workers and nearby communities. Without such an analysis, the DEIR does not comply with CEQA's requirement to identify and disclose all potentially significant environmental impacts.

13 - AQ-1 cont.

B. Emissions from Hazardous Waste Rail Transport Are Substantially Underestimated

The DEIR's air quality and health risk assessment accounts for emissions associated with the transport of hazardous waste materials via a combination of truck and rail.[142] However, the analysis significantly underestimates these emissions by limiting its modeling to one-way trip distances ending at the boundary of the San Francisco Bay Area Air Basin, rather than extending to the actual disposal site located in Utah.[143] Specifically, the DEIR assumes a rail line-haul distance of only 145 miles, which does not reflect the full transport route to the final landfill destination.[144]

Dr. Clark estimates that the landfill receiving the Project's hazardous waste is approximately 820 miles from the Project site by rail.[145] By artificially restricting its analysis to in-basin emissions, the DEIR omits a substantial portion of the air pollutant and greenhouse gas emissions attributable to Project-related waste disposal.[146] This results in a material underestimation of criteria air pollutants and as well as diesel particulate matter.[147]

14 - AQ-3

The methodological flaw compromises the accuracy and completeness of the DEIR's air quality and health risk analyses, in violation of CEQA's requirement for a full and accurate disclosure of environmental impacts.[148] The DEIR must be

[142] DEIR at p. 3.3-24.
[143] Clark Comments at p. 17.
[144] *Ibid.*
[145] *Ibid.*
[146] *Ibid.*
[147] *Ibid.*
[148] CEQA Guidelines §§ 15144, 15151.

printed on recycled paper

revised to account for emissions along the entire transport route to the actual disposal site.

14 - AQ-3 cont.

IX. THE NOISE AND VIBRATION ANALYSIS IS DEFICIENT

A. Baseline Noise Conditions Are Inconsistent with Regulatory Standards

An EIR must disclose the existing setting in a manner that enables a clear evaluation of potential impacts.[149] The DEIR fails to provide an adequate baseline for ambient noise conditions because it relies on average noise levels (Leq) rather than the regulatory-defined metrics that govern noise impacts in San Francisco.[150] Specifically, San Francisco Police Code § 2901 defines ambient noise thresholds in terms of L_{90} or L_{99} metrics, which represent the noise level exceeded 90% or 99% of the time, respectively.[151] These metrics are designed to capture background or residual noise environment, excluding transient or atypical noise events.

By using Leq as the principal descriptor of existing ambient conditions, the DEIR does not provide a baseline that is consistent with regulatory standards. Leq incorporates all sound energy over a given time and is heavily influenced by intermittent or short-duration noise events.[152] As a result, it can substantially overstate the typical background noise environment.[153] This makes it impossible to accurately assess whether future Project-generated noise will exceed established ambient-based thresholds defined in terms of L_{90} or L_{99}, thereby precluding a meaningful comparison between baseline conditions and project noise levels.[154]

15 - NO-1

The DEIR must be revised to incorporate L_{90} or L_{99} measurements in its baseline noise characterization and ensure that impact assessments and threshold comparisons are conducted using those same metrics. This correction is essential for the analysis to be legally defensible, technically accurate, and informative to the public and decisionmakers.

---

[149] CEQA Guidelines § 15125; *Neighbors for Smart Rail v. Exposition Metro Line Constr. Auth.* (2013) 57 Cal.4th 439, 447.
[150] Jue Comments at p. 2.
[151] *Ibid.*
[152] *Ibid.*
[153] *Ibid.*
[154] *Ibid.*

printed on recycled paper

B. The Operational Noise Analysis Severely Underestimates Transformer Sound Levels Due to Misapplication of Sound Data

The DEIR significantly underestimates operational noise levels from the proposed transformer installations due to critical misapplication of National Electrical Manufacturer Association (NEMA) data.[155] Specifically, the DEIR reports that each of the six transformers at the new City Substation transformers would generate 55 dBA at six feet and cumulatively generate 63 dBA at the same distance.[156] However, these values are derived from NEMA reference sound level data, which are not equivalent to either sound pressure levels or sound power levels.[157]

NEMA standards provide reference sound levels for transformers to facilitate comparisons across equipment types – not as direct measures of environmental noise exposure.[158] These reference levels must be converted to sound pressure levels by applying appropriate acoustic equations that account for the radiating surface area of the transformer enclosure and the distance from the source.[159] The DEIR fails to perform this necessary conversion, resulting in a fundamentally flawed analysis.[160]

16 - NO-3

When NEMA reference levels are correctly translated, accounting for typical radiating surface area of a pad-mounted transformer, the estimated reference sound pressure level at six feet is approximately 78 dBA – not 55 dBA as stated in the DEIR.[161] At 50 feet, the corrected cumulative sound level from six units would be approximately 60 dBA.[162] This is materially higher than what the DEIR claims and could substantially alter the conclusions regarding noise exposure at nearby sensitive receptors.

The mischaracterization of source noise results in a flawed impact assessment. By underreporting transformer noise by more than 20 dBA at six feet, the DEIR risks masking potentially significant impacts that may require mitigation or design changes. To remedy this deficiency, the DEIR must be revised to apply the correct acoustic conversion methodology, using the actual surface area of the

[155] *Id*. at pp. 2-3.
[156] DEIR, Appen. E at p. 59.
[157] Jue Comments at p. 2.
[158] *Ibid*.
[159] *Ibid*.
[160] *Ibid*.
[161] *Id*. at pp. 2-3.
[162] *Ibid*.

printed on recycled paper

transformer enclosure to convert sound power data into sound pressure levels. The revised analysis must then reevaluate whether the resulting noise levels exceed applicable thresholds and consider feasible mitigation measures where appropriate.

16 - NO-3 cont.

C. Vibration Impacts from Pile Driving Activities Are Not Adequately Analyzed

The DEIR fails to adequately analyze the potential impacts of pile driving activities associated with construction of the new City Substation by neglecting to consider site-specific soil and subsurface conditions and failing to provide a reference peak particle velocity (PPV).[163] These omissions render the analysis of vibration and structural impacts incomplete and legally deficient under CEQA.

The severity of noise and vibration impacts from pile driving is highly dependent on geotechnical factors such as soil type, groundwater depth, and the presence of bedrock or other subsurface materials.[164] However, the DEIR provides only a generalized discussion of pile driving impacts and applies uniform assumptions without demonstrating that these assumptions are appropriate given the site's actual geotechnical conditions.[165] The absence of any substantive analysis of how the subsurface conditions may affect vibration impacts undermines the credibility of the DEIR's conclusions.[166] Without this information, the DEIR cannot accurately evaluate whether vibration levels will exceed significance thresholds or whether mitigation measures are sufficient to avoid or minimize impacts.

17 - NO-5

In addition, the DEIR fails to provide a reference PPV for evaluating pile driving impacts.[167] Applying the Federal Transit Administration's standard reference level of 1.158 in/sec at 25 feet, the Project's estimated vibration levels reach approximately 0.489/sec PPV.[168] This value is just below the California Department of Transportation's damage threshold of 0.5 in/sec PPV for modern industrial and commercial buildings.[169] The resulting buffer – equating to a margin of 2 feet – indicates a narrow safety threshold.[170] Such a minimal margin raises

[163] *Id*. at pp. 3-4.
[164] *Id*. at p. 3.
[165] *Ibid*.
[166] *Ibid*.
[167] *Id*. at pp. 3-4.
[168] *Id*. at p. 3.
[169] *Id*. at p. 4.
[170] *Ibid*.

printed on recycled paper

concerns about the potential for structural damage, particularly given uncertainties in site conditions and modeling assumptions.[171]

Moreover, although the DEIR states that the closest on-site structure to pile driving activities is approximately 70 feet,[172] it does not prohibit future positioning of the new City Substation or other project components closer to the existing buildings.[173] As currently written, nothing would prevent pile driving from occurring within 25 feet of existing structures.[174] This lack of a firm setback allowance or design constraint introduces the potential for significant vibration impacts that the DEIR has neither disclosed nor mitigated.

17 - NO-5 cont.

To comply with CEQA, the DEIR must be revised to include a site-specific geotechnical analysis that evaluates how the on-site soil and subsurface conditions will influence the nature and extent of pile driving impacts.[175] This analysis must inform the determination of significance and the development of effective mitigation measures.[176]

D. Noise Impacts from Trenchless Construction Activities Are Not Adequately Analyzed

The DEIR fails to provide an adequate analysis of noise impacts associated with trenchless construction methods. This omission renders the environmental analysis legally deficient under CEQA, which requires that an EIR contains sufficient detail to allow for informed public review and decision-making.[177]

18 - NO-2

The DEIR does not disclose or analyze the anticipated depth of the launch pit, a key factor that directly influences the propagation of construction noise.[178] The depth of the launch pit affects both the degree of acoustic shielding provided by the surrounding soil and the exposure of sensitive receptors to above-ground equipment, such as auger drills.[179] Without this information, the DEIR cannot accurately assess the extent to which trenchless construction will generate significant noise impacts.

---

[171] *Ibid.*
[172] DEIR at p. 3.2-61.
[173] Jue Comments at p. 3.
[174] *Ibid.*
[175] *Ibid.*
[176] *Ibid.*
[177] CEQA Guidelines § 15151.
[178] Jue Comments at p. 5.
[179] *Ibid.*

printed on recycled paper

Equally problematic is the DEIR's apparent assumption that all surrounding sensitive receptors are one-story in height.[180] Nearby residential structures include two-story homes or apartments, with second story living spaces and bedrooms that are likely to be above the level of trenchless construction equipment. Vertical proximity increases the potential for noise exposure and diminishes the effectiveness of intervening barriers or topography.[181] The DEIR's failure to acknowledge this condition results in an underestimation of potential noise impacts, particularly for residents occupying the upper floors who are more likely to experience direct line-of-sight exposure to elevated noise sources.[182]

If the launch pit is 10 feet below ground level, Ms. Jue estimates that nearby residences may experience approximately 15 dBA of noise reduction.[183] However, if a nearby residence is two stories or taller, the effective shielding would be reduced to 10 dBA, at most, because the elevated height would limit the barriers effectiveness.[184] As a result, multi-story buildings within 15 feet of the launch pit could experience noise levels of 74 dBA, resulting in a potentially significant impact.[185]

By failing to specify the launch pit depth and account for the multi-story nature of nearby residences, the DEIR does not provide a complete or accurate assessment of potential noise impacts from trenchless construction activities. To remedy this deficiency, the DEIR must be revised to disclose the anticipated dimensions and depth of the launch and receiving pits, analyze how these dimensions affect the emission and attenuation of construction-related noise, account for the presence of two-story residences and evaluate noise impacts to upper-floor occupants, and identify and implement feasible mitigation measures, such as enhanced barriers, enclosures, or restrictions on operating hours and equipment types.[186] Without these corrections, the DEIR's conclusions regarding trenchless construction noise impacts are not supported by substantial evidence and fail to comply with CEQA.

18 - NO-2 cont.

[180] *Ibid.*
[181] *Ibid.*
[182] *Ibid.*
[183] *Ibid.*
[184] *Ibid.*
[185] *Ibid.*
[186] *Ibid.*

printed on recycled paper

E. Noise Mitigation Measures Are Inadequate

Under CEQA, an EIR must disclose and evaluate feasible mitigation measures that would minimize the project's significant environmental impacts.[187] As a general rule, it is inappropriate for an EIR to defer formulation of mitigation measures to a future date.[188] While CEQA does allow agencies to establish performance standards in lieu of fully specified mitigation measures, this is permissible only when it is impractical or infeasible to provide detailed measures at the time of EIR certification.[189] In such cases, the lead agency must: (1) clearly commit to implementing the mitigation; (2) adopt enforceable performance standards; and (3) identify the types of actions that could feasibly achieve those standards.[190] Any future mitigation actions identified in the EIR must be described in sufficient detail to demonstrate their potential feasibility and effectiveness.[191]

1. *Mitigation Measure M-NO-1 Is Vague and Unenforceable*

19 - NO-4

The DEIR concludes that impacts associated with potential nighttime generator operation during construction of the distribution express feeder is potentially significant.[192] To reduce this impact, the DEIR identified Mitigation Measure M-NO-1, which requires that the dewatering of trenchless excavation pits to be designed to meet a performance standard of no more than 5 dBA above ambient levels by implementing quiet generators and/or acoustical enclosures.[193] While the inclusion of a performance standard represents an attempt to define acceptable noise levels, the measure remains vague and unenforceable for several reasons.

First, the terms "quiet" generator and "acoustical enclosure" are not clearly defined.[194] The use of qualitative descriptors alongside a performance threshold introduces ambiguity when the mitigation measure does not specify what equipment qualifies as acceptable. For instance, it is unclear whether any generator that meets the performance standard qualifies as "quiet," or if the measure requires the selection of generators that are inherently lower in noise

[187] Pub. Res. Code §§ 21061, 21100(b)(3); CEQA Guidelines § 15126.4.
[188] CEQA Guidelines § 15126.4(a)(1)(B).
[189] *Ibid*.
[190] *Ibid*.; *Save Our Capitol! v. Department of Gen. Servs.* (2023) 87 Cal.App.5th 655, 687-88; *East Oakland Stadium Alliance v. City of Oakland* (2023) 89 Cal.App.5th 1226, 1255.
[191] *East Oakland Stadium Alliance v. City of Oakland* (2023) 89 Cal.App.5th 1226, 1258-59, 75.
[192] DEIR at p. 3.2-33.
[193] *Ibid*.
[194] Jue Comments at p. 4.

printed on recycled paper

output, even before mitigation measures are applied (e.g., sound enclosures, shielding, etc.).[195]

Second, while the 5 dBA threshold provides a measurable standard, the DEIR does not explain how compliance will be verified. There is no discussion of measurement methodology, monitoring procedures, or enforcement mechanisms.[196] Without such implementation details, there is no assurance that generator-related noise will be effectively controlled, particularly in sensitive receptor areas where even a 5 dBA increase may be perceived as intrusive.[197]

19 - NO-4 cont.

To comply with CEQA, the mitigation measure must be revised to eliminate vague terminology, provide a clear definition of acceptable generator equipment (including allowable noise ratings at specific distances) and acoustic enclosures, and outline a robust monitoring and enforcement plan. At a minimum, the measure should require pre-construction ambient noise surveys, on-site verification of generator noise emissions, and corrective actions if measured noise levels exceed the 5 dBA threshold.[198]

2. *Use of Improper Baselines Precludes Meaningful Evaluation of Mitigation Measures M-NO-3a and M-NO-3b*

As discussed in Section IX.A., the DEIR fails to use an appropriate baseline for evaluating noise impacts.[199] Because the ambient noise measurements do not adhere to the definitions set for the in the applicable noise ordinance, the effectiveness of associated mitigation measures cannot be meaningfully assessed.[200] This flaw undermines the validity of the impact analysis and the determination of whether the Mitigation Measure M-NO-3a, which addresses operational noise from stationary sources,[201] and Mitigation Measure M-NO-3b, which addresses operational noise from service yards, will reduce impacts to a less than significant level.[202] As a result, the conclusion that these mitigation measures are sufficient to reduce impacts to less than significant is not supported by substantial evidence.

20 - NO-1

[195] *Ibid*.
[196] *Ibid*.
[197] *Ibid*.
[198] *Ibid*.
[199] *Id*. at pp. 1-2.
[200] *Id*. at pp. 1-2, 5.
[201] DEIR at p. 3.2-49,
[202] *Id*. at p. 3.2-51.

printed on recycled paper

To comply with CEQA, the DEIR must be revised to establish the proper baseline in accordance with the applicable local noise ordinance. Only with a valid baseline can the effectiveness of the proposed mitigation measures be properly evaluated. Absent such revisions, the DEIR fails to provide an accurate, complete, and good-faith effort at disclosure as required by CEQA.

20 - NO-1 cont.

3. *Mitigation Measure M-NO-4a Is Inadequate Without Requiring Consultation with a Geotechnical Engineer*

Mitigation Measure M-NO-4a requires the establishment of vibration limits not to be exceeded within a certain distance of buildings and/or structures, monitor vibration levels during construction, and repair any vibration-related damage to its pre-construction condition.[203] The measure is deficient because it fails to require consultation with a qualified geotechnical engineer to assess and implement protective measures for buildings located within 25 feet of pile driving activities.[204] This omission renders the mitigation measure incomplete and potentially ineffective under CEQA.

As discussed in Section IX.C., pile driving can generate groundborne vibration levels that may cause cosmetic or structural damage to nearby buildings.[205] The severity of vibration impacts is highly site-specific and dependent on factors including the soil and subsurface conditions and proximity to sensitive structures.[206] Although the DEIR states the closest on-site structure to pile driving activities is approximately 70 feet,[207] it does not prohibit future positioning of the new City Substation or other project components closer to the existing buildings.[208] As currently written, nothing in the DEIR or the project description would prevent pile driving from occurring within 25 feet of existing structures.[209]

21 - NO-4

Despite this potential, M-NO-4a lacks a mandatory requirement for a geotechnical evaluation where buildings are located within 25 feet of vibration-generating activities.[210] Standard set back distances or general vibration limitations may not adequately address localized conditions that could increase the

[203] *Id.* at p. 3.2-55.
[204] Jue Comments at p. 3.
[205] *Ibid.*
[206] *Ibid.*
[207] DEIR at p. 3.2-61.
[208] Jue Comments at p. 3.
[209] *Ibid.*
[210] *Id.* at pp. 5-6.

printed on recycled paper

risk of structural damage.[211] Without professional input, the mitigation strategy lacks the site-specific responsiveness necessary to ensure effectiveness.[212]

O-CUE 21 - NO-4 cont.

X. CONCLUSION

For the reasons discussed above, the DEIR is wholly inadequate under CEQA. It must be thoroughly revised to provide legally adequate analysis of, and mitigation for, all the Project's potentially significant impacts. These revisions will necessarily require that the DEIR be recirculated for additional public review. Until the DEIR has been revised and recirculated, CCSF may not lawfully approve the project.

Thank you for your consideration of these comments. Please include them in the record of proceedings for the Project.

Sincerely,



Andrew J. Graf

Attachments
AJG:acp

[211] *Ibid.*
[212] *Ibid.*

5954-020acp

printed on recycled paper

ATTACHMENT A

ADAMS BROADWELL JOSEPH & CARDOZO
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
601 GATEWAY BOULEVARD, SUITE 1000
SOUTH SAN FRANCISCO, CA 94080-7037
TEL: (650) 589-1660
FAX: (650) 589-5062
agraf@adamsbroadwell.com

SACRAMENTO OFFICE
520 CAPITOL MALL, SUITE 350
SACRAMENTO, CA 95814-4721
TEL: (916) 444-6201
FAX: (916) 444-6209

KEVIN T. CARMICHAEL
CHRISTINA M. CARO
THOMAS A. ENSLOW
KELILAH D. FEDERMAN
ANDREW J. GRAF
TANYA A. GULESSERIAN
KENDRA D. HARTMANN*
DARIEN K. KEY
RACHAEL E. KOSS
AIDAN P. MARSHALL
TARA C. RENGIFO
MICHAEL R. SEVILLE

Of Counsel
MARC D. JOSEPH
DANIEL L. CARDOZO

Not admitted in California. Licensed in Colorado.

March 7, 2022

Via E-Mail and Overnight Mail

Lisa Gibson
Planning Department
City and County of San Francisco
49 South Van Ness Avenue, Ste 1400
San Francisco, CA 94103
lisa.gibson@sfgov.org
CPC.EPIntake@sfgov.org

Julie Moore
Planning Department
City and County of San Francisco
49 South Van Ness Ave, Ste 1400
San Francisco, CA 94103
Julie.moore@sfgov.org
CPC.PGEPowerAssetMND@sfgov.org

Re: **Appeal of the Preliminary Mitigated Negative Declaration for the PG&E Power Asset Acquisition Project (Case No. 2019-017272ENV; SCH No. 2022010066)**

Dear Ms. Gibson and Ms. Moore:

We write on behalf of the Coalition of California Utility Employees ("CUE") to appeal the determination of no significant effect on the environment contained in the City and County of San Francisco's ("CCSF") Preliminary Mitigated Negative Declaration[1] and Initial Study (collectively referred to as "PMND") for the Pacific Gas & Electric ("PG&E") Power Asset Acquisition Project (2019-017272ENV) ("Project"), pursuant to the California Environmental Quality Act[2] ("CEQA") and San Francisco Administrative Code § 31.11.

CCSF intends to purchase all distribution assets and substantially all transmission assets from PG&E that are needed to provide reliable electricity service to customers in San Francisco.[3] As part of the transfer, the electric grid

[1] San Francisco Planning Department, Preliminary Mitigated Negative Declaration (Jan. 5, 2022) p. 1 (hereinafter "PMND"), *available at* https://citypln-m-extnl.sfgov.org/SharedLinks.aspx?accesskey=97d301cc03b27414e5d9b1094c0417d12d6490816f492c50fd12d069980806b3&VaultGUID=A4A7DACD-B0DC-4322-BD29-F6F07103C6E0.
[2] Pub. Res. Code § 21000 *et seq.*
[3] PMND at p. 1.

printed on recycled paper

assets CCSF intends to acquire must be physically separated from PG&E's electric grid.[4] To do so, CCSF would need to modify several existing substations, construct new distribution feeders, and install distribution infrastructure to connect and disconnect existing electrical lines.[5] Although not described in the PMND, as a result of CCSF's acquisition of certain PG&E assets, PG&E would need to undertake additional activities to ensure it is able to provide safe and reliable service to its customers outside San Francisco.

As a threshold matter, CCSF should not be designated as the lead agency for the proposed Project. That responsibility properly rests with the California Public Utilities Commission ("CPUC"). If CCSF adopts the PMND, based on our review of the PMND and supporting documentation, we conclude CCSF would fail to comply with CEQA. Specifically, the PMND fails to provide a complete and accurate project description, nor does it sufficiently describe the current environmental setting. These deficiencies are fatal errors because all potentially significant environmental impacts which may result from the Project could not be adequately analyzed in the PMND.

As described in this appeal, the PMND lacks substantial evidence to conclude the Project could not have a significant effect on the environment. To the contrary, there is more than a fair argument based on substantial evidence that the Project could have a potentially significant effect on the environment, including energy, noise, air quality, and public and worker health. CCSF cannot undertake any further actions concerning the proposed Project until an environmental impact report ("EIR") is prepared which fully discloses and analyzes the Project's potentially significant direct, indirect, and cumulative impacts, and incorporates all feasible mitigation measures to minimize the Project's impacts to less than significant.

We prepared these comments with the assistance of the following technical experts: air quality and health risk expert, Ray Kapahi; electric grid operation and maintenance experts, Hunter Stern, Roberto Balistreri and Damien Padilla; energy consultant, Robert Earle; and noise expert, Deborah Jue. The comments and qualifications of these experts are appended hereto as Exhibit A (Kapahi),[6] Exhibit

[4] *Ibid.*
[5] *Ibid.*
[6] **Exhibit A**, Environmental Permitting Specialists, Analysis of Public Health Risks Associated with the Construction of the Potrero Substation for the PG&E Power Asset Acquisition Project (Mar. 7, 2022) (hereinafter "Kapahi Comments").

printed on recycled paper

B (Stern/Balistreri/Padilla),[7] Exhibit C (Earle),[8] and Exhibit D (Jue).[9] CCSF must respond to each expert's comments separately and fully.

I. STATEMENT OF INTEREST

CUE is a coalition of unions whose members work at essentially all of the electric utilities in California, both investor-owned and publicly owned. The unions include the International Brotherhood of Electrical Workers Local 1245, whose members work at PG&E. CUE and its members are concerned with projects that can result in serious environmental harm without providing countervailing economic benefits such as decent wages and benefits. CEQA provides a balancing process whereby economic benefits are weighted against significant impacts to the environment.[10] Environmentally determinantal projects can jeopardize future jobs by making it more difficult and more expensive for industry to expand in San Francisco and the Bay Area, and by making it less desirable for businesses to locate and people to live and recreate in the city and surrounding areas. Continued degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduces future employment opportunities.

The individual representatives of CUE, including Hunter Stern and Roberto Balistreri, and the members of the affiliated labor organizations, including Damien Padilla, live, work, recreate and/or raise their families in San Francisco and in the surrounding Bay Area. They would be directly affected by the Project's environmental and health and safety impacts. Individual members may also work on the Project itself. They would be the first in line to be exposed to any health and safety hazards which may be present on the Project site. They each have a personal interest in protecting the Project area from unnecessary, adverse environmental and public health impacts. It is in this spirit we offer these comments.

---

[7] **Exhibit B**, Letter to Adams Broadwell Joseph & Cardozo from Hunter Stern et al. re: Preliminary Mitigated Negative Declaration – PG&E Power Asset Acquisition Project (Mar. 4, 2022) (hereinafter "Stern/Balistreri/Padilla Comments")

[8] **Exhibit C**, Letter to Adams, Broadwell, Joseph & Cardozo from Robert Earle re: Analysis of San Francisco Preliminary Mitigated Negative Declaration (Mar. 1, 2022) (hereinafter "Earle Comments").

[9] **Exhibit D**, Letter to Andrew J. Graf, Adams Broadwell Joseph & Cardozo from Deborah A. Jue, Wilson Ihrig re: PG&E Power Asset Acquisition PMND (Feb. 26, 2022) (hereinafter "Jue Comments").

[10] Pub. Res. Code § 21871(a)(3); *Citizens for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 171.

printed on recycled paper

II. STANDARD OF REVIEW

CEQA requires that lead agencies analyze any project with potentially significant environmental impacts in an EIR.[11] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR protects not only the environment, but also informed self-government."[12] The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."[13]

CEQA's purpose and goals must be met through the preparation of an EIR, except in certain limited circumstances.[14] CEQA contains a strong presumption in favor of requiring a lead agency to prepare an EIR. This presumption is reflected in the "fair argument" standard. Under that standard, a lead agency "shall" prepare an EIR whenever substantial evidence in the whole record before the agency supports a fair argument that a project may have a significant effect on the environment.[15]

In contrast, a mitigated negative declaration may be prepared only when, after preparing an initial study, a lead agency determines that a project may have a significant effect on the environment, but:

> (1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

---

[11] *See* Pub. Res. Code § 21000; CEQA Guidelines § 15002.
[12] *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 564 (internal citations omitted).
[13] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.
[14] *See* Pub. Res. Code § 21100.
[15] Pub. Res. Code §§ 21080(d), 21082.2(d); CEQA Guidelines §§ 15002(k)(3), 15064(f)(1), (h)(1); *Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal.* (1993) 6 Cal.4th 1112, 1123; *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 82; *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-151; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1601-1602.

printed on recycled paper

> (2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.[16]

Courts have held that if "no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR."[17] The fair argument standard creates a "low threshold" favoring environmental review through an EIR, rather than through issuance of a negative declaration.[18] An agency's decision not to require an EIR can be upheld only when there is no credible evidence to the contrary.[19]

"Substantial evidence" required to support a fair argument is "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached."[20] "Substantial evidence" includes "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts"[21] and does not include "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment."[22]

When determining whether an EIR is required, the lead agency is required to apply the following principle:

> [I]n marginal cases where it is not clear whether there is substantial evidence that a project may have a significant effect on the environment, the lead agency shall be guided by the following principle: If there is disagreement among

---

[16] Pub. Res. Code § 21064.5.
[17] *See, e.g.*, *Communities for a Better Environment. v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 319-320.
[18] *Citizens Action to Serve All Students v. Thornley* (1990) 222 Cal.App.3d 748, 754.
[19] *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th, 1307, 1318; *see also Friends of B Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 1002 ("If there was substantial evidence that the proposed project might have a significant environmental impact, evidence to the contrary is not sufficient to support a decision to dispense with preparation of an EIR and adopt a negative declaration, because it could be 'fairly argued' that the project might have a significant environmental impact").
[20] CEQA Guidelines § 15384(a).
[21] *Id*. § 15384(b).
[22] *Id*. § 15384(b).
5954-005acp

printed on recycled paper

> expert opinion supported by facts over the significance of an effect on the environment, the Lead Agency shall treat the effect as significant and shall prepare an EIR.[23]

Furthermore, CEQA requires that potentially significant impacts be mitigated through measures that are "fully enforceable through permit conditions, agreements, or other legally binding instruments."[24] Deferring formulation of mitigation measures to post-approval studies is generally impermissible.[25] Mitigation measures adopted after project approval deny the public the opportunity to comment on the project as modified to mitigate impacts.[26] If identification of specific mitigation measures is impractical until a later stage in the project, specific performance criteria must be articulated and further approvals must be made contingent upon meeting these performance criteria.[27] Courts have held that simply requiring a project applicant to obtain a future report and then comply with the report's recommendations is insufficient to meet the standard for properly deferred mitigation.[28]

III. THE CALIFORNIA PUBLIC UTILITIES COMMISSION IS THE PROPER LEAD AGENCY

CEQA defines the "lead agency" as "the public agency which has the principal responsibility for carrying out or approving the project which may have a significant effect on the environment."[29] The criteria for determining which agency will be the lead agency is set forth in CEQA Guidelines § 15051.[30] Generally, if a project will be carried out by a public agency, that agency is designated as the lead agency even if the project would be located within the jurisdiction of another public agency.[31]

On the surface, CCFS proposes a Project that appears to be carried out exclusively by the agency. However, as a foreseeable consequence of the proposed Project, PG&E would need to undertake additional activities to ensure that it can

---

[23] *Id.* § 15064(f).
[24] *Id.* § 15126.4(a)(2).
[25] *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308-309; Pub. Res. Code § 21061.
[26] *Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359, 1393; *Quail Botanical Gardens Found., Inc., supra,* 29 Cal.App.4th at p. 1604, fn. 5.
[27] *Id.*
[28] *Id.*
[29] Pub. Res. Code § 21067; CEQA Guidelines § 15367.
[30] CEQA Guidelines § 15367.
[31] *Id.* § 15051(a).

printed on recycled paper

provide safe and reliable electricity service to its customers. Because both CCSF and PG&E will need to perform various activities to physically separate the electric grid, the whole project is more akin to a public/private partnership, where the proposed project would be carried out jointly by a public agency and a private party.

In *Center for Biological Diversity v. County of San Bernardino*,[32] the court addressed how a public/private partnership should be analyzed under CEQA Guidelines § 15051. "[I]f a project will be carried out jointly in a partnership between a public agency and a nongovernmental person or entity, the agency that will serve as the lead agency for purposes of the environmental review for the project may be (1) the public agency that is a part of the public/private partnership, or (2) the public agency with the greatest responsibility for supervising or approving the project as a whole.[33] In contrast to the agency at issue in *Center for Biological Diversity*, CCSF does not meet both prongs of the test.[34] While CCSF will carry out part of the Project, the CPUC has the greatest responsibility for supervising and approving the Project as a whole because the Project cannot proceed without first receiving CPUC approval pursuant to Public Utilities Code § 851.

Under Public Utilities Code § 851(a), public utility property that is necessary or useful in the performance of the utility's duties to the public cannot be sold or transferred without Commission approval. Pursuant to Public Utilities Code § 851(b)(1), this requirement applies to any voluntary or involuntary change in ownership of assets from an electric corporation to a public utility.[35] "The primary standard used by the Commission to determine if a transaction should be authorized under section 851 is whether the transaction will serve the public interest."[36] "Where necessary and appropriate, the Commission may attach conditions to a transaction in order to protect and promote the public interest."[37] Because the CPUC's discretionary public interest determination is a condition

---

[32] *Center for Biological Diversity v. County of San Bernardino* (2016) 247 Cal. App. 4th 326.
[33] *Id.* at p. 340.
[34] *Id.* at p. 341.
[35] Pub. Util. Code § 854.2(b)(1)(F).
[36] D.04-07-023 at 11-12 (citing D.00-06-005, 2000 Cal. PUC LEXIS 281, *4; D.99-04-066, p.5; D.99-02-036, p. 9; D.97-06-066, 72 CPUC 2d 851, 861; D.95-10-045, 62 CPUC 2d 160, 167; D.94-01-041, 53 CPUC 2d 116, 119; D.93-04-019, 48 CPUC 2d 601, 603; D.86-03-090, 1986 Cal. PUC LEXIS 198 *28 and COL 3; and D.8491, 19 CRC 199, 200).
[37] D.04-07-023 at 12 (citing D.95-10-045, 62 CPUC 2d 160, 167-68; D.94-01-041, 53 CPUC 2d116, 119; D.90-07-030, 1990 Cal. PUC LEXIS 612 *5; D.89-07-016, 32 CPUC 2d 233, 242; D.86-03-090, 1986 Cal. PUC LEXIS 198 *84-85 and COL 16; and D.3320, 10 CRC 56, 63).
5954-005acp

printed on recycled paper

precedent to the proposed Project, the CPUC has the greatest responsibility for approving the project as a whole.

Moreover, where separate agencies are identified under the two-prong test articulated in *Center for Biological Diversity*, the agency which acts first on the project in question will normally be the lead agency.[38] As discussed above, the CPUC's public interest determination must occur before any other actions can be taken with respect to the proposed Project. Therefore, the CPUC is the proper lead agency.

Allowing CCSF to proceed as the lead agency would be prejudicial because the whole project cannot be identified until PG&E ascertains the activities it must undertake to ensure safe and reliable operation of the grid. Therefore, CCSF should refrain from taking any actions on the PMND until after the CPUC completes its environmental review of the whole project.

IV. THE PMND VIOLATES CEQA BY FAILING TO PROVIDE AN ACCURATE PROJECT DESCRIPTION

The initial study and negative declaration must include a description of the project.[39] "All phases of the project planning, implementation, and operation must be considered in the Initial Study of the project."[40] "Where an agency fails to provide an accurate project description, or fails to gather information and undertake an adequate environmental analysis in its initial study, a negative declaration is inappropriate. An accurate and complete project description is necessary to fully evaluate the project's potential environmental effects."[41]

A. The PMND Fails to Describe the Activities that PG&E Must Undertake to Ensure It Can Provide Safe and Reliable Electric Service

A complete project description must include details as to the "later phases of the project, and any secondary, support, or off-site features necessary for its

[38] CEQA Guidelines § 15051(c).
[39] *Id.* § 15063(d)(1), 15071(a).
[40] *Id.* § 15063(a)(1)
[41] *El Dorado County Taxpayers for Quality Growth v. County of El Dorado* (2004) 122 Cal.App.4th 1591, 1597 (internal citations omitted).

printed on recycled paper

implementation."[42] The requirements of CEQA cannot be avoided by chopping the project into many small parts or by excluding reasonably foreseeable future activities that may become part of the project.[43] The PMND must supply enough information so that the decisionmakers and the public can fully understand the scope of the Project.[44] A lead agency must fully analyze the whole project in a single environmental review document and may not piecemeal or split a project into pieces for purposes of analysis.

The PMND analyzes the physical activities that CCSF proposes to perform to physically separate the electric grid, but it fails to describe and analyze the activities that PG&E must undertake to ensure that PG&E can maintain a safe and reliable grid. Because the PMND fails to adequately describe the full scope of the Project, it also fails to disclose the full range and severity of the Project's potentially significant environmental and public health impacts. CEQA requires an EIR to be prepared which analyzes the activities that both CCSF and PG&E must undertake to separate the two systems and ensure both systems can maintain safe and reliable service.

B. The PMND Fails to Adequately Describe the Transformers Installed at the Martin Substation

The PMND references the use of National Electrical Manufacturers Association standards for the transformers to be installed at the Martin Substation.[45] However, the specific power rating and dimensions of this equipment are not identified. As Ms. Jue explains in her attached comments, substations of similar size and scope can generate a sound level of 81 dBA at a 6-foot distance, which is substantially higher than the results provided in the PMND.[46] Without an adequate description of the transformers to be utilized at the substation, the operational noise impacts cannot be adequately analyzed. An EIR must be prepared with a detailed description of the equipment operating at the Martin Substation so decisionmakers and the public can properly assess the Project's noise impacts.

---

[42] *Bozung v. Local Agency Formation Commission of Ventura County* (1975) 13 Cal.3d 267, 283-84.
[43] Pub. Res. Code § 21159.27 (prohibiting piecemealing); *see also Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351, 370.
[44] *Dry Creek Citizens Coalition v. County of Tulare* (1990) 70 Cal.App.4th 20, 26.
[45] PMND at p. 97.
[46] Jue Comments at p. 4.
5954-005acp

C. The PMND Fails to Accurately Describe the Equipment that Could Be Utilized During Project Construction

The PMND states that installation of duct bank beneath the MUNI light rail line crossings would require horizontal directional drilling or jack and bore construction methods.[47] The PMND identifies several different pieces of construction equipment that would be required for Project construction;[48] however, the list omits hoe ram/hydra break and jackhammer which are commonly used during trenching and excavation of a jack and bore pit.[49] In addition, the PMND's noise value for backhoe equipment is not consistent with the source documents.[50]

By failing to accurately describe all potential pieces of construction equipment that may be used during Project construction, the noise and air quality impacts cannot be adequately analyzed.[51] An EIR must be prepared with a detailed description of the construction equipment that may be used during Project construction so decisionmakers and the public can properly assess the Project's noise impacts.

D. The PMND Fails to Adequately Describe the Increased Electric Generation Necessary for the Project

CEQA requires an analysis of the project's energy consumption.[52] Appendix F to the CEQA Guidelines provides "[g]uidance on information that may be included" in an analysis of a project's energy use.[53] It states: "The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include: (1) decreasing overall per capita energy consumption, (2) decreasing reliance on fossil fuels such as coal, natural gas and oil, and (3) increasing reliance on renewable energy sources."[54] Appendix F identifies several items that should be addressed in the project description, including "[t]otal energy

---

[47] PMND at p. 25.
[48] *Id*. at p. 28.
[49] Jue Comments at p. 2.
[50] *Id*. at p. 2.
[51] *Id*. at p. 2.
[52] Pub. Res. Code § 21100(b)(3); CEQA Guidelines § 15126.4(a)(1), Appendix F.
[53] CEQA Guidelines § 15126.2(b).
[54] *Id*., Appendix F, I.

printed on recycled paper

requirements of the project by fuel type and end use" and "identification of the energy supplies that would serve the project."[55]

The PMND lacks an adequate description of the additional generation CCSF will need to supply because of the asset transfer. SFPUC provides electric services within CCSF and to certain electric customers outside of San Francisco.[56] SFPUC's municipal power utility and CleanPowerSF, the SFPUC's community choice aggregation program, provide power to about 70% of electric customers in San Francisco.[57] The remaining 30% of power is provided by PG&E.[58] Therefore, the total generation delivered by SFPUC would necessarily increase to serve those customers that are currently served by PG&E, but would be served by SFPUC following the asset transfer.[59]

The PMND omits any description of the increased power supply that will be required because of the proposed Project. As a result, the PMND fails to meaningfully analyze the "project's energy requirements and its energy use efficiencies" and "the effects of the project on local and regional energy supplies and on requirements for additional capacity."[60] An EIR must be prepared with a detailed description of the Project's anticipated energy generation.

V. THE PMND VIOLATES CEQA BY FAILING TO ADEQUATELY DESCRIBE THE BASELINE NOISE CONDITIONS

An initial study must include a description of the project's environmental setting.[61] The description of the environmental setting constitutes the baseline physical conditions by which a lead agency may assess the significance of a project's impacts.[62] "The purpose of this requirement is to give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts."[63]

---

[55] *Id.*, Appendix F, II.A.2, 4.
[56] PMND at p. 6.
[57] *Ibid.*
[58] Earle Comments at p. 1.
[59] *Ibid.*
[60] CEQA Guidelines, Appendix F.II.C.1-2.
[61] *Id.* § 15063(d)(2).
[62] *Id.* § 15125(a); *see also Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 38 Cal. 4th 310, 320-21 (CEQA Guidelines § 15125(a) applies to an initial study).
[63] CEQA Guidelines § 15125(a).

printed on recycled paper

"An initial study may rely upon expert opinion supported by facts, technical studies or other substantial evidence to document its findings."[64] Substantial evidence is defined as "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached."[65] It includes "facts, reasonable assumption predicated upon facts, and expert opinion supported by facts,"[66] but does not include "[a]rgument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate."[67]

"[P]reparing a Negative Declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can."[68] "If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact."[69] An agency is not allowed to hide behind its own failure to gather relevant data.[70]

A. The PMND Fails to Establish Daytime Ambient Noise Levels Along the Distribution Lines and Near the Martin, Randolph, and Plymouth Substations

The PMND's construction noise impact analysis for the distribution lines and the Martin, Randolph, and Plymouth substation relies on data drawn from other sources, most of which is presented in terms of hourly metrics such as community noise level equivalent ("CNEL") and Ldn.[71] However, these metrics does not accurately capture the existing noise levels at the various locations where construction will occur.[72] In fact, the PMND provides no evidence to explain how CNEL or Ldn data was used to establish the daytime ambient thresholds, which require hourly Leq values.[73] The PMND also contains limited discussion on the

---

[64] *Id.* § 15063(a)(3).
[65] *Id.* § 15384(a).
[66] *Id.* § 15384(b).
[67] *Id.* § 15384(a).
[68] *Id.* § 15144 (emphasis added).
[69] *Id.* § 15145 (emphasis added).
[70] *City of Redlands v. County of San Bernardino (*2002) 96 Cal.App.4th 398, 408.
[71] PMND at p. 85-86, 91-94; Jue Comments at p. 1.
[72] Jue Comments at p. 1.
[73] *Ibid.*

printed on recycled paper

existing noise environments, including neighboring noise-sensitive land uses.[74] As a result, the construction noise impacts cannot be adequately analyzed.[75]

B. The PMND Fails to Establish the Nighttime Ambient Noise Levels at the Martin and Potrero Substations

The PMND's operational noise impact analysis for the Martin Substation relies on CNEL as specified in the Daly City general plan.[76] However, like daytime ambient levels, CNEL does not accurately capture the nighttime noise levels existing at the residences located near the Martin Substation.[77] Statistical noise metrics such as L90 should be used to establish the baseline nighttime environment near the substation.[78] As a result, the noise impacts from the transformers operating at the substation cannot be adequately analyzed.[79]

The PMND's operational noise impact analysis for the Potrero Substation suffers from similar flaws. The PMND relies on ambient noise levels of 67 dBA identified in the Potrero Power Station EIR.[80] However, these are daytime values which have no bearing on whether the strong tonal noises associated with the STATCOM systems would increase the nighttime ambient.[81] Without establishing the baseline nighttime noise levels, the impacts of the STATCOM system cannot be adequately analyzed.

---

[74] *Id*. at p. 2.
[75] *Id*. at p. 2.
[76] PMND at p. 98.
[77] Jue Comments at p. 1.
[78] *Ibid*.
[79] *Id*. at pp. 3-4.
[80] PMND at p. 95.
[81] Jue Comments at p. 4.

printed on recycled paper

VI. SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THE PROJECT MAY RESULT IN POTENTIALLY SIGNIFICANT IMPACTS

A. The PMND Fails to Analyze the Reasonably Foreseeable Indirect Impacts from an Insufficiently Sized or Trained Workforce to Operate and Maintain San Francisco's Electric System

A lead agency must consider the reasonably foreseeable indirect environmental consequences of a project's economic or social changes.[82] A physical change to the environment cannot be disregarded simply because it is a secondary result of the project's economic or social effects.[83] Indeed, the CEQA Guidelines state: "Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project.[84]

The PMND significantly underestimates the number of field employees CCSF will need to safely and reliable operate and maintain the electric grid in San Francisco. On top of that, CCSF erroneously assumes that the existing labor pool includes enough qualified personnel to hire an adequately size workforce. Without an adequately sized workforce, CCSF's customers will experience more frequent and longer lasting power outages because CCSF will not be able to timely respond to power outages, or maintain and replace the electric system as necessary over time. As a result, CCSF customers will turn to backup generation to ensure their electricity needs are met.

The PMND fails to analyze the reasonably foreseeable indirect impacts from an insufficiently sized or trained workforce. This includes the air quality impacts resulting from increased reliance on diesel backup generators during longer lasting and more frequent power outages.

1. The PMND Severely Underestimates the Number of Field Employees CCSF Will Need to Operate and Maintain the Electric System

The PMND assumes that CCSF will need to hire approximately 200 new employees, with 150 employees responsible for administrative activities and 50

[82] CEQA Guidelines § 15064(d)-(e).
[83] *Id*. § 15064(e).
[84] *Id*. § 15064(e).

printed on recycled paper

employees responsible for field operations for the infrastructure assets.[85] However, a field workforce of 50 employees would not ensure safe and reliable operation of the electric grid that serves customers in San Francisco.

PG&E currently utilizes a field workforce of over 100 employees, consisting of lineman, cableman, troublemen, substation electricians, meter technicians and system operators.[86] However, the number of qualified workers CCSF needs is likely even larger than that because PG&E currently has a staffing shortage.[87] Therefore, CCSF severely underestimates the number of field employees it would need to safely and reliability operate and maintain the grid.[88]

2. The PMND Erroneously Assumes It Will Be Able to Hire a Sufficiently Sized and Trained Workforce to Operate and Maintain the Electric System

The PMND assumes that the new employees, including the 50 field employees, would be drawn from the existing labor pool in the San Francisco Bay Area.[89] This assumption is incorrect for three reasons.

First, there is a national shortage of lineman, the workers qualified to work on electrical lines and infrastructure.[90] As Mr. Stern, Mr. Balistreri and Mr. Padilla explain, "[i]t takes five years to 'grow' a lineman, including completion of state-certified apprenticeship or training program and several years of on-the-job training. Workers need years of on-the-job training as a journeyman in their craft to learn the ins and outs of the electric system work. The 'growing' process is even longer for cable splicers who work on the underground electric systems splicing lead cable and installing and maintaining underground protection network systems."[91]

---

[85] PMND at pp. 33, 83.
[86] Stern/Balistreri/Padilla Comments at pp 1-2.
[87] *Id*. at p. 2.
[88] Id. at p. 2.
[89] PMND at p. 115.
[90] Stern/Balistreri/Padilla Comments at p. 2; *see also* Klien Tools, Dark by 2050 (Oct. 2020), *available at* https://data.kleintools.com/sites/all/product_assets/documents/brochures/klein/DarkBy2050_Klein_ResearchPaper.pdf.
[91] Stern/Balistreri/Padilla Comments at p. 2.

printed on recycled paper

This problem is compounded by the fact that San Francisco's electric system is unique when compared to other electric systems in the United States. As Mr. Stern, Mr. Balistreri and Mr. Padilla explain:

> The system in San Francisco has a complicated design scheme based on a dense underground electric network, the fourth largest in the United States and the largest west of the Mississippi., and complex wiring system aboveground. Both the overhead and underground systems in San Francisco are complicated by a wide variety of equipment, both in age and its operations. A worker who has not been trained and worked in San Francisco for many years, absorbing on-the-job training from senior, highly experienced workers and operating and maintaining this equipment directly, cannot perform this work safely or reliably. There are currently very few lead splicers qualified to work on the San Francisco underground network.[92]

Second, it is incredibly difficult to attract qualified workers to the San Francisco Bay Area due to the high cost of living. In fact, PG&E is going to great lengths to restaff its electric workforce in the Bay Area, including San Francisco, to make up for the workers it lost in the recent years.[93] To attract and retain qualified workers in certain job classifications, PG&E is offering, among other incentives, exceptionally premium wages, special overtime provisions, retention incentives, and housing subsidies.[94] These extraordinary terms appear unmatched by other electric utilities in California and nationally, but are necessary to attract and retain workers in San Francisco.[95] Therefore, CCSF would need to match these terms to even compete for the limited pool of qualified workers which are available.

Third, CCSF cannot assume that it would subsume PG&E's current workforce. As Mr. Stern, Mr. Balistreri and Mr. Padilla explain:

> PG&E offers a benefit that SFPUC cannot offer – the opportunity for workers to transfer out of San Francisco and work in other areas of PG&E service territory. This is known as the "salmon run." As PG&E workers attain higher seniority, they begin to bid out of the Bay Area into less populated areas. This phenomenon has existed since the early 1980s. Additionally, PG&E is

---

[92] *Id.* at p. 2-3
[93] *Id.* at p. 3.
[94] *Ibid.*
[95] *Ibid.*

printed on recycled paper

> understaffed outside of the Bay area. Therefore, PG&E would absorb its current San Francisco workforce to staff other areas that are understaffed. Indeed, none of PG&E's current San Francisco workforce resides in San Francisco.[96]

In addition, there would be clear financial harm to most PG&E workers if they were to transfer to CCSF due to lost retirement benefits. As Mr. Stern, Mr. Balistreri and Mr. Padilla explain:

> PG&E retirement benefits are ERISA based while the SFPUC benefits are public sector based in the San Francisco Employees Retirement System. Individual workers cannot transfer funds between these two retirement systems. As a result, PG&E workers would lose a big chunk of their retirement benefits by leaving PG&E for the SFPUC. The only way that this issue can be cured is if a ballot initiative is proposed to give these new electric utility workers extra funding out of San Francisco's general fund to make these workers whole for retirement purposes. Such a measure must be placed on the ballot and approved by San Francisco voters. Existing City and County of San Francisco workers would likely object to the granting of extra general fund funds to attract these new electric workers. The City and County of San Francisco is also facing the likelihood of increased budget shortfalls from higher losses in revenue connected to expected continuing reduced tourism and large scale remote workforce. The result is that there is no incentive for PG&E workers to go work for the SFPUC.[97]

3. The PMND Fails to Analyze Impacts from an Insufficiently Sized or Trained Workforce

To provide safe and reliable electric service in San Francisco, the SFPUC must have a sufficiently sized and trained workforce. Without enough qualified personnel, there won't be enough workers to respond to outages or repair the system.[98] This results in a cascading effect that causes greater wear and tear on the utility's infrastructure, and increases the likelihood of equipment failure in the

[96] *Ibid.*
[97] *Id.* at p. 3-4.
[98] *Id.* at p. 4.

printed on recycled paper

future.[99] As a result, there will be an increase in the number of customers that have more frequent and longer lasting power outages.[100]

The PMND fails to analyze the impacts from an insufficiently sized or trained workforce, including more frequent and longer duration outages. For example, the MND fails to analyze the air quality and health risk impacts from the use of diesel backup generators during longer lasting and/or more frequent power outages.[101]

As the frequency and duration of outages increase, many electricity customers will turn to backup generation.[102] In San Francisco, there are approximately 1,190 permitted backup generators as of 2020.[103] The vast majority of these generators are likely diesel powered given that approximately 90% of the permitted backup generators in BAAQMD utilize diesel fuel.[104] Any increases in generator use would result in a corresponding increase of harmful emissions.[105]

B. The PMND Lacks Substantial Evidence to Support Its Conclusion that the Cancer Risk from Construction Activities at the Potrero Substation Would be Less Than Significant with Mitigation

The PMND concludes the health risks from construction activities at the Potrero Substation would be less than significant with mitigation.[106] To mitigate health risks, the PMND proposes M-AQ-2 which would require the use of Tier 4 Final engines for all off-road construction equipment used for the substation.[107] To reach this conclusion, the PMND relies on a screening health risk assessment described in the Air Quality Technical Report ("AQTR").[108]

The AQTR calculated the emissions associated with construction of the Potrero Substation using screening tools developed by Ramboll (then Environ) for

---

[99] Dark by 2050 at p. 21.
[100] Stern/Balistreri/Padilla Comments at p. 4.
[101] *Id.* at p. 4; Earle Comments at pp. 2-3.
[102] Earle Comments at p. 3.
[103] *Id.* at p. 2; *see also* M.Cubed, Diesel Back-Up Generator Population Grows Rapidly in the Bay Area and Southern California (Oct. 2021) p. 14, *available at* https://www.bloomenergy.com/wp-content/uploads/diesel-back-up-generator-population-grows-rapidly.pdf.
[104] Earle Comments at pp. 2-3.
[105] *Id.* at p. 3.
[106] PMND at p. 124.
[107] *Id.* at p. 120.
[108] *Id.* at p. 124.

printed on recycled paper

SFPUC use: v.6 – Phase 1 (Area Projects) and v.8 – Phase 2 (linear Roadway Projects).[109] The AQTR claims that the emission component of these tools utilized the construction equipment information provided by the CCSF;[110] however, this is incorrect. The screening tool utilized horsepower ("HP") assumptions for several pieces of construction that are lower than those provide by CCSF.[111]

The issue is exemplified by the bore/drill rigs that are anticipated to be used during the pile driving subphase at the Potrero Substation. As Mr. Kapahi explains, the AQTR used a HP rating of 82 for bore/drill rigs during the pile driving subphase,[112] instead of a HP rating of 299 provided by CCSF as indicated in Table 2 of the AQTR.[113] The PMND also did not rely on CalEEMod default assumption of 221.[114]

Because the AQTR utilized lower horsepower ratings for multiple pieces of construction equipment, it severely underestimates the construction emissions for the Potrero Substation.[115] As a result, the PMND lacks substantial evidence to support its conclusion that the health risks from construction activities at the substation would be less than significant.

C. Substantial Evidence Supports a Fair Argument that the Cancer Risk from Construction Activities at the Potrero Substation Would Be Significant Even with the Proposed Mitigation

1. *If the Horsepower Error Is Corrected for Bore/Drill Rigs in the AQTR's Screening Tool, Then Construction Activities at the Potrero Substation Would Result in a Significant Cancer Risk Even with the Proposed Mitigation*

---

[109] PMND, appen. C, attach. 1 (Letter to Julie Moore, San Francisco Planning Department from Michael Keinath, Ramboll re: CEQA Air Quality Health Risk Assessment for Pacific Gas & Electric Power Asset Acquisition Project, San Francisco, California (Mar. 2, 2021) p. 7 (hereinafter "AQTR")).
[110] *Ibid.*
[111] Kapahi Comments at p. 13.
[112] *Ibid.*
[113] *Ibid.*
[114] *Ibid.*
[115] *Id.* at p. 15.

printed on recycled paper

As discussed above, the AQTR underestimates the HP rating for several pieces of construction equipment to be used at the Potrero Substation.[116] If the horsepower error is corrected for just bore/drill rigs in the manner recommended by the AQTR's screening tool, then the construction activities at the substation would result in a significant impact, even with implementation of M-AQ-2.

As Mr. Kapahi explains, the screening tool identifies a "typical" HP for bore/drill rigs as 82. However, CCSF identifies the HP rating for bore/drill rigs as 299,[117] and the CalEEMod default HP for bore/drill rigs is 221.[118] Even if the lower CalEEMod default is utilized, the cancer risk for construction activities would exceed the relevant significance threshold.

Mr. Kapahi provides a walkthrough for how the emissions estimates change when the HP error is corrected.[119] The screening tool provides instructions for how to calculate emissions when the actual HP is known.[120] It states:

> For diesel equipment, the "typical" horsepower (HP) option should be selected if the actual equipment is unknown. When default horsepower is selected an assumed HP consistent with CalEEMod default values will be used and represents a fleet average horsepower. For confirmation the HP ratings for all equipment, including defaults are provided in the "HP Check" column. If an equipment HP is in between options, the higher HP option should be selected.[121]

The screening tool provides 8 options to select for horsepower on the data input tab: typical, 50, 120, 175, 250, 500, 750, and 100.[122] Since the CalEEMod default HP rating of 221 for bore/drill rigs is between 175 and 250, the screening tool recommends that the higher HP option be selected.[123] Therefore, the correct HP rating for bore/drill rigs would be 250.[124]

---

[116] *Id.* at p. 13.
[117] *Ibid.*
[118] *Ibid.*
[119] *Id.* at pp. 13-14.
[120] *Id.* at p. 13.
[121] Kapahi Comments at p. 13-14, attach. 1 at p. 3.
[122] Kapahi Comments at p. 14.
[123] *Ibid.*
[124] *Ibid.*

printed on recycled paper

When an HP of 250 is inserted for bore/drill rigs, the screening tool's health impacts and air concentration analysis report provides a new calculation for the total cancer risk.[125] The screening tool estimates that the total cancer risk for a resident located 50 feet from the Project site on the 1st floor would be 6.24 per million.[126]

The 6.24 per million cancer risk does not account for onsite construction impacts (including onsite trucks) during the trenching subphase for the Potrero Substation, nor does it account for offsite truck impacts during all construction phases at the substation. When the emissions for these activities are also considered, the total cancer risk for a resident located 50 feet from the Project site on the 1st floor would be 7.14 per million.[127]

Therefore, construction activities at the Potrero Substation would exceed the PMND's cancer risk threshold of 7.0 per million, even with implementation of M-AQ-2 requiring the use of Tier 4 Final engines. Therefore, the health risks from the Project would be significant and unmitigated to a less than significant level.

2. Even Without Correcting Errors in the AQTR's Screening Tool, It Shows Construction at the Potrero Substation Would Result in a Significant Cancer Risk for Sensitive Receptors at Higher Elevations

The PMND concludes the cancer risk for the nearest sensitive receptor to the Potrero Substation is 6.7 per one million.[128] However, this conclusion is based on an impact to a resident located 50 feet from the substation on the 1st floor of the planned Potrero Power Station Mixed-Use Development Project ("Potrero Power Station Project").[129] However, the building proposed to be located nearest to the Potrero Substation is expected to be a multi-story residential building.[130] Therefore, the PMND must also evaluate sensitive receptors at greater elevations.

---

[125] *Id.* at p. 14, attach. 4 at p. 3.
[126] *Id.* at p. 14, attach. 4 at p. 8.
[127] *Id.* at p. 15, attach. 2 at p. 9.
[128] PMND at p. 124.
[129] AQTR at p. 10, Table 12 (Screening HRA Results, Tier 4 Engines).
[130] San Francisco Planning Department, Draft Environmental Impact Report: Potrero Power Station Mixed Use Development (Oct. 3, 2018) p. 2-16, 2-18, 2-20 *available at* https://sfplanning.s3.amazonaws.com/sfmea/2017-011878ENV_DEIR_Volume_1.pdf.

printed on recycled paper

According to the AQTR's health risk screening analysis for the Potrero Substation under the Controlled (Tier 4 Final engines) scenario, residents located 50 feet from the substation on the 2nd and 3rd floors have an estimated cancer risk of 7.53 and 6.88 per million, respectively.[131] However, this screening analysis did not include trenching to install duct banks at the substation.

A separate screening analysis for the trenching phase shows that residents located 50 feet from the substation on the 2nd and 3rd floors and have an estimated cancer risk of 1.12 and 0.71 per million, respectively.[132] Therefore, emissions generated from construction at the Potrero Substation would create a cancer risk to future sensitive receptors located approximately 50 feet away on the 2nd and 3rd floor of 8.65 and 7.59 per million, respectively.

As a result, the cancer risk for higher elevations would exceed the PMND threshold of 7.0 per million persons exposed.[133] Therefore, the cancer risk from construction activities at the Potrero Substation would be significant even with implementation of M-AQ-2, requiring the use of Tier 4 Final engines.

3. An Independent Health Risk Analysis Shows that Construction Activities at the Potrero Substation Would Result in a Significant Impact Even with the Proposed Mitigation

As discussed above, the PMND relies on a screening health risk assessment for construction activities at the Potrero Substation.[134] Construction-related risks were analyzed using air dispersion modeling conducted in AERSCREEN.[135] However, this model suffers from two critical deficiencies.

First, the model is not site specific.[136] This means the model fails to account for relevant factors like prevailing winds. Here, the prevailing winds at the Project site blow from West to East, meaning that emissions from construction equipment will travel directly towards future sensitive receptors at the planned Potrero Power Station Project.[137]

---

[131] Kapahi Comments, attach. 1 at p. 8.
[132] Kapahi Comments, attach. 2 at p. 9.
[133] PMND at p. 124.
[134] *Ibid.*
[135] AQTR at p. 7; Kapahi Comments at p. 7.
[136] *Ibid.*
[137] *Id.* at p. 7, attach. 3.

printed on recycled paper

Second, the model uses an empirical factor to estimate annual emissions based on hourly pollutant concertation.[138] As a result, the model can underestimate the annual concentration depending on the location.[139]

Mr. Kapahi analyzed the public health risks associated with the construction of the Potrero Substation to determine the cancer risk from exposure to diesel particulate matter ("DPM") that would be released from construction equipment and other onsite sources.[140] Mr. Kapahi's analysis relied on the same exact construction information, assumptions, and emissions utilized by the AQTR for the Controlled scenario.[141] However, in contrast to the AQTR, Mr. Kapahi's analysis utilizes AEROMOD dispersion model to produce a more accurate and site-specific estimate of pollutant concentrations and cancer risk.[142] Mr. Kapahi's methodology followed the Tier 3 (Refined) risk analysis described in the BAAQMD guidelines for modeling local health risks.[143]

Mr. Kapahi found that sensitive receptors located 50 feet from the Potrero Substation at a 5 foot elevation would have an estimated cancer risk of 16 per million.[144] Mr. Kapahi also found that sensitive receptors located 50 feet from the substation at a 20 foot elevation would have an estimated cancer risk of 10.7 per million.[145] Based on these results, even if the PMND requires the use of Tier 4 Final engines, construction at the Potrero Substation would exceed the threshold of 7.0 per million.

In instances where experts disagree over the significance of an impact, the lead agency must treat the effect as significant and prepare an EIR.[146] Contrary evidence on factual questions will not support a decision to forgo an EIR, because it could still be "fairly argued" that the project may have a significant effect on the environment.[147] Therefore, health risks from construction activities at the Potrero Substation would be significant, even with M-AQ-2.

---

[138] *Id*. at p. 7.
[139] *Ibid*.
[140] *Id*. at p. 3.
[141] *Id*. at p. 5.
[142] *Id*. at p. 7.
[143] *Ibid*.
[144] *Id*. at p. 10.
[145] *Ibid*.
[146] CEQA Guidelines § 15064(g).
[147] *See Brentwood Ass'n for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 503; *Friends of "B" St. v. City of Hayward* (1989) 106 Cal.App.3d 988, 1002.

printed on recycled paper

D. The PMND Fails to Meaningfully Analyze Whether the Project's Health Risk Impacts Are Cumulatively Considerable

A lead agency must find that a project may have a significant effect on the environment if the project's potential environmental impacts, although individually limited, are cumulatively considerable.[148] "Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effect of past projects, other current projects, and probable future projects.[149] To assess whether a cumulative effect triggers the need for an EIR, the lead agency must determine (1) whether the cumulative impact itself may be significant and (2) whether the project's incremental contribution to that effect would be "cumulatively considerable."[150] A project's impacts must be found cumulatively considerable if its incremental effects are significant when viewed within the context of the effects of past, current, and probable future projects.[151]

When making this determination, a lead agency may not conclude that a cumulative impact is insignificant solely because the project's contribution to an unacceptable existing environmental condition is relatively small. For example, in *Kings County Farm Bureau v. City of Hanford*, the EIR concluded that a proposed cogeneration plant's air emissions were not a significant cumulative impact, based on a determination that the plant's emissions would be less than 1% of area emissions of the relevant pollutants.[152] The court held that this conclusion improperly focused on the project-specific impacts and did not properly consider the collective effects of the relevant projects on air quality.[153] The court characterized this analysis as a "ratio theory" that masked the seriousness of the cumulative problem.[154]

In *Los Angeles Unified School District v. City of Los Angeles* ("*LAUSD*"), the court reached a similar conclusion.[155] In that case, the lead agency reasoned that

---

[148] Pub. Res. Code § 21083(b); CEQA Guidelines § 15064(h)(1), 15065(a)(3).
[149] Pub. Res. Code § 21083(b)(2); CEQA Guidelines § 15064(h)(1), 15065(a)(3); *see San Bernardino Valley Audubon Soc'y v. Metropolitan Water Dist.* (1999) 71 Cal.App.4th 382, 398 (EIR required for habitat conservation plan in part because initial study did not adequately explain why cumulative adverse effects to endangered species would not occur).
[150] CEQA Guidelines § 15064(h)(1).
[151] *Id.* § 15064(h)(1), 15065(a)(3).
[152] *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 714, 718-21.
[153] *Id.* at p. 721.
[154] *Id.* at p. 721.
[155] *Los Angeles Unified School District v. City of Los Angeles* (1997) 58 Cal.App.4th 1019.

printed on recycled paper

an expected addition of 5 decibels of traffic noise from development envisioned by the specific plan would have an insignificant impact because the noise level around the school was already beyond the maximum specified by Department of Health guidelines.[156] The court rejected this approach, finding that it trivialized the project's impact.[157] The relevant issue was not the relative amount of project-generated traffic noise compared with existing traffic noise.[158] Rather, the key question was whether the additional traffic noise should be considered in light of the serious existing noise problem.[159] Because the EIR did not consider the issue, the court found its discussion of noise impacts inadequate.[160]

The key question in this case is whether the additional health risks posed by construction of the Potrero Substation should be considered significant given the serious existing health risks in the surrounding neighborhood. "[T]he greater the existing environmental problems are, the lower the threshold should be for treating a project's contribution to cumulative impacts as significant."[161] The PMND's analysis (or lack thereof) suffers from the same problems identified by the court in *Kings County Farm Bureau* and *LAUSD*.

Here, the PMND fails to analyze whether the cancer risk and $PM_{2.5}$ emissions from construction of the Potrero Substation are cumulatively considerable. Instead, the PMND simply concludes, without any additional discussion, that the proposed Project's contribution is not cumulatively considerable because it would not exceed the project-level contribution threshold.[162] The PMND fails to explain why compliance with the project-specific threshold is not enough even through the Project exceeds BAAQMD's cumulative threshold.

For cumulative impacts, BAAQMD adopted a significance threshold of 100 in a million increased excess cancer risk.[163] Under this standard, a project would have a cumulative significant impact if the aggregate total of all past, present, and

---

[156] *Id.* at p. 1024-25.
[157] *Id.* at p. 1025.
[158] *Ibid.*
[159] *Ibid.*
[160] *Id.* at p. 1025-26.
[161] *Communities for a Better Env't v. California Resources Agency* (2002) 103 Cal.App.4th 98, 120.
[162] PMND at pp. 128-29.
[163] Bay Area Air Quality Management District, California Environmental Quality Act: Air Quality Guidelines (May 2017) p. 2-2, 5-15 to 5-16 (hereinafter "BAAQMD Guidelines"), *available at* https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en&rev=0d2d971e661d41f28a56953f1776bdde.

printed on recycled paper

foreseeable future sources within a 1,000 foot radius (or beyond where appropriate) from the fence line of a source, or from the location of a receptor, plus the contribution from the project, exceeds a cancer risk of more than 100 in one million.[164] BAAQMD explained:

> The 100 in a million threshold is based on EPA guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level. In protecting public health with an ample margin of safety, EPA strives to provide maximum feasible protection against risks to health from hazardous air pollutants (HAPs) by limiting risk to a level no higher than the one in ten thousand (100 in a million) estimated risk that a person living near a source would be exposed to at the maximum pollutant concentrations for 70 years (NESHAP 54 Federal Register 38044, September 14, 1989; CAA section 112(f)). One hundred in a million excess cancer cases is also consistent with the ambient cancer risk in the most pristine portions of the Bay Area based on the District's recent regional modeling analysis.[165]

Given BAAQMD's cumulative threshold is supported by substantial evidence, it should be utilized to determine whether the proposed Project's impacts are significant. Indeed, the PMND utilizes BAAQMD thresholds to determine whether the Project's daily criteria air pollutants are significant.[166] It also relies on BAAQMD thresholds when analyzing the health risks from construction at the Martin Substation.[167] The PMND has not provided substantial evidence supporting its decision to deviate from BAAQMD's cumulative threshold for portions of the Project within San Francisco.

E. Substantial Evidence Supports a Fair Argument that Construction Activities at the Potrero Substation, in Combination with the Cumulative Projects, Would Result in a Cumulatively Considerable Contribution to a Significant Impact

Even assuming the PMND's project-level threshold is an acceptable method for determining whether the Project's contribution is cumulatively considerable, Mr. Kapahi's comments support a fair argument that that the cumulative cancer risk

---

[164] *Id*. at p 5-15.
[165] *Id*. at p. D-43.
[166] PMND at pp. 118-21, 125-26.
[167] *Id*. at pp. 129-30.

printed on recycled paper

impacts are significant. As discussed above, Mr. Kapahi found cancer risk of 16 per million due to DPM emissions from construction equipment and other onsite sources at the Potrero Substation even with the use of Tier 4 Final engines.[168] When added to background sources and reasonably foreseeable future uses identified in the PMND, the cumulative cancer risk is 132 per million.[169]

By any threshold, the Project's cancer risk contribution is cumulatively considerable, even with mitigation, because the cancer risk caused by construction emissions from the Potrero Substation exceeds the project-level threshold of 7.0 per million set by the PMND,[170] the project-level threshold of 10.0 per million set by BAAQMD,[171] and the cumulative impact threshold of 100 per million set by BAAQMD.[172]

Moreover, if the horsepower errors in the AQTR's screening tool are corrected, then the total cancer risk for a resident located 50 feet from the Project site on the 1st floor would be 7.14 per million.[173] Therefore, construction activities at the Potrero Substation would exceed the cancer risk threshold of 7.0 per million utilized by the PMND even the use of Tier 4 Final engines.

Finally, the AQTR's screening tool also shows that emissions generated from construction at the Potrero Substation would create a cancer risk of 8.65 per million to future sensitive receptors located approximately 50 feet away on the 2nd floor. As a result, the cancer risk for higher elevations would exceed the PMND threshold of 7.0 per million persons exposed.[174] Therefore, the cancer risk from construction activities at the Potrero Substation would be significant even with implementation of M-AQ-2.

Given that the Project exceeds the PMND's project-level cancer risk threshold and BAAQMD's cumulative cancer risk threshold, substantial evidence supports a fair argument that the proposed Project, in combination with the cumulative projects, would result in a cumulatively considerable contribution to a significant cumulative impact on air quality.

---

[168] Kapahi Comments at p. 10-12.
[169] *Id*. at p. 12.
[170] PMND at p. 128.
[171] BAAQMD Guidelines at pp. 2-2, 2-5.
[172] *Id*. at pp. 2-2, 5-15 to 5-16.
[173] Kapahi Comments at p. 15, attach. 2 at p. 9.
[174] PMND at p. 124.
5954-005acp

F. The PMND Fails to Analyze Acute Diesel Particulate Matter Impacts on Construction Workers

The PMND analyzes cancer risks from DPM, but it fails to analyze acute DPM impacts. Since the Office of Environmental Health Hazard Assessment ("OEHHA") last evaluated health impacts of DPM in 1998, substantial additional research has been conducted on acute health impacts of DPM.[175] Based on this more current research, Canada established an acute reference exposure level for DPM of 10 µg/m^3 to protect against adverse effects on the respiratory system.[176] The absence of an OEHHA acute risk exposure level does not excuse the evaluation of acute health risks.[177]

Here, the PMND fails to evaluate the non-cancer risk associated with acute exposure to DPM. An analysis of acute DPM impacts is need to assess potentially significant health impacts that the construction workers might experience during construction of the Project. The AQTR did not provide the maximum daily or hourly emission rate when analyzing the health risk impacts at the Potrero and Martin substations.[178] As a result, the acute 1-hour refence exposure level for DPM could not be reliably calculated.[179] An EIR must be prepared to analyze the acute DPM impacts.

G. The PMND Lacks Substantial Evidence to Conclude that Construction Noise Impacts Along the Distribution Lines Would Be Less than Significant

The PMND states that construction along the distribution alignments and distribution separation work could be within 15 feet of the proposed Project sites.[180] Construction work would typically advance approximately 40 feet per day within the trench.[181] The PMND acknowledges that construction on longer city blocks could be up to three to four weeks.[182] Ms. Jue also notes that residents along

---

[175] Kapahi Comments at pp. 11-12.
[176] *Id.* at p. 12; *see also* Canada, Human Health Risk Assessment for Diesel Exhaust, (March 4, 2016) p. 11, *available at* http://publications.gc.ca/collections/collection_2016/sc-hc/H129-60-2016-eng.pdf.
[177] CEQA Guidelines § 15064(b).
[178] *Id.* at p. 12.
[179] *Ibid.*
[180] PMND at p. 91.
[181] *Id.* at p. 92.
[182] *Ibid.*

printed on recycled paper

stretches of Geneva Avenue could be exposed to construction noise for approximately 3 weeks.[183]

In analyzing construction noise impacts, the PMND states that when construction noise would result in a 10 dBA increase over existing daytime noise levels at the nearest sensitive receptor, it then considers the duration and severity.[184] Where construction would be limited in duration (usually less than two weeks) and frequency, the PMND concludes the impacts is less than significant.[185]

As Ms. Jue explains, the PMND fails to adequately establish the baseline noise levels along the distribution lines.[186] As a result, the significance of construction noise impacts along the distribution lines cannot be adequately analyzed. Even in the absence of an adequate baseline, Ms. Jue found that on long stretches of the distribution lines with no obstructions, residential receptors could be exposed to noise levels above 10 dBA increase for 3 weeks.[187] Therefore, substantial evidence supports a fair argument that construction noise impacts along the distribution lines could be potentially significant.[188] An EIR must be prepared to identify feasible mitigation measures to reduce the potentially significant construction noise impacts to less than significant.

H. Substantial Evidence Supports a Fair Argument that Construction at the Martin Substation Would Violate the City of Brisbane's Noise Ordinance

Construction upgrades to the Martin Substation would occur in the City of Brisbane.[189] Chapter 8.28 (Noise Control) of the Brisbane Municipal Code establishes provisions to protect the peace, health, safety, and welfare of citizens from excessive, unnecessary, and unreasonable noises resulting from sources in the community. Section 8.28.060 authorizes construction, alteration, or repair activities if they meet at least one of the following noise limitations:

---

[183] Jue Comments at p. 2.
[184] PMND at p. 89.
[185] *Ibid*.
[186] Jue Comments at p. 2.
[187] *Id*. at pp. 2-3.
[188] *Id*. at p. 3.
[189] PMND at p. 7.

printed on recycled paper

1. No individual piece of equipment shall produce a noise level exceeding 83 dBA at 25 feet from the source.
2. The noise level at any point outside of the property plan of the project shall not 86 dBA.

The PMND acknowledges that the City of Brisbane prohibits construction equipment noise from exceeding 83 dBA as measured at 25 feet and limits construction noise to 86 dBA at the property line.[190] The PMND then admits that construction equipment at the Martin Substation would create noise levels exceeding 83 dBA at 25 feet[191] and estimates that the maximum hourly noise level at 50 feet from the substation would be 91 dBA L_{eq}.[192] Despite these admissions, the PMND erroneously concludes, without any supporting evidence, that construction activities would comply with the local noise ordinances simply by utilizing SFPUC's standard construction noise measures.[193]

The PMND fails to demonstrate how the SFPUC's standard noise construction measure would adequately mitigate the Project's construction noise impacts to less than significant. Therefore, the PMND lacks substantial evidence to support its conclusion that construction of the Martin Substation would not cause a substantial temporary increase exceeding standards established by the Brisbane noise ordinance.

I. The PMND Lacks Substantial Evidence to Support Its Conclusion that Pile Driving at the Potrero Substation Would Not Generate Excessive Groundborne Vibrations

The PMND concludes that groundborne vibration from pile driving activities at the Potrero Substation would be less than significant with mitigation.[194] To establish the propagation rate, the PMND relies on a value of 1.5 provided by the Federal Transit Authority.[195] However, the PMND also cites to the California Department of Transportation's ("Caltrans") Transportation and Construction

---

[190] *Id*. at p. 88; *see also* Brisbane Municipal Code § 8.28.060.
[191] PMND at p. 89
[192] *Id*. at p. 93 (Table 12: Estimated Maximum Noise Levels from Project Construction Activities at Martin Substation at the Nearest Sensitive Receptor).
[193] *Id*. at p. 90; Jue Comments at p. 4.
[194] PMND at p. 102.
[195] *Id*. at p. 100 (Table 15: Construction Equipment Vibration Levels at Various Distances (PPV)).

printed on recycled paper

Vibration Manual which recommends a value of 1.1.[196] Caltrans cautions the use of propagation rates greater than 1.1 because those values "would likely result in overestimation of amplitudes at distances closer than 25 ft and would be slightly conservative at distances beyond 25 ft."[197]

If the value recommended by Caltrans is utilized, the vibration impact from pile driving would be potentially significant for older residential structures and historic buildings beyond 100 feet.[198] Here, the nearest historic structure to the Potrero Substation is the American Can Company Building located approximately 130 feet of the impact pile driving.[199] Therefore, the PMND erroneously concludes the Project construction would have no adverse vibratory effects to historic structures.[200]

J. The PMND Fails to Adequately Analyze Whether the Broderick Terry Duel Landmark Park is a Historic Resource Under CEQA

The PMND concludes that the Broderick Terry Duel Landmark Park ("Duel Site") is not a historic resources because it is not a registered landmark with a designation of 770 or higher on the California Register of Historical Resources ("Register").[201] While it is true that the landmark does not automatically qualify as a historic resource under CEQA, the PMND fails to analyze whether it could otherwise qualify.

Public Resources Code § 21084.1 creates three categories of historical resources: mandatory historical resources; presumptive historical resources; and property that may be found historical at the discretion of the lead agency.[202] Mandatory historical resources are those that are formally listed in, or determined to be eligible for listing in, the Register.[203] A resource becomes "listed" if it is

---

[196] Jue Comments at p. 5; California Department of Transportation, Transportation and Construction Vibration Guidance Manual (Apr. 2020) p. 31 (hereinafter "Caltrans Vibration Manual"), *available at* https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf.
[197] Caltrans Vibration Manual at pp. 31-32.
[198] Jue Comments at p. 5.
[199] PMND at p. 101.
[200] *Ibid.*
[201] *Id.* at p. 65.
[202] *Friends of the Willow Glen Trestle v. City of San Jose* (2016) 2 Cal.App.5th 457, 469; *Valley Advocates v. City of Fresno* (2008) 160 Cal.App.4th 1039, 1051.
[203] Pub. Res. Code § 21084.1; CEQA Guidelines § 15064.5(a)(1).

printed on recycled paper

nominated for listing and the State Historical Resources Commission determines that it is "significant" and that it meets one of the four statutory criteria for listing.[204] A historical resource is "eligible" for listing if the State Historical Resource Commission formally makes such a determination over a local agency or owner objects to the listing.[205]

Although the Duel Site is identified on the Register as Registered Historical Landmark No. 19,[206] it is not a mandatory historical resources because it has not been "listed." Under Public Resources Code § 5031(a), California Registered Historical Landmarks Nos. 770 and below are not automatically "listed" because they are not presumed to have been evaluated using the framework currently required to be listing. However, the fact that the Duel Site is not "listed" on the Register does not relieve CCSF of its obligation to exercise discretion to determine whether the site is a historical resource.[207]

The CEQA Guidelines require that a resource be considered "historically significant" if the resource meets the criteria for listing on the Register,[208] including the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives and persons important to our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in pre-history or history.[209]

---

[204] Pub. Res. Code § 5024.1(b).
[205] *Id.* § 5024.1(f).
[206] PMND at p. 65; *see also* Office of Historic Preservation, Broderick-Terry Dueling Place, https://ohp.parks.ca.gov/ListedResources/Detail/19 (last visited Mar. 7, 2022); The Historical Marker Database, Broderick – Terry Duel, https://www.hmdb.org/m.asp?m=117083 (last visited Mar. 7, 2022); National Park Service, The Broderick-Terry Duel, https://www.nps.gov/goga/learn/historyculture/broderick-terry-duel.htm (last visited Mar. 7, 2022).
[207] CEQA Guidelines § 15064.5(a)(4); s*ee Valley Advocates v. City of Fresno* (2008) 160 Cal.App.4th 1039, 1062 (agency's determination that a building should not be listed on a local register did not relieve the agency of its obligation to determine whether the building was a historical resources).
[208] Pub. Res. Code § 5024.1; CEQA Guidelines § 4852.
[209] CEQA Guidelines § 15064.5(a)(3).
5954-005acp

The lead agency's discretionary decision that a landmark is not a historical resource must be supported by substantial evidence.[210] Because the PMND fails to adequately analyze whether Duel Site is a historic resource under CEQA, CCSF lacks substantial evidence to conclude that the landmark is not a historic resource.

VII. THE PMND LACK SUBSTANTIAL EVIDENCE TO SUPPORT THE PROPOSED MITIGATION MEASURES REDUCING NOISE IMPACTS TO LESS THAN SIGNIFICANT

Mitigated negative declarations are based on conditions of approval that are designed to avoid potential environmental impacts or to ensure that any impacts that result will not be significant. Mitigation can be accomplished by (1) avoiding the impact by not taking certain action or parts of the action, (2) minimizing the impacts by limiting an activity, (3) repairing, rehabilitating, or restoring the affected environment, (4) reducing or eliminating an impact over time through preservation and maintenance operations, or (5) compensating for an impact by replacing or providing substituting resources or environments.[211] A lead agency should not defer formulation of mitigation to the future.[212]

A. The PMND Lacks Substantial Evidence to Support the Performance Standard in M-NOI-1

To reduce construction noise impacts at the Martin and Potrero substations, the PMND proposes M-NOI-1.[213] M-NOI-1 requires that the SFPUC implement a Project-specific noise control plan for construction of the Martin Substation, and if certain circumstances exist during construction of the Potrero substation.[214] M-NOI-1 sets a performance target of construction activities not resulting in a noise level greater than 90 dBA (1-hour Leq) and 10 dBA above ambient noise level at noise sensitive receptors (nearby residents and childcare uses).[215]

---

[210] Pub. Res. Code § 21084.1; CEQA Guidelines § 15064.5(a)(3); F*riends of the Willow Glen Trestle v. City of San Jose* (2016) 2 Cal.App.5th 457, 468; *Valley Advocates v. City of Fresno* (2008) 160 Cal.App.4th 1039, 1070.
[211] CEQA Guidelines § 15370.
[212] *Id*. § 15126.4(a)(1)(B).
[213] PMND at pp. 94-95.
[214] *Id*. at pp. 95-96.
[215] *Id*. at p. 96.
5954-005acp

The PMND lacks substantial evidence to conclude the noise control plan would be able to implement feasible measures to achieve the performance standards.[216] M-NOI-1 should include a requirement for a multi-day noise survey at one or more locations near the Martin Substation and Potrero Substation, if needed.[217]

B. The PMND Fails to Demonstrate the Project Could Achieve Compliance with Performance Standards in M-NO-2

To reduce operational noise equipment at the Potrero Substation, the PMND proposes M-NO-2.[218] M-NO-2 requires that the SFPUC demonstrate that fixed mechanical equipment at the substation comply with the noise limits specified in San Francisco Noise Ordinance § 2909c-d.[219] The PMND fails to establish adequate performance standards to ensure the Project would comply the applicable noise ordinances.

For example, M-NO-2 does not require that a qualified engineer review the mechanical equipment design prior to installation to ensure compliance with noise standards.[220] Instead, the mitigation measure proposes only acoustical treatments to reduce noise *after* the equipment has already been installed.[221] The PMND lacks substantial evidence to conclude that the proposed measures could reduce impacts to less than significant, and impermissibly defers M-NO-2.[222] As a result, the PMND cannot conclude that the Project's operational noise impacts are less than significant.

VIII. CONCLUSION

The PMND is inadequate because it fails to (1) completely and accurately describe the project, (2) set forth the existing environmental setting, and (3) identify, analyze, and mitigate all potentially significant impacts to energy, noise, air quality, and public and worker health. Due to these deficiencies, CCSF cannot

[216] Jue Comments at p. 5.
[217] *Ibid.*
[218] PMND at p. 99.
[219] *Ibid.*
[220] *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 42 Cal.3d 376, 418.
[221] PMND at p. 99; Jue Comments at p. 6.
[222] Jue Comments at p. 6.

printed on recycled paper

conclude that the Project's impacts have been mitigated to a less than significant level.

CEQA requires that an EIR be prepared if there is substantial evidence supporting a fair argument that any aspect of a project, either individually or cumulatively, may cause a significant effect on the environment.[223]As discussed in detail above, there is more than a fair argument based on substantial evidence that the Project would result in significant adverse impacts not identified in the PMND. Moreover, there is substantial evidence supporting a fair argument that the proposed mitigation measures will not reduce potentially significant impacts to a level of insignificance.

We urge CCSF to fulfill its responsibilities under CEQA by withdrawing the PMND. An EIR must be prepared to address the issues raised in this comment letter, the attached comments from Mr. Kapahi, Mr. Stern/Mr. Balistreri/Mr. Padilla, Mr. Earle, and Ms. Jue, and other public comments in the record. The CPUC is the appropriate lead agency to prepare the EIR. This is the only way decisionmakers and the public can ensure the Project's significant environmental, public health and safety impacts are mitigated to less than significant levels.

Thank you for your consideration of these comments.

Sincerely,



Andrew J. Graf

Attachments

AJG:acp

[223] CEQA Guidelines § 15063(b)(1).
5954-005acp

EXHIBIT A

Analysis of Public Health Risks Associated with the Construction of the Potrero Substation for the PG&E Power Asset Acquisition Project

San Francisco, California

March 7, 2022

Prepared By:
Environmental Permitting Specialists
7068 Riverside Boulevard
Sacramento, CA 95831
Contact: Ray Kapahi, Principal
Tel: 916-687-8352
Ray.Kapahi@gmail.com

TABLE OF CONTENTS

SECTION 1: INTRODUCTION..... 3

SECTION 2: EMISSIONS SOURCES 5

SECTION 3: MODELING METHODOLOGY..... 7
- 3.1 Dispersion Modeling
- 3.2 Risk Calculation

SECTION 4: RESULTS..... 10
- 4.1 Project Level
- 4.2 Cumulative

SECTION 5: HORSEPOWER ERRORS IN AQTR SCREENING TOOL..... 13

SECTION 6: REFERENCES..... 16

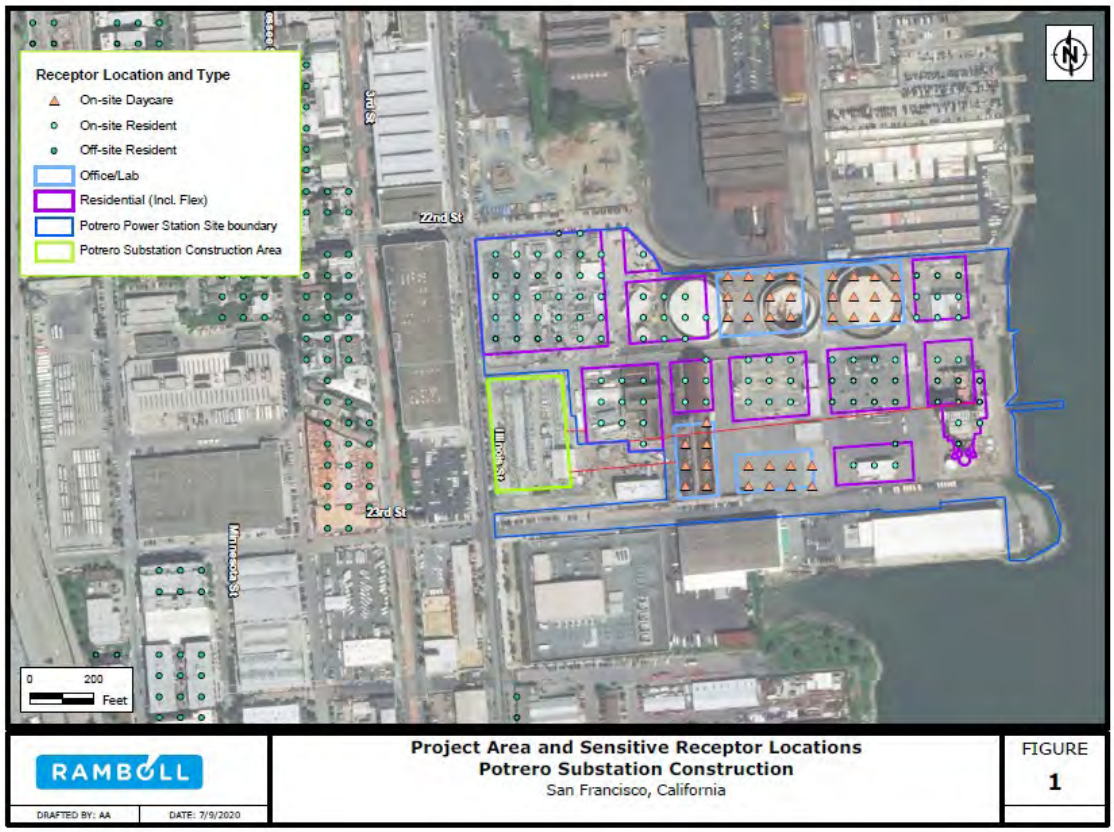
ATTACHMENTS

SECTION 1: INTRODUCTION

Environmental Permitting Specialists (EPS) has completed an analysis of public health risks associated with the construction of the Potrero Substation in San Francisco. This substation is part of the broader Pacific Gas & Electric Power Asset Acquisition Project.

The Potrero Substation is located East of Illinois Street between 22rd Street and 23rd Street, in the Potrero Hills neighborhood of San Francisco as showing in Figure 1-1. Future residences are planned to be located approximately 50 feet of the project site. Construction activities at the substation are expected to last approximately 1 year.

Figure 1-1



The purpose of this analysis is to determine the cancer risk from exposure to diesel particulate matter (DPM) that would be released from construction equipment and other onsite sources during construction of the Potrero Substation.

The following documents were reviewed in preparing the current analysis:

- Preliminary Mitigated Negative Declaration (PMND) and Initial Study for the PG&E Power Asset Acquisition Project
- Air Quality Technical Report (AQTR) (dated March 2, 2021) and Supplemental Data Memo (dated April 15, 2021) prepared by Ramboll for the PG&E Power Asset Acquisition Project, including, but not limited to, the following underlying spreadsheets and files:
    - Construction Emissions
    - Screening HRA Calcs
    - 2017_EMFAC2017_SFPUC Screening Tool v.8 - Phase 2 (Linear Roadway Projects) - Potrero Duct Banks - Fleet Avg
    - 2017_EMFAC2017_SFPUC Screening Tool v.8 - Phase 2 (Linear Roadway Projects) - Potrero Duct Banks
    - SFPUC Screening Tool v.6 - Phase 1 (Area Projects) - Potrero_pile driving - Fleet Avg
    - SFPUC Screening Tool v.6 - Phase 1 (Area Projects) - Potrero_pile driving
    - Supplemental Data Memo Tables

This report is divided into three main Sections:

- Emissions Sources
- Modeling Methodology and Risk Assessment
- Detailed Summary of Results
    - Project level
    - Cumulative

The report also discusses critical errors found in the screening tool utilized by the AQTR to calculate construction emissions at the Potrero Substation.

Technical data and calculations are provided in the accompanying attachments.

SECTION 2: EMISSION SOURCES

This analysis relies on the emissions data produced by Ramboll in the AQTR screening tool spreadsheets: V.6 – Phase 1 (Area Projects) and v.8 – Phase 2 (Linear Roadway Projects).[1] Therefore, this analysis relies on the same exact construction information, assumptions, and emissions calculations utilized in the screening tool to determine the local health risk assessment for the Potrero Substation.[2]

Ramboll produced two separate sets of emissions data for the Potrero Substation. The first set of data looked at the impact of the construction at the Potrero Substation in an Uncontrolled scenario utilizing fleet average engines for construction equipment. The second set of data looked at the impact of construction at the Potrero Substation in a Controlled scenario using Tier 4 Final engines for construction equipment. This analysis utilizes the emissions data from the Controlled scenario, which can be found in Attachments 1 and 2.[3]

Specifically, total DPM emissions from various construction equipment on-site (including onsite truck emissions) were estimated to equal 10.016 pounds, excluding emissions from trenching. The overall emissions data for the Potrero substation is reproduced in Figure 2-1. A breakdown of emissions results by construction subphase (excluding the trenching subphase) for the substation is shown in Figure 2-2.

Figure 2-1
Overall Potrero Substation Emissions by Chemical Used for Health Risk Analysis of Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts, Excluding Trenching Phase[4]

Chemical	CAS	Project Emissions (lbs)		
		Onsite Total[1]	Offsite Total[2]	Overall Total[3]
PM2.5	PM2.5	9.215	0.007	9.22
TOG	TOG	103.077	0.021	103.10
Diesel Particulate Matter	9901	10.016	0.007	10.02

[1] Air Quality Technical Report (AQTR) for CEQA Air Quality Health Risk Assessment for Pacific Gas & Electric Power Asset Acquisition Project, March 7, 2021, at 7; SFPUC Screening Tool v.6 – Phase 1 (Area Projects) – Potrero_pile driving; 2017_EMFAC2017_SFPUC Screening Tool v.8 – Phase 2 (Linear Roadway Projects) – Potrero Duct Banks.
[2] AQTR at 7-9.
[3] SFPUC Screening Tool v.6 – Phase 1 (Area Projects) – Potrero_pile driving; 2017_EMFAC2017_SFPUC Screening Tool v.8 – Phase 2 (Linear Roadway Projects) – Potrero Duct Banks.
[4] SFPUC Screening Tool v.6 – Phase 1 (Area Projects) – Potrero_pile driving (Tab "2. Emissions").

Figure 2-2
Emissions Summary for Potrero Substation by Phase of Emissions for Health Risk Analysis[5]

Chemical	CAS	Total Onsite (Including Onsite Trucks) Emissions by Phase (lbs)				
		1	2	3	4	5
Diesel Particulate Matter	9901	1.260	2.795	2.861	1.614	1.485

Total DPM emissions for the trenching phase (including onsite truck emissions) was estimated to equal 0.56 pounds. The emissions data is reproduced in Figure 2-3.

Figure 2-3
Overall Potrero Substation Emissions by Chemical Used for Health Risk Analysis of Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts for Trenching Phase[6]

Chemical	CAS	Project Emissions (lbs)		
		Onsite Total[1]	Offsite Total[2]	Overall Total[3]
PM2.5	PM2.5	0.515	0.004	0.52
TOG	TOG	5.717	0.012	5.73
Diesel Particulate Matter	9901	0.560	0.004	0.56

Therefore, the estimated DPM emissions from the Potrero Substation for the duration of the project is 10.576 pounds as shown in Table 2-1. This emission rate assumes implementation of Tier 4 Final engines.

Table 2-1
Potrero Substation DPM Emissions

Potrero Substation Subphase	Total DPM Emissions (lbs)
Site Excavation	10.016
Pile Driving	
Concrete Foundations	
Concrete Slabs	
Backfill and Grading	
Electrical Equipment/Gate Install	
Trenching	0.560
Total	**10.576**

The spreadsheets did not include a breakdown of maximum hourly onsite emissions for DPM by sub-phase. This is a critical omission as acute DPM emissions could be significant as there are standards for acute exposure to DPM that have been established in other countries. This is discussed in the Section 4.1

[5] SFPUC Screening Tool v.6 – Phase 1 (Area Projects) – Potrero_pile driving (Tab "Emissions Summary").
[6] 2017_EMFAC2017_SFPUC Screening Tool v.8 – Phase 2 (Linear Roadway Projects) – Potrero Duct Banks (Tab "2. Emissions").

SECTION 3: MODELING METHODOLOGY

A combination of air dispersion and health risk models were used to translate the emission rate of DPM described in Section 2 into cancer risk in the vicinity of the substation. Both the Bay Area Air Quality Management District (BAAQMD) and Office of Environmental Health Hazard Assessment (OEHHA) provide guidance on how to conduct the dispersion modeling and health risk calculations. The methodology used in this analysis follows the Tier 3 (Refined) risk analysis as described in the BAAQMD 2012 and 2016 Guidelines. The risk model used (HARP2) incorporates the recommended exposure and the latest pollutant toxicity.

This approach taken in this assessment report differs from the approach used by Ramboll in the AQTR. The AQTR screening tool employs screening type of dispersion modeling tools that are not site specific. For example, the prevailing winds at the project site blow from the West to the East directly towards the sensitive receptors (Attachment 3). This cannot be captured using a screening level model such as AERSCREEN.

A second problem is that the AQTR screening tool uses an empirical factor to estimate annual emissions based on hourly pollutant concentration. This can overstate of understate the annual concentration depending on the location.

This analysis used hourly wind speed and direction data to calculate annual concentration. Five years of hourly data (43,800 hours) were used to calculate the annual concentration. This results in a more accurate and site-specific estimate of pollutant concentration and cancer risk.

3.1 Air Dispersion Modeling

The CARB and OEHHA recommended AERMOD dispersion model (Version 21112) was employed in the current exposure assessment. The plot files created using Lakes Environmental (AERMODVIEW) Version 10.2.0 were exported into the risk model.

This section discusses the model set-up, the extent of the modeling area, and the choice and duration of meteorological data.

3.1.1 Model Set-Up

The following modeling options were used.

- Use of Calm Wind Processing
- Use of Missing Data Processing
- Flat Terrain

Construction emissions associated with the Potrero substation were modeled as a single ground level area source. Emissions were assumed to occur between 8 am and 5 pm, Monday to Friday.

3.1.2 Modeling Grid

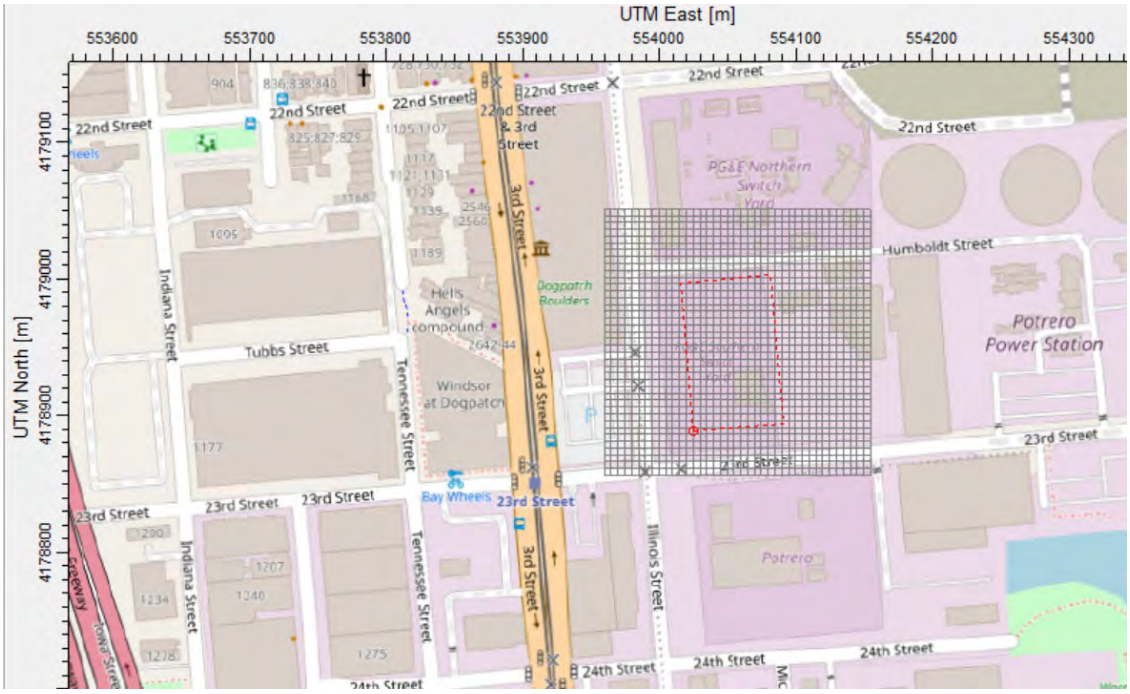
A rectangular (x-y) Cartesian coordinate system was used. A 40 x 40 grid with a cell spacing of 2 meters was employed. A receptor height of 5 feet and 20 feet were used to provide results for nearby sensitive receptors. A layout of the modeling grid is presented in Figure 3-1.

3.1.3 Meteorological Data

Five years (2009 to 2013) of meteorological data from San Francisco airport was used along upper air data from Oakland airport. The upper air data are required to establish the local inversion heights.

The results of the dispersion modeling were exported into the risk model discussed in the next subsection.

Figure 3-1
Lay-Out of Modeling Grid



3.2 Risk Calculation

EPS used the California Air Resources Board Hotspots Analysis and Reporting Program Version 2 (HARP2) (Version 21081) risk model. This model incorporates the latest toxicity data and recommended exposure pathways approved by OEHHA[7] to calculate the cancer risk. The analysis assumes an exposure duration of 12 months. An emission rate of 10.576 pounds of DPM was used to calculate the cancer risk. Other assumptions are as follows:

Calculation Method:	OEHHA Derived
Exposure Pathways:	Mandatory Minimum
Receptor Type:	Individual Resident
Deposition Velocity:	Not Used as Exposure is Primarily via Inhalation

[7] OEHHA Hotspots Analysis and Reporting Program (HARP) available at: https://ww3.arb.ca.gov/toxics/harp/harp.htm

SECTION 4: RESULTS

4.1 Project Level Risks

The results of the risk calculations are summarized in Table 4.1 for the 5 foot elevation and 20 foot elevation at various distances from the Potrero Substation. The spatial distribution of cancer around the substation for 5 foot elevation appears in Figure 4-1 and the 20 foot elevation appears in Figure 4-2.

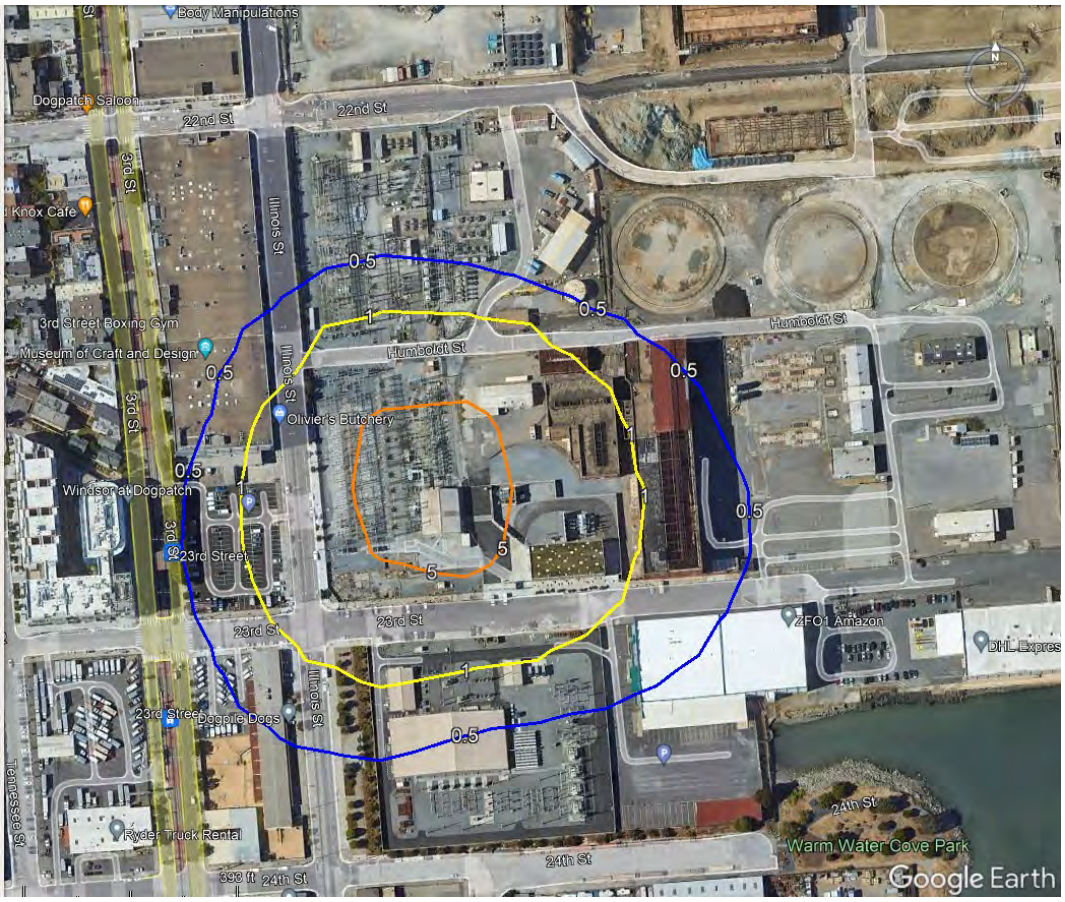
Table 4-1
Health Risk Summary

Distance from Substation (feet)	5' Elevation (cancer risk per million)	20' Elevation (cancer risk per million)
50	16.0	10.7
100	6.23	9.3
150	3.24	6.1

Figure 4-1
Spatial Distribution of Cancer Risk Per Million for Receptors Located at 5 Feet in Elevation



Figure 4-2
Spatial Distribution of Cancer Risk Per Million for Receptors Located at 20 Feet in Elevation



The AQTR identifies the location for the closest sensitive receptor as 50 feet from the Potrero Substation, 1st floor.[8] Therefore, the cancer risk for the nearest residence from Potrero substation is 16 per million, assuming the use of Tier 4 Final engines for construction equipment.

OEHHA has not established an acute reference exposure level (REL) for DPM, but other agencies have. The absence of an OEHHA acute risk exposure level does not excuse the evaluation of acute health risks. In the absence of an OEHHA significance threshold, it is standard practice to conduct a literature search to determine if other authorities have established a threshold. Since OEHHA last evaluated health impacts of DPM in 1998,[9]

[8] AQTR at Table 12 (Screening HRA Results, Tier 4 Engines).
[9] Findings of the Scientific Review Panel on the Report on Diesel Exhaust, 1998, https://www.arb.ca.gov/toxics/dieseltac/de-fnds.pdf.

substantial additional research has been conducted on acute health impacts of DPM.[10] Based on this more current research, Canada recently established an acute REL for DPM of 10 µg/m^3 to protect against adverse effects on the respiratory system.[11] There is no regulation or guidance requiring that only OEHHA RELs be used be used in California health risk assessments.

The AQTR did not provide the maximum daily or hourly emission rate by Phase, so the acute 1-hour REL could not be reliably calculated.

4.2 Cumulative Risk

As discussed in the AQTR, the Potrero substation is located adjacent to two projects that have published EIRs: the Potrero Power Station and Pier 70. The DIER for the Potrero Power Station included a cumulative HRA that disclosed impacts of the project itself on its own on-site residential receptors, as well as the impacts of the Pier 70 project and background cancer risk.[12] The results of these risk calculation, including construction of the Potrero Substation, are shown in Table 4-2.

Table 4-2
Cumulative Health Risk Summary

Source	Cancer Risk (per million)
Background	65
Pier 70 Construction and Operation	11
Potrero Power Station Construction and Operation	40
Potrero Substation Mitigated Construction Risk Contribution	16
Total	**132**

[10] See, e.g., A. A. Mehus and others, Comparison of Acute Health Effects from Exposures to Diesel and Biodiesel Fuel Emissions and references cited therein, *Journal of Occupational and Environmental Medicine*, v. 57, no. 7, pp. 705-712, July 2015.
[11] Government of Canada, Human Health Risk Assessment for Diesel Exhaust, March 4, 2016, http://publications.gc.ca/collections/collection_2016/sc-hc/H129-60-2016-eng.pdf.
[12] AQTR at 8.

SECTION 5: HORSEPOWER ERRORS IN AQTR SCREENING TOOL

As discussed in Section 3, the AQTR calculated the emissions associated with construction of the Potrero Substation using screening tools developed by Ramboll for SFPUC use: v.6 – Phase 1 (Area Projects) and v.8 – Phase 2 (linear Roadway Projects).[13] The AQTR claims that the emission component of these tools utilized the construction equipment information identified in Table 2.[14] However, this is incorrect. The screening tool utilized horsepower ("HP") assumptions for several pieces of construction that are lower than those identified in Table 2.

For example, the AQTR used a HP rating of 82 for bore/drill rigs during the pile driving subphase,[15] instead of a HP rating of 299 provided by CCSF as indicated in Table 2 of the AQTR.[16] The screening tool also underestimated the HP for the following pieces of equipment: trackers/loaders/backhoes, excavators, off-highway trucks, and cranes.

The AQTR also did not rely on CalEEMod default assumptions. According to Appendix D of the User's Guide for CalEEMod Version 2020.4.0 and Appendix D of the User's Guide for CalEEMod Version 2016.3.2, the default HP for bore/drill rigs is 221.[17] Because the AQTR utilized lower horsepower ratings for multiple pieces of construction equipment, it severely underestimates the construction emissions for the Potrero Substation.

If the horsepower error is corrected for just bore/drill rigs in the manner recommended by the AQTR's screening tool, then the cancer risk at the Potrero Substation would exceed the applicable threshold even with implementation of Tier 4 Final engines. The screening tool identifies a "typical" HP for bore/drill rigs as 82. However, as discussed above, the AQTR identifies the HP rating for bore/drill rigs as 299, and the CalEEMod default HP for bore/drill rigs is 221.

The screening tool provides instructions for how to calculate emissions when the actual HP is known. It states: "For diesel equipment, the "typical" horsepower (HP) option should be selected if the actual equipment is unknown. When default horsepower is selected an assumed HP consistent with CalEEMod default values will be used and represents a fleet average horsepower. For confirmation the HP ratings for all equipment, including defaults are provided

[13] AQTR at 7.
[14] AQTR at 7.
[15] SFPUC Screening Tool v.6 - Phase 1 (Area Projects) - Potrero_pile driving.xlsx (1. Data Input).
[16] AQTR at 10, Table 2 (Construction Equipment).
[17] CalEEMod, Appendix D: Default Data Tables, May 2021, D-11, http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-d2020-4-0-full-merge.pdf?sfvrsn=12; CalEEMod, Appendix D: Default Data Tables, Oct. 2017, D-10, http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4.

in the "HP Check" column. If an equipment HP is in between options, the higher HP option should be selected."[18]

The screening tool provides 8 options to select for horsepower on the data input tab: typical, 50, 120, 175, 250, 500, 750, and 100.[19] Since the CalEEMod default HP rating of 221 for bore/drill rigs is between 175 and 250, the screening tool recommends that the higher HP option be selected. Therefore, for purposes of this analysis, it is assumed that the rating for bore/drill rigs would be 250.

When an HP of 250 is inserted for bore/drill rigs, the screening tool's health impacts and air concentration analysis report provides a new calculation for the total cancer risk.[20] The screening tool estimates that the total cancer risk for a resident located 50 feet from the Project site on the 1st floor would be 6.24 per million as shown in Figure 5-1.[21] The results can be found in Attachment 4.

Figure 5-1

Onsite Construction Impacts (Including Onsite Trucks)

Receptor Distance (ft)	Total Cancer Risk (in a million) for: Resident			
	1st Floor	2nd Floor	3rd Floor	4th Floor
10	6.86	10.37	7.89	3.04
20	6.72	9.66	7.76	2.97
30	6.56	9.06	7.63	2.94
40	6.40	8.53	7.50	2.95
50	6.24	8.07	7.37	2.96

The 6.24 per million cancer risk does not account for onsite construction impacts (including onsite trucks) during the trenching subphase for the Potrero Substation, nor does it account for offsite truck impacts during all construction phases at the substation. When the emissions for these activities are also considered, the total cancer risk for a resident located 50 feet from the Project site on the 1st floor would be 7.14 per million as shown in Table 5-1.

[18] SFPUC Screening Tool v.6 - Phase 1 (Area Projects) - Potrero_pile driving.xlsx (1. Data Input) (Table Note 2).
[19] SFPUC Screening Tool v.6 - Phase 1 (Area Projects) - Potrero_pile driving.xlsx (1. Data Input).
[20] SFPUC Screening Tool v.6 - Phase 1 (Area Projects) - Potrero_pile driving (CalEEMod HP).xlsx (1. Data Input).
[21] SFPUC Screening Tool v.6 - Phase 1 (Area Projects) - Potrero_pile driving (CalEEMod HP).xlsx (3. Health Risk & Concentration).

Table 5-1
Screening HRA Results, Tier 4 Engines (incl. Bore/Drill Rig HP 250)

Source		Receptor	Location	Cancer Risk (in a million)
Substation	Onsite Construction Impacts (Including Onsite Trucks)	Resident	1st floor, 50 ft	6.24[22]
	Offsite Truck Impacts	Resident	1st floor, 50 ft	0.010[23]
Trenching	Onsite Construction Impacts (Including Onsite Trucks)	Resident	1st floor, 50 ft	0.68[24]
	Offsite Truck Impacts	Resident	1st floor, 50 ft	0.21[25]
			Total	**7.14**

In addition, because the health risk analysis described in Sections 2 through 4 relied on the same emissions assumptions as the AQTR screening tool, my health risk analysis also underestimates the cancer risk since DPMs would increase when the higher HP assumption for bore/drill rigs is utilized.

[22] SFPUC Screening Tool v.6 - Phase 1 (Area Projects) - Potrero_pile driving (CalEEMod HP).xlsx (3. Health Risk & Concentration).
[23] AQTR at p. 10, Table 12 (Screening HRA Results, Tier 4 Engines).
[24] AQTR at p. 10, Table 12 (Screening HRA Results, Tier 4 Engines).
[25] AQTR at p. 10, Table 12 (Screening HRA Results, Tier 4 Engines).

SECTION 6: REFERENCES

BAAQMD (2012) "Recommended Methods for Screening and Modeling Local Risks and Hazards. May 2012.

BAAQMD (2016) "BAAQMD Air Toxics NSR Program – Health Risk Assessment Guidelines", December 2016.

EPA (2012) "Technical Support Document for Exposure Assessment and Stochastic Analysis. Office of Environmental Health Hazard Assessment. California Environmental Protection Agency, August 2012.

CARB (2003) HARP User's Guide. Available at: http://www.arb.ca.gov/toxics/harp/harp.htm December 2003.

EPA (2004) "User's Guide for the AMS/EPA Regulatory Model – AERMOD". EPA Document No. EPA=454/B-03-001 September 2004.

OEHHA (2014) Consolidated Table of Approved health Risk Values. Cal EPA, Office of Environmental Health Hazard Assessment. Available at: file:///C:/2014%20Feather%20River%20AQMD/Hollycross%20Cemetary/OEHHA%20contable.pdf. July 3, 2014.

ATTACHMENT 1

O-CUE

Screening Tool Data Inputs

The following Inputs are required:

1) Project site data and schedule
2) Offsite truck trip data
3) On-site construction equipment emissions data

Data Input Instructions:
For each of the three data input sections below, enter the required project and equipment data in the yellow highlighted cells according the directions indicated. Refer to the data check indicator below to confirm that all necessary data inputs are complete and there aren't any detected errors in the data entry.

Data Input Check: Complete: No Errors or Missing Data Found

Follow the data entry instructions under each section.

1) Project Site Data and Schedule Inputs

Site Data Instructions:
Enter the indicated project parameters in the yellow hightlighted cells below according the directions indicated to the right of each cell.

Project Name:	Potrero Substation	(Enter Text)
Project Size:	5.0 Acres	(Select from dropdown menu)
Landuse Type:	San Francisco - Industrial	(Select from dropdown menu)
Project Start Date:	1/1/2020	(Enter in mm/dd/yyyy format)
Project Duration:	52	(Enter Project duration in weeks; must be more than 26 weeks)
Project End Date:	12/31/2020	
Project Duration*:	1.00	Years
Project Lifetime (for Greenhouse Gas Annualization):**	1	Years

***Note:** Regardless of project duration, even when greater than 2.25 years, the health risk analysis will be based on the most conservative age sensitivity assumptions.
****Note**: If the lifetime of the project is unknown, 20 years may be used as a default.
*****Note:** OEHHA recommends that projects that are less than 6 months be assumed to last 6 months.

Project Phasing Instructions:
If a project will have only one phase, the project start date and end date will be the same as the phase start and end dates and must be entered in the table below. If multiple phases are entered the phases dates must not overlap or have gaps in time and the end date of the last phase must match the project end date.

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Data Check	
Phase Starting Date:	1/1/2020	2/21/2020	6/17/2020	9/10/2020	10/28/2020	5 Phases Entered	
Phase Length:	7.1	16.7	12.1	6.8	9.3	Total Weeks Match	(Enter the phase length in weeks)
Phase End Date:	2/20/2020	6/16/2020	9/9/2020	10/27/2020	12/31/2020	Project End Date Match	
Construction Hour per day:	8	8	8	8	8	Hours Entered	(Enter integer number between 1 and 24)
Construction Days per week:	5	5	5	5	5	Hours Entered	(Enter integer number between 1 and 7)

Screening Tool Data Inputs

2) Offsite Heavy Duty Diesel Truck Trip Data Inputs

Offsite Truck Instructions:
Complete data entry in each row of the table below for the number or heavy duty diesel truck trips visiting the project site per construction phase. For each field of the table, either use the dropdown menu to select the appropriate entry or enter a value in accordance with the field description. If an invalid entry is made in a field, a warning message will occur. For each entry, all fields must be completed. If a field is missing for any entry, the data check column will indicate "Missing Data".

Diesel Truck Trip Table

Entry ID	Phase	Year	Total Truck Trips	Max Truck Trips per Hour	Onsite Idling Time (minutes)[1]	Truck Trip Lenth (miles)[2]	Data Check
A	1	2020	41	6	5	20	Complete
B	2	2020	86	6	5	7.3	Complete
C							No Entry
D							No Entry
E							No Entry
F							No Entry
G							No Entry
H							No Entry
I							No Entry
J							No Entry

Table Notes:
1) The onsite idling time represents the amount of time a truck idles onsite upon arrive or departure. Thus each truck is assumed to idle for this duration twice per trip while onsite. Note that the 5 minute truck idling rule applies to most trucks with some exceptions (e.g., concrete trucks or trucks waiting in queue). If certain truck trips will have longer idling times, each set of trucks should be entered as a separate entry with the specified phase.
2) The one-way truck trip length is the distance each truck travels to or from the site and is used to estimate criteria pollutant emissions from the project. For haul truck trips assume a 20 mile trip length and for vendor truck trips assume a 7.3 mile trip length.

3) On-Site Construction Equipment Data Inputs

Construction Equipment Instructions:
Complete data entry in each row of the table below for each piece of equipment to be used during the project construction. When entering data, complete data entry from left to right as each subsequent field may depend of a previous entry. For each field of the table, either use the dropdown menu to select the appropriate entry or enter a value in accordance with the field description. If an invalid entry is made in a field, a warning message will occur. For each entry, all fields must be completed. If a field is missing for any entry, the data check column will indicate "Missing Data". If incompatible data is entered for a given piece of equipment, a "Data Error" warning will be provided prompting a review of the data inputs as incompatible selections have been made. Note that the phase number and year for each piece of equipment should match with the phase schedule entered above.

Construction Equipment Table

Entry ID	Equipment and Usage Inputs									Diesel Engine Control Options		Data Check
	Phase[1]	Year[1]	Fuel Type	Equipment Type	Horsepower (HP)[2]	HP Check	Equipment Quantity	# of Working Days[3]	Daily Hours of Operation Per Piece of Equip[4]	Engine Standard[5]	Diesel Particulate Filter[6]	Diesel Type[7]	
1	1	2020	Diesel	Tractors/Loaders/Backhoes	Typical	75	1	23	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
2	1	2020	Diesel	Excavators	Typical	157	1	23	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
3	1	2020	Diesel	Off-Highway Trucks	Typical	381	1	23	1	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
4	1	2020	Diesel	Plate Compactors	Typical	8	1	23	2	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
5	1	2020	Diesel	Generator Sets	Typical	84	1	23	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
6	1	2020	Diesel	Air Compressors	Typical	78	1	23	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
7	2	2020	Diesel	Cranes	Typical	208	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
8	2	2020	Diesel	Tractors/Loaders/Backhoes	Typical	75	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
9	2	2020	Diesel	Generator Sets	Typical	84	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
10	2	2020	Diesel	Air Compressors	Typical	78	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
11	3	2020	Diesel	Tractors/Loaders/Backhoes	Typical	75	1	39	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
12	3	2020	Diesel	Off-Highway Trucks	Typical	381	1	39	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
13	3	2020	Diesel	Plate Compactors	Typical	8	1	39	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
14	3	2020	Diesel	Generator Sets	Typical	84	1	39	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
15	3	2020	Diesel	Air Compressors	Typical	78	1	39	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
16	4	2020	Diesel	Tractors/Loaders/Backhoes	Typical	75	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
17	4	2020	Diesel	Off-Highway Trucks	Typical	381	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
18	4	2020	Diesel	Plate Compactors	Typical	8	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
19	4	2020	Diesel	Generator Sets	Typical	84	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
20	4	2020	Diesel	Air Compressors	Typical	78	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
21	5	2020	Diesel	Tractors/Loaders/Backhoes	Typical	75	1	30	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
22	5	2020	Diesel	Cranes	Typical	208	1	30	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
23	5	2020	Diesel	Generator Sets	Typical	84	1	30	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
24	5	2020	Diesel	Air Compressors	Typical	78	1	30	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete

Screening Tool Data Inputs

25	2	2020	Diesel	Bore/Drill Rigs	Typical	82	1	32	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
26	2	2020	Diesel	Cranes	Typical	208	1	32	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
27	2	2020	Diesel	Generator Sets	Typical	84	1	32	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
28	2	2020	Diesel	Air Compressors	Typical	78	1	32	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
29													No Entry
30													No Entry
31													No Entry
32													No Entry
33													No Entry
34													No Entry
35													No Entry
36													No Entry
37													No Entry
38													No Entry
39													No Entry
40													No Entry
41													No Entry
42													No Entry
43													No Entry
44													No Entry
45													No Entry
46													No Entry
47													No Entry
48													No Entry
49													No Entry
50													No Entry

Table Notes:

1) The phase and year entered for each piece of equipment should be consistent with the phases and schedules entered in the project phasing table. If a phase is entered that is not already defined in the phase table, the applicable phase cell will be highlighted in red indicating an error.
2) For diesel equipment, the "typical" horsepower (HP) option should be selected if the actual equipment HP is unknown. When default horsepower is selected, an assumed HP consistent with CalEEMod default values will be used and represents a fleet average horsepower. For confirmation the HP ratings for all equipment, including defaults are provided in the "HP Check" column. If an equipment HP is in between the listed option, the higher HP option should be selected.
3) Number days the equipment will operate within the specified phase.
4) Number of hours per day that each piece of the specified equipment will operate.
5) For diesel equipment, specify the engine standard of each piece equipment to be used if know, else choose fleet average. For other equipment types, choose the NA option (e.g., NA = Gasoline)
6) For diesel equipment, the option to apply a Level 3 Verified Diesel Emission Control System (VDECS) diesel particulate filter (DPF) will be allowed for Tier 2 and Tier 3 engine standards. DPFs are assumed to reduce tailpipe PM10 emissions by 85% and total organic gas (TOG) emissions by 90%.
7) For diesel equipment, the option to use 20% bio-diesel (B20) will be allowed for all engine standard options. Bio-diesel is assumed to reduce tailpipe PM10 emissions by 7% and TOG emissions by 13% and increase NOx emissions by 3%.

O-CUE

Emissions Summary Output Report

Project Data

	User Selections
Project Name:	Potrero Substation
Project Size:	5.0 Acres
Landuse Type:	San Francisco - Industrial
Project Start Date:	1/1/2020
Project End Date:	12/31/2020
# of Phases:	5
Data Input Check:	Complete: No Errors or Missing Data Found

Overall Project Emissions by Chemical Used for Health Risk Analysis of Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts

Chemical	CAS	Project Emissions (lbs)		
		Onsite Total[1]	Offsite Total[2]	Overall Total[3]
PM2.5	PM2.5	9.215	0.007	9.22
TOG	TOG	103.077	0.021	103.10
Diesel Particulate Matter	9901	10.016	0.007	10.02
1,3-Butadiene	106990	0.000	0.000	0.00
Acetaldehyde	75070	0.000	0.000	0.00
Acrolein	107028	0.000	0.000	0.00
Benzene	71432	0.000	0.000	0.00
Chlorine	7782505	0.000	0.000	0.00
Copper	7440508	0.000	0.000	0.00
Ethylbenzene	100414	0.000	0.000	0.00
Formaldehyde	50000	0.000	0.000	0.00
Hexane	110543	0.000	0.000	0.00
Manganese	7439965	0.000	0.000	0.00
Methanol	67561	0.000	0.000	0.00
Methyl Ethyl Ketone	78933	0.000	0.000	0.00
Naphthalene	91203	0.000	0.000	0.00
Nickel	7440020	0.000	0.000	0.00
Propylene	115071	0.000	0.000	0.00
Styrene	100425	0.000	0.000	0.00
Sulfates	9960	0.000	0.000	0.00
Toluene	108883	0.000	0.000	0.00
Xylenes (Total)	1330207	0.000	0.000	0.00

Table Notes:

1) Onsite total emissions includes all construction equipment operation and the portion of the diesel truck trip emissions associated with onroad trucks while they are onsite.

2) Offsite total emissions includes offsite diesel truck emissions from onroad truck travel evaluated in the health risk analysis (i.e. from 1,000 ft of travel).

3) Overall total emissions is the sum of all onsite and offsite emissions for construction equipment and trucks evaluated in the health risk analysis.

Total Project Criteria Pollutant and GHG Emissions

Chemical	Criteria Emissions By Phase and Project Total (lbs)[1]						
	1	2	3	4	5	Project	
PM10	1.51	2.99	2.86	1.61	1.49	10.46	
PM2.5	1.40	2.76	2.63	1.48	1.37	9.64	
NOx	49.54	74.95	63.38	35.75	29.71	253.33	Annualized GHG Emissions (Metric Tons/year)[3]
ROG	13.33	28.41	29.37	16.57	14.84	102.52	
CO2e*	55,121	111,902	108,317	61,102	56,467	392,910	178.22

Average Daily Criteria Pollutant Emissions

Chemical	Criteria Emissions By Phase and Project Total (lbs/day)[1,4]						May 2017 BAAQMD Thresholds (lbs/day)[6]
	1	2	3	4	5	Project	
Total Days[5]	51	117	85	48	65	366	
PM10	0.03	0.03	0.03	0.034	0.023	0.03	54
PM2.5	0.03	0.02	0.03	0.031	0.021	0.03	82
NOx	0.97	0.64	0.75	0.745	0.457	0.69	54
ROG	0.26	0.24	0.35	0.345	0.228	0.28	54

Table Notes:

1) Criteria emissions include all onsite construction emissions and onroad truck emissions for the full truck trip length. Worker commute trip emissions are excluded as negligible.

2) CO2e emissions equal CO2 emissions plus CH4 and N2O emissions multiplying by the corresponding global warming potentials (CH4: 21 and N2O: 310).

3)Annualized GHG Emissions are calculated based on the specified Project Lifetime (default 20 years).

4) Daily average emissions are calculated as the quantity of emissions divided by the total number days for each phase and the project as a whole.

5) Total days are calculated as the total number of days between the project start date and end date.

6) Average daily emissions are compared to these threshold values. These values may be edited if the CEQA Guidance changes.

O-CUE

Emissions Summary Output Report

Project Phase Breakdown of Emissions Used In Health Risk Analysis

Max Hourly - Onsite Construction Emissions by Chemical (Including Onsite Trucks) for Health Risk Analysis of Acute Non-Cancer Impacts

Chemical	CAS	May Hourly Onsite Emissions by Phase (lbs)					
		1	2	3	4	5	Max
PM2.5	PM2.5	0.011	0.012	0.008	0.008	0.006	0.012
TOG	TOG	0.123	0.137	0.096	0.096	0.063	0.137
Diesel Particulate Matter	9901	0.000	0.000	0.000	0.000	0.000	0.000
1,3-Butadiene	106990	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Acetaldehyde	75070	0.010	0.011	0.007	0.007	0.005	0.011
Acrolein	107028	<0.001	<0.001	0.000	0.000	0.000	<0.001
Benzene	71432	0.002	0.003	0.002	0.002	0.001	0.003
Chlorine	7782505	0.000	0.000	0.000	0.000	0.000	0.000
Copper	7440508	0.000	0.000	0.000	0.000	0.000	0.000
Ethylbenzene	100414	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Formaldehyde	50000	0.018	0.020	0.014	0.014	0.009	0.020
Hexane	110543	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese	7439965	0.000	0.000	0.000	0.000	0.000	0.000
Methanol	67561	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Methyl Ethyl Ketone	78933	0.002	0.002	0.001	0.001	0.001	0.002
Naphthalene	91203	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	7440020	0.000	0.000	0.000	0.000	0.000	0.000
Propylene	115071	0.003	0.003	0.002	0.002	0.002	0.003
Styrene	100425	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sulfates	9960	0.000	0.000	0.000	0.000	0.000	0.000
Toluene	108883	0.002	0.002	0.001	0.001	0.001	0.002
Xylenes (Total)	1330207	0.001	0.001	0.001	0.001	0.001	0.001

Project Total - Onsite Construction Emissions by Chemical (Including Onsite Trucks) for Health Risk Analysis of Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts

Chemical	CAS	Project Total Onsite Emissions by Phase (lbs)					Project Total Onsite
		1	2	3	4	5	
PM2.5	PM2.5	1.159	2.572	2.632	1.485	1.367	9.215
TOG	TOG	12.919	28.399	29.846	16.836	15.076	103.077
Diesel Particulate Matter	9901	1.260	2.795	2.861	1.614	1.485	10.016
1,3-Butadiene	106990	0.000	0.000	0.000	0.000	0.000	0.000
Acetaldehyde	75070	0.000	0.000	0.000	0.000	0.000	0.000
Acrolein	107028	0.000	0.000	0.000	0.000	0.000	0.000
Benzene	71432	0.000	0.000	0.000	0.000	0.000	0.000
Chlorine	7782505	0.000	0.000	0.000	0.000	0.000	0.000
Copper	7440508	0.000	0.000	0.000	0.000	0.000	0.000
Ethylbenzene	100414	0.000	0.000	0.000	0.000	0.000	0.000
Formaldehyde	50000	0.000	0.000	0.000	0.000	0.000	0.000
Hexane	110543	0.000	0.000	0.000	0.000	0.000	0.000
Manganese	7439965	0.000	0.000	0.000	0.000	0.000	0.000
Methanol	67561	0.000	0.000	0.000	0.000	0.000	0.000
Methyl Ethyl Ketone	78933	0.000	0.000	0.000	0.000	0.000	0.000
Naphthalene	91203	0.000	0.000	0.000	0.000	0.000	0.000
Nickel	7440020	0.000	0.000	0.000	0.000	0.000	0.000
Propylene	115071	0.000	0.000	0.000	0.000	0.000	0.000
Styrene	100425	0.000	0.000	0.000	0.000	0.000	0.000
Sulfates	9960	0.000	0.000	0.000	0.000	0.000	0.000
Toluene	108883	0.000	0.000	0.000	0.000	0.000	0.000
Xylenes (Total)	1330207	0.000	0.000	0.000	0.000	0.000	0.000

Max Hourly - Offsite Truck Emissions by Chemical for Health Risk Analysis of Acute Non-Cancer Impacts

Chemical	CAS	May Hourly Offsite Emissions by Phase (lbs)					
		1	2	3	4	5	Max
PM2.5	PM2.5	<0.001	<0.001	0.000	0.000	0.000	<0.001
TOG	TOG	0.001	0.001	0.000	0.000	0.000	0.001
Diesel Particulate Matter	9901	0.000	0.000	0.000	0.000	0.000	0.000
1,3-Butadiene	106990	0.000	0.000	0.000	0.000	0.000	0.000
Acetaldehyde	75070	<0.001	<0.001	0.000	0.000	0.000	<0.001
Acrolein	107028	<0.001	<0.001	0.000	0.000	0.000	<0.001
Benzene	71432	<0.001	<0.001	0.000	0.000	0.000	<0.001
Chlorine	7782505	0.000	0.000	0.000	0.000	0.000	0.000
Copper	7440508	0.000	0.000	0.000	0.000	0.000	0.000
Ethylbenzene	100414	0.000	0.000	0.000	0.000	0.000	0.000
Formaldehyde	50000	<0.001	<0.001	0.000	0.000	0.000	<0.001
Hexane	110543	0.000	0.000	0.000	0.000	0.000	0.000
Manganese	7439965	0.000	0.000	0.000	0.000	0.000	0.000
Methanol	67561	0.000	0.000	0.000	0.000	0.000	0.000
Methyl Ethyl Ketone	78933	<0.001	<0.001	0.000	0.000	0.000	<0.001
Naphthalene	91203	0.000	0.000	0.000	0.000	0.000	0.000
Nickel	7440020	0.000	0.000	0.000	0.000	0.000	0.000
Propylene	115071	0.000	0.000	0.000	0.000	0.000	0.000
Styrene	100425	0.000	0.000	0.000	0.000	0.000	0.000
Sulfates	9960	0.000	0.000	0.000	0.000	0.000	0.000
Toluene	108883	<0.001	<0.001	0.000	0.000	0.000	<0.001
Xylenes (Total)	1330207	<0.001	<0.001	0.000	0.000	0.000	<0.001

Project Total - Offsite Truck Emissions by Chemical for Health Risk Analysis of Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts

Chemical	CAS	Project Total Offsite Emissions by Phase (lbs)					Project Total Offsite
		1	2	3	4	5	
PM2.5	PM2.5	0.002	0.005	0.000	0.000	0.000	0.007
TOG	TOG	0.007	0.014	0.000	0.000	0.000	0.021
Diesel Particulate Matter	9901	0.002	0.005	0.000	0.000	0.000	0.007
1,3-Butadiene	106990	0.000	0.000	0.000	0.000	0.000	0.000
Acetaldehyde	75070	0.000	0.000	0.000	0.000	0.000	0.000
Acrolein	107028	0.000	0.000	0.000	0.000	0.000	0.000
Benzene	71432	0.000	0.000	0.000	0.000	0.000	0.000
Chlorine	7782505	0.000	0.000	0.000	0.000	0.000	0.000
Copper	7440508	0.000	0.000	0.000	0.000	0.000	0.000
Ethylbenzene	100414	0.000	0.000	0.000	0.000	0.000	0.000
Formaldehyde	50000	0.000	0.000	0.000	0.000	0.000	0.000
Hexane	110543	0.000	0.000	0.000	0.000	0.000	0.000
Manganese	7439965	0.000	0.000	0.000	0.000	0.000	0.000
Methanol	67561	0.000	0.000	0.000	0.000	0.000	0.000
Methyl Ethyl Ketone	78933	0.000	0.000	0.000	0.000	0.000	0.000
Naphthalene	91203	0.000	0.000	0.000	0.000	0.000	0.000
Nickel	7440020	0.000	0.000	0.000	0.000	0.000	0.000
Propylene	115071	0.000	0.000	0.000	0.000	0.000	0.000
Styrene	100425	0.000	0.000	0.000	0.000	0.000	0.000
Sulfates	9960	0.000	0.000	0.000	0.000	0.000	0.000
Toluene	108883	0.000	0.000	0.000	0.000	0.000	0.000
Xylenes (Total)	1330207	0.000	0.000	0.000	0.000	0.000	0.000

O-CUE

Emissions Summary Output Report

Chemical Emissions Contribution Analysis of Emissions Used for Health Risk Analysis for Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts (Not used for Acute Non-Cancer Impacts)

User Instructions:
Select desired chemical from the drop down menu at the top of each column to generate a breakdown of the project emissions by equipment entry.

Entry ID	Phase	Equipment Type[1]	Fuel Type	Project Chemical Emissions by Equipment Entry (lbs)						
				Benzene	PM2.5	Diesel Particulate Matter	1,3-Butadiene	Formaldehyde	Methanol	Sulfates
				71432	PM2.5	9901	106990	50000	67561	9960
1	1	Tractors/Loaders/Backhoes	Diesel	0.000	0.155	0.168	0.000	0.000	0.000	0.000
2	1	Excavators	Diesel	0.000	0.336	0.365	0.000	0.000	0.000	0.000
3	1	Off-Highway Trucks	Diesel	0.000	0.102	0.111	0.000	0.000	0.000	0.000
4	1	Plate Compactors	Diesel	0.000	0.006	0.007	0.000	0.000	0.000	0.000
5	1	Generator Sets	Diesel	0.000	0.348	0.378	0.000	0.000	0.000	0.000
6	1	Air Compressors	Diesel	0.000	0.210	0.228	0.000	0.000	0.000	0.000
7	2	Cranes	Diesel	0.000	0.321	0.349	0.000	0.000	0.000	0.000
8	2	Tractors/Loaders/Backhoes	Diesel	0.000	0.148	0.161	0.000	0.000	0.000	0.000
9	2	Generator Sets	Diesel	0.000	0.333	0.362	0.000	0.000	0.000	0.000
10	2	Air Compressors	Diesel	0.000	0.200	0.218	0.000	0.000	0.000	0.000
11	3	Tractors/Loaders/Backhoes	Diesel	0.000	0.262	0.285	0.000	0.000	0.000	0.000
12	3	Off-Highway Trucks	Diesel	0.000	1.381	1.501	0.000	0.000	0.000	0.000
13	3	Plate Compactors	Diesel	0.000	0.044	0.047	0.000	0.000	0.000	0.000
14	3	Generator Sets	Diesel	0.000	0.590	0.641	0.000	0.000	0.000	0.000
15	3	Air Compressors	Diesel	0.000	0.355	0.386	0.000	0.000	0.000	0.000
16	4	Tractors/Loaders/Backhoes	Diesel	0.000	0.148	0.161	0.000	0.000	0.000	0.000
17	4	Off-Highway Trucks	Diesel	0.000	0.779	0.847	0.000	0.000	0.000	0.000
18	4	Plate Compactors	Diesel	0.000	0.025	0.027	0.000	0.000	0.000	0.000
19	4	Generator Sets	Diesel	0.000	0.333	0.362	0.000	0.000	0.000	0.000
20	4	Air Compressors	Diesel	0.000	0.200	0.218	0.000	0.000	0.000	0.000
21	5	Tractors/Loaders/Backhoes	Diesel	0.000	0.202	0.219	0.000	0.000	0.000	0.000
22	5	Cranes	Diesel	0.000	0.438	0.476	0.000	0.000	0.000	0.000
23	5	Generator Sets	Diesel	0.000	0.454	0.493	0.000	0.000	0.000	0.000
24	5	Air Compressors	Diesel	0.000	0.273	0.297	0.000	0.000	0.000	0.000
25	2	Bore/Drill Rigs	Diesel	0.000	0.321	0.349	0.000	0.000	0.000	0.000
26	2	Cranes	Diesel	0.000	0.467	0.507	0.000	0.000	0.000	0.000
27	2	Generator Sets	Diesel	0.000	0.484	0.526	0.000	0.000	0.000	0.000
28	2	Air Compressors	Diesel	0.000	0.292	0.317	0.000	0.000	0.000	0.000
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
A	1	On-road Diesel Trucks	Diesel	0.000	0.005	0.006	0.000	0.000	0.000	0.000
B	2	On-road Diesel Trucks	Diesel	0.000	0.011	0.012	0.000	0.000	0.000	0.000
C										
D										
E										
			Project Total (lbs)	0.000	9.222	10.024	0.000	0.000	0.000	0.000

Table Notes:
1) On-road diesel truck trip emissions presented in this summary table include the aggregate of the offsite and onsite diesel truck emissions and only includes emissions evaluated in the health risk analysis (i.e. from 1,000 ft of travel). The onroad truck emissions presented here do not represent the full truck trip length.

O-CUE

Emissions Summary Output Report

Chemical Emissions Contribution Analysis of Emissions Used for Health Risk Analysis for Acute Non-Cancer Impacts

User Instructions:
Select desired chemical from the drop down menu at the top of each column to generate a breakdown of the project emissions by equipment entry.

Entry ID	Phase	Equipment Type[1]	Fuel Type	Project Chemical Emissions by Equipment Entry (lbs)						
				Diesel Particulate Matter	PM2.5	Acetaldehyde	1,3-Butadiene	Formaldehyde	Methanol	Sulfates
				9901	PM2.5	75070	106990	50000	67561	9960
1	1	Tractors/Loaders/Backhoes	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
2	1	Excavators	Diesel	0.000	0.002	0.001	0.000	0.003	0.000	0.000
3	1	Off-Highway Trucks	Diesel	0.000	0.004	0.004	0.000	0.007	0.000	0.000
4	1	Plate Compactors	Diesel	0.000	0.000	0.000	0.000	0.001	0.000	0.000
5	1	Generator Sets	Diesel	0.000	0.002	0.002	0.000	0.003	0.000	0.000
6	1	Air Compressors	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
7	2	Cranes	Diesel	0.000	0.002	0.001	0.000	0.003	0.000	0.000
8	2	Tractors/Loaders/Backhoes	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
9	2	Generator Sets	Diesel	0.000	0.002	0.002	0.000	0.003	0.000	0.000
10	2	Air Compressors	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
11	3	Tractors/Loaders/Backhoes	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
12	3	Off-Highway Trucks	Diesel	0.000	0.004	0.004	0.000	0.007	0.000	0.000
13	3	Plate Compactors	Diesel	0.000	0.000	0.000	0.000	0.001	0.000	0.000
14	3	Generator Sets	Diesel	0.000	0.002	0.002	0.000	0.003	0.000	0.000
15	3	Air Compressors	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
16	4	Tractors/Loaders/Backhoes	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
17	4	Off-Highway Trucks	Diesel	0.000	0.004	0.004	0.000	0.007	0.000	0.000
18	4	Plate Compactors	Diesel	0.000	0.000	0.000	0.000	0.001	0.000	0.000
19	4	Generator Sets	Diesel	0.000	0.002	0.002	0.000	0.003	0.000	0.000
20	4	Air Compressors	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
21	5	Tractors/Loaders/Backhoes	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
22	5	Cranes	Diesel	0.000	0.002	0.001	0.000	0.003	0.000	0.000
23	5	Generator Sets	Diesel	0.000	0.002	0.002	0.000	0.003	0.000	0.000
24	5	Air Compressors	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
25	2	Bore/Drill Rigs	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
26	2	Cranes	Diesel	0.000	0.002	0.001	0.000	0.003	0.000	0.000
27	2	Generator Sets	Diesel	0.000	0.002	0.002	0.000	0.003	0.000	0.000
28	2	Air Compressors	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
A	1	On-road Diesel Trucks	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
B	2	On-road Diesel Trucks	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
C										
D										
E										
			Project Total (lbs)	0.000	0.046	0.039	0.001	0.075	0.000	0.000

Table Notes:
1) On-road diesel truck trip emissions presented in this summary table include the aggregate of the offsite and onsite diesel truck emissions and only includes emissions evaluated in the health risk analysis (i.e. from 1,000 ft of travel). The onroad truck emissions presented here do not represent the full truck trip length.

O-CUE

Health Impacts and Air Concentration Analysis Report

Project Data

	User Selections
Project Name:	Potrero Substation
Project Size:	5.0 Acres
Landuse Type:	San Francisco - Industrial
Project Start Date:	1/1/2020
Project End Date:	12/31/2020
# of Phases:	5
Receptor Type:	Resident
Data Check:	Complete: No Errors or Missing Data Found

Receptor Type	User Selection
Resident	◉
Resident Adult	○
School Child	○
Day Care Child	○

User Instructions:
*Select applicable receptor type, if unknown use Resident.

Risk Value	May 2017 BAAQMD Thresholds
Cancer Risk (in a million)	10
Chronic HI	1
Acute HI	1
PM2.5 Concentration (ug/m3)	0.3

User Instructions:
The risk values in the tables below are compared to these thresholds. They may be updated if the CEQA Guidelines change.

Overview of Maximum Health Impacts by Distance and Receptor Height

Onsite Construction Impacts (Including Onsite Trucks)

Receptor Distance (ft)	Total Cancer Risk (in a million) for: Resident				Max Chronic HI				Max Acute HI				PM2.5 Concentration (ug/m3)			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
10	6.41	9.68	7.36	2.84	0.010	0.014	0.011	0.004	0.176	0.266	0.202	0.078	0.044	0.066	0.051	0.020
20	6.27	9.01	7.24	2.77	0.009	0.013	0.011	0.004	0.172	0.248	0.199	0.076	0.043	0.062	0.050	0.019
30	6.12	8.45	7.13	2.74	0.009	0.013	0.011	0.004	0.168	0.232	0.196	0.075	0.042	0.058	0.049	0.019
40	5.97	7.96	7.00	2.75	0.009	0.012	0.010	0.004	0.164	0.219	0.192	0.076	0.041	0.055	0.048	0.019
50	5.82	7.53	6.88	2.76	0.009	0.011	0.010	0.004	0.160	0.207	0.189	0.076	0.040	0.052	0.047	0.019
100	5.13	5.91	6.23	2.76	0.008	0.009	0.009	0.004	0.141	0.162	0.171	0.076	0.035	0.041	0.043	0.019
200	3.99	4.09	5.26	2.54	0.006	0.006	0.008	0.004	0.110	0.112	0.145	0.070	0.027	0.028	0.036	0.017
300	3.17	3.12	4.54	2.25	0.005	0.005	0.007	0.003	0.087	0.086	0.125	0.062	0.022	0.021	0.031	0.015
400	2.58	2.53	3.93	2.01	0.004	0.004	0.006	0.003	0.071	0.069	0.108	0.055	0.018	0.017	0.027	0.014
500	2.23	2.14	3.44	1.83	0.003	0.003	0.005	0.003	0.061	0.059	0.095	0.050	0.015	0.015	0.024	0.013
600	2.00	1.86	3.05	1.74	0.003	0.003	0.005	0.003	0.055	0.051	0.084	0.048	0.014	0.013	0.021	0.012
700	1.80	1.65	2.73	1.65	0.003	0.002	0.004	0.002	0.049	0.045	0.075	0.045	0.012	0.011	0.019	0.011
800	1.63	1.48	2.46	1.56	0.002	0.002	0.004	0.002	0.045	0.041	0.068	0.043	0.011	0.010	0.017	0.011
900	1.49	1.34	2.25	1.48	0.002	0.002	0.003	0.002	0.041	0.037	0.062	0.041	0.010	0.009	0.015	0.010
1000	1.36	1.23	2.07	1.40	0.002	0.002	0.003	0.002	0.037	0.034	0.057	0.039	0.009	0.008	0.014	0.010

Offsite Truck Impacts

Receptor Distance (ft)	Total Cancer Risk (in a million) for: Resident				Max Chronic HI				Max Acute HI				PM2.5 Concentration (ug/m3)			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
10	0.01	0.02	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.006	0.003	0.001	<0.001	<0.001	<0.001	<0.001
20	0.01	0.02	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.006	0.003	0.001	<0.001	<0.001	<0.001	<0.001
30	0.01	0.02	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.005	0.003	0.001	<0.001	<0.001	<0.001	<0.001
40	0.01	0.02	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.005	0.003	0.001	<0.001	<0.001	<0.001	<0.001
50	0.01	0.02	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001
100	0.01	0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.003	0.003	0.001	<0.001	<0.001	<0.001	<0.001
200	0.01	0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.002	0.002	0.003	0.001	<0.001	<0.001	<0.001	<0.001
300	0.01	0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.002	0.002	0.002	0.001	<0.001	<0.001	<0.001	<0.001
400	<0.01	<0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.002	0.001	<0.001	<0.001	<0.001	<0.001
500	<0.01	<0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.002	0.001	<0.001	<0.001	<0.001	<0.001
600	<0.01	<0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
700	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
800	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
900	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
1000	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001

O-CUE

Health Impacts and Air Concentration Analysis Report

Analysis of Combined Health Impacts at nearest Receptor Location

User Instructions:
Select the distance, in feet, from the project boundary and truck route to the nearest sensitive receptor location to evaluate the phase by phase impacts and overall combined onsite and offsite impacts at the project's maximally exposed individual receptor (MEIR). Note that the combined analysis conservatively assumes that the onsite construction MEIR and the offsite truck MEIR occur at the same location.

Distance From Site (ft): 50 (Select from dropdown menu)
Distance From Roadway (ft): 50 (Select from dropdown menu)
Receptor Type: Resident (As specified above)

Onsite Construction Results (Including Onsite Trucks)

Phase	Cancer Risk (in a million) at 50 ft from Site				Chronic HI at 50 ft from Site				Acute HI at 50 ft from Site				PM2.5 Concentration (ug/m3) at 50 ft from Site			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
1	0.73	0.95	0.87	0.35	0.006	0.008	0.008	0.003	0.144	0.186	0.170	0.068	0.029	0.038	0.035	0.014
2	1.63	2.10	1.92	0.77	0.006	0.008	0.007	0.003	0.160	0.207	0.189	0.076	0.028	0.037	0.034	0.013
3	1.66	2.15	1.97	0.79	0.009	0.011	0.010	0.004	0.106	0.137	0.125	0.050	0.040	0.052	0.047	0.019
4	0.94	1.21	1.11	0.44	0.009	0.011	0.010	0.004	0.106	0.137	0.125	0.050	0.040	0.052	0.047	0.019
5	0.86	1.12	1.02	0.41	0.006	0.008	0.007	0.003	0.070	0.090	0.082	0.033	0.027	0.035	0.032	0.013
Total/Max[1]	5.82	7.53	6.88	2.76	0.009	0.011	0.010	0.004	0.160	0.207	0.189	0.076	0.040	0.052	0.047	0.019

Offsite Truck Impacts

Phase	Cancer Risk (in a million) at 50 ft from Roadway				Chronic HI at 50 ft from Roadway				Acute HI at 50 ft from Roadway				PM2.5 Concentration (ug/m3) at 50 ft from Roadway			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
1	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001
2	0.01	0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001
3																
4																
5																
Total/Max[1]	0.01	0.02	0.01	0.00	0.000	0.000	0.000	0.000	0.003	0.004	0.003	0.001	0.000	0.000	0.000	0.000

Combined Project Impacts

Phase	Cancer Risk (in a million)				Chronic HI				Acute HI				PM2.5 Concentration (ug/m3)			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
1	0.73	0.95	0.87	0.35	0.006	0.008	0.008	0.003	0.147	0.191	0.173	0.070	0.029	0.038	0.035	0.014
2	1.63	2.11	1.93	0.77	0.006	0.008	0.007	0.003	0.163	0.211	0.192	0.077	0.029	0.037	0.034	0.014
3	1.66	2.15	1.97	0.79	0.009	0.011	0.010	0.004	0.106	0.137	0.125	0.050	0.040	0.052	0.047	0.019
4	0.94	1.21	1.11	0.44	0.009	0.011	0.010	0.004	0.106	0.137	0.125	0.050	0.040	0.052	0.047	0.019
5	0.86	1.12	1.02	0.41	0.006	0.008	0.007	0.003	0.070	0.090	0.082	0.033	0.027	0.035	0.032	0.013
Total/Max[1]	**5.83**	**7.55**	**6.89**	**2.77**	**0.009**	**0.011**	**0.010**	**0.004**	**0.163**	**0.211**	**0.192**	**0.077**	**0.040**	**0.052**	**0.047**	**0.019**
Threshold	10	10	10	10	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	0.3	0.3	0.3
Exceedance	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**

Table Notes:
1) Total is used to determine cancer risk. Maximum from each phase is used for chronic HI, acute HI and $PM_{2.5}$ concentration.

O-CUE

Health Impacts and Air Concentration Analysis Report

Analysis of Combined Health Impacts by Percent Chemical Contribution

User Instructions:
Select a receptor floor height to generate a break down of the contribution of each emitted chemical to the cancer risk, chronic HI, and acute HI at the chosen receptor distance and specified floor height.

Floor: (Select from dropdown menu)
Distance From Site (ft): (As specified above)
Distance From Roadway (ft): (As specified above)
Receptor Type: (As specified above)

Cancer Risk	
Chemical	50 & 50 ft 2nd Floor
Diesel Particulate Matter	100.00%
1,3-Butadiene	0.00%
Acetaldehyde	0.00%
Acrolein	NA
Benzene	0.00%
Chlorine	NA
Copper	NA
Ethylbenzene	0.00%
Formaldehyde	0.00%
Hexane	NA
Manganese	NA
Methanol	NA
Methyl Ethyl Ketone	NA
Naphthalene	0.00%
Nickel	0.00%
Propylene	NA
Styrene	NA
Sulfates	NA
Toluene	NA
Xylenes (Total)	NA

Chronic HI	
Chemical	50 & 50 ft 2nd Floor
Diesel Particulate Matter	100.00%
1,3-Butadiene	0.00%
Acetaldehyde	0.00%
Acrolein	0.00%
Benzene	0.00%
Chlorine	0.00%
Copper	NA
Ethylbenzene	0.00%
Formaldehyde	0.00%
Hexane	0.00%
Manganese	0.00%
Methanol	0.00%
Methyl Ethyl Ketone	NA
Naphthalene	0.00%
Nickel	0.00%
Propylene	0.00%
Styrene	0.00%
Sulfates	NA
Toluene	0.00%
Xylenes (Total)	0.00%

Acute HI	
Chemical	50 & 50 ft 2nd Floor
Diesel Particulate Matter	NA
1,3-Butadiene	NA
Acetaldehyde	4.39%
Acrolein	8.11%
Benzene	18.90%
Chlorine	0.00%
Copper	0.00%
Ethylbenzene	NA
Formaldehyde	68.47%
Hexane	NA
Manganese	NA
Methanol	<0.01%
Methyl Ethyl Ketone	0.03%
Naphthalene	NA
Nickel	0.00%
Propylene	NA
Styrene	<0.01%
Sulfates	0.00%
Toluene	0.01%
Xylenes (Total)	0.01%

Table Notes:
1) Impacts are presented only for those chemicals for which carcinogenic or noncarcinogenic impacts have been associated. All other chemicals are designated as not applicable (NA). The top three contributing chemicals are automatically highlighted.

O-CUE

Health Impacts and Air Concentration Analysis Report

Analysis of Air Concentration Chemical Contribution at Selected Receptor

Floor: (As specified above)
Distance From Site (ft): (As specified above)
Distance From Roadway (ft): (As specified above)
Receptor Type: (As specified above)

Max Phase Average Concentration (ug/m^3)	
Chemical	**50 & 50 ft 2nd Floor**
PM2.5	5.17E-02
Diesel Particulate Matter	5.62E-02
1,3-Butadiene	NA
Acetaldehyde	NA
Acrolein	NA
Benzene	NA
Chlorine	NA
Copper	NA
Ethylbenzene	NA
Formaldehyde	NA
Hexane	NA
Manganese	NA
Methanol	NA
Methyl Ethyl Ketone	NA
Naphthalene	NA
Nickel	NA
Propylene	NA
Styrene	NA
Sulfates	NA
Toluene	NA
Xylenes (Total)	NA

Max Phase Hourly Concentration (ug/m^3)	
Chemical	**50 & 50 ft 2nd Floor**
PM2.5	5.12E+00
Diesel Particulate Matter	NA
1,3-Butadiene	9.92E-02
Acetaldehyde	4.37E+00
Acrolein	4.29E-02
Benzene	1.08E+00
Chlorine	NA
Copper	NA
Ethylbenzene	1.59E-01
Formaldehyde	7.96E+00
Hexane	8.20E-02
Manganese	NA
Methanol	1.57E-02
Methyl Ethyl Ketone	8.66E-01
Naphthalene	4.44E-02
Nickel	NA
Propylene	1.36E+00
Styrene	3.03E-02
Sulfates	NA
Toluene	8.19E-01
Xylenes (Total)	5.83E-01

Table Notes:
1) Concentrations are presented for all evaluated chemicals, if no concentration is calculated for a given chemical, the concentration will be returned as not applicable (NA). NA indicates that the given chemical is not present in the speciation profiles of the entered equipment or is not evaluated for the applicable health effect end point of the given average concentration (i.e., cancer risk, chronic HI, or acute HI).

ATTACHMENT 2

O-CUE

Screening Tool Data Inputs

The following Inputs are required:

1) Project site data and schedule
2) Offsite truck trip data
3) On-site construction equipment emissions data

Data Input Instructions:
For each of the three data input sections below, enter the required project and equipment data in the yellow highlighted cells according the directions indicated. Refer to the data check indicator below to confirm that all necessary data inputs are complete and there aren't any detected errors in the data entry.

Data Input Check: Complete: No Errors or Missing Data Found

Follow the data entry instructions under each section.

1) Project Site Data and Schedule Inputs

Site Data Instructions:
Enter the indicated project parameters in the yellow hightlighted cells below according the directions indicated to the right of each cell.

Project Name:	Duct Banks	(Enter Text)
Project Length:	500 ft	(Enter total construction length, and select the units in the dropdown menu)
Project Length (ft):	500	
Model Length:	Long Linear (> 300 meters)	(Select from dropdown menu)
Landuse Type:	San Francisco - Suburban Medium Density	(Select from dropdown menu)
Project Start Date:	1/1/2020	(Enter in mm/dd/yyyy format)
Project Duration:	2.6	(Enter Project duration in weeks)
Project End Date:	1/21/2020	
Project Duration*:	0.06	Years
Project Lifetime (for Greenhouse Gas Annualization):**	1	Years

***Note:** Regardless of project duration, even when greater than 2.25 years, the health risk analysis will be based on the most conservative age sensitivity assumptions.
**Note: If the lifetime of the project is unknown, 20 years may be used as a default.
****Note:** OEHHA recommends that projects that are less than 6 months be assumed to last 6 months.

Project Phasing Instructions:
If a project will have only one phase, the project start date and end date will be the same as the phase start and end dates and must be entered in the table below. If multiple phases are entered the phases dates must not overlap or have gaps in time and the end date of the last phase must match the project end date.

1

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Data Check	
Phase Starting Date:	1/1/2020					1 Phase Entered	
Phase Length:	2.6					Total Weeks Match	(Enter the phase length in weeks)
Phase End Date:	1/21/2020					Project End Date Match	
Construction Hour per day:	8					Hours Entered	(Enter integer number between 1 and 24)
Construction Days per week:	5					Hours Entered	(Enter integer number between 1 and 7)

O-CUE

Screening Tool Data Inputs

2) Offsite Heavy Duty Diesel Truck Trip Data Inputs

Offsite Truck Instructions:
Complete data entry in each row of the table below for the number or heavy duty diesel truck trips visiting the project site per construction phase. For each field of the table, either use the dropdown menu to select the appropriate entry or enter a value in accordance with the field description. If an invalid entry is made in a field, a warning message will occur. For each entry, all fields must be completed. If a field is missing for any entry, the data check column will indicate "Missing Data".

Diesel Truck Trip Table

Entry ID	Phase	Year	Total Truck Trips	Max Truck Trips per Hour	Onsite Idling Time (minutes)[1]	Truck Trip Lenth (miles)[2]	Data Check
A	1	2020	71	6	5	20	Complete
B							No Entry
C							No Entry
D							No Entry
E							No Entry
F							No Entry
G							No Entry
H							No Entry
I							No Entry
J							No Entry

Table Notes:
1) The onsite idling time represents the amount of time a truck idles onsite upon arrive or departure. Thus each truck is assumed to idle for this duration twice per trip while onsite. Note that the 5 minute truck idling rule applies to most trucks with some exceptions (e.g., concrete trucks or trucks waiting in queue). If certain truck trips will have longer idling times, each set of trucks should be entered as a separate entry with the specified phase.
2) The one-way truck trip length is the distance each truck travels to or from the site and is used to estimate criteria pollutant emissions from the project. For haul truck trips assume a 20 mile trip length and for vendor truck trips assume a 7.3 mile trip length.

3) On-Site Construction Equipment Data Inputs

Construction Equipment Instructions:
Complete data entry in each row of the table below for each piece of equipment to be used during the project construction. When entering data, complete data entry from left to right as each subsequent field may depend of a previous entry. For each field of the table, either use the dropdown menu to select the appropriate entry or enter a value in accordance with the field description. If an invalid entry is made in a field, a warning message will occur. For each entry, all fields must be completed. If a field is missing for any entry, the data check column will indicate "Missing Data". If incompatible data is entered for a given piece of equipment, a "Data Error" warning will be provided prompting a review of the data inputs as incompatible selections have been made. Note that the phase number and year for each piece of equipment should match with the phase schedule entered above.

Construction Equipment Table

Entry ID	Equipment and Usage Inputs										Diesel Engine Control Options		Data Check
	Phase[1]	Year[1]	Fuel Type	Equipment Type	Horsepower (HP)[2]	HP Check	Equipment Quantity	# of Working Days[3]	Daily Hours of Operation Per Piece of Equip[4]	Engine Standard[5]	Diesel Particulate Filter[6]	Diesel Type[7]	
1	1	2020	Diesel	Concrete/Industrial Saws	Typical	81	1	13	1	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
2	1	2020	Diesel	Excavators	Typical	157	1	13	6	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
3	1	2020	Diesel	Generator Sets	Typical	84	1	13	4	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
4	1	2020	Diesel	Off-Highway Trucks	Typical	381	1	13	2	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
5	1	2020	Diesel	Other Construction Equipment	Typical	327	2	13	1	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
6	1	2020	Diesel	Rollers	Typical	84	1	13	2	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
7													No Entry
8													No Entry
9													No Entry
10													No Entry
11													No Entry
12													No Entry
13													No Entry
14													No Entry
15													No Entry
16													No Entry
17													No Entry
18													No Entry

Screening Tool Data Inputs

19													No Entry
20													No Entry
21													No Entry
22													No Entry
23													No Entry
24													No Entry

Screening Tool Data Inputs

25													No Entry
26													No Entry
27													No Entry
28													No Entry
29													No Entry
30													No Entry
31													No Entry
32													No Entry
33													No Entry
34													No Entry
35													No Entry
36													No Entry
37													No Entry
38													No Entry
39													No Entry
40													No Entry
41													No Entry
42													No Entry
43													No Entry
44													No Entry
45													No Entry
46													No Entry
47													No Entry
48													No Entry
49													No Entry
50													No Entry

Table Notes:
1) The phase and year entered for each piece of equipment should be consistent with the phases and schedules entered in the project phasing table. If a phase is entered that is not already defined in the phase table, the applicable phase cell will be highlighted in red indicating an error.
2) For diesel equipment, the "typical" horsepower (HP) option should be selected if the actual equipment HP is unknown. When default horsepower is selected, an assumed HP consistent with CalEEMod default values will be used and represents a fleet average horsepower. For confirmation the HP ratings for all equipment, including defaults are provided in the "HP Check" column. If an equipment HP is in between the listed option, the higher HP option should be selected.
3) Number days the equipment will operate within the specified phase.
4) Number of hours per day that each piece of the specified equipment will operate.
5) For diesel equipment, specify the engine standard of each piece equipment to be used if know, else choose fleet average. For other equipment types, choose the NA option (e.g., NA = Gasoline)
6) For diesel equipment, the option to apply a Level 3 Verified Diesel Emission Control System (VDECS) diesel particulate filter (DPF) will be allowed for Tier 2 and Tier 3 engine standards. DPFs are assumed to reduce tailpipe PM10 emissions by 85% and total organic gas (TOG) emissions by 90%.
7) For diesel equipment, the option to use 20% bio-diesel (B20) will be allowed for all engine standard options. Bio-diesel is assumed to reduce tailpipe PM10 emissions by 7% and TOG emissions by 13% and increase NOx emissions by 3%.

4) Receptor Type Selection

Type ID	Receptor
1	Resident
2	Resident Adult
3	School Child
4	Day Care Child

User Selection	1

Table Notes:
* Receptor type selection occurs in Table 3. Health Risk & Concentration.

O-CUE

Emissions Summary Output Report

Project Data

	User Selections
Project Name:	Duct Banks
Project Length (ft):	500
Model Length:	Long Linear (> 300 meters)
Landuse Type:	San Francisco - Suburban Medium Density
Project Start Date:	1/1/2020
Project End Date:	1/21/2020
# of Phases:	1
Data Input Check:	Complete: No Errors or Missing Data Found

Overall Project Emissions by Chemical Used for Health Risk Analysis of Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts

Chemical	CAS	Project Emissions (lbs)		
		Onsite Total[1]	Offsite Total[2]	Overall Total[3]
PM2.5	PM2.5	0.515	0.004	0.52
TOG	TOG	5.717	0.012	5.73
Diesel Particulate Matter	9901	0.560	0.004	0.56
1,3-Butadiene	106990	0.000	0.000	0.00
Acetaldehyde	75070	0.000	0.000	0.00
Acrolein	107028	0.000	0.000	0.00
Benzene	71432	0.000	0.000	0.00
Chlorine	7782505	0.000	0.000	0.00
Copper	7440508	0.000	0.000	0.00
Ethylbenzene	100414	0.000	0.000	0.00
Formaldehyde	50000	0.000	0.000	0.00
Hexane	110543	0.000	0.000	0.00
Manganese	7439965	0.000	0.000	0.00
Methanol	67561	0.000	0.000	0.00
Methyl Ethyl Ketone	78933	0.000	0.000	0.00
Naphthalene	91203	0.000	0.000	0.00
Nickel	7440020	0.000	0.000	0.00
Propylene	115071	0.000	0.000	0.00
Styrene	100425	0.000	0.000	0.00
Sulfates	9960	0.000	0.000	0.00
Toluene	108883	0.000	0.000	0.00
Xylenes (Total)	1330207	0.000	0.000	0.00

Table Notes:
1) Onsite total emissions includes all construction equipment operation and the portion of the diesel truck trip emissions associated with onroad trucks while they are onsite.
2) Offsite total emissions includes offsite diesel truck emissions from onroad truck travel evaluated in the health risk analysis (i.e. from 1,000 ft of travel).
3) Overall total emissions is the sum of all onsite and offsite emissions for construction equipment and trucks evaluated in the health risk analysis.

Total Project Criteria Pollutant Emissions

Chemical	Criteria Emissions By Phase and Project Total (lbs)[1]						
	1	2	3	4	5	Project	
PM10	1.00					1.00	
PM2.5	0.93					0.93	
NOx	51.65					51.65	Annualized GHG Emissions (Metric Tons/year)
ROG	6.69					6.69	
$CO2e^{2}$	33,924					33,924	15.39

Average Daily Criteria Pollutant Emissions

Chemical	Criteria Emissions By Phase and Project Total (lbs/day)[1,3]						May 2011 Draft BAAQMD Thresholds (lbs/day)[5]
	1	2	3	4	5	Project	
Total Days[4]	21					21	
PM10	0.05					0.05	54
PM2.5	0.04					0.04	82
NOx	2.46					2.46	54
ROG	0.32					0.32	54

Table Notes:
1) Criteria emissions include all onsite construction emissions and onroad truck emissions for the full truck trip length. Worker commute trip emissions are excluded as negligible.
2) CO2e emissions equal CO2 emissions plus CH4 and N2O emissions multiplying by the corresponding global warming potentials (CH4: 21 and N2O: 310).
3) Daily average emissions are calculated as the quantity of emissions divided by the total number days for each phase and the project as a whole.
4) Total days are calculated as the total number of days between the project start date and end date.
5) Average daily emissions are compared to these threshold values. These values may be edited if the CEQA Guidance changes.

O-CUE

Emissions Summary Output Report

Project Phase Breakdown of Emissions Used In Health Risk Analysis

Max Hourly - Onsite Construction Emissions by Chemical (Including Onsite Trucks) for Health Risk Analysis of Acute Non-Cancer Impacts

Chemical	CAS	May Hourly Onsite Emissions by Phase (lbs)					
		1	2	3	4	5	Max
PM2.5	PM2.5	0.019					0.019
TOG	TOG	0.218					0.218
Diesel Particulate Matter	9901	0.000					0.000
1,3-Butadiene	106990	<0.001					<0.001
Acetaldehyde	75070	0.017					0.017
Acrolein	107028	<0.001					<0.001
Benzene	71432	0.004					0.004
Chlorine	7782505	0.000					0.000
Copper	7440508	0.000					0.000
Ethylbenzene	100414	0.001					0.001
Formaldehyde	50000	0.032					0.032
Hexane	110543	<0.001					<0.001
Manganese	7439965	0.000					0.000
Methanol	67561	<0.001					<0.001
Methyl Ethyl Ketone	78933	0.003					0.003
Naphthalene	91203	<0.001					<0.001
Nickel	7440020	0.000					0.000
Propylene	115071	0.005					0.005
Styrene	100425	<0.001					<0.001
Sulfates	9960	0.000					0.000
Toluene	108883	0.003					0.003
Xylenes (Total)	1330207	0.002					0.002

Project Total - Onsite Construction Emissions by Chemical (Including Onsite Trucks) for Health Risk Analysis of Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts

Chemical	CAS	Project Total Onsite Emissions by Phase (lbs)					Project Total Onsite
		1	2	3	4	5	
PM2.5	PM2.5	0.515					0.515
TOG	TOG	5.717					5.717
Diesel Particulate Matter	9901	0.560					0.560
1,3-Butadiene	106990	0.000					0.000
Acetaldehyde	75070	0.000					0.000
Acrolein	107028	0.000					0.000
Benzene	71432	0.000					0.000
Chlorine	7782505	0.000					0.000
Copper	7440508	0.000					0.000
Ethylbenzene	100414	0.000					0.000
Formaldehyde	50000	0.000					0.000
Hexane	110543	0.000					0.000
Manganese	7439965	0.000					0.000
Methanol	67561	0.000					0.000
Methyl Ethyl Ketone	78933	0.000					0.000
Naphthalene	91203	0.000					0.000
Nickel	7440020	0.000					0.000
Propylene	115071	0.000					0.000
Styrene	100425	0.000					0.000
Sulfates	9960	0.000					0.000
Toluene	108883	0.000					0.000
Xylenes (Total)	1330207	0.000					0.000

Max Hourly - Offsite Truck Emissions by Chemical for Health Risk Analysis of Acute Non-Cancer Impacts

Chemical	CAS	May Hourly Offsite Emissions by Phase (lbs)					
		1	2	3	4	5	Max
PM2.5	PM2.5	<0.001					<0.001
TOG	TOG	0.001					0.001
Diesel Particulate Matter	9901	0.000					0.000
1,3-Butadiene	106990	0.000					0.000
Acetaldehyde	75070	<0.001					<0.001
Acrolein	107028	<0.001					<0.001
Benzene	71432	<0.001					<0.001
Chlorine	7782505	0.000					0.000
Copper	7440508	0.000					0.000
Ethylbenzene	100414	0.000					0.000
Formaldehyde	50000	<0.001					<0.001
Hexane	110543	0.000					0.000
Manganese	7439965	0.000					0.000
Methanol	67561	0.000					0.000
Methyl Ethyl Ketone	78933	<0.001					<0.001
Naphthalene	91203	0.000					0.000
Nickel	7440020	0.000					0.000
Propylene	115071	0.000					0.000
Styrene	100425	0.000					0.000
Sulfates	9960	0.000					0.000
Toluene	108883	<0.001					<0.001
Xylenes (Total)	1330207	<0.001					<0.001

Project Total - Offsite Truck Emissions by Chemical for Health Risk Analysis of Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts

Chemical	CAS	Project Total Offsite Emissions by Phase (lbs)					Project Total Offsite
		1	2	3	4	5	
PM2.5	PM2.5	0.004					0.004
TOG	TOG	0.012					0.012
Diesel Particulate Matter	9901	0.004					0.004
1,3-Butadiene	106990	0.000					0.000
Acetaldehyde	75070	0.000					0.000
Acrolein	107028	0.000					0.000
Benzene	71432	0.000					0.000
Chlorine	7782505	0.000					0.000
Copper	7440508	0.000					0.000
Ethylbenzene	100414	0.000					0.000
Formaldehyde	50000	0.000					0.000
Hexane	110543	0.000					0.000
Manganese	7439965	0.000					0.000
Methanol	67561	0.000					0.000
Methyl Ethyl Ketone	78933	0.000					0.000
Naphthalene	91203	0.000					0.000
Nickel	7440020	0.000					0.000
Propylene	115071	0.000					0.000
Styrene	100425	0.000					0.000
Sulfates	9960	0.000					0.000
Toluene	108883	0.000					0.000
Xylenes (Total)	1330207	0.000					0.000

O-CUE

Emissions Summary Output Report

Chemical Emissions Contribution Analysis of Emissions Used for Health Risk Analysis for Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts (Not used for Acute Non-Cancer Impacts)

User Instructions:
Select desired chemical from the drop down menu at the top of each column to generate a breakdown of the project emissions by equipment entry.

Entry ID	Phase	Equipment Type[1]	Fuel Type	Project Chemical Emissions by Equipment Entry (lbs)						
				Benzene	PM2.5	Diesel Particulate Matter	1,3-Butadiene	Formaldehyde	Methanol	Sulfates
				71432	PM2.5	9901	106990	50000	67561	9960
1	1	Concrete/Industrial Saws	Diesel	0.000	0.023	0.025	0.000	0.000	0.000	0.000
2	1	Excavators	Diesel	0.000	0.142	0.155	0.000	0.000	0.000	0.000
3	1	Generator Sets	Diesel	0.000	0.098	0.107	0.000	0.000	0.000	0.000
4	1	Off-Highway Trucks	Diesel	0.000	0.115	0.125	0.000	0.000	0.000	0.000
5	1	Other Construction Equipment	Diesel	0.000	0.107	0.117	0.000	0.000	0.000	0.000
6	1	Rollers	Diesel	0.000	0.025	0.027	0.000	0.000	0.000	0.000
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
A	1	On-road Diesel Trucks	Diesel	0.000	0.008	0.008	0.000	0.000	0.000	0.000
B										
C										
D										
E										
			Project Total (lbs)	0.000	0.519	0.564	0.000	0.000	0.000	0.000

Table Notes:
1) On-road diesel truck trip emissions presented in this summary table include the aggregate of the offsite and onsite diesel truck emissions and only includes emissions evaluated in the health risk analysis (i.e. from 1,000 ft of travel). The onroad truck emissions presented here do not represent the full truck trip length.

Emissions Summary Output Report

Chemical Emissions Contribution Analysis of Emissions Used for Health Risk Analysis for Acute Non-Cancer Impacts

User Instructions:
Select desired chemical from the drop down menu at the top of each column to generate a breakdown of the project emissions by equipment entry.

Entry ID	Phase	Equipment Type[1]	Fuel Type	Project Chemical Emissions by Equipment Entry (lbs)						
				Diesel Particulate Matter	PM2.5	Acetaldehyde	1,3-Butadiene	Formaldehyde	Methanol	Sulfates
				9901	PM2.5	75070	106990	50000	67561	9960
1	1	Concrete/Industrial Saws	Diesel	0.000	0.002	0.001	0.000	0.003	0.000	0.000
2	1	Excavators	Diesel	0.000	0.002	0.001	0.000	0.003	0.000	0.000
3	1	Generator Sets	Diesel	0.000	0.002	0.002	0.000	0.003	0.000	0.000
4	1	Off-Highway Trucks	Diesel	0.000	0.004	0.004	0.000	0.007	0.000	0.000
5	1	Other Construction Equipment	Diesel	0.000	0.008	0.007	0.000	0.013	0.000	0.000
6	1	Rollers	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
A	1	On-road Diesel Trucks	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
B										
C										
D										
E										
			Project Total (lbs)	0.000	0.020	0.017	0.000	0.032	0.000	0.000

Table Notes:
1) On-road diesel truck trip emissions presented in this summary table include the aggregate of the offsite and onsite diesel truck emissions and only includes emissions evaluated in the health risk analysis (i.e. from 1,000 ft of travel). The onroad truck emissions presented here do not represent the full truck trip length.

O-CUE

Health Impacts and Air Concentration Analysis Report

Project Data

User Selections
Duct Banks
500
Long Linear (> 300 meters)
San Francisco - Suburban Medium Density
1/1/2020
1/21/2020
1
Resident
Complete: No Errors or Missing Data Found

Project Name:
Project Length (ft):
Model Length:
Landuse Type:
Project Start Date:
Project End Date:
# of Phases:
Receptor Type:
Data Check:

Receptor Type	User Selection
Resident	◉
Resident Adult	○
School Child	○
Day Care Child	○

User Instructions:
*Select applicable receptor type, if unknown use Resident.

Risk Value	May 2017 Draft BAAQMD Thresholds
Cancer Risk (in a million)	10
Chronic HI	1
Acute HI	1
PM2.5 Concentration (ug/m3)	0.3

User Instructions:
The risk values in the tables below are compared to these thresholds. They may be updated if the CEQA Guidelines change.

Overview of Maximum Health Impacts by Distance and Receptor Height

Onsite Construction Impacts (Including Onsite Trucks)

Receptor Distance (ft)	Total Cancer Risk (in a million) for: Resident				Max Chronic HI				Max Acute HI				PM2.5 Concentration (ug/m3)			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
10	0.70	1.55	0.73	0.31	0.015	0.033	0.015	0.007	0.605	1.333	0.623	0.269	0.069	0.151	0.071	0.030
20	0.71	1.40	0.72	0.32	0.015	0.030	0.015	0.007	0.606	1.205	0.621	0.275	0.069	0.137	0.070	0.031
30	0.70	1.29	0.72	0.32	0.015	0.027	0.015	0.007	0.603	1.108	0.618	0.278	0.068	0.126	0.070	0.032
40	0.69	1.19	0.72	0.32	0.015	0.025	0.015	0.007	0.595	1.026	0.615	0.276	0.067	0.116	0.070	0.031
50	0.68	1.12	0.71	0.31	0.014	0.024	0.015	0.007	0.585	0.958	0.613	0.270	0.066	0.109	0.070	0.031
100	0.61	0.84	0.68	0.27	0.013	0.018	0.014	0.006	0.523	0.719	0.588	0.229	0.059	0.082	0.067	0.026
200	0.49	0.55	0.58	0.25	0.010	0.012	0.012	0.005	0.420	0.475	0.501	0.218	0.048	0.054	0.057	0.025
300	0.40	0.41	0.50	0.24	0.008	0.009	0.011	0.005	0.340	0.348	0.426	0.203	0.039	0.039	0.048	0.023
400	0.32	0.32	0.44	0.21	0.007	0.007	0.009	0.005	0.278	0.271	0.374	0.184	0.032	0.031	0.042	0.021
500	0.27	0.26	0.38	0.19	0.006	0.005	0.008	0.004	0.231	0.222	0.329	0.166	0.026	0.025	0.037	0.019
600	0.23	0.22	0.34	0.18	0.005	0.005	0.007	0.004	0.195	0.187	0.290	0.152	0.022	0.021	0.033	0.017
700	0.20	0.19	0.30	0.16	0.004	0.004	0.006	0.003	0.170	0.163	0.258	0.139	0.019	0.018	0.029	0.016
800	0.18	0.17	0.27	0.15	0.004	0.004	0.006	0.003	0.154	0.144	0.231	0.129	0.017	0.016	0.026	0.015
900	0.16	0.15	0.24	0.14	0.003	0.003	0.005	0.003	0.140	0.129	0.209	0.123	0.016	0.015	0.024	0.014
1000	0.15	0.14	0.22	0.14	0.003	0.003	0.005	0.003	0.129	0.117	0.190	0.116	0.015	0.013	0.022	0.013

Onsite Construction Impacts (Generator)

Receptor Distance (ft)	Total Cancer Risk (in a million) for: Resident				Max Chronic HI				Max Acute HI				PM2.5 Concentration (ug/m3)			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
10	0.30	5.70	2.98	1.51	0.006	0.121	0.063	0.032	0.110	2.122	1.110	0.561	0.029	0.555	0.290	0.147
20	0.30	2.22	2.20	1.29	0.006	0.047	0.047	0.027	0.111	0.826	0.821	0.482	0.029	0.216	0.215	0.126
30	0.26	1.51	1.62	1.15	0.006	0.032	0.034	0.024	0.097	0.562	0.602	0.428	0.025	0.147	0.157	0.112
40	0.23	1.06	1.25	1.01	<0.01	0.023	0.027	0.021	0.087	0.396	0.467	0.375	0.023	0.104	0.122	0.098
50	0.21	0.79	1.03	0.89	<0.01	0.017	0.022	0.019	0.078	0.295	0.382	0.331	0.020	0.077	0.100	0.086
100	0.13	0.29	0.46	0.52	<0.01	0.006	0.010	0.011	0.047	0.107	0.172	0.193	0.012	0.028	0.045	0.051
200	0.08	0.13	0.20	0.26	<0.01	<0.01	<0.01	0.006	0.031	0.049	0.074	0.097	0.008	0.013	0.019	0.025
300	0.06	0.08	0.12	0.18	<0.01	<0.01	<0.01	<0.01	0.023	0.030	0.046	0.067	0.006	0.008	0.012	0.018
400	0.05	0.06	0.08	0.14	<0.01	<0.01	<0.01	<0.01	0.019	0.021	0.032	0.054	<0.01	0.005	0.008	0.014
500	0.04	0.04	0.07	0.12	<0.01	<0.01	<0.01	<0.01	0.016	0.016	0.025	0.045	<0.01	<0.01	0.007	0.012
600	0.03	0.04	0.06	0.10	<0.01	<0.01	<0.01	<0.01	0.013	0.013	0.021	0.039	<0.01	<0.01	0.005	0.010
700	0.03	0.03	0.05	0.09	<0.01	<0.01	<0.01	<0.01	0.011	0.012	0.018	0.034	<0.01	<0.01	<0.01	0.009
800	0.03	0.03	0.04	0.08	<0.01	<0.01	<0.01	<0.01	0.010	0.011	0.015	0.030	<0.01	<0.01	<0.01	0.008
900	0.03	0.03	0.04	0.07	<0.01	<0.01	<0.01	<0.01	0.009	0.010	0.013	0.028	<0.01	<0.01	<0.01	0.007
1000	0.02	0.02	0.03	0.07	<0.01	<0.01	<0.01	<0.01	0.009	0.009	0.012	0.025	<0.01	<0.01	<0.01	0.007

Offsite Truck Impacts

Receptor Distance (ft)	Total Cancer Risk (in a million) for: Resident				Max Chronic HI				Max Acute HI				PM2.5 Concentration (ug/m3)			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
10	<0.01	0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.007	0.003	0.001	<0.001	0.001	<0.001	<0.001
20	<0.01	0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.006	0.003	0.001	<0.001	0.001	<0.001	<0.001
30	<0.01	0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.006	0.003	0.001	<0.001	0.001	<0.001	<0.001
40	<0.01	0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.005	0.003	0.001	<0.001	0.001	<0.001	<0.001
50	<0.01	0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.005	0.003	0.001	<0.001	0.001	<0.001	<0.001
100	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001
200	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.002	0.002	0.003	0.001	<0.001	<0.001	<0.001	<0.001
300	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.002	0.002	0.002	0.001	<0.001	<0.001	<0.001	<0.001
400	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.002	0.001	<0.001	<0.001	<0.001	<0.001
500	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.002	0.001	<0.001	<0.001	<0.001	<0.001
600	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
700	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
800	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
900	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
1000	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001

O-CUE

Health Impacts and Air Concentration Analysis Report

Analysis of Combined Health Impacts at nearest Receptor Location

User Instructions:
Select the distance, in feet, from the project boundary and truck route to the nearest sensitive receptor location to evaluate the phase by phase impacts and overall combined onsite and offsite impacts at the project's maximally exposed individual receptor (MEIR). Note that the combined analysis conservatively assumes that the onsite construction MEIR and the offsite truck MEIR occur at the same location.

Phase:	1	2	3	4	5	
Distance From Site (ft):	50	100	100	100	100	(Select from dropdown menu)
Distance from Generator (ft):	50	50	50	50	50	(Select from dropdown menu)
Distance From Roadway (ft):	50	900	900	900	900	(Select from dropdown menu)
Receptor Type:	Resident					(As specified above)

Onsite Construction Results (Including Onsite Trucks)

Phase	Cancer Risk (in a million) at 50 ft from Site				Chronic HI at 50 ft from Site				Acute HI at 50 ft from Site				PM2.5 Concentration (ug/m3) at 50 ft from Site			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
1	0.68	1.12	0.71	0.31	0.014	0.024	0.015	0.007	0.585	0.958	0.613	0.270	0.066	0.109	0.070	0.031
2																
3																
4																
5																
Total/Max[1]	0.68	1.12	0.71	0.31	0.014	0.024	0.015	0.007	0.585	0.958	0.613	0.270	0.066	0.109	0.070	0.031

Onsite Construction Results (Generator)

Phase	Cancer Risk (in a million) at 50 ft from Generator				Chronic HI at 50 ft from Generator				Acute HI at 50 ft from Generator				PM2.5 Concentration (ug/m3) at 50 ft from Generator			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
1	0.21	0.79	1.03	0.89	<0.01	0.017	0.022	0.019	0.078	0.295	0.382	0.331	0.020	0.077	0.100	0.086
2																
3																
4																
5																
Total/Max[1]	0.21	0.79	1.03	0.89	0.004	0.017	0.022	0.019	0.078	0.295	0.382	0.331	0.020	0.077	0.100	0.086

Offsite Truck Impacts

Phase	Cancer Risk (in a million) at 50 ft from Roadway				Chronic HI at 50 ft from Roadway				Acute HI at 50 ft from Roadway				PM2.5 Concentration (ug/m3) at 50 ft from Roadway			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
1	<0.01	0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.005	0.003	0.001	<0.001	0.001	<0.001	<0.001
2																
3																
4																
5																
Total/Max[1]	0.00	0.01	0.00	0.00	0.000	0.000	0.000	0.000	0.003	0.005	0.003	0.001	0.000	0.001	0.000	0.000

Combined Project Impacts

Phase	Cancer Risk (in a million)				Chronic HI				Acute HI				PM2.5 Concentration (ug/m3)			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
1	0.89	1.91	1.74	1.20	0.019	0.040	0.037	0.025	0.666	1.257	0.998	0.602	0.087	0.186	0.170	0.117
2																
3																
4																
5																
Total/Max[1]	**0.89**	**1.91**	**1.74**	**1.20**	**0.019**	**0.040**	**0.037**	**0.025**	**0.666**	**1.257**	**0.998**	**0.602**	**0.087**	**0.186**	**0.170**	**0.117**
Threshold	10	10	10	10	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	0.3	0.3	0.3
Exceedance	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**Yes**	**No**	**No**	**No**	**No**	**No**	**No**

Table Notes:
1) Total is used to determine cancer risk. Maximum from each phase is used for chronic HI, acute HI and $PM_{2.5}$ concentration.

O-CUE

Health Impacts and Air Concentration Analysis Report

Analysis of Combined Health Impacts by Percent Chemical Contribution

User Instructions:
Select a receptor floor height to generate a break down of the contribution of each emitted chemical to the cancer risk, chronic HI, and acute HI at the chosen receptor distance and specified floor height.

Floor:	1st Floor	(Select from dropdown menu)
Distance From Site (ft):	50	(As specified for phase 1 above)
Distance From Generator (ft):	50	(As specified for phase 1 above)
Distance From Roadway (ft):	50	(As specified for phase 1 above)
Max Chronic Phase:	1	(automatically determined based on combined impacts)
Max Acute Phase:	1	(automatically determined based on combined impacts)
Receptor Type:	Resident	(As specified above)

Cancer Risk	
Chemical	**50, 50, & 50 ft**
	1st Floor
Diesel Particulate Matter	100.00%
1,3-Butadiene	0.00%
Acetaldehyde	0.00%
Acrolein	NA
Benzene	0.00%
Chlorine	NA
Copper	NA
Ethylbenzene	0.00%
Formaldehyde	0.00%
Hexane	NA
Manganese	NA
Methanol	NA
Methyl Ethyl Ketone	NA
Naphthalene	0.00%
Nickel	0.00%
Propylene	NA
Styrene	NA
Sulfates	NA
Toluene	NA
Xylenes (Total)	NA

Chronic HI	
Chemical	**50, 50, & 50 ft**
	1st Floor
Diesel Particulate Matter	100.00%
1,3-Butadiene	0.00%
Acetaldehyde	0.00%
Acrolein	0.00%
Benzene	0.00%
Chlorine	0.00%
Copper	NA
Ethylbenzene	0.00%
Formaldehyde	0.00%
Hexane	0.00%
Manganese	0.00%
Methanol	0.00%
Methyl Ethyl Ketone	NA
Naphthalene	0.00%
Nickel	0.00%
Propylene	0.00%
Styrene	0.00%
Sulfates	NA
Toluene	0.00%
Xylenes (Total)	0.00%

Acute HI	
Chemical	**50, 50, & 50 ft**
	1st Floor
Diesel Particulate Matter	NA
1,3-Butadiene	NA
Acetaldehyde	4.38%
Acrolein	4.26%
Benzene	19.76%
Chlorine	0.00%
Copper	0.00%
Ethylbenzene	NA
Formaldehyde	71.46%
Hexane	NA
Manganese	NA
Methanol	<0.01%
Methyl Ethyl Ketone	0.03%
Naphthalene	NA
Nickel	0.00%
Propylene	NA
Styrene	<0.01%
Sulfates	0.00%
Toluene	0.01%
Xylenes (Total)	0.01%

Table Notes:
1) Impacts are presented only for those chemicals for which carcinogenic or noncarcinogenic impacts have been associated. All other chemicals are designated as not applicable (NA). The top three contributing chemicals are automatically highlighted.

Health Impacts and Air Concentration Analysis Report

Analysis of Air Concentration Chemical Contribution at Selected Receptor

Floor:	1st Floor	(As specified above)
Distance From Site (ft):	50	(As specified for phase 1 above)
Distance From Generator (ft):	50	(As specified for phase 1 above)
Distance From Roadway (ft):	50	(As specified for phase 1 above)
Receptor Type:	Resident	(As specified above)

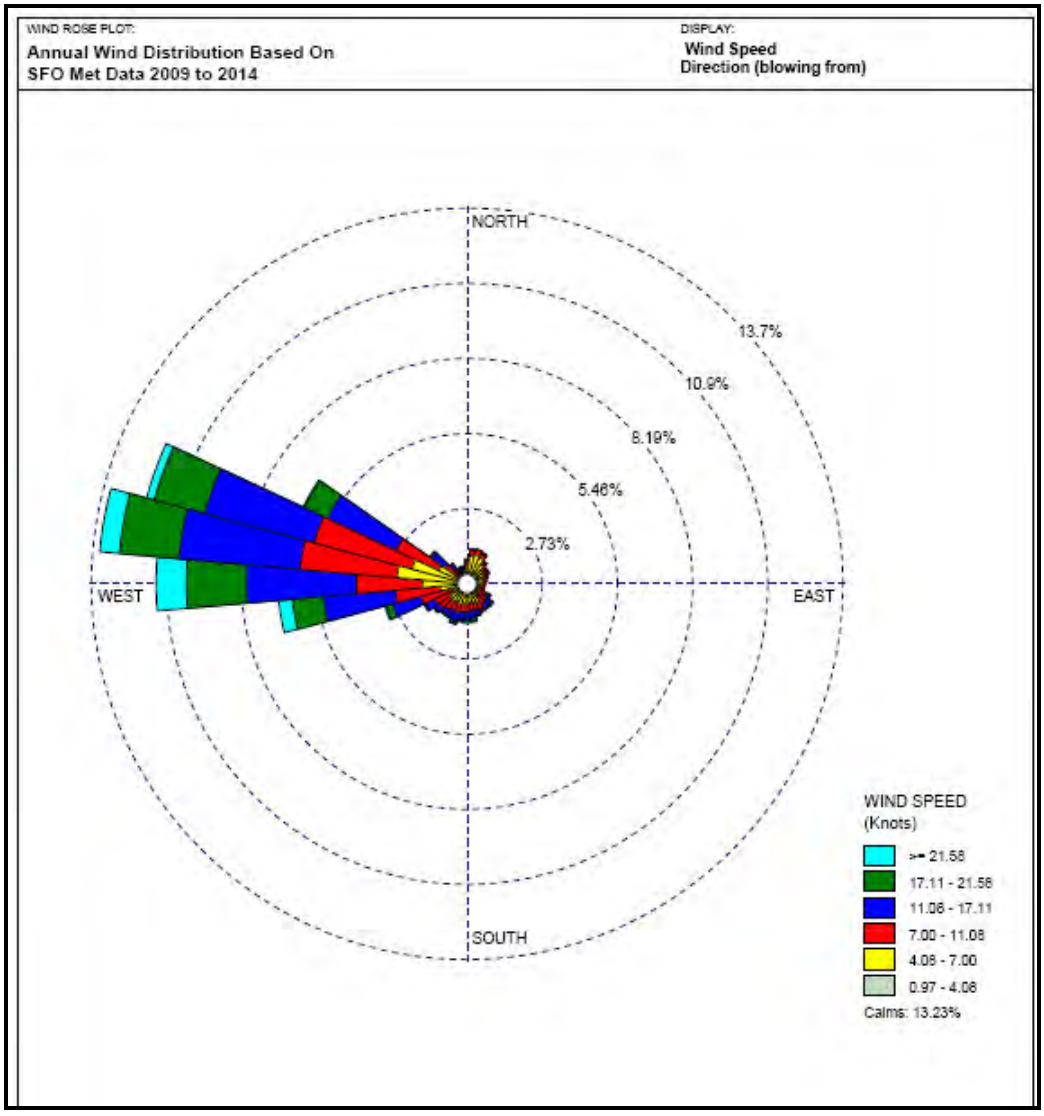
Max Phase Average Concentration (ug/m^3)	
Chemical	**50, 50, & 50 ft**
	1st Floor
PM2.5	8.71E-02
Diesel Particulate Matter	9.46E-02
1,3-Butadiene	NA
Acetaldehyde	NA
Acrolein	NA
Benzene	NA
Chlorine	NA
Copper	NA
Ethylbenzene	NA
Formaldehyde	NA
Hexane	NA
Manganese	NA
Methanol	NA
Methyl Ethyl Ketone	NA
Naphthalene	NA
Nickel	NA
Propylene	NA
Styrene	NA
Sulfates	NA
Toluene	NA
Xylenes (Total)	NA

Max Phase Hourly Concentration (ug/m^3)	
Chemical	**50, 50, & 50 ft**
	1st Floor
PM2.5	1.62E+01
Diesel Particulate Matter	NA
1,3-Butadiene	3.32E-01
Acetaldehyde	1.37E+01
Acrolein	7.08E-02
Benzene	3.55E+00
Chlorine	NA
Copper	NA
Ethylbenzene	5.33E-01
Formaldehyde	2.62E+01
Hexane	2.74E-01
Manganese	NA
Methanol	5.24E-02
Methyl Ethyl Ketone	2.74E+00
Naphthalene	1.48E-01
Nickel	NA
Propylene	4.54E+00
Styrene	1.01E-01
Sulfates	NA
Toluene	2.66E+00
Xylenes (Total)	1.88E+00

Table Notes:

1) Concentrations are presented for all evaluated chemicals, if no concentration is calculated for a given chemical, the concentration will be returned as not applicable (NA). NA indicates that the given chemical is not present in the speciation profiles of the entered equipment or is not evaluated for the applicable health effect end point of the given average concentration (i.e., cancer risk, chronic HI, or acute HI).

ATTACHMENT 3


WIND ROSE PLOT:
Annual Wind Distribution Based On
SFO Met Data 2009 to 2014
DISPLAY:
Wind Speed
Direction (blowing from)
NORTH
EAST
SOUTH
WEST
13.7%
10.9%
8.19%
5.46%
2.73%
WIND SPEED
(Knots)
>= 21.56
17.11 - 21.56
11.06 - 17.11
7.00 - 11.06
4.08 - 7.00
0.97 - 4.08
Calms: 13.23%

ATTACHMENT 4

O-CUE

Screening Tool Data Inputs

The following Inputs are required:

1) Project site data and schedule
2) Offsite truck trip data
3) On-site construction equipment emissions data

Data Input Instructions:
For each of the three data input sections below, enter the required project and equipment data in the yellow highlighted cells according the directions indicated. Refer to the data check indicator below to confirm that all necessary data inputs are complete and there aren't any detected errors in the data entry.

Data Input Check: Complete: No Errors or Missing Data Found

Follow the data entry instructions under each section.

1) Project Site Data and Schedule Inputs

Site Data Instructions:
Enter the indicated project parameters in the yellow hightlighted cells below according the directions indicated to the right of each cell.

Project Name:	Potrero Substation	(Enter Text)
Project Size:	5.0 Acres	(Select from dropdown menu)
Landuse Type:	San Francisco - Industrial	(Select from dropdown menu)
Project Start Date:	1/1/2020	(Enter in mm/dd/yyyy format)
Project Duration:	52	(Enter Project duration in weeks; must be more than 26 weeks)
Project End Date:	12/31/2020	
Project Duration*:	1.00	Years
Project Lifetime (for Greenhouse Gas Annualization):**	1	Years

***Note:** Regardless of project duration, even when greater than 2.25 years, the health risk analysis will be based on the most conservative age sensitivity assumptions.
****Note**: If the lifetime of the project is unknown, 20 years may be used as a default.
*****Note:** OEHHA recommends that projects that are less than 6 months be assumed to last 6 months.

Project Phasing Instructions:
If a project will have only one phase, the project start date and end date will be the same as the phase start and end dates and must be entered in the table below. If multiple phases are entered the phases dates must not overlap or have gaps in time and the end date of the last phase must match the project end date.

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Data Check	
Phase Starting Date:	1/1/2020	2/21/2020	6/17/2020	9/10/2020	10/28/2020	5 Phases Entered	
Phase Length:	7.1	16.7	12.1	6.8	9.3	Total Weeks Match	(Enter the phase length in weeks)
Phase End Date:	2/20/2020	6/16/2020	9/9/2020	10/27/2020	12/31/2020	Project End Date Match	
Construction Hour per day:	8	8	8	8	8	Hours Entered	(Enter integer number between 1 and 24)
Construction Days per week:	5	5	5	5	5	Hours Entered	(Enter integer number between 1 and 7)

Screening Tool Data Inputs

2) Offsite Heavy Duty Diesel Truck Trip Data Inputs

Offsite Truck Instructions:
Complete data entry in each row of the table below for the number or heavy duty diesel truck trips visiting the project site per construction phase. For each field of the table, either use the dropdown menu to select the appropriate entry or enter a value in accordance with the field description. If an invalid entry is made in a field, a warning message will occur. For each entry, all fields must be completed. If a field is missing for any entry, the data check column will indicate "Missing Data".

Diesel Truck Trip Table

Entry ID	Phase	Year	Total Truck Trips	Max Truck Trips per Hour	Onsite Idling Time (minutes)[1]	Truck Trip Lenth (miles)[2]	Data Check
A	1	2020	41	6	5	20	Complete
B	2	2020	86	6	5	7.3	Complete
C							No Entry
D							No Entry
E							No Entry
F							No Entry
G							No Entry
H							No Entry
I							No Entry
J							No Entry

Table Notes:
1) The onsite idling time represents the amount of time a truck idles onsite upon arrive or departure. Thus each truck is assumed to idle for this duration twice per trip while onsite. Note that the 5 minute truck idling rule applies to most trucks with some exceptions (e.g., concrete trucks or trucks waiting in queue). If certain truck trips will have longer idling times, each set of trucks should be entered as a separate entry with the specified phase.
2) The one-way truck trip length is the distance each truck travels to or from the site and is used to estimate criteria pollutant emissions from the project. For haul truck trips assume a 20 mile trip length and for vendor truck trips assume a 7.3 mile trip length.

3) On-Site Construction Equipment Data Inputs

Construction Equipment Instructions:
Complete data entry in each row of the table below for each piece of equipment to be used during the project construction. When entering data, complete data entry from left to right as each subsequent field may depend of a previous entry. For each field of the table, either use the dropdown menu to select the appropriate entry or enter a value in accordance with the field description. If an invalid entry is made in a field, a warning message will occur. For each entry, all fields must be completed. If a field is missing for any entry, the data check column will indicate "Missing Data". If incompatible data is entered for a given piece of equipment, a "Data Error" warning will be provided prompting a review of the data inputs as incompatible selections have been made. Note that the phase number and year for each piece of equipment should match with the phase schedule entered above.

Construction Equipment Table

Entry ID	Equipment and Usage Inputs									Diesel Engine Control Options		Data Check
	Phase[1]	Year[1]	Fuel Type	Equipment Type	Horsepower (HP)[2]	HP Check	Equipment Quantity	# of Working Days[3]	Daily Hours of Operation Per Piece of Equip[4]	Engine Standard[5]	Diesel Particulate Filter[6]	Diesel Type[7]	
1	1	2020	Diesel	Tractors/Loaders/Backhoes	Typical	75	1	23	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
2	1	2020	Diesel	Excavators	Typical	157	1	23	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
3	1	2020	Diesel	Off-Highway Trucks	Typical	381	1	23	1	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
4	1	2020	Diesel	Plate Compactors	Typical	8	1	23	2	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
5	1	2020	Diesel	Generator Sets	Typical	84	1	23	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
6	1	2020	Diesel	Air Compressors	Typical	78	1	23	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
7	2	2020	Diesel	Cranes	Typical	208	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
8	2	2020	Diesel	Tractors/Loaders/Backhoes	Typical	75	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
9	2	2020	Diesel	Generator Sets	Typical	84	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
10	2	2020	Diesel	Air Compressors	Typical	78	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
11	3	2020	Diesel	Tractors/Loaders/Backhoes	Typical	75	1	39	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
12	3	2020	Diesel	Off-Highway Trucks	Typical	381	1	39	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
13	3	2020	Diesel	Plate Compactors	Typical	8	1	39	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
14	3	2020	Diesel	Generator Sets	Typical	84	1	39	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
15	3	2020	Diesel	Air Compressors	Typical	78	1	39	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
16	4	2020	Diesel	Tractors/Loaders/Backhoes	Typical	75	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
17	4	2020	Diesel	Off-Highway Trucks	Typical	381	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
18	4	2020	Diesel	Plate Compactors	Typical	8	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
19	4	2020	Diesel	Generator Sets	Typical	84	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
20	4	2020	Diesel	Air Compressors	Typical	78	1	22	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
21	5	2020	Diesel	Tractors/Loaders/Backhoes	Typical	75	1	30	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
22	5	2020	Diesel	Cranes	Typical	208	1	30	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
23	5	2020	Diesel	Generator Sets	Typical	84	1	30	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
24	5	2020	Diesel	Air Compressors	Typical	78	1	30	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete

Screening Tool Data Inputs

25	2	2020	Diesel	Bore/Drill Rigs	250	250	1	32	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
26	2	2020	Diesel	Cranes	Typical	208	1	32	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
27	2	2020	Diesel	Generator Sets	Typical	84	1	32	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
28	2	2020	Diesel	Air Compressors	Typical	78	1	32	8	Tier 4 (Final)	NA - Tier 4	Non Bio-Diesel	Complete
29													No Entry
30													No Entry
31													No Entry
32													No Entry
33													No Entry
34													No Entry
35													No Entry
36													No Entry
37													No Entry
38													No Entry
39													No Entry
40													No Entry
41													No Entry
42													No Entry
43													No Entry
44													No Entry
45													No Entry
46													No Entry
47													No Entry
48													No Entry
49													No Entry
50													No Entry

Table Notes:

1) The phase and year entered for each piece of equipment should be consistent with the phases and schedules entered in the project phasing table. If a phase is entered that is not already defined in the phase table, the applicable phase cell will be highlighted in red indicating an error.
2) For diesel equipment, the "typical" horsepower (HP) option should be selected if the actual equipment HP is unknown. When default horsepower is selected, an assumed HP consistent with CalEEMod default values will be used and represents a fleet average horsepower. For confirmation the HP ratings for all equipment, including defaults are provided in the "HP Check" column. If an equipment HP is in between the listed option, the higher HP option should be selected.
3) Number days the equipment will operate within the specified phase.
4) Number of hours per day that each piece of the specified equipment will operate.
5) For diesel equipment, specify the engine standard of each piece equipment to be used if know, else choose fleet average. For other equipment types, choose the NA option (e.g., NA = Gasoline)
6) For diesel equipment, the option to apply a Level 3 Verified Diesel Emission Control System (VDECS) diesel particulate filter (DPF) will be allowed for Tier 2 and Tier 3 engine standards. DPFs are assumed to reduce tailpipe PM10 emissions by 85% and total organic gas (TOG) emissions by 90%.
7) For diesel equipment, the option to use 20% bio-diesel (B20) will be allowed for all engine standard options. Bio-diesel is assumed to reduce tailpipe PM10 emissions by 7% and TOG emissions by 13% and increase NOx emissions by 3%.

O-CUE

Emissions Summary Output Report

Project Data

	User Selections
Project Name:	Potrero Substation
Project Size:	5.0 Acres
Landuse Type:	San Francisco - Industrial
Project Start Date:	1/1/2020
Project End Date:	12/31/2020
# of Phases:	5
Data Input Check:	Complete: No Errors or Missing Data Found

Overall Project Emissions by Chemical Used for Health Risk Analysis of Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts

Chemical	CAS	Project Emissions (lbs)		
		Onsite Total[1]	Offsite Total[2]	Overall Total[3]
PM2.5	PM2.5	9.873	0.007	9.88
TOG	TOG	110.330	0.021	110.35
Diesel Particulate Matter	9901	10.731	0.007	10.74
1,3-Butadiene	106990	0.000	0.000	0.00
Acetaldehyde	75070	0.000	0.000	0.00
Acrolein	107028	0.000	0.000	0.00
Benzene	71432	0.000	0.000	0.00
Chlorine	7782505	0.000	0.000	0.00
Copper	7440508	0.000	0.000	0.00
Ethylbenzene	100414	0.000	0.000	0.00
Formaldehyde	50000	0.000	0.000	0.00
Hexane	110543	0.000	0.000	0.00
Manganese	7439965	0.000	0.000	0.00
Methanol	67561	0.000	0.000	0.00
Methyl Ethyl Ketone	78933	0.000	0.000	0.00
Naphthalene	91203	0.000	0.000	0.00
Nickel	7440020	0.000	0.000	0.00
Propylene	115071	0.000	0.000	0.00
Styrene	100425	0.000	0.000	0.00
Sulfates	9960	0.000	0.000	0.00
Toluene	108883	0.000	0.000	0.00
Xylenes (Total)	1330207	0.000	0.000	0.00

Table Notes:

1) Onsite total emissions includes all construction equipment operation and the portion of the diesel truck trip emissions associated with onroad trucks while they are onsite.

2) Offsite total emissions includes offsite diesel truck emissions from onroad truck travel evaluated in the health risk analysis (i.e. from 1,000 ft of travel).

3) Overall total emissions is the sum of all onsite and offsite emissions for construction equipment and trucks evaluated in the health risk analysis.

Total Project Criteria Pollutant and GHG Emissions

Chemical	Criteria Emissions By Phase and Project Total (lbs)[1]						
	1	2	3	4	5	Project	
PM10	1.51	3.70	2.86	1.61	1.49	11.18	
PM2.5	1.40	3.41	2.63	1.48	1.37	10.30	
NOx	49.54	89.25	63.38	35.75	29.71	267.63	Annualized GHG Emissions (Metric Tons/year)[3]
ROG	13.33	35.55	29.37	16.57	14.84	109.65	
CO2e*	55,121	98,645	108,317	61,102	56,467	379,652	172.21

Average Daily Criteria Pollutant Emissions

Chemical	Criteria Emissions By Phase and Project Total (lbs/day)[1,4]						May 2017 BAAQMD Thresholds (lbs/day)[6]
	1	2	3	4	5	Project	
Total Days[5]	51	117	85	48	65	366	
PM10	0.03	0.03	0.03	0.034	0.023	0.03	54
PM2.5	0.03	0.03	0.03	0.031	0.021	0.03	82
NOx	0.97	0.76	0.75	0.745	0.457	0.73	54
ROG	0.26	0.30	0.35	0.345	0.228	0.30	54

Table Notes:

1) Criteria emissions include all onsite construction emissions and onroad truck emissions for the full truck trip length. Worker commute trip emissions are excluded as negligible.

2) CO2e emissions equal CO2 emissions plus CH4 and N2O emissions multiplying by the corresponding global warming potentials (CH4: 21 and N2O: 310).

3)Annualized GHG Emissions are calculated based on the specified Project Lifetime (default 20 years).

4) Daily average emissions are calculated as the quantity of emissions divided by the total number days for each phase and the project as a whole.

5) Total days are calculated as the total number of days between the project start date and end date.

6) Average daily emissions are compared to these threshold values. These values may be edited if the CEQA Guidance changes.

Emissions Summary Output Report

Project Phase Breakdown of Emissions Used In Health Risk Analysis

Max Hourly - Onsite Construction Emissions by Chemical (Including Onsite Trucks) for Health Risk Analysis of Acute Non-Cancer Impacts

Chemical	CAS	May Hourly Onsite Emissions by Phase (lbs)					
		1	2	3	4	5	Max
PM2.5	PM2.5	0.011	0.015	0.008	0.008	0.006	0.015
TOG	TOG	0.123	0.165	0.096	0.096	0.063	0.165
Diesel Particulate Matter	9901	0.000	0.000	0.000	0.000	0.000	0.000
1,3-Butadiene	106990	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Acetaldehyde	75070	0.010	0.013	0.007	0.007	0.005	0.013
Acrolein	107028	<0.001	<0.001	0.000	0.000	0.000	<0.001
Benzene	71432	0.002	0.003	0.002	0.002	0.001	0.003
Chlorine	7782505	0.000	0.000	0.000	0.000	0.000	0.000
Copper	7440508	0.000	0.000	0.000	0.000	0.000	0.000
Ethylbenzene	100414	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Formaldehyde	50000	0.018	0.024	0.014	0.014	0.009	0.024
Hexane	110543	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese	7439965	0.000	0.000	0.000	0.000	0.000	0.000
Methanol	67561	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Methyl Ethyl Ketone	78933	0.002	0.003	0.001	0.001	0.001	0.003
Naphthalene	91203	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	7440020	0.000	0.000	0.000	0.000	0.000	0.000
Propylene	115071	0.003	0.004	0.002	0.002	0.002	0.004
Styrene	100425	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sulfates	9960	0.000	0.000	0.000	0.000	0.000	0.000
Toluene	108883	0.002	0.002	0.001	0.001	0.001	0.002
Xylenes (Total)	1330207	0.001	0.002	0.001	0.001	0.001	0.002

Project Total - Onsite Construction Emissions by Chemical (Including Onsite Trucks) for Health Risk Analysis of Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts

Chemical	CAS	Project Total Onsite Emissions by Phase (lbs)					Project Total Onsite
		1	2	3	4	5	
PM2.5	PM2.5	1.159	3.229	2.632	1.485	1.367	9.873
TOG	TOG	12.919	35.652	29.846	16.836	15.076	110.330
Diesel Particulate Matter	9901	1.260	3.510	2.861	1.614	1.485	10.731
1,3-Butadiene	106990	0.000	0.000	0.000	0.000	0.000	0.000
Acetaldehyde	75070	0.000	0.000	0.000	0.000	0.000	0.000
Acrolein	107028	0.000	0.000	0.000	0.000	0.000	0.000
Benzene	71432	0.000	0.000	0.000	0.000	0.000	0.000
Chlorine	7782505	0.000	0.000	0.000	0.000	0.000	0.000
Copper	7440508	0.000	0.000	0.000	0.000	0.000	0.000
Ethylbenzene	100414	0.000	0.000	0.000	0.000	0.000	0.000
Formaldehyde	50000	0.000	0.000	0.000	0.000	0.000	0.000
Hexane	110543	0.000	0.000	0.000	0.000	0.000	0.000
Manganese	7439965	0.000	0.000	0.000	0.000	0.000	0.000
Methanol	67561	0.000	0.000	0.000	0.000	0.000	0.000
Methyl Ethyl Ketone	78933	0.000	0.000	0.000	0.000	0.000	0.000
Naphthalene	91203	0.000	0.000	0.000	0.000	0.000	0.000
Nickel	7440020	0.000	0.000	0.000	0.000	0.000	0.000
Propylene	115071	0.000	0.000	0.000	0.000	0.000	0.000
Styrene	100425	0.000	0.000	0.000	0.000	0.000	0.000
Sulfates	9960	0.000	0.000	0.000	0.000	0.000	0.000
Toluene	108883	0.000	0.000	0.000	0.000	0.000	0.000
Xylenes (Total)	1330207	0.000	0.000	0.000	0.000	0.000	0.000

Max Hourly - Offsite Truck Emissions by Chemical for Health Risk Analysis of Acute Non-Cancer Impacts

Chemical	CAS	May Hourly Offsite Emissions by Phase (lbs)					
		1	2	3	4	5	Max
PM2.5	PM2.5	<0.001	<0.001	0.000	0.000	0.000	<0.001
TOG	TOG	0.001	0.001	0.000	0.000	0.000	0.001
Diesel Particulate Matter	9901	0.000	0.000	0.000	0.000	0.000	0.000
1,3-Butadiene	106990	0.000	0.000	0.000	0.000	0.000	0.000
Acetaldehyde	75070	<0.001	<0.001	0.000	0.000	0.000	<0.001
Acrolein	107028	<0.001	<0.001	0.000	0.000	0.000	<0.001
Benzene	71432	<0.001	<0.001	0.000	0.000	0.000	<0.001
Chlorine	7782505	0.000	0.000	0.000	0.000	0.000	0.000
Copper	7440508	0.000	0.000	0.000	0.000	0.000	0.000
Ethylbenzene	100414	0.000	0.000	0.000	0.000	0.000	0.000
Formaldehyde	50000	<0.001	<0.001	0.000	0.000	0.000	<0.001
Hexane	110543	0.000	0.000	0.000	0.000	0.000	0.000
Manganese	7439965	0.000	0.000	0.000	0.000	0.000	0.000
Methanol	67561	0.000	0.000	0.000	0.000	0.000	0.000
Methyl Ethyl Ketone	78933	<0.001	<0.001	0.000	0.000	0.000	<0.001
Naphthalene	91203	0.000	0.000	0.000	0.000	0.000	0.000
Nickel	7440020	0.000	0.000	0.000	0.000	0.000	0.000
Propylene	115071	0.000	0.000	0.000	0.000	0.000	0.000
Styrene	100425	0.000	0.000	0.000	0.000	0.000	0.000
Sulfates	9960	0.000	0.000	0.000	0.000	0.000	0.000
Toluene	108883	<0.001	<0.001	0.000	0.000	0.000	<0.001
Xylenes (Total)	1330207	<0.001	<0.001	0.000	0.000	0.000	<0.001

Project Total - Offsite Truck Emissions by Chemical for Health Risk Analysis of Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts

Chemical	CAS	Project Total Offsite Emissions by Phase (lbs)					Project Total Offsite
		1	2	3	4	5	
PM2.5	PM2.5	0.002	0.005	0.000	0.000	0.000	0.007
TOG	TOG	0.007	0.014	0.000	0.000	0.000	0.021
Diesel Particulate Matter	9901	0.002	0.005	0.000	0.000	0.000	0.007
1,3-Butadiene	106990	0.000	0.000	0.000	0.000	0.000	0.000
Acetaldehyde	75070	0.000	0.000	0.000	0.000	0.000	0.000
Acrolein	107028	0.000	0.000	0.000	0.000	0.000	0.000
Benzene	71432	0.000	0.000	0.000	0.000	0.000	0.000
Chlorine	7782505	0.000	0.000	0.000	0.000	0.000	0.000
Copper	7440508	0.000	0.000	0.000	0.000	0.000	0.000
Ethylbenzene	100414	0.000	0.000	0.000	0.000	0.000	0.000
Formaldehyde	50000	0.000	0.000	0.000	0.000	0.000	0.000
Hexane	110543	0.000	0.000	0.000	0.000	0.000	0.000
Manganese	7439965	0.000	0.000	0.000	0.000	0.000	0.000
Methanol	67561	0.000	0.000	0.000	0.000	0.000	0.000
Methyl Ethyl Ketone	78933	0.000	0.000	0.000	0.000	0.000	0.000
Naphthalene	91203	0.000	0.000	0.000	0.000	0.000	0.000
Nickel	7440020	0.000	0.000	0.000	0.000	0.000	0.000
Propylene	115071	0.000	0.000	0.000	0.000	0.000	0.000
Styrene	100425	0.000	0.000	0.000	0.000	0.000	0.000
Sulfates	9960	0.000	0.000	0.000	0.000	0.000	0.000
Toluene	108883	0.000	0.000	0.000	0.000	0.000	0.000
Xylenes (Total)	1330207	0.000	0.000	0.000	0.000	0.000	0.000

Emissions Summary Output Report

Chemical Emissions Contribution Analysis of Emissions Used for Health Risk Analysis for Cancer Risk, Chronic Non-Cancer, and $PM_{2.5}$ Impacts (Not used for Acute Non-Cancer Impacts)

User Instructions:
Select desired chemical from the drop down menu at the top of each column to generate a breakdown of the project emissions by equipment entry.

Entry ID	Phase	Equipment Type[1]	Fuel Type	Project Chemical Emissions by Equipment Entry (lbs)						
				Benzene	PM2.5	Diesel Particulate Matter	1,3-Butadiene	Formaldehyde	Methanol	Sulfates
				71432	PM2.5	9901	106990	50000	67561	9960
1	1	Tractors/Loaders/Backhoes	Diesel	0.000	0.155	0.168	0.000	0.000	0.000	0.000
2	1	Excavators	Diesel	0.000	0.336	0.365	0.000	0.000	0.000	0.000
3	1	Off-Highway Trucks	Diesel	0.000	0.102	0.111	0.000	0.000	0.000	0.000
4	1	Plate Compactors	Diesel	0.000	0.006	0.007	0.000	0.000	0.000	0.000
5	1	Generator Sets	Diesel	0.000	0.348	0.378	0.000	0.000	0.000	0.000
6	1	Air Compressors	Diesel	0.000	0.210	0.228	0.000	0.000	0.000	0.000
7	2	Cranes	Diesel	0.000	0.321	0.349	0.000	0.000	0.000	0.000
8	2	Tractors/Loaders/Backhoes	Diesel	0.000	0.148	0.161	0.000	0.000	0.000	0.000
9	2	Generator Sets	Diesel	0.000	0.333	0.362	0.000	0.000	0.000	0.000
10	2	Air Compressors	Diesel	0.000	0.200	0.218	0.000	0.000	0.000	0.000
11	3	Tractors/Loaders/Backhoes	Diesel	0.000	0.262	0.285	0.000	0.000	0.000	0.000
12	3	Off-Highway Trucks	Diesel	0.000	1.381	1.501	0.000	0.000	0.000	0.000
13	3	Plate Compactors	Diesel	0.000	0.044	0.047	0.000	0.000	0.000	0.000
14	3	Generator Sets	Diesel	0.000	0.590	0.641	0.000	0.000	0.000	0.000
15	3	Air Compressors	Diesel	0.000	0.355	0.386	0.000	0.000	0.000	0.000
16	4	Tractors/Loaders/Backhoes	Diesel	0.000	0.148	0.161	0.000	0.000	0.000	0.000
17	4	Off-Highway Trucks	Diesel	0.000	0.779	0.847	0.000	0.000	0.000	0.000
18	4	Plate Compactors	Diesel	0.000	0.025	0.027	0.000	0.000	0.000	0.000
19	4	Generator Sets	Diesel	0.000	0.333	0.362	0.000	0.000	0.000	0.000
20	4	Air Compressors	Diesel	0.000	0.200	0.218	0.000	0.000	0.000	0.000
21	5	Tractors/Loaders/Backhoes	Diesel	0.000	0.202	0.219	0.000	0.000	0.000	0.000
22	5	Cranes	Diesel	0.000	0.438	0.476	0.000	0.000	0.000	0.000
23	5	Generator Sets	Diesel	0.000	0.454	0.493	0.000	0.000	0.000	0.000
24	5	Air Compressors	Diesel	0.000	0.273	0.297	0.000	0.000	0.000	0.000
25	2	Bore/Drill Rigs	Diesel	0.000	0.978	1.064	0.000	0.000	0.000	0.000
26	2	Cranes	Diesel	0.000	0.467	0.507	0.000	0.000	0.000	0.000
27	2	Generator Sets	Diesel	0.000	0.484	0.526	0.000	0.000	0.000	0.000
28	2	Air Compressors	Diesel	0.000	0.292	0.317	0.000	0.000	0.000	0.000
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
A	1	On-road Diesel Trucks	Diesel	0.000	0.005	0.006	0.000	0.000	0.000	0.000
B	2	On-road Diesel Trucks	Diesel	0.000	0.011	0.012	0.000	0.000	0.000	0.000
C										
D										
E										
			Project Total (lbs)	0.000	9.880	10.738	0.000	0.000	0.000	0.000

Table Notes:
1) On-road diesel truck trip emissions presented in this summary table include the aggregate of the offsite and onsite diesel truck emissions and only includes emissions evaluated in the health risk analysis (i.e. from 1,000 ft of travel). The onroad truck emissions presented here do not represent the full truck trip length.

O-CUE

Emissions Summary Output Report

Chemical Emissions Contribution Analysis of Emissions Used for Health Risk Analysis for Acute Non-Cancer Impacts

User Instructions:
Select desired chemical from the drop down menu at the top of each column to generate a breakdown of the project emissions by equipment entry.

Entry ID	Phase	Equipment Type[1]	Fuel Type	Project Chemical Emissions by Equipment Entry (lbs)						
				Diesel Particulate Matter	PM2.5	Acetaldehyde	1,3-Butadiene	Formaldehyde	Methanol	Sulfates
				9901	PM2.5	75070	106990	50000	67561	9960
1	1	Tractors/Loaders/Backhoes	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
2	1	Excavators	Diesel	0.000	0.002	0.001	0.000	0.003	0.000	0.000
3	1	Off-Highway Trucks	Diesel	0.000	0.004	0.004	0.000	0.007	0.000	0.000
4	1	Plate Compactors	Diesel	0.000	0.000	0.000	0.000	0.001	0.000	0.000
5	1	Generator Sets	Diesel	0.000	0.002	0.002	0.000	0.003	0.000	0.000
6	1	Air Compressors	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
7	2	Cranes	Diesel	0.000	0.002	0.001	0.000	0.003	0.000	0.000
8	2	Tractors/Loaders/Backhoes	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
9	2	Generator Sets	Diesel	0.000	0.002	0.002	0.000	0.003	0.000	0.000
10	2	Air Compressors	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
11	3	Tractors/Loaders/Backhoes	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
12	3	Off-Highway Trucks	Diesel	0.000	0.004	0.004	0.000	0.007	0.000	0.000
13	3	Plate Compactors	Diesel	0.000	0.000	0.000	0.000	0.001	0.000	0.000
14	3	Generator Sets	Diesel	0.000	0.002	0.002	0.000	0.003	0.000	0.000
15	3	Air Compressors	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
16	4	Tractors/Loaders/Backhoes	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
17	4	Off-Highway Trucks	Diesel	0.000	0.004	0.004	0.000	0.007	0.000	0.000
18	4	Plate Compactors	Diesel	0.000	0.000	0.000	0.000	0.001	0.000	0.000
19	4	Generator Sets	Diesel	0.000	0.002	0.002	0.000	0.003	0.000	0.000
20	4	Air Compressors	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
21	5	Tractors/Loaders/Backhoes	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
22	5	Cranes	Diesel	0.000	0.002	0.001	0.000	0.003	0.000	0.000
23	5	Generator Sets	Diesel	0.000	0.002	0.002	0.000	0.003	0.000	0.000
24	5	Air Compressors	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
25	2	Bore/Drill Rigs	Diesel	0.000	0.004	0.003	0.000	0.006	0.000	0.000
26	2	Cranes	Diesel	0.000	0.002	0.001	0.000	0.003	0.000	0.000
27	2	Generator Sets	Diesel	0.000	0.002	0.002	0.000	0.003	0.000	0.000
28	2	Air Compressors	Diesel	0.000	0.001	0.001	0.000	0.002	0.000	0.000
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
A	1	On-road Diesel Trucks	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
B	2	On-road Diesel Trucks	Diesel	0.000	0.001	0.001	0.000	0.001	0.000	0.000
C										
D										
E										
			Project Total (lbs)	0.000	0.049	0.041	0.001	0.079	0.000	0.000

Table Notes:
1) On-road diesel truck trip emissions presented in this summary table include the aggregate of the offsite and onsite diesel truck emissions and only includes emissions evaluated in the health risk analysis (i.e. from 1,000 ft of travel). The onroad truck emissions presented here do not represent the full truck trip length.

O-CUE

Health Impacts and Air Concentration Analysis Report

Project Data

	User Selections
Project Name:	Potrero Substation
Project Size:	5.0 Acres
Landuse Type:	San Francisco - Industrial
Project Start Date:	1/1/2020
Project End Date:	12/31/2020
# of Phases:	5
Receptor Type:	Resident
Data Check:	Complete: No Errors or Missing Data Found

Receptor Type	User Selection
Resident	◉
Resident Adult	○
School Child	○
Day Care Child	○

User Instructions:
*Select applicable receptor type, if unknown use Resident.

Risk Value	May 2017 BAAQMD Thresholds
Cancer Risk (in a million)	10
Chronic HI	1
Acute HI	1
PM2.5 Concentration (ug/m3)	0.3

User Instructions:
The risk values in the tables below are compared to these thresholds. They may be updated if the CEQA Guidelines change.

Overview of Maximum Health Impacts by Distance and Receptor Height

Onsite Construction Impacts (Including Onsite Trucks)

Receptor Distance (ft)	Total Cancer Risk (in a million) for: Resident				Max Chronic HI				Max Acute HI				PM2.5 Concentration (ug/m3)			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
10	6.86	10.37	7.89	3.04	0.010	0.014	0.011	0.004	0.211	0.318	0.242	0.093	0.044	0.066	0.051	0.020
20	6.72	9.66	7.76	2.97	0.009	0.013	0.011	0.004	0.206	0.296	0.238	0.091	0.043	0.062	0.050	0.019
30	6.56	9.06	7.63	2.94	0.009	0.013	0.011	0.004	0.201	0.278	0.234	0.090	0.042	0.058	0.049	0.019
40	6.40	8.53	7.50	2.95	0.009	0.012	0.010	0.004	0.196	0.262	0.230	0.091	0.041	0.055	0.048	0.019
50	6.24	8.07	7.37	2.96	0.009	0.011	0.010	0.004	0.191	0.248	0.226	0.091	0.040	0.052	0.047	0.019
100	5.50	6.33	6.68	2.96	0.008	0.009	0.009	0.004	0.169	0.194	0.205	0.091	0.035	0.041	0.043	0.019
200	4.27	4.38	5.64	2.72	0.006	0.006	0.008	0.004	0.131	0.134	0.173	0.083	0.027	0.028	0.036	0.017
300	3.39	3.34	4.86	2.41	0.005	0.005	0.007	0.003	0.104	0.102	0.149	0.074	0.022	0.021	0.031	0.015
400	2.77	2.71	4.22	2.15	0.004	0.004	0.006	0.003	0.085	0.083	0.129	0.066	0.018	0.017	0.027	0.014
500	2.39	2.29	3.69	1.96	0.003	0.003	0.005	0.003	0.073	0.070	0.113	0.060	0.015	0.015	0.024	0.013
600	2.14	1.99	3.26	1.87	0.003	0.003	0.005	0.003	0.066	0.061	0.100	0.057	0.014	0.013	0.021	0.012
700	1.93	1.76	2.92	1.77	0.003	0.002	0.004	0.002	0.059	0.054	0.090	0.054	0.012	0.011	0.019	0.011
800	1.75	1.59	2.64	1.67	0.002	0.002	0.004	0.002	0.054	0.049	0.081	0.051	0.011	0.010	0.017	0.011
900	1.59	1.44	2.41	1.58	0.002	0.002	0.003	0.002	0.049	0.044	0.074	0.049	0.010	0.009	0.015	0.010
1000	1.46	1.32	2.22	1.50	0.002	0.002	0.003	0.002	0.045	0.040	0.068	0.046	0.009	0.008	0.014	0.010

Offsite Truck Impacts

Receptor Distance (ft)	Total Cancer Risk (in a million) for: Resident				Max Chronic HI				Max Acute HI				PM2.5 Concentration (ug/m3)			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
10	0.01	0.02	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.006	0.003	0.001	<0.001	<0.001	<0.001	<0.001
20	0.01	0.02	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.006	0.003	0.001	<0.001	<0.001	<0.001	<0.001
30	0.01	0.02	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.005	0.003	0.001	<0.001	<0.001	<0.001	<0.001
40	0.01	0.02	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.005	0.003	0.001	<0.001	<0.001	<0.001	<0.001
50	0.01	0.02	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001
100	0.01	0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.003	0.003	0.001	<0.001	<0.001	<0.001	<0.001
200	0.01	0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.002	0.002	0.003	0.001	<0.001	<0.001	<0.001	<0.001
300	0.01	0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.002	0.002	0.002	0.001	<0.001	<0.001	<0.001	<0.001
400	<0.01	<0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.002	0.001	<0.001	<0.001	<0.001	<0.001
500	<0.01	<0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.002	0.001	<0.001	<0.001	<0.001	<0.001
600	<0.01	<0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
700	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
800	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
900	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
1000	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001

O-CUE

Health Impacts and Air Concentration Analysis Report

Analysis of Combined Health Impacts at nearest Receptor Location

User Instructions:
Select the distance, in feet, from the project boundary and truck route to the nearest sensitive receptor location to evaluate the phase by phase impacts and overall combined onsite and offsite impacts at the project's maximally exposed individual receptor (MEIR). Note that the combined analysis conservatively assumes that the onsite construction MEIR and the offsite truck MEIR occur at the same location.

Distance From Site (ft): 50 (Select from dropdown menu)
Distance From Roadway (ft): 50 (Select from dropdown menu)
Receptor Type: Resident (As specified above)

Onsite Construction Results (Including Onsite Trucks)

Phase	Cancer Risk (in a million) at 50 ft from Site				Chronic HI at 50 ft from Site				Acute HI at 50 ft from Site				PM2.5 Concentration (ug/m3) at 50 ft from Site			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
1	0.73	0.95	0.87	0.35	0.006	0.008	0.008	0.003	0.144	0.186	0.170	0.068	0.029	0.038	0.035	0.014
2	2.04	2.64	2.41	0.97	0.008	0.010	0.009	0.004	0.191	0.248	0.226	0.091	0.036	0.046	0.042	0.017
3	1.66	2.15	1.97	0.79	0.009	0.011	0.010	0.004	0.106	0.137	0.125	0.050	0.040	0.052	0.047	0.019
4	0.94	1.21	1.11	0.44	0.009	0.011	0.010	0.004	0.106	0.137	0.125	0.050	0.040	0.052	0.047	0.019
5	0.86	1.12	1.02	0.41	0.006	0.008	0.007	0.003	0.070	0.090	0.082	0.033	0.027	0.035	0.032	0.013
Total/Max[1]	6.24	8.07	7.37	2.96	0.009	0.011	0.010	0.004	0.191	0.248	0.226	0.091	0.040	0.052	0.047	0.019

Offsite Truck Impacts

Phase	Cancer Risk (in a million) at 50 ft from Roadway				Chronic HI at 50 ft from Roadway				Acute HI at 50 ft from Roadway				PM2.5 Concentration (ug/m3) at 50 ft from Roadway			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
1	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001
2	0.01	0.01	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.003	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001
3																
4																
5																
Total/Max[1]	0.01	0.02	0.01	0.00	0.000	0.000	0.000	0.000	0.003	0.004	0.003	0.001	0.000	0.000	0.000	0.000

Combined Project Impacts

Phase	Cancer Risk (in a million)				Chronic HI				Acute HI				PM2.5 Concentration (ug/m3)			
	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	1st Floor	2nd Floor	3rd Floor	4th Floor
1	0.73	0.95	0.87	0.35	0.006	0.008	0.008	0.003	0.147	0.191	0.173	0.070	0.029	0.038	0.035	0.014
2	2.05	2.65	2.42	0.97	0.008	0.010	0.009	0.004	0.194	0.252	0.229	0.092	0.036	0.046	0.042	0.017
3	1.66	2.15	1.97	0.79	0.009	0.011	0.010	0.004	0.106	0.137	0.125	0.050	0.040	0.052	0.047	0.019
4	0.94	1.21	1.11	0.44	0.009	0.011	0.010	0.004	0.106	0.137	0.125	0.050	0.040	0.052	0.047	0.019
5	0.86	1.12	1.02	0.41	0.006	0.008	0.007	0.003	0.070	0.090	0.082	0.033	0.027	0.035	0.032	0.013
Total/Max[1]	**6.25**	**8.08**	**7.38**	**2.96**	**0.009**	**0.011**	**0.010**	**0.004**	**0.194**	**0.252**	**0.229**	**0.092**	**0.040**	**0.052**	**0.047**	**0.019**
Threshold	10	10	10	10	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	0.3	0.3	0.3
Exceedance	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**

Table Notes:
1) Total is used to determine cancer risk. Maximum from each phase is used for chronic HI, acute HI and $PM_{2.5}$ concentration.

O-CUE

Health Impacts and Air Concentration Analysis Report

Analysis of Combined Health Impacts by Percent Chemical Contribution

User Instructions:
Select a receptor floor height to generate a break down of the contribution of each emitted chemical to the cancer risk, chronic HI, and acute HI at the chosen receptor distance and specified floor height.

Floor:	**2nd Floor**	(Select from dropdown menu)
Distance From Site (ft):	50	(As specified above)
Distance From Roadway (ft):	50	(As specified above)
Receptor Type:	Resident	(As specified above)

Cancer Risk	
Chemical	**50 & 50 ft 2nd Floor**
Diesel Particulate Matter	100.00%
1,3-Butadiene	0.00%
Acetaldehyde	0.00%
Acrolein	NA
Benzene	0.00%
Chlorine	NA
Copper	NA
Ethylbenzene	0.00%
Formaldehyde	0.00%
Hexane	NA
Manganese	NA
Methanol	NA
Methyl Ethyl Ketone	NA
Naphthalene	0.00%
Nickel	0.00%
Propylene	NA
Styrene	NA
Sulfates	NA
Toluene	NA
Xylenes (Total)	NA

Chronic HI	
Chemical	**50 & 50 ft 2nd Floor**
Diesel Particulate Matter	100.00%
1,3-Butadiene	0.00%
Acetaldehyde	0.00%
Acrolein	0.00%
Benzene	0.00%
Chlorine	0.00%
Copper	NA
Ethylbenzene	0.00%
Formaldehyde	0.00%
Hexane	0.00%
Manganese	0.00%
Methanol	0.00%
Methyl Ethyl Ketone	NA
Naphthalene	0.00%
Nickel	0.00%
Propylene	0.00%
Styrene	0.00%
Sulfates	NA
Toluene	0.00%
Xylenes (Total)	0.00%

Acute HI	
Chemical	**50 & 50 ft 2nd Floor**
Diesel Particulate Matter	NA
1,3-Butadiene	NA
Acetaldehyde	4.39%
Acrolein	6.80%
Benzene	19.19%
Chlorine	0.00%
Copper	0.00%
Ethylbenzene	NA
Formaldehyde	69.48%
Hexane	NA
Manganese	NA
Methanol	<0.01%
Methyl Ethyl Ketone	0.03%
Naphthalene	NA
Nickel	0.00%
Propylene	NA
Styrene	<0.01%
Sulfates	0.00%
Toluene	0.01%
Xylenes (Total)	0.01%

Table Notes:
1) Impacts are presented only for those chemicals for which carcinogenic or noncarcinogenic impacts have been associated. All other chemicals are designated as not applicable (NA). The top three contributing chemicals are automatically highlighted.

O-CUE

Health Impacts and Air Concentration Analysis Report

Analysis of Air Concentration Chemical Contribution at Selected Receptor

Floor:	2nd Floor	(As specified above)
Distance From Site (ft):	50	(As specified above)
Distance From Roadway (ft):	50	(As specified above)
Receptor Type:	Resident	(As specified above)

Max Phase Average Concentration (ug/m^3)	
Chemical	**50 & 50 ft 2nd Floor**
PM2.5	5.17E-02
Diesel Particulate Matter	5.62E-02
1,3-Butadiene	NA
Acetaldehyde	NA
Acrolein	NA
Benzene	NA
Chlorine	NA
Copper	NA
Ethylbenzene	NA
Formaldehyde	NA
Hexane	NA
Manganese	NA
Methanol	NA
Methyl Ethyl Ketone	NA
Naphthalene	NA
Nickel	NA
Propylene	NA
Styrene	NA
Sulfates	NA
Toluene	NA
Xylenes (Total)	NA

Max Phase Hourly Concentration (ug/m^3)	
Chemical	**50 & 50 ft 2nd Floor**
PM2.5	6.15E+00
Diesel Particulate Matter	NA
1,3-Butadiene	1.21E-01
Acetaldehyde	5.20E+00
Acrolein	4.29E-02
Benzene	1.31E+00
Chlorine	NA
Copper	NA
Ethylbenzene	1.94E-01
Formaldehyde	9.63E+00
Hexane	9.98E-02
Manganese	NA
Methanol	1.91E-02
Methyl Ethyl Ketone	1.03E+00
Naphthalene	5.40E-02
Nickel	NA
Propylene	1.65E+00
Styrene	3.69E-02
Sulfates	NA
Toluene	9.86E-01
Xylenes (Total)	7.02E-01

Table Notes:
1) Concentrations are presented for all evaluated chemicals, if no concentration is calculated for a given chemical, the concentration will be returned as not applicable (NA). NA indicates that the given chemical is not present in the speciation profiles of the entered equipment or is not evaluated for the applicable health effect end point of the given average concentration (i.e., cancer risk, chronic HI, or acute HI).



Statement of Qualifications
Environmental Permitting Specialists (EPS)

EPS is a specialized consulting firm focusing on air quality impact analysis, health risk assessments, odor analysis, CEQA Support, air quality monitoring, risk management plans and air permits. The firm is headquartered in Sacramento, California and has been providing these services since 1995. Firms such as Sunsweet Growers, Amazon, Teichert Construction, Sacramento City Unified School District. Blue Diamond Growers and many others have used our services. These firms they recognize the complexity of ever changing environmental regulations and prefer to have a specialized firm handle these issues on their behalf.

Practice Areas

- Construction Industries
- Biomass to Energy Plants
- Food Industries
- Cannabis Cultivation and Processing

In addition to providing services to private sector, EPS routinely provides technical support services to various air pollution control districts. These include:

- Feather River Air Quality Management District
- Amador Air District
- Calaveras Air Pollution Control District
- Placer County Air Pollution Control District
- Great Basic Air Quality Management District

Contact:

Ray Kapahi
E-Mail: ray.kapahi@gmail.com
Phone: 916-806-8333
Web-Site: https://www.epsconsulting.org/

Resume and list of recent assignments are attached.

Ray Kapahi
Senior Air Quality
Consulting Engineer



Ray.Kapahi@gmail.com

Office: 916.687.8352
Mobile: 916.806.8333

Practice Areas

- Air Quality Permitting
- Odor Investigation and Control
- Health Risk Assessment
- Computational Fluid Dynamics
- Greenhouse Gas Analysis
- Atmospheric Dispersion Modeling

Industries

- Solid Waste
- Energy Production
- Construction and Mining
- Cannabis Cultivation
- Oil and Gas Production
- Food Industries

Education and Training

- BSc. Physics (1972)
- MEng. Chemical Engineering (1975)
- CARB Accredited Green House Gas (GHG) Lead Verifier with Specialization in Process Emissions and Electricity Transactions (2009)

News

- Presentation "Numerical Modeling of Landfill Gas and Odors" 33rd International Conference on Solid Waste Technology and Management. March 11 to 14, 2018, Annapolis, MD.

- Presentation "Integrated Approach to Effective Odor Control at Landfills and Composting Facilities" Wastecon 2016, Indianapolis, IN.

EXPERIENCE

Over 30 years of experience in analyzing air quality and odor impacts, permitting of stationary sources, and preparation of environmental impact documents. Mr. Kapahi assists a broad range of clients and assists them to identify and meet their regulatory obligations.

The scope of his experience includes siting of new landfills, waste to energy plants, obtaining conditional use permits from City and County Governments for new projects or expansion of existing projects. Specific experience and skills include preparation of emission inventories, analysis and measurements of odors, dispersion modeling, oversight of air quality monitoring, analysis of impacts to public health, responding to public comments, and appearing before City and County Planning Boards and Commissions as an expert witness on behalf of clients.

Following approvals for new facilities or expansion of existing facilities, Mr. Kapahi continues to work with clients to ensure on-going compliance.

REPRESENTATIVE PROJECTS

Air Quality Modeling and Permitting

- **Permitting of a Powdered Milk Plant (Turlock, CA)**

Evaluate emissions of various air pollutants from the proposed 30 million gallons per year mild processing/drying facility. Demonstrate compliance with local and state air quality regulations, including regulation of toxic air pollutants.

- **Permit Revisions for an Existing Fruit Dehydration Facility (Yuba City, CA)**

Assisted a major food processor in revising their operating permits to allow for additional steam production. Worked cooperatively with the local air district to ensure timely issuance of the revised permits.

- **Permitting of a Waste to Energy Plant (Fort Irwin, CA)**

Quantify emissions from a proposed 34 tons per day solid waste to energy project. Analyze emissions associated with pyrolysis and subsequent utilization of synthetic gas to generate 1.5 MW of electric power. Prepare the necessary permit applications and supporting documentation.

- **Permitting of a CBD Oil Extraction Facility (Mendota, CA)**

Quantify emissions from a proposed solvent extraction process. Assist in design of an RTO VOC control system. The facility was permitting in 2019 and is currently operating.

Publications and Presentations

Presentation "Use of Advanced Models to Control Fugitive Odors from Composting Sites". US Compost Council Annual Meeting, January 2015, Austin, TX.

"Air Emissions from Landfills and Transfer Stations – Do they Increase Public Health Risks?" Presented at Quad State Environmental Conference, Pigeon Forge TN, Sept 2015.

"Risks of Carbon Credit Invalidation Under California's Cap-and-Trade Program", Presented at the 2014 Air and Waste Management Association Annual Conference. June 24-27, 2014. Long Beach, CA

"Estimate of VOC Emissions from Sludge Drying", Presented at the 1995 SWANA Conference. November 1995, Baltimore, MD.

"Use of Biofilters to Control VOCs", Biocycle, February 1995.

"Impacts of the 1990 Clean Air Act Amendments", San Jose Business Journal, March 24, 1994.

"Modeling Fine Particulates" in Municipal Waste Incineration Risk Assessment, Edited by Curtis Travis, Plenum Press, 1990.

Specialized Training

Calculating Tank Emissions. Trinity Consultants. Los Angeles, CA February 1-2, 2020.

Accidental Release Modeling Workshop. Trinity Consultants. Dallas, TX November 1-2, 2018.

HARP2 (Risk Assessment Model) Training at California Air Resources Board. Redding, CA

Hearing Board Variance Training – California Air Resources Board (1995)

Air Emissions and Odors from Wastewater – University of Texas, Austin (1994)

Professional Affiliations

Air and Waste Management Association (Board Member)

American Institute of Chemical Engineers (Member)

Member Technical Advisory Committee (TAC) for the California Energy Commission

Odor Analysis and Mitigation

- **Ventilation System for Odor Control (Anaheim, CA)**

Advanced computational fluid mechanics (CFD) models were used to predict the air flow and building pressure to identify the location, size and number of exhaust fans required to remove odors from the transfer station building.

- **Analysis of Potential Odors from Outdoor and Indoor Cannabis Cultivation (Georgetown and Somerset, Eldorado County, CA)**

EPS is working cooperatively with growers and El Dorado County Planning Department to evaluate odors associated with indoor and outdoor cannabis cultivation. Through use of on-site odor measurements and dispersion models, EPS has been able to project intensity of future odors from new cannabis operations and demonstrate compliance with the County's Ordinance limiting odors at the property lines and at nearby homes.

- **Analysis and Control of Fugitive Dust and Odors from a Soil Blending Facility (Stockton, CA)**

Advanced computational fluid mechanics (CFD) models were used to predict the air flow and movement of fugitive dust at a soil blending facility. With this information, the client was able to install? appropriate mitigation services to mitigate off-site migration of fugitive dust. View how the movement of dust occurs at:
https://www.youtube.com/watch?v=wXEX6IT-54U

- **Review of Odor Control Systems for Cannabis Cultivation and Distribution Facilities (Palm Springs, CA)**

EPS evaluated the *odor* control system for over 15 different odor cultivation and distribution facilities in Palm Springs. The effectiveness of the proposed system was evaluated and recommendations were made to the City to Palm Springs.

Analysis of Public Health Risks

- **Analysis of Public Health Risks Associated with Composting Operations (Napa County, CA)**

Estimate the types and amounts of toxic air contaminants (TAC) released from green waste and food waste composting. An air dispersion model was used with local wind data to determine the concentration of each TAC. The concentration estimates were supplemented with toxicity data to quantify public health risks from exposure to the various toxic pollutants.

- **Analysis of Public Health Risks from Proposed Asphalt Plant (Kern County, California)**

Analyze emissions of any toxic air pollutants from a proposed 250 tons per day asphalt plant. Emissions from aggregate drying, propane combustion and asphalt oil were quantified. Acute and chronic public health risks from exposure to various toxic pollutants were calculated.

Ray Kapahi, DBA Environmental Permitting Specialists
Current and Recent Projects

Project	Location	Description	Client
Preparation of Initial Sturt and mitigated negative declaration (ISMND) for Proposed Exploratory Oil and Gas Well	Kern County, CA	• Quantify air and greenhouse gas emissions from proposed exploratory oil and gas well • Assess the significance of air and GHG impacts • Recommend mitigation • Analyze public health risks	RAB Consulting, Fairfield, CA
Analysis of Public Health Risks from Proposed Warehouse Buildings	Stockton, CA	• Evaluate public health risks associated with proposed 2.8 million square feet warehouse development on a 20 acre lot • Evaluate health impacts associated with construction and operational (occupancy) phases	First Industrial Realty Trust, Chicago, IL
Review of Permit Application for a Biomass to Energy Plant	Mariposa County, CA	• Review permit application and associated support documents • Confirm emissions and use of best available control technology (BACT) • Recommend issuance or denial of air permits	Amador Air District, Jackson, CS
Analysis of Air Quality and Public Health Risks from Proposed Mining, Aggregate, Concrete and Asphalt plant Complex	Newman (Stanislaus County), California	• Estimate emissions from various phases of mining, aggregate production, asphalt and concrete production and recycling plant • Determine significant of air quality and public health impacts	Calaveras Building Materials, Fresno, CA
Preparation of CEQA Documents for Proposed Asphalt Plant	Delano (Kern County), CA	• Quantify air and greenhouse gas emissions from a proposed hot-mix drum type asphalt plant • Determine emission rates of toxic air pollutants • Prepare health risk assessment to quantify cancer risk to workers and the public from exposure to future toxic air emissions	Jaxon Enterprises, Redding, CA

Project	Location	Description	Client
Air monitoring of Carbon Monoxide at a School Transportation Center	Sacramento, CA	• Monitor ambient concentrations of carbon monoxide (CO) at the school bus yard • Determine if CO concentration exceed the state 1-hour standard	Law Firm Spinelli, Donald & Nott, Sacramento, CA
Impacts to Future Residents from Emissions from Vehicles and Trail Locomotives	Sacramento, CA	• Evaluate existing concentrations of toxic air contaminants at the proposed 150 unit housing development • Evaluate impacts from emissions from trucks and cars travelling along US Hwy 50 • Evaluate emissions from diesel train locomotives travelling along adjacent tracks	EAH Housing, San Rafael, CA
Evaluation of Odors from Proposed Outdoor Cannabis Cultivation	Somerset and Georgetown (El Dorado County)	• Review plans for outdoor cannabis cultivation • Model future odor emissions to determine compliance with El Dorado County odor ordinance • Recommend odor mitigation (if required)	Multiple Confidential Clients
Dispersion Modeling of Emissions from Proposed Lithium Extraction Plant	Salton Sea (Imperial County, CA)	• Calculate emissions from proposed emergency electric generator • Set-up modeling domain, source height and location and modeling grid • Calculate impacts from various criteria air pollutants	RCH Group, Sacramento, CA
Analysis of Public Health Risks from Proposed Warehouse Land Use Development	Richmond, CA	• Evaluate public health risks associated with proposed 324,000 square feet warehouse development on a 30 acre lot • Evaluate health impacts associated with construction and operational (occupancy) phases	Scannell Properties, Lafayette, CA

EXHIBIT B

To: Adams Broadwell Joseph & Cardozo

From: Hunter Stern, Roberto Balistreri, Damien Padilla

Date: March 4, 2022

Re: Preliminary Mitigated Negative Declaration – PG&E Power Asset Acquisition Project

I. Introduction

On January 5, 2022, the San Francisco Planning Department issued a Preliminary Mitigated Negative Declaration and Initial Study ("MND") for the PG&E Power Asset Acquisition Project ("Project"). The Project includes, among other things, the City and County of San Francisco's purchase of all of Pacific Gas and Electric Company's ("PG&E") distribution assets and substantially all of the PG&E's transmission assets for the City of San Francisco to provide reliable electricity service to customers in San Francisco. These assets include substations, transformers, transmission and distribution lines, supporting equipment, operational facilities, records and other facilities. The assets operate 24 hours per day, seven days per week. The San Francisco Public Utilities Commission ("SFPUC") anticipates approximately 200 new employees may be hired for administration, operation and maintenance of the electric system. 150 of these employees would be administrative employees located at the SFPUC headquarters. Project management would require routine inspections, repair, maintenance and operation of the electric system. The SFPUC estimates it would employ approximately 50 new people to conduct field operations for the infrastructure assets.[1]

As described below, the MND has at least three significant flaws. First, the MND significantly underestimates the number of workers required to operate and maintain the electric system to safely and reliably serve San Francisco electric customers. Second, the MND fails to acknowledge that hiring a sufficient number of adequately trained workers to operate and maintain the electric system will be exceptionally difficult, if not impossible. Third, the MND fails to analyze the impacts from an insufficiently sized or qualified workforce to operate and maintain the electric system serving San Francisco.

II. The MND Significantly Underestimates the Number of Workers Required to Operate and Maintain the Electric System to Safely and Reliably Serve San Francisco

The MND states that SFPUC would hire approximately 50 workers for field operations. The MND significantly underestimates the number of workers necessary to operate and maintain the electric system to safely and reliably serve San Francisco. There are currently more than 100

[1] MND, p. 83.

PG&E employees operating and maintaining the electric system (overhead and underground) which serves San Francisco. These include linemen, cablemen, troublemen, substation electricians, meter technicians and system operators. On this basis alone, the MND underestimates the field workforce by at least 50 workers.

However, the number of qualified workers needed to safely and reliably serve San Francisco customers is likely even larger because PG&E currently has a staffing shortage. The 100 plus workers operating and maintaining San Francisco's electric grid each currently log, on average, 800 hours of overtime per year. PG&E has slowly lost staffing in the San Francisco Bay Area and has just undertaken a plan to restaff these areas, focusing on San Francisco, the Peninsula and the South Bay.[2] Thus, the 100 plus PG&E workers currently operating and maintaining the system serving San Francisco is insufficient and the MND's assumption of 50 workers to conduct field operations for the infrastructure assets is grossly underestimated.

III. The MND Fails to Acknowledge that Hiring a Sufficiently Sized and Trained Workforce to Operate and Maintain the Electric System Will be Exceptionally Difficult, if not Impossible

The MND states that the SFPUC will hire approximately 50 workers for field operations of the infrastructure. Even if 50 workers were sufficient to provide safe and reliable electric service to San Francisco (which is absolutely NOT the case), hiring 50 adequately trained workers will be exceptionally difficult, if not impossible.

First, there is a national shortage of linemen, the workers qualified to work on electrical lines and infrastructure.[3] The shortage is predicted to get worse.[4] It takes five years to "grow" a lineman, including completion of a state-certified apprenticeship or training program and several years of on-the-job training. Workers need years of on-the-job training as a journeyman in their craft to learn the ins and outs of the electric system work. The "growing" process is even longer for cable splicers who work on the underground electric systems splicing lead cable and installing and maintaining underground protection network systems.

This is particularly true for San Francisco where the electric system is unique. The system in San Francisco has a complicated design scheme based on a dense underground electric network, the fourth largest in the United States and the largest west of the Mississippi, and

---

[2] *See attached* February 2, 2022 Letter Agreement No. 22-06-PGE.

[3] *See, e.g.*, https://lowellcorp.com/2907-2/ re shortage in Michigan; https://www.walb.com/2021/09/12/albany-utilities-working-towards-fixing-shortage-linemen-workers/ re shortage in Georgia; https://www.arkansasonline.com/news/2021/oct/18/4-nlr-electric-linemen-resign/ re shortage in Arkansas; https://www.ocalagazette.com/44202-2/ re shortage in Florida; *see also* Klein Tools, Dark by 2050 (Oct. 2020), https://data.kleintools.com/sites/all/product_assets/documents/brochures/klein/DarkBy2050_Klein_ResearchPaper.pdf.

[4] Klein Tools, Dark by 2050, pp. 10-11, available at https://data.kleintools.com/sites/all/product_assets/documents/brochures/klein/DarkBy2050_Klein_ResearchPaper.pdf.

complex overhead wiring system. Both the overhead and underground systems in San Francisco are complicated by a wide variety of equipment, both in age and its operations. A worker who has not been trained and worked in San Francisco for many years, absorbing on-the-job training from senior, highly experienced workers and operating and maintaining this equipment directly, cannot perform this work safely or reliably. Moreover, there are currently very few lead splicers qualified to work on the San Francisco underground network.

Second, it is incredibly difficult to attract qualified workers to the San Francisco Bay Area due to the high cost of housing and living. As a result, PG&E has experienced a loss of workers in the Bay Area and has recently undertaken a plan to restaff these areas, focusing on San Francisco, the Peninsula and the South Bay. This plan includes a Letter Agreement with IBEW Local 1245 to attract and retain employees in certain job classifications which provides exceptionally premium wages, special overtime provisions, retention incentives and housing subsidies, among other incentives.[5] These extraordinary terms appear unmatched by other electric utilities in California and nationally but are necessary to attract and retain a qualified workforce in San Francisco. The SFPUC would have to match these terms to attract a qualified workforce.

Third, even if the SFPUC could match PG&E's extraordinary wages and benefits for the workers who currently operate and maintain the electric system in San Francisco, it is highly unlikely that the SFPUC would be able to attract these workers. This is because PG&E offers a benefit that the SFPUC cannot offer – the opportunity for workers to transfer out of San Francisco and work in other areas of PG&E service territory. This is known as the "salmon run." As PG&E workers attain higher seniority, they begin to bid out of the Bay Area into less populated areas. This phenomenon has existed since the early 1980s. Additionally, PG&E is understaffed outside of the Bay Area. Therefore, PG&E would absorb its current San Francisco workforce to staff other areas that are understaffed. Indeed, none of PG&E's current San Francisco workforce resides in San Francisco.

Finally, there is clear financial harm to PG&E workers who leave PG&E and go to work for SFPUC, since these workers would lose significant value to their retirement benefits. PG&E retirement benefits are ERISA based while the SFPUC benefits are public sector based in the San Francisco Employees Retirement System. Individual workers cannot transfer funds between these two retirement systems. As a result, PG&E workers would lose a big chunk of their retirement benefits by leaving PG&E for the SFPUC. The only way that this issue can be cured is if a ballot initiative is proposed to give these new electric utility workers extra funding out of San Francisco's general fund to make these workers whole for retirement purposes. Such a measure must be placed on the ballot and approved by San Francisco voters. Existing City and County of San Francisco workers would likely object to the granting of extra general fund funds to attract these new electric workers. The City and County of San Francisco is also facing the likelihood of

[5] *Id.*

increased budget shortfalls from higher losses in revenue connected to expected continuing reduced tourism and large-scale remote workforce.[6] The result is that there is no incentive for PG&E workers to go work for the SFPUC.

IV. The MND Fails to Analyze the Impacts from an Insufficiently Sized or Trained Workforce to Operate and Maintain the Electric System Serving San Francisco

To provide safe and reliable electric service in San Francisco, the SFPUC must have a sufficiently sized and trained workforce. Without enough adequately trained workers, there won't be enough workers to timely respond to outages or repair the system. As a result, there will be more frequent and longer duration outages.[7] The MND fails to analyze the impacts from an insufficiently sized or trained workforce, including more frequent and longer duration outages. For example, the MND fails to analyze air quality and health risk impacts from the use of diesel back-up generators during longer and/or more frequent outages.

[6] *See* https://www.sfexaminer.com/news/federal-funding-shrinks-sf-budget-deficit-to-23m/; *see also* https://sfstandard.com/business/economic-recovery-elusive-in-sf-as-workers-tourists-stay-away/.
[7] Dark by 2050 at p. 3, 21-37, available at https://data.kleintools.com/sites/all/product_assets/documents/brochures/klein/DarkBy2050_Klein_ResearchPaper.pdf.

Qualifications

Hunter Stern is an Assistant Business Manager for the International Brotherhood of Electrical Workers Local Union 1245. Mr. Stern has held this position for 10 years. Mr. Stern has worked for IBEW Local 1245 for 27 years in several capacities, including working with field personnel performing critical functions in every aspect of the electric system. Mr. Stern works on legislative, regulatory and policy matters, public affairs and workforce development and training programs. From 1997-2007, Mr. Stern represented PG&E electric workers in San Francisco to solve problems and negotiate local agreements on overtime call outs, assignments and work and safety rules. Since 2007, Mr. Stern has worked on regulatory issues related to electric services in San Francisco as well as issues between PG&E and the City and County of San Francisco related to the Interconnection Agreement between the parties. Mr. Stern has also been involved in specific projects to increase reliability and transmission capacity within San Francisco as well as the decommissioning of Hunters Point Power Plant. Mr. Stern has served on the IBEW-PG&E Joint Apprenticeship and Training Committee for seven years. In addition, he has served on local and regional workforce development boards to develop and implement effective training and workforce policies. Mr. Stern holds a B.A. in political science with an emphasis on public policy from Brown University. Mr. Stern has resided in San Francisco for more than 30 years.

Roberto Balistreri is an Assistant Business Manager for the International Brotherhood of Electrical Workers Local Union 1245. Mr. Balistreri joined IBEW Local 1245 in 2015 as a business representative where he represented all of PG&E's electric employees in San Francisco. Mr. Balistreri was promoted to his current position in 2021. Prior to joining IBEW Local 1245, he worked on the electric system in San Francisco for PG&E as a lineman. He began as an apprentice lineman for PG&E in San Francisco in 2004 and became a journeyman lineman in 2008. Prior to becoming a lineman, Mr. Balistreri was a groundman for PG&E in San Francisco. Mr. Balistreri served as a shop steward from 2008 to 2015. Mr. Balistreri was born and raised in San Francisco and still lives in San Francisco today.

Damien Padilla is a cable splicer and cable crew foreman for PG&E in San Francisco. Mr. Padilla began his career as an apprentice cable splicer in 2006 and has been a journeyman cable splicer since 2010. Mr. Padilla runs a crew in the underground electric system of San Francisco that is responsible for emergency response, maintenance and repair. Since 2019, Mr. Padilla has served as an IBEW Local 1245 Safety Steward for the union's Peer to Peer Safety Initiative dedicated to creating a safety culture that motivates union members to promote safety though mutual support and protection on the job. Mr. Padilla was also elected to the IBEW Local 1245 Advisory Council to serve as the representative for the San Francisco Division and General Office of PG&E.

Pacific Gas and Electric Company

LETTER AGREEMENT NO. 22-06-PGE

IBEW

PACIFIC GAS AND ELECTRIC COMPANY
LABOR RELATIONS
375 N. WIGET LANE
SUITE 130
WALNUT CREEK, CA 94598
925.974.4461
MATTHEW LEVY
SENIOR DIRECTOR

INTERNATIONAL BROTHERHOOD OF
ELECTRICAL WORKERS, AFL-CIO
LOCAL UNION 1245, I.B.E.W.
P.O. BOX 2547
VACAVILLE, CALIFORNIA 95696
707.452.2700
BOB DEAN
BUSINESS MANAGER

February 2, 2022

Mr. Bob Dean, Business Manager
Local Union No. 1245
International Brotherhood of
Electrical Workers, AFL-CIO
P.O. Box 2547
Vacaville, CA 95696

Dear Mr. Dean:

The Company and Union met to discuss the challenge of retaining and attracting specific apprentice and journeyman classifications (listed in Tables 1 – 4) within the San Francisco, Peninsula, De Anza and San Jose divisions.

This agreement addresses the critical staffing levels within specific headquarters listed in Table 5 and Company efforts to attract and retain employees into the classifications listed in Tables 1-4, and the parties have agreed upon the following:

1. Premium Wages
2. Special Overtime Provisions
3. Retention Incentive
4. Housing Subsidy that is available as an option to specific employees for up to thirty-six (36) months
5. A Bid Lock, applicable to employees who enter these classifications and headquarters/locations on or after March 13, 2022
6. Eligible Headquarters
7. Comparable Classifications
8. Mortgage Subsidy Program Reopener
9. Alternative Work Schedules
10. Oversight Committee

This agreement supersedes LA R1-19-17 for the headquarters or locations listed on Table 5. LA R1-19-17 will remain in effect, under the same terms and conditions, for the East Bay Division, Mission Division and Promo/Demo Area 7 headquarters/locations as listed in Attachment 1 of LA R1-19-17.

1. **Wages**:

   A) Journey level employees hired before March 13, 2022 who are currently regularly headquartered at an eligible headquarters or location (listed on Table 5) and in an eligible classification (listed on Table 1) will receive a twenty-five percent (25%) hourly wage premium, effective March 13, 2022. This hourly wage premium replaces the hourly wage premium offered under LA R1-19-17 for these eligible employees only.

Eligible employees must accumulate at least twenty-four (24) months (4,160 straight-time hours) of participation in the 25% premium program before the 25% increase will be included in the "Basic Weekly Pay" for the purpose of calculating benefits under Part II (the Final Pay Pension) of the Retirement Plan, Covered Compensation under Part III of the Pacific Gas and Electric Company Retirement Plan, and Covered Compensation under the Retirement Savings Plan for Union-Represented Employees.

Eligible incumbent employees (i.e. those included in LA R1-19-17) will receive equal credit for time previously worked while within an eligible classification and location toward the twenty-four (24) month requirement to qualify for the 25% increase to be included in the "Basic Weekly Pay" for the purpose of calculating benefits under Part II (the Final Pay Pension) of the Retirement Plan, Covered Compensation under Part III of the Pacific Gas and Electric Company Retirement Plan, and Covered Compensation under the Retirement Savings Plan for Union-Represented Employees.

After an employee accumulates twenty-four (24) months (4,160 straight-time hours) of service in the 25% hourly wage premium program, the increase will be included in the "Basic Weekly Pay" for retirement purposes, through reclassification of the employee to the appropriate equivalent classification in Table 3.

B) Apprentice employees hired before March 13, 2022 who are regularly headquartered at an eligible headquarters or location (listed on Table 5) and in an eligible classification (listed on Table 2) will receive a ten percent (10%) hourly wage premium, effective March 13, 2022, once they reach the 30-month step of their respective classification. The 10% hourly wage premium will not be included in the "Basic Weekly Pay" for the purpose of calculating benefits under Part II (the Final Pay Pension) of the Pacific Gas and Electric Company Retirement Plan, Covered Compensation under Part III of the Pacific Gas and Electric Company Retirement Plan, and Covered Compensation under the Retirement Savings Plan for Union-Represented Employees.

C) Journey level employees hired on or after March 13, 2022 who are regularly headquartered at an eligible headquarters or location (listed on Table 5) and in an eligible classification (listed on Table 3) will receive a base hourly wage rate that is twenty-five percent (25%) higher than the base hourly wage rate for the equivalent classification listed on Table 1.

D) Apprentice employees hired on or after March 13, 2022 who are regularly headquartered at an eligible headquarters or location (listed on Table 5) and in an eligible classification (listed on Table 4) will receive a base hourly wage rate that is ten percent (10%) higher than the base hourly wage rate for the equivalent classification listed on Table 2, once they reach the 30-month step of their respective classification.

E) The new premiums and wage rates will be programmed and applied as soon as administratively possible. If the premiums and wage rates are not available by March 13, 2022, the pay will be retroactive to March 13, 2022. The intent of the premium is to incentivize eligible employees to be regularly headquartered at the locations listed in Table 5. Employees assigned to provide temporary support at those headquarters/locations will not be eligible to receive the hourly wage premium. Employees on an upgrade from an eligible classification or upgraded as a subject matter expert from an eligible base classification and regularly assigned to a headquarters listed in Table 5, will continue to be eligible to receive the hourly wage premium.

2. **Overtime**:

A) The parties agree that all overtime will be paid at the double-time rate of pay for those employees within eligible classifications (listed in Tables 1 and 3, e.g., journey level classifications) and who are regularly headquartered in an eligible headquarters or location (listed on Table 5).

B) When following pre-arranged overtime and emergency overtime procedures in Title 208, Title 212 and Title 308 of the Physical Agreement, those employees within new eligible classifications (listed in Tables 3 and 4) will be treated the same as their equivalent classifications (listed in Tables 1 & 2) for overtime scheduling/call-out purposes.

C) For purposes of this agreement, the parties agree that California overtime rules do not apply consistent with California Labor Code Section 514. Accordingly, the overtime rules applicable to employees covered

by this letter agreement are the overtime rules outlined in this Letter Agreement and any applicable overtime rules under the Fair Labor Standards Act.

3. **Retention Incentive**:

A) Effective April 1, 2022, current journey level incumbents (as of March 12, 2022) in an eligible headquarters or location (listed on Table 5) and in an eligible classification (listed on Table 1) will receive a $2,000 per month Retention Incentive for each full month in such eligible classification/headquarters (payable on a quarterly basis).

These current journey level incumbents are not eligible to receive the Housing Subsidy described in Section 4 below.

B) Effective April 1, 2022, any employee who is hired, assigned, placed or bids into an eligible headquarters or location (listed on Table 5) and in an eligible classification (listed on Tables 1 and 3) will be offered the choice of a:

1) $2,000 per month Retention Incentive for each full month in such eligible classification/headquarters (payable on a quarterly basis). Once an employee elects the Retention Incentive, they become ineligible for the Housing Subsidy described in Section 4 below.

OR

2) Up to a thirty-six (36) month Housing Subsidy if they meet the terms and conditions described in Section 4 below

C) The Retention Incentive will not be included in the "Basic Weekly Pay" for the purpose of calculating benefits under Part II (the Final Pay Pension) of the Pacific Gas and Electric Company Retirement Plan, Covered Compensation under Part III of the Pacific Gas and Electric Company Retirement Plan, and Covered Compensation under the Retirement Savings Plan for Union-Represented Employees.

D) This Retention Incentive is considered taxable compensation. All taxable compensation under this Letter Agreement shall be subject to the withholding of all applicable federal and state income and employment taxes.

4. **Housing Subsidy**:

A) Effective April 1, 2022, any employee who is hired, assigned, placed or bids from an area not excluded in subsection B below into an eligible headquarters or location (listed on Table 5) and remains in an eligible classification (listed on Tables 1 and 3) in that headquarters or location will be reimbursed for up to $4,000 per month (payable on a monthly basis) for up to thirty-six (36) consecutive months for each full month living in the geographic locations described below.

In order to receive reimbursement, employees must provide acceptable documentation on a monthly basis that they live in the geographic locations described below. Acceptable documentation must be approved by the Company and is defined as a monthly mortgage statement, rental lease agreement or other documentation deemed acceptable to the Company. Documents provided that do not list the employee's name may require additional verification. Impound accounts, Homeowner Association (HOA) fees, property taxes, utility expenses, etc., are not eligible for reimbursement. If any issues arise regarding acceptable documentation that cannot be resolved locally, the Oversight Committee will be convened to resolve the issue.

Employees must reside within the geographic locations described below based on the headquarters where they are assigned:

- San Francisco Division
  - San Francisco or San Mateo Counties. Employees may not reside south of the City of San Mateo.

- Peninsula Division
  - San Francisco, San Mateo, or Santa Clara Counties. Employees must reside north of the City of San Jose

- De Anza Division
  - San Mateo or Santa Clara Counties or the Cities of Fremont, Newark, and Union City

- San Jose Division
  - Santa Clara County or the Cities of Fremont, Newark, and Union City

Eligible employees who choose to receive the Housing Subsidy cannot simultaneously receive the Retention Incentive described in Section 3 above. Upon conclusion of the thirty-six (36) consecutive months in the Housing Subsidy program, employees who remain in an eligible headquarters or location (listed on Table 5) and in an eligible classification (listed on Table 1 and 3) will transition to the Retention Incentive described in Section 3 above.

At any time, an employee who is currently participating in the Housing Subsidy program may choose to instead receive the Retention Incentive described in Section 3 above. Once an employee opts out of the Housing Subsidy program, they will no longer be eligible to participate in the Housing Subsidy program.

The Housing Subsidy may only be received one-time, up to thirty-six (36) months.

B) Bidders from the following divisions/locations are excluded from participation in the Housing Subsidy program:

- East Bay, Mission, Central Coast, North Bay, Diablo, and those GC yards located within these divisions

C) The Housing Subsidy will not be included in the "Basic Weekly Pay" for the purpose of calculating benefits under Part II (the Final Pay Pension) of the Pacific Gas and Electric Company Retirement Plan, Covered Compensation under Part III of the Pacific Gas and Electric Company Retirement Plan, and Covered Compensation under the Retirement Savings Plan for Union-Represented Employees.

D) The Housing Subsidy is considered taxable compensation. All taxable compensation under this Letter Agreement shall be subject to the withholding of all applicable federal and state income and employment taxes.

5. **Bid Lock**:

A) All employees who are hired, assigned, placed or bid into one of the classifications listed in Tables 1 and 3 and report to headquarters listed in Table 5, on or after March 13, 2022, will be subject to a "bid lock" for three (3) years and may only bid to the classifications listed in Tables 1 and 3 within the headquarters listed on Table 5.

B) All Apprentices who are hired, assigned, placed or bid into one of the classifications listed in Tables 2 or 4 and report to headquarters listed in Table 5, on or after March 13, 2022, will be subject to a "bid lock" for three (3) years after they progress to their respective journey classification and may only bid classifications listed in Tables 1 and 3 within the headquarters listed on Table 5.

6. **Eligible Headquarters**:

A) The regular headquarters of eligible Title 200 classifications are listed on Table 5.

B) A Title 300 regular headquarters is defined as follows:

- The current location where the employee was hired, placed, or bid in accordance with Title 305.7,or 305.5(c); and,
- Within the eligible locations in Table 5; and,

- The employee is not provided the expense allowances pursuant to Title 301.4(a), Zone 3.

A transfer under the provisions of 301.1(a) or (b) or placement under 305.5(a) from a current non-eligible Title 300 location to an eligible Title 300 location will require 120 days worked at a location included in Table 5 to be eligible for the hourly wage premium.

7. Comparable Classifications

A) The new classifications listed on Tables 3 & 4 will be added to their respective Job Definitions Lines of Progression, as well as Exhibit VIII – Job Comparisons Table in the IBEW Physical Agreement in the future.

B) The new classifications listed on Tables 3 & 4 will be considered the same as their equivalent classifications listed on Tables 1 & 2 for the following purposes:

1. Overtime
2. Job Bidding
3. Vacation/Holiday/Floating Holiday Scheduling
4. Hours
5. Demotion

8. **Mortgage Subsidy Program Reopener**:

A) The parties agree to continue exploration of a mortgage subsidy program throughout 2022.

9. **Alternative Work Schedules**:

A) When staffing levels increase, the following alternative work schedules would be available for consideration:

- 9x80 Schedule – See LA 93-97
- 4x10 Schedule – See LA 93-96
- 12-Hour Schedule – See LA 93-98

B) All schedule changes must be discussed in advance with the local IBEW Business Representative, Labor Relations and Electric Operations leadership before implementation. However, the parties agree that each headquarters listed on Table 5 may have a variety of alternative work schedules. All alternative work schedules must be documented and agreed upon through a local letter agreement.

C) The parties agree to continue discussions regarding additional alternative work schedule options, beyond those identified above, when staffing levels increase in the headquarters listed on Table 5.

10. Oversight Committee

A) The Company and Union shall each appoint three members to be part of an Oversight Committee. The Oversight Committee will attempt to resolve any issues that may arise regarding this Letter of Agreement within forty-five (45) days. Issues that the Oversight Committee cannot resolve will be subject to the party's grievance procedure Subsection 102.3(a)(2) timelines will be waived for the forty-five (45) period.

O-CUE

Mr. Bob Dean

February 2, 2022
LA 22-06-PGE

This proposal has been discussed with Senior Assistant Business Manager Bob Gerstle.

If you agree, please so indicate in the space provided below and return one executed copy of this letter to the Company.

Very truly yours,

PACIFIC GAS AND ELECTRIC COMPANY

By: _____
Matthew Lewy
Senior Director

The Union is in agreement.

LOCAL UNION NO. 1245, INTERNATIONAL
BROTHERHOOD OF ELECTRICAL WORKERS, AFL-CIO

____ Feb 3, 2022 _____, 2022

By: _____
Bob Dean
Business Manager

Mr. Bob Dean

February 2, 2022
LA 22-06-PGE

Table 1

Eligible Classifications

IBEW T200/T300	SAP Code	Classification
IBEW T200	50010199	Cable Crew Foreman
IBEW T200	50010375	Cable Splicer
IBEW T200	50010091	Cableman
IBEW T200	50010227	Compliance Inspector
IBEW T200	50010228	Compliance Inspector - Underground
IBEW T200	51574842	Distribution Line Technician
IBEW T200	50010191	Electric Crew Foreman
IBEW T200	50010193	Electric Crew Foreman - Transmission
IBEW T200	50010244	Lineman
IBEW T200	50010241	Lineman - Transmission
IBEW T200	50315043	M&C Coordinator - Electric*
IBEW T200	52489846	M&C Coordinator – Electric Transmission*
IBEW T200	50010184	Night Cable Crew Foreman
IBEW T200	50010378	Night Cable Splicer
IBEW T200	50010431	Transmission Troubleman
IBEW T200	50010432	Troubleman
IBEW T200	50010380	Unassigned Cable Splicer
IBEW T200	50010246	Unassigned Lineman
IBEW T200	50010188	Underground Constr Crew Frmn - Electric
IBEW T200	50010234	Underground Constr Journeyman - Elec
IBEW T300	50010377	Cable Splicer - GC
IBEW T300	52748619	Lead Contractor Inspector – GC**
IBEW T300	50010247	Lineman - GC
IBEW T300	50010179	Subforeman A - Overhead
IBEW T300	50010178	Subforeman A - Underground

*Must be a journeyman to be eligible for the premium
**The specific terms applicable to this classification will be addressed in a separate MOU

Table 2

Eligible Classifications

IBEW T200/T300	SAP Code	Classification
IBEW T200	51754495	Apprentice Cable Splicer
IBEW T200	50449466	Apprentice Lineman
IBEW T200	50010260	Apprentice Lineman – Transmission
IBEW T300	51754496	Apprentice Cable Splicer - GC
IBEW T300	50449467	Apprentice Lineman - GC

Mr. Bob Dean

February 2, 2022
LA 22-06-PGE

Table 3

Eligible Classifications

IBEW T200/T300	SAP Code	Classification	2022 Wage Rate
IBEW T200	52854424	Cable Crew Leader – SF/PN/DA/SJ	00: $78.35 12: $80.84
IBEW T200	52854407	Cable Splicer – SF/PN/DA/SJ	$75.65
IBEW T200	52854422	Underground Troubleshooter – SF/PN/DA/SJ	00: $79.63 12: $80.84
IBEW T200	52854411	Compliance Inspector – SF/PN/DA/SJ	$82.58
IBEW T200	52854412	Compliance Inspector UG – SF/PN/DA/SJ	$75.65
IBEW T200	52854414	Distribution Line Technician – SF/PN/DA/SJ	$88.48
IBEW T200	52854417	Electric Crew Leader – SF/PN/DA/SJ	00: $86.40 12: $88.48
IBEW T200	52854421	Electric Crew Leader-Trnsmn – SF/PN/DA/SJ	00: $90.81 12: $92.95
IBEW T200	52854405	Line Worker – SF/PN/DA/SJ	$82.58
IBEW T200	52854419	Line Worker – Transmission – SF/PN/DA/SJ	$86.71
IBEW T200	52854508	M&C Coordinator - Electric* – SF/PN/DA/SJ	00: $82.58 12: $86.40
IBEW T200	52854509	M&C Coordinator – ElecTrnsm* – SF/PN/DA/SJ	00: $86.71 12: $90.71
IBEW T200	52854425	Night Cable Crew Leader – SF/PN/DA/SJ	00: $81.74 12: $83.19
IBEW T200	52854423	Night Cable Splicer – SF/PN/DA/SJ	00: $76.81 06: $78.35
IBEW T200	52854420	Transmission Troubleshooter – SF/PN/DA/SJ	$88.41
IBEW T200	52854415	Troubleshooter – SF/PN/DA/SJ	$84.19
IBEW T200	52854408	Unassigned Cable Splicer – SF/PN/DA/SJ	$75.65
IBEW T200	52854416	Unassigned Line Worker – SF/PN/DA/SJ	$82.58
IBEW T200	52854410	UG Constr Crew Leader – Elec – SF/PN/DA/SJ	00: $86.40 12: $88.48
IBEW T200	52854409	UG Constr Journey Wkr – Elec – SF/PN/DA/SJ	$82.58
IBEW T300	52854506	Cable Splicer – GC – SF/PN/DA/SJ	$79.41
IBEW T300	52854501	Lead Contractor Inspector-GC – SF/PN/DA/SJ**	00: $92.95 18: $97.58
IBEW T300	52854503	Line Worker – GC – SF/PN/DA/SJ	$86.71
IBEW T300	52854504	GC Crew Leader A – Overhead – SF/PN/DA/SJ	00: $90.81 06: $92.95
IBEW T300	52854507	GC Crew Leader A – UG – SF/PN/DA/SJ	00: $90.36 06:$92.53

*Must be a journeyman to be eligible for the premium
**The specific terms applicable to this classification will be addressed in a separate LA

Mr. Bob Dean

February 2, 2022
LA 22-06-PGE

Table 4

Eligible Classifications

IBEW T200/T300	SAP Code	Classification	2022 Wage Rate
IBEW T200	52854406	Apprentice Cable Splicer – SF/PN/DA/SJ	00: $46.49 06: $47.50 12: $50.51 18: $51.84 24: $53.31 30: $60.04 36: $62.02
IBEW T200	52854413	Apprentice Line Worker – SF/PN/DA/SJ	00: $44.72 06: $46.02 12: $47.41 18: $48.84 24: $50.29 30: $56.97 36: $58.73 42: $60.46
IBEW T200	52854418	Apprentice Line Worker – Trnsm – SF/PN/DA/SJ	00: $46.94 06: $48.21 12: $49.89 18: $51.33 24: $53.03 30: $59.85
IBEW T300	52854505	Apprentice Cable Splicer – GC – SF/PN/DA/SJ	00: $48.80 06: $49.86 12: $53.01 18: $54.41 24: $55.96 30: $63.07 36: $65.13
IBEW T300	52854502	Apprentice Line Worker – GC – SF/PN/DA/SJ	00: $46.94 06: $48.33 12: $49.79 18: $51.28 24: $52.82 30: $59.86 36: $61.61 42: $63.48

Mr. Bob Dean

February 2, 2022
LA 22-06-PGE

Table 5

T-200 Eligible Headquarters:

Division	Headquarters (Service Yard)
De Anza	Cupertino Service Center
Peninsula	Colma Service Center
Peninsula	San Carlos Service Center
Peninsula	Martin SC in Daly City
Peninsula	Half Moon Bay
San Francisco	SF Service Center
San Jose	Cinnabar Service Center
San Jose	Edenvale Service Center
San Jose	Metcalf Substation

T300 Eligible locations:

De Anza - GC	N/A
Peninsula - GC	N/A
San Francisco - GC	Martin Service Center 731 Schwerin Street, Daly City
San Jose - GC	GC Yard 680 Dado Street, San Jose
San Jose - GC	GC Yard 336 W. Main, Morgan Hill

- Intent is to include any future GC Electric yards within SF, San Mateo and Santa Clara Counties
- Any addition to Table 5 will be discussed and agreed upon in writing by the Oversight Committee

EXHIBIT C

To: Adams, Broadwell, Joseph & Cardozo

From: Robert Earle, Alea IE, LLC

Date: March 1, 2022

Re: Analysis of San Francisco Preliminary Mitigated Negative Declaration

Introduction

On January 5, 2022, the San Francisco Planning Department issued a Preliminary Mitigated Negative Declaration and accompanying study (collectively, "PMND") for the PG&E Power Asset Acquisition Project ("PAAP"). As further described below, PMND has at least two significant flaws. First, the PMND description of the project is incomplete and leaves out energy supply issues including the potential for increased pollution, including greenhouse gases ("GHG") emissions. Second, the PMND does not address the potential for increased pollution, including GHGs, NOx, and particulate matter ("PM"), from the operation of the distribution wires.

The PMND description of the project is incomplete and fails to meet CEQA requirements

The PMND description of the project is incomplete. PAAP is part of the City of San Francisco's effort to form a municipal utility which would provide all the electric power to consumers within its boundaries. The acquisition of PG&E's distribution system and related infrastructure is a key part of the municipalization project. Currently, the San Francisco Public Utilties Commission ("SFPUC") provides power to about 70% of electricity customers, with PG&E providing the bulk of the remaining power. The municipalization would therefore result in an increase in the power SFPUC would supply. The PMND description of the project omits the increase in power supply, and the resulting impacts from the increase, that are a central part of the project.

CEQA requires analysis of "[t]he project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including …operation…," and "[t]he effects of the project on energy resources." CEQA also requires the "[i]dentification of the total energy requirements of the project by fuel type and end use" and the "energy supplies that would serve the project."[1] The PMND should have included this information with respect to the

[1] CEQA Guidelines, Appendix F.

increase in power supply by the SFPUC to 30% of San Francisco electricity consumers, but it does not.

Moreover, CEQA requires that all GHG emissions generated either directly or indirectly must be considered.[2] The increased supply by SFPUC could result in increased GHG emissions as well as increased NOx, PM, and other pollutants compared with the supply currently provided by PG&E. The PMND fails to address this issue as well.

The PMND does not address the potential for increased pollution due to its operation of the distribution system

When power outages occur, many electricity consumers turn to backup generation, often in the form of diesel generation. In San Francisco, there were 1,190 permitted backup generators in 2020.[3] In the Bay Area Air Quality Management District ("BAAQMD"), about 90% of back-up generators are diesel fueled.[4] The number of diesel generators has been growing rapidly with 34% growth from about 2018 to 2020.[5] Figure 1 shows the geographic distribution of backup generators in the Bay Area.

[2] CEQA Guidelines, Appendix G, Section VIII(a).
[3] "Diesel Back-Up Generator Population Grows Rapidly in the Bay Area and Southern California," M.Cubed, p. 14.
[4] *Id.*, p. 2.
[5] *Ibid.*

Figure 1: Backup Generators in the Bay Area[6]



An increased number of outages and/or increased duration of outages would naturally increase the use of backup generation and thus diesel emissions. The number and duration of outages are dependent in part on the availability of a skilled and qualified workforce.[7] Obviously, if qualified personnel are not available in the event of an outage or to effect repairs that would avoid an outage, then the number of outages and their duration would increase. Power outages can also be caused by personnel without adequate training attempting maintenance work.

Whether the SFPUC can develop and maintain a sufficient skilled and qualified workforce and thus avoid increased emissions from diesel-fueled backup generation is highly uncertain. The SFPUC recognized in its report in 2019 analyzing PAAP that there is a nationwide shortage in craft workers, and recruiting and retaining capable workers is a significant risk.[8] Consequently, it is possible that PAAP will result in a diminished workforce contributing to more frequent and longer duration outages. These increased and longer outage events mean that diesel-fueled backup generation will be run for more hours resulting in increased pollution. The PMND should have addressed this, but did not.

[6] From "The Diesel-Fired California Dream," Jason Fordney, **California Energy Markets**, October 8, 2021.
[7] See, for instance, PG&E's recent testimony in Application 21-06-021, PG&E-04 and PG&E-08 before the California Public Utilities Commission ("CPUC"); and CPUC Decision 06-05-016.
[8] "Preliminary Report on Electric Service Options," SFPUC, May 2019, p. 35, 38.

ROBERT EARLE, PH.D.

Dr. Earle is an economist with extensive experience in the energy, telecomm, and finance sectors including valuation, environmental mitigation methods and costs, and regulatory economics. Having worked as a consultant as well as an industry manager, he currently supports clients in analyzing market opportunities, strategy, regulatory issues, and litigation. His areas of expertise include electric power sector modeling, economics of environmental mitigation, electric power and gas markets, regulatory policy and ratemaking, demand response, and system optimization.

Dr. Earle has also worked extensively on tariff and market design, including as an expert witness before a number of regulatory commissions. He was the architect of an economic model used to evaluate alternative methods for environmental mitigation including BPM/BACT technology, incentives, and markets. Results from this work were used in numerous studies for investment decisions, policy studies, and litigation.

Dr. Earle was manager of economic analysis at the California Power Exchange where his responsibilities included developing an overall analytic infrastructure for market analysis, analysis of new products, and briefing regulatory and legislative bodies. Dr. Earle holds Ph.D. and M.S. degrees in Operations Research, both from Stanford University.

EDUCATION

Ph.D. Operations Research, Stanford University

M.S. Operations Research, Stanford University

A.B. Mathematics, the College of William & Mary

REPRESENTATIVE PAST EXPERIENCE

Electricity Sector Structure and Regulation

- Advised in the development of transmission strategy for several renewables companies in the United States and Canada (wind and biomass) including analysis of transmission access, planning, cost allocation and siting conditions in regions in North America.
- Developed transmission pricing structure for Saudi Electric Company.
- Advised clients in Canada, the Middle East, and the United States on transmission pricing structures.
- Conducted numerous demand response potential and valuation studies for utilities across the United States.
- Analyzed energy efficiency potential in the Southeast for environmental and ratepayer advocates.
- Provided expert testimony on energy efficiency incentives for Oklahoma Gas & Electric.
- Led analysis for Midwest ISO of wholesale market interface with demand response.

Bidding/Auction Design and Analysis, Market Modeling

- Conducted detailed studies of participant bidding behavior for the purpose of product development, policy changes, and investigations. The results of these studies were used to establish standard

methodologies for staff to use. In addition, Dr. Earle invented new techniques for characterizing bids to examine product ideas and various alternative market structures.

- Led the development of a new type of multivariate statistical model to track market changes and rigorously assess auction participant behavior. Reflecting the auction structure, this model uniquely codetermined all prices at the same time. To do this, a number of new statistical techniques were created.
- Advised two merging companies needing advice on divestiture of their generation assets with respect to both asset value and issues of strategic behavior. For this purpose, Dr. Earle designed and implemented an oligopoly simulation of the market. This game theoretic model explicitly represents company strategies and interactions in the marketplace. Dr. Earle's findings were used to shape the decisions of the investment bank in selling the merged companies' assets and win regulatory approval.

Environment

- Architect of economic model used to evaluate alternative methods for environmental mitigation including BPM/BACT technology, incentives, and markets. Results from this work were used in numerous studies for investment decisions, policy studies, and litigation.
- Advised clients on approaches to environmental mitigation in the oil, electric power, and water sectors.
- Managed a 2-year project to develop a carbon mitigation strategy for a major country in the Middle East.
- Managed a successful water privatization for a city of five million where environmental concerns formed a key part of the privatization effort.

Valuation of Assets, Market Strategies

- For the Electric Power Research Institute (EPRI), developed a methodology for the valuation of alternative market strategies for hydroelectric power plants using stochastic dynamic programming. The changing dynamics of the electricity market, in particular the structure of electricity prices, may have significant implications for the value of a technology that can store energy and release it according to market conditions, thereby leading to a premium value for such resources. The methodology Dr. Earle developed was published in an EPRI report.
- Assessed the impact of market structure changes on plant value that resulted in the restructuring of a bid for generation assets.
- As a result of reorganization, a utility company needed help in valuation of its load management technology and program. At the time, its program was one of the top five in the United States. Dr. Earle directed a team to conduct market research on this technology and teach a class on its current status. As a follow-on, Dr. Earle acted as a facilitator to the client in their development of a valuation methodology. This project resulted in the client deciding to phase-out its efforts in this area.

Corporate Strategy

- In preparation for deregulation of the generation sector in the power industry, Dr. Earle co-led a team to formulate valuation and corporate asset deployment strategies for a $5 billion southeastern utility. The various options considered included: asset spin-off, divestiture, mergers, and acquisitions. Different scenarios implied different trade-offs among the business units of the company. This required extensive financial modeling of the various options and sensitivity to the client's cultural

issues in order to reach a unified decision. These recommendations were adopted by the board as the basis for ongoing company strategy.

- Conducted market research for a company that was considering starting an energy brokerage in California. Key issues investigated were market size and structure, first mover advantage, and risk. As a result of this work, the company selected an effective start-up strategy for its new operation in California.

- Reporting to the CEO, co-negotiated a settlement calculation involving a billion dollars. Co-wrote the filing implementing the settlement and then coordinated its implementation through the IT and settlements process.

EXPERT TESTIMONY

- Before the California Public Utilities Commission, on behalf of the Coalition of California Utility Employees, 2022 Major Updates to the Avoided Cost Calculator.
- Before the California Public Utilities Commission, on behalf of the Coalition of California Utility Employees, concerning the rulemaking to revisit net energy metering tariffs.
- Before the California Public Utilities Commission, on behalf of the Coalition of California Utility Employees, concerning the issuance of recovery bonds for Pacific Gas & Electric.
- Before the California Public Utilities Commission, on behalf of the Coalition of California Utility Employees, concerning Southern California Edison's Application for Wildfire Cost Securitization.
- Before the Washington Utilities and Transportation Commission, on behalf of the Attorney General of the State of Washington, concerning power costs and interjurisdictional allocation in the PacifiCorp 2021 General Rate Case.
- Before the California Public Utilities Commission, on behalf of the Coalition of California Utility Employees, concerning the Southern California Edison 2021 General Rate Case.
- Before the California Public Utilities Commission, on behalf of the Coalition of California Utility Employees, concerning 2020 Major Updates to the Avoided Cost Calculator.
- Before the California Public Utilities Commission, on behalf of the Coalition of California Utility Employees, concerning the Pacific Gas & Electric Gas 2020 General Rate Case.
- Before the California Public Utilities Commission, on behalf of the Coalition of California Utility Employees, concerning the Pacific Gas & Electric Gas Transmission and Storage Rate Case.
- Before the California Public Utilities Commission, on behalf of the Coalition of California Utility Employees, concerning the Power Charge Indifference Adjustment.
- Before the Ohio Public Utilities Commission, on behalf of FirstEnergy, concerning the market for renewable energy credits.
- Before the District Court in Dallas, Texas, on behalf of O Mart, submitted an expert affidavit concerning the appropriate method to value a breach of an electric power purchase contract.
- Before the Superior Court of California in Los Angeles County, on behalf of several municipal utilities, submitted two expert reports on the structure of California electricity markets and on certain transactions in the California electricity marketplace.
- Before the Oklahoma Corporation Commission, on behalf of Oklahoma Gas & Electric, concerning cost recovery and shareholder incentives for DSM programs.

- Before the Public Utilities Commission of Texas, on behalf of El Paso Electric, concerning the capacity value of certain electric power contracts in a fuel cost reconciliation proceeding.
- Before the Federal Energy Regulatory Commission, on behalf of El Paso Electric, concerning the effect of certain power market transactions on California and western markets and the effect of information sharing on California markets.
- Before the New Brunswick Public Utilities Board, on behalf of J.D. Irving, Ltd. and the Canadian Manufacturers and Exporters, concerning the transmission tariff application by New Brunswick Power.

PUBLICATIONS AND PRESENTED PAPERS

"Tail of the Corona Virus?: High Stakes Decisions with Little Information – A Case Examining Data Leadership," with Jung Park and Karl Schmedders, February 2021.

"Attack of zombie companies: don't let them eat bailouts that are vital to restore the economy," with Jung Park and Karl Schmedders, *the Conversation*, June 2, 2020, republished in *The National Interest.*

"Coronavirus: the economic recovery won't only be U-shaped – it'll look like a wheelbarrow," with Jung Park and Karl Schmedders, *the Conversation*, April 14, 2020, republished in *World Economic Forum Agenda* and *The National Interest*.

"Spectrum Auctions Around the World: An Assessment of International Experiences with Auction Restrictions", with David W. Sosa, July 2013, prepared for Mobile Future.

"Hydraulic Fracturing: the regulatory year in review," *Oil and Gas Financial Journal*, January 2012, Vol. 9, No. 1.

"How not to improve surface water quality," with Virginia Perry-Failor, *Regulation*, Fall 2010, Cato Institute Press.

"The Costs of Compliance to EPA's Advance Notice of Proposed Rulemaking on the PCB Use Authorization for Interstate Natural Gas Pipelines," with Susan Tierney, prepared on behalf of the Interstate Natural Gas Association of America ("INGAA"), September 10, 2010.

"Demand Response on Steroids: Extra Value from using the Smart Grid?," *Natural Gas and Electricity*, February 2010.

"Measuring the Capacity Impacts of Demand Response," with Ed Kahn and Edo Macan, *Electricity Journal*, June 2009.

"Ethanol 2.0," with Ahmad Faruqui, *Regulation*, Winter 2008, Cato Institute Press.

"Fostering Economic Demand Response in the Midwest ISO," with Sam Newell, Ahmad Faruqui, Attila Hajos, and Ryan Hledik, prepared for the Midwest ISO, December 30, 2008.

"Transforming America's Power Industry: The Investment Challenge 2010-2030," with Mark Chupka, Peter Fox-Penner, and Ryan Hledik, prepared for the Edison Foundation, November 2008.

"The Role of Expectations in Modeling Costs of Climate Change Policies," with Paul Bernstein and David Montgomery, to appear in *Integrated Assessment of Human-induced Climate Change*, Cambridge University Press, 2007.

"On Price Caps under Uncertainty," with Karl Schmedders and Tymon Tatur, *Review of Economic Studies*, January 2007.

"Demand Response and Advance Metering," with Ahmad Faruqui, *Regulation*, The Cato Institute, Spring 2006.

"Toward a New Paradigm for Valuing Demand Response," with Ahmad Faruqui, *The Electricity Journal*, May 2006.

"Rate Case Mania," with Ahmad Faruqui, *Public Utilities Fortnightly*, February 2006.

"Controlling the Thirst for Demand," with Anees Azzouni and Ahmad Faruqui, *Middle East Economic Digest*, December 2, 2005.

"Reforming Electricity Pricing in the Middle East," with Anees Azzouni and Ahmad Faruqui, *Middle East Economic Survey*, December 5, 2005.

"Ontario Demand-Supply Balance Update: Where will the hot trading occur?," Interjurisdictional Power Transaction Conference, The Canadian Institute, Toronto, invited talk, April 8, 2002.

"Price Caps and Uncertain Demand," with Karl Schmedders and Tymon Tatur, Discussion Paper #1340, CMS-EMS: The Center for Mathematical Studies in Economics and Management Sciences, Kellogg School of Management, Northwestern University, March 6, 2002.

"Demand Uncertainty and Risk-Aversion: Why Price Caps May Lead to Higher Prices," with Karl Schmedders, Discussion Paper #1330, CMS-EMS: The Center for Mathematical Studies in Economics and Management Sciences, Kellogg School of Management, Northwestern University, October 2, 2001.

"Demand Elasticity in the California Day-Ahead Market," *Electricity Journal*, October 2000.

"Electric Power Deregulation and Market Monitoring," with Philip Q. Hanser and James D. Reitzes, *Electricity Journal*, October 2000.

"How Many Firms Are Enough?—Deregulating Electric Generation," with Philip Q. Hanser and James D. Reitzes, Western Economic Association Conference, Vancouver, B.C., July 2000.

"Review of Price Behavior in the California Power Exchange," Western Power Trading Forum, invited talk, May 2000.

"Electric Power Restructuring: Industrial Organization," Department of Management and Strategy, Kellogg School of Management, Northwestern University, invited talk, April 26, 2000.

"Reply to Borenstein and Bushnell," with Philip Q. Hanser and James D. Reitzes, *Electricity Journal*, March 2000.

"Market Power Basics," IEEE Los Angeles Chapter, invited talk, March 14, 2000.

"Lessons from the Early Days of Competition in California," with Philip Q. Hanser, Weldon C. Johnson, and James D. Reitzes, *Electricity Journal*, October 1999.

"Optionality in Energy and Ancillary Services Markets," with Jason A. Hicks, Deregulation Progress Report: Issues and Insights Conference, invited talk, August 4, 1999.

"Measuring Market Power: Back to the Basics," with Jason A. Hicks, invited talk, Deregulation Progress Report: Issues and Insights Conference, August 4, 1999.

Mechanisms for Evaluating the Role of Hydroelectric Generation in Ancillary Services Markets, with R.P. Broehm, F.C. Graves, T.J. Jenkin, and D.M. Murphy, EPRI, Palo Alto, CA: 1998. Report TR-111707.

"Power Market Price Forecasting: Pitfalls and Unresolved Issues," with Frank C. Graves and Philip Q. Hanser, *USAEE/IAEE Annual North American Conference Proceedings*, October 1998.

"Capacity Expansion/Investment Dynamics: Price Forecasting in Deregulated Electric Power Markets," presentation to Market Price Forecasting Conference, Baltimore, Maryland, August 25, 1998.

"Planning Reserve Requirements in a Deregulated Industry: One-Part vs. Two-Part Pricing -or- How I Learned to Stop Worrying and Love Regulation," with Frank C. Graves and Philip Q. Hanser, presentation to ISO Operations, Planning, and Design: An MIT Energy Laboratory, Massachusetts Institute of Technology, June 10, 1998.

"One-Part Markets for Electric Power: Ensuring the Benefits of Competition," with Frank C. Graves, Philip Q. Hanser, and E. Grant Read, in *Power Systems Restructuring: Engineering and Economics*, Marija Ilic, Francisco Galiana, and Lester Fink, eds., Kluwer Academic Publishers, Boston, 1998.

"Computation of Electric Power Production Cost with Transmission Constraints," Energy Modeling Forum, Stanford University, EMF-SR6, December 1996.

TEACHING

Guest lecturer for Master's level seminars, Department of Quantitative Business Administration, University of Zurich

o Reinforcement Learning	Autumn 2017, 2018, 2019, 2020
o Neural Networks and Deep Learning	Spring 2017, 2019, 2020, 2021
o Machine Learning for Managers	Autumn 2016, Spring 2018
o Methods in Economic Consulting	Autumn 2015

Master's Theses Supervised:

- "Use of a Reinforcement Learning Algorithm to Search Trading Strategies for the Management of a Multi-Asset Portfolio", Master of Arts in Banking and Finance, Colin Grab, 2018.
- "A Reinforcement Learning Approach for Airline Revenue Management," Master of Arts in Banking and Finance, Marco Kiener, 2021 (*forthcoming*).

OTHER PROFESSIONAL ACTIVITIES

- Referee for *Journal of Regulatory Economics*, *Energy Journal.*
- Center for Research in Regulated Industries, Rutgers University, member of organizing committee for annual Western Conference, 2005 – 2015.

POSITIONS HELD

2015-present	Alea IE, LLC, Owner
2009-2015	Analysis Group, Vice President
2007-2009	Brattle Group, Principal and San Francisco Office Director
2001-2007	Charles River Associates, Principal
1999-2001	California Power Exchange, Manager of Economic Analysis
1997-1999	Brattle Group, Associate

EXHIBIT D

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION
CALIFORNIA
WASHINGTON
NEW YORK

WI #21-005.02

February 26, 2022

Andrew J. Graf, Esq.
Associate Attorney
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, California 94080

SUBJECT: PG&E Power Asset Acquisition PMND

Dear Mr. Graf,

Per your request, I have reviewed the Preliminary Mitigated Negative Declaration (PMND) for the subject matter project. The Proposed Project would install approximately 10 miles of underground power distribution lines under existing streets and within the substation boundaries and install 300 vaults. At four substations, new equipment and transmission and distribution lines will be installed. Affected substations include

- Martin Substation, located on Geneva Avenue near Bayshore Boulevard in Brisbane
- Potrero Substation, located on Illinois Street in San Francisco near Humboldt Street in San Francisco
- Plymouth Substation, located on Plymouth Avenue near Broad Street in San Francisco
- Randolph Substation, located on Byxbee Street in San Francisco near Randolph Street in San Francisco

Baseline Noise Levels are not Clearly Established

The PMND draws upon noise data from other studies. Most of this data is presented in terms of 24-hour metrics such as the CNEL and Ldn. Only the noise data provided near the Potrero Substation[1] includes daytime hourly Leq values. The PMND provides no evidence to explain how the CNEL or Ldn data was used to establish the daytime ambient levels thresholds along the distribution lines or near the Martin substation, which require hourly Leq values. Furthermore, no evidence is presented to understand the nighttime environment, for which a statistical noise metric like the L90 is commonly used.

[1] Potrero Power Station Mixed-Use DEIR, reference 52.

The PMND contains limited discussion on the existing noise environment and how the existing land use at neighboring noise-sensitive uses compares to each jurisdiction's General Plan guidelines. This limits the reader's understanding of the setting and the suitability of the thresholds.

Significance Criteria are Improperly Established

As noted above, since the PMND lacks sufficient evidence to establish the baseline, the substantial noise thresholds are not all properly established. In particular, the daytime and nighttime noise thresholds along the longer distribution segments and near the Martin substation are not clearly developed.

As noted on page 89 of PMND, paragraph 2, the determination of a substantial noise increased is based on a) whether the activity causes a noise increase greater than 10 dBA over the ambient, and b) whether the activity would occur for more than two weeks. The PMND contains limited information about daytime and nighttime noise levels, which cannot be directly calculated from the Ldn. Thus, it is not possible to determine whether substantial noise increases would occur. See Table 1.

Construction Noise Analysis is Incomplete

Table 11 of the PMND seems to have at least one error. The values for the Backhoe are not consistent adjusting for distance, and the source documents (FTA and FHWA) list the noise level at 50 ft should be 80 and 78 dBA, respectively. Table 11 also seems to omit sources like a hoe ram/hydra break or jackhammer which are commonly used during trenching and excavation of a jack and bore pit.

Table 1 presents the information we have extracted from the PMND, with notations for items that are missing. In the absence of obstructions, it would appear that are several long stretches along Geneva Avenue where distribution line work could exceed the ambient by 10 dBA; these impact zones could extend as far as 600 ft along Geneva Avenue in areas where the road is over 40 ft wide. If the work progresses at a rate of 40 ft[2], the noise could impact homes for 15 work days, or three weeks, which would be a potentially significant impact and require mitigation.

Even though the work at Randolph and Plymouth substations will be limited in time duration, the PMND omits any information to identify which specific buildings could be impacted during this work.

Table 1 Substantial Noise Increase Analysis

Construction Component	Receptor	Ambient	10 dBA above Hourly Ambient	Construction Noise, Hourly Leq (dBA)	Notes
Distribution Lines		50 dBA to 70 dBA Ldn depending on location No information on daytime hourly Leq	Not determined		Advance 40 ft per day
	Residences as close as 15 ft			91-100 max 91-94 average	Based on E.7 Table 11. Extrapolate to 15 ft Combine: Drill rig and excavator

[2] Indicated in partial paragraph 1 on page 91.

Construction Component	Receptor	Ambient	10 dBA above Hourly Ambient	Construction Noise, Hourly Leq (dBA)	Notes
	100 ft			75-84 max 75-78 average	
	600 ft			59-68 max 59-62 average	On long stretches with no obstructions: 15 days= 3 weeks potentially significant impact
Martin Substation		78 dBA Ldn			12 months duration
	Geneva Residences @ 200 ft north	65 dBA-70 dBA CNEL No information on daytime hourly Leq	Not determined	79 dBA Leq	The PMND found the unmitigated impact to be significant, but M-NO-1 reduced the impact to less than significant.
Randolph Substation		60-65 dBA Ldn No information on daytime hourly Leq	Not determined		
	Residences as close as 15 ft			91-100 max 91-94 average	Similar to distribution lines. Trenching and vaults; one week not significant
Plymouth Substation		65-70 dBA Ldn No information on daytime hourly Leq	Not determined		
	Residences as close as 15 ft			91-100 max 91-94 average	Similar to distribution lines. Trenching and vaults; one week not significant
Potrero Substation		Daytime: 67 dBA Leq No information on nighttime hourly Leq	77 Leq Not determined		12 month duration
	Residence south Switchyard @300 ft			76 w/o piles 86 w piles	no impact No mitigation because 12 days ~ 2 weeks
	Future Mixed use @ 50 ft			91 w/o piles 101 w piles	MM M-NOI-1

Operational Noise Analysis has Errors

The analysis of the operational noise at the Martin and Potrero Substations has errors (pages 97 – 99). The errors in the PMND would appear to be as follows:

Transformer Noise

1. The analysis references use of the NEMA standards for transformers. The specific power rating and dimensions of the transformers are not provided to verify the noise level derived. As a point of comparison, the FTA document cited in the PMND analysis indicates that transit

substations can generate a sound level of 63 dBA at 50 ft distance[3]. A transit substation has a similar size and scope to a substation transformer and extrapolating this FTA reference level to 6 ft distance results in a sound level of 81 dBA for the substation. This is substantially higher than the result provided in the PMND and suggests that the PMND source data may be incorrect.

2. Furthermore, as there no evidence presented in the PMND regarding the nighttime noise conditions, there is no basis to evaluate the significance of the transformer noise at 25 ft distance, which is one of the significance thresholds described on page 97.

Martin Substation

1. The analysis refers to noise levels of 65 – 70 dBA from the Day City General Plan, However, as noted on page 86 of the PMND, these are CNEL values and have no bearing on evaluating whether the new transformer would increase the nighttime ambient.

2. The analysis also incorrectly references the Daly City standard. As indicated on page 88 of the PMND, the land use compatibility level is 60 CNEL, which takes into account the total environment. A single noise source introduced into the environment cannot be isolated and evaluated on its own for land use compatibility. In fact, the existing environment falls under the Daly City[4] "Conditionally Acceptable" category. The PMND should include a discussion of how the improvements at the Martin Substation would or would not be contrary to the policies of the Daly City Noise Element.

3. The City of Brisbane prohibits construction equipment noise from exceeding 83 dBA as measured at 25 feet and limits construction noise to 86 dBA at the property line. The PMND states that construction equipment at the Martin substation would emit noise levels exceeding 83 dBA at 25 feet. In fact, Table 12 estimates the maximum hourly noise level at 50 feet to be 91 dBA Leq.[5] As a result, construction would cause a substantial temporary because the noise levels exceed the standards established by the local ordinance.

Potrero Substation

1. The PMND appears to characterize noise from the STATCOM based only on noise from the HVAC units. Based on our experience, the noise associated with STATCOM systems is characterized by strong tonal components from the large transformer-like STATCOM units and the large banks of heat exchangers and fans. The noise level and character can fluctuate noticeably based on the load conditions that the substation experiences. The impact such devices could have during nighttime hours when people are trying to sleep, and the ambient noise environment is low does not appear to be considered in the PMND.

2. The analysis refers to ambient noise levels of 67 dBA from the prior Potrero Power DEIR, however, as noted on page 98 of the PMND, these are daytime values and have no bearing on evaluating whether the STATCOM would increase the nighttime ambient. See also Table 1.

[3] Table 4-24, FTA 2018
[4] Figure NE-2, https://www.dalycity.org/DocumentCenter/View/903/Noise-Element-PDF
[5] PMND at page 93.

Vibration Analysis is Inaccurate

The vibration from construction equipment is summarized in Table 15 of the PMND. Note 1 of the table indicates that the propagation rate of n=1.5 was used. This value of n was drawn from the referenced FTA document. However, Note 2 also references a second source of data for this table from Caltrans. In the Caltrans document, section 7.1.1, the recommended value is n=1.1 because, "values greater than 1.1 would likely results in overestimation of amplitudes at distances closer than 25 ft"; at greater distances, a higher value of n would also predict lower values at distances greater than 25 ft which could miss potential vibration impacts"[6]. As this project is located in California it would be more appropriate to use 1.1 as suggested by Caltrans for a suitably conservative assessment. Furthermore, the FTA document also includes an upper range value for impact pile drivers which is over twice that used in the PMND. Thus Table 15 of the PMND would appear thus:

Equipment	5 Feet	10 Feet	15 Feet	25 Feet	50 Feet	75 Feet	100 Feet
Pile driver (impact) - upper range	**8.915**	**4.159**	**2.663**	**1.518**	**0.708**	**0.453**	**0.330**
Pile driver (impact hammer)	**3.782**	**1.764**	**1.130**	**0.644**	0.300	0.192	0.140
Pile driver (vibratory)	**0.998**	**0.466**	0.298	0.170	0.079	0.051	0.037
Caisson drilling	**0.523**	0.244	0.156	0.089	0.042	0.027	0.019
Loaded trucks	**0.446**	0.208	0.133	0.076	0.035	0.023	0.017
Small bulldozer	**0.018**	0.008	0.005	0.003	0.001	0.001	0.001
Large bulldozer	**0.523**	0.244	0.156	0.089	0.042	0.027	0.019
Vibratory roller	**1.233**	**0.575**	**0.368**	0.210	0.098	0.063	0.046

The vibration impact from impact pile driving would thus be potentially significant for older residential structures and historic buildings beyond 100 ft from the impact pile work. Vibration impact at new residential structures within 75 ft from the pile driving would also be potentially significant. Thus, at the Potrero Substation, potentially significant vibration impacts would occur at structures within the American Can Company Building that would be within 130 ft of the impact pile driving and the new Potrero Power Station Mixed-Use Project within 110 ft.

Mitigation Measures are Inadequate

The PMND provides no evidence that the noise control plan outlined in mitigation measure MM-NO-1: Construction noise control will be able to implement feasible measures to achieve the evaluation thresholds of 90 dBA 1-hour Leq and limit noise increases to 10 dBA over the ambient. Even if supplemental information is provided to update the baseline noise levels in PMND, they might be overly broad and not be representative of the conditions at the residences most affected by the construction work. MM-NOI-1 should include a requirement for a multi-day noise survey at one or more locations near each project site (Martin Substation and Potrero Substation, if needed), conducted over a minimum 72-hours corresponding to the proposed construction days and hours.

[6] The Caltrans text uses the term "conservative" in the context that the values are low. From an impact evaluation perspective, the higher values of n predict lower values of vibration and could potentially be optimistic.

The PMND should provide quantitative evidence that the noise control measures identified in M-NO-2, such as temporary barriers or curtains, and placing stationary sources such as generators "as far away as possible", could reduce the impacts to less than significant.

Conclusions

Since the existing environment is not well established, there is insufficient foundation to determine the effect that the Project could make for temporary and on-going operations. The PMND must provide evidence that mitigation measure MM-NO-1 would reduce the impacts below the level of significance, and mitigation measure MM-NO-2 likewise must demonstrate that the project will have no significant impact on the future Potrero Power residences.

The vibration analysis fails to include the upper range of impact pile driving vibration, which could generate potentially significant impacts near the Potrero Substation.

Please feel free to contact me with any questions on this information.

Very truly yours,

WILSON IHRIG

Deborah A. Jue, INCE-USA
Principal

pge power asset pmnd review_wilson ihrig_march 4 2022.docx

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION



DEBORAH JUE

Principal

Since joining Wilson Ihrig in 1990, Ms. Jue has been involved in with many projects from environmental assessments and entitlements, through design development, construction documents and construction administration support. As an acoustical consultant, she has provided noise measurement, analysis and recommendations to control noise and vibration both at the interior of the project and at the neighboring properties. She has authored many reports concerning compliance with the requirements of California Noise Insulation Standards, Title 24, local Noise Elements, environmental assessments and Federal noise criteria, and is well aware of the additional design and construction technique requirements to achieve industry standards. Ms. Jue has authored or provided input for many environmental documents and technical studies in accordance with NEPA and California's CEQA regulations, most of them related to surface transportation, and she gives presentations to public officials when necessary to explain construction noise problems, noise mitigation goals, and noise control methods. She can develop construction noise and vibration criteria to address vibration damage potential to nearby buildings and sensitive structures, and vibration annoyance or disruption potential for occupants of nearby buildings.

Education

- M.S. in Mechanical Engineering, University of California, Berkeley, 1998
- B.S. in General Engineering: Acoustics, Stanford University, 1988

Professional Associations (Member)

- American Society of Mechanical Engineers
- Acoustical Society of America
- National Council of Acoustical Consultants
- Institute of Noise Control Engineering
- WTS
- Transportation Research Board, AEP80 Standing Committee Member (2021-2024)

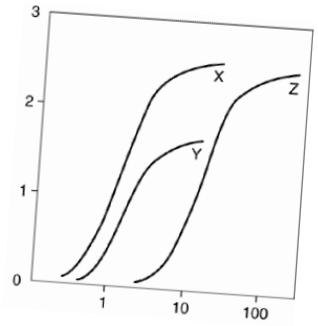
Research and Published Papers

- ACRP Report 175, ACRP 07-14, *Improving Intelligibility of Airport Terminal Public Address Systems*
- NCHRP 25-25, *Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects*
- *Transportation Research Record*, V. 2502, "Considerations to Establish Ground-Borne Noise Criteria to Define Mitigation for Noise-Sensitive Spaces"

Relevant Experience

- California High Speed Rail Caltrain Corridor EIR/EIS, San Francisco to San Jose
- UC Berkeley Northgate Hall A/V Renovations, Berkeley
- MacArthur Station, *long-term construction noise and vibration monitoring*, Oakland
- Safeway @ Claremont & College, *HVAC noise and construction noise monitoring*, Oakland
- ACTC I-80/Ashby, *interchange traffic noise analysis*, Berkeley and Emeryville
- ACTC I-680 Express Lanes, *traffic noise analysis*, Contra Costa County, CA
- Chase Arena, *construction noise and vibration monitoring*, San Francisco

ATTACHMENT B



Clark & Associates
Environmental Consulting, Inc.

OFFICE
12405 Venice Blvd
Suite 331
Los Angeles, CA 90066

PHONE
310-907-6165

EMAIL
jclark.assoc@gmail.com

May 16, 2025

Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Attn: Mr. Andrew Graf

Subject: Comments On Draft Environmental Impact Report (DEIR) For PG&E Power Acquisition Project, City and County of San Francisco, SCH No. 2023-005370ENV

At the request of Adams Broadwell Joseph & Cardozo (ABJC), Clark and Associates (Clark) has reviewed materials related to Draft EIR for the above referenced project prepared by the City and County of San Francisco (CCSF) Planning Department.

Clark's review of the materials in no way constitutes a validation of the conclusions or materials contained within the plan. If we do not comment on a specific item this does not constitute acceptance of the item.

Project Description:

According to the DEIR, CCSF proposes to purchase Pacific Gas and Electric Company (PG&E)owned electrical transmission and distribution assets (the "Assets") in San Francisco and San Mateo County that are needed to provide electricity service to customers within the city (the "Project"). After CCSF completes its acquisition of the Assets, it would own, operate, and maintain the electricity grid in San Francisco, most of which is currently owned by PG&E. This project does not include the purchase of PG&E's natural gas facilities; thus, PG&E would continue providing natural gas services to customers in San Francisco.

The change in ownership itself would not result in physical changes to the environment requiring environmental review; however,

construction would be needed to physically separate PG&E's existing electric system into two separate systems (generally divided along the San Francisco/San Mateo county border), to allow both systems to be safely, reliably, and independently operated by CCSF and PG&E. CCSF would provide electricity service to city customers; PG&E would continue to provide electricity service to its customers outside of San Francisco. The EIR focuses on these areas where physical changes to the environment would occur because of the project.

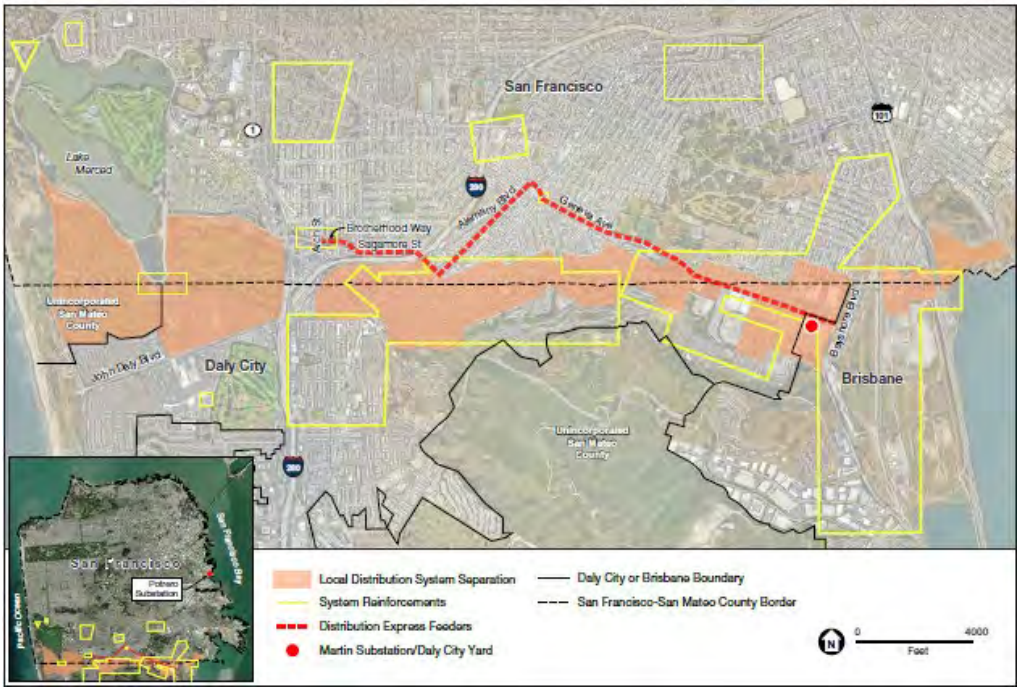


Figure 1: Project Area Overview Analyzed In DEIR

The portion of the project requiring new construction or modifications to existing facilities would primarily be in the southern portion of San Francisco and along the county border in the northern portions of Brisbane and Daly City. CCSF would modify the existing Martin Substation (or construct a new substation, which is analyzed in the EIR as a new substation variant), construct new underground express distribution feeders, and modify the existing distribution infrastructure. The distribution express feeders alignment would be approximately 3.8 miles long and generally installed within streets, sidewalks, and other publicly owned land. It would extend from near Arch Street in the west, south to Brotherhood Way and Sagamore Street, east along Sickles Avenue, northeast along Huron Avenue and Alemany Boulevard, and southeast along Geneva Avenue to the Martin Substation in Brisbane. Disconnecting and connecting distribution lines between overhead poles and underground

vaults could occur either above- or below-ground, and would be performed in small, discontinuous areas generally located near the county border. Construction associated with the project would take approximately 3 years after the purchase and transfer of the Assets.

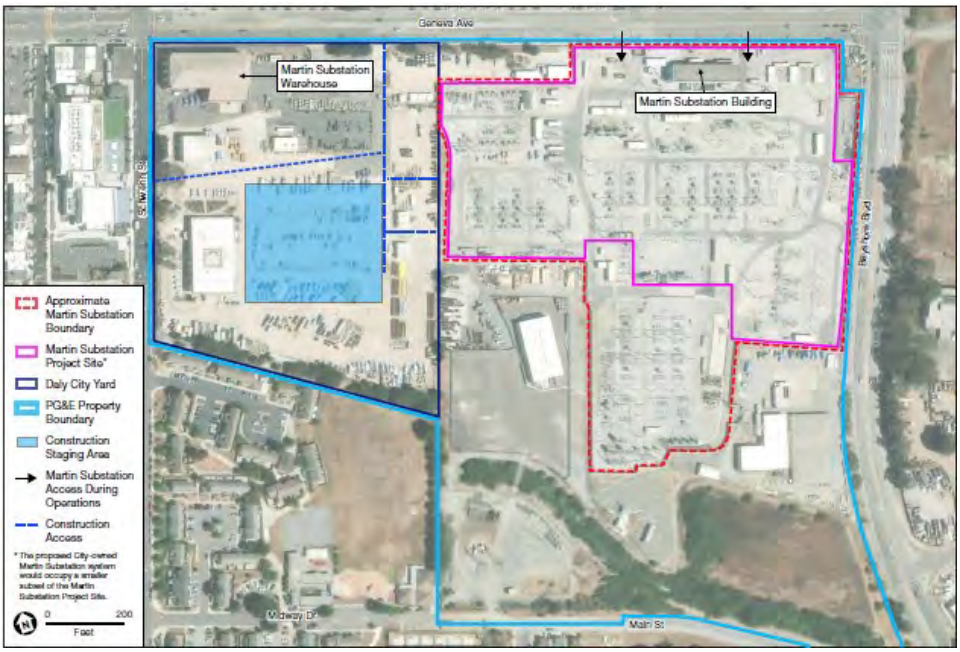


Figure 2: Martin Substation Project Site and Construction Staging Area

According to the Air Quality Technical Memorandum and Health Risk Assessment[1] prepared by Ramboll (Appendix F to the DEIR), the Martin Substation is an existing outdoor, air-insulated substation located on the borderline of Daly City and the City of Brisbane, where PG&E's high voltage transmission lines are reduced to lower voltage distribution lines to supply electricity to San Francisco. Construction occurring at this Project component would reconfigure and partition the Martin Substation into two interconnected utility systems. Construction activities are anticipated to include installation of new and relocation of existing transformers, demolition of existing structures, installation of new foundation pads, excavation to access existing duct banks for reconnection, construction of new underground duct banks and vaults, and installation of a galvanized fence.

The Martin Substation separation would require construction within areas subject to California Department of Toxic Substances Control (DTSC) restrictions due to hazardous substances in soil and

[1] Ramboll. 2024. Air Quality And Health Risk Assessment Results, PG&E Power Asset Acquisition Project, San Francisco, California, Case No. CASE NO. 2023-005370ENV. Pgs 5-6

groundwater, and thus would require obtaining DTSC approval of a soil management plan and a health and safety plan prior to any excavation. A land use covenant currently restricts operations and maintenance activities at the entire Martin Substation property and prohibits certain types of land uses (e.g., residential, hospital, school, daycare center). The anticipated excavation associated with the Martin Substation separation is approximately 7,930 cubic yards. Construction of this Project component is anticipated to take approximately 33 months.

The DEIR also includes an alternative to Martin Substation separation. Under the Project Variant, CCSF would construct a new City Substation in the adjacent Daly City Yard instead of the separation work at the existing substation. Ground disturbance in the Daly City Yard would require construction within areas subject to the same land use covenants, operations and maintenance agreements, and soil management plan requirements as the Martin Substation separation. The anticipated excavation associated with the new City substation is approximately 34,980 cubic yards. Construction of the new City Substation is expected to take 26 months. All other components of the Project (i.e., distribution express feeders, local distribution system separation, system reinforcements) would be the same as the Martin Substation separation.

Ramboll goes on to define the linear components of the Project as following components: distribution express feeders, local distribution system separation, and system reinforcements.

- **Distribution Express Feeders:** Approximately 3.8 miles of new underground distribution express feeders from Martin Substation would be constructed to connect Martin Substation and the existing distribution system in San Francisco. The proposed express feeders would be installed in duct banks. Underground construction would be completed using a cut-and-cover method (i.e., trenching) along roadway lanes. The linear trenching work would proceed at a rate of approximately 40 feet per day with a maximum open trench length of 100 to 400 feet occurring on each city block at a time. Construction of this Project component is anticipated to take approximately 12 months in total.
- **Local Distribution System Separation:** Construction of this Project component would reconfigure and separate overhead and below-ground distribution lines around the San Francisco-San Mateo County Border, requiring both overhead and underground construction with trenching activities. Construction activities for this Project component would include disconnecting existing line segments, adding or replacing telecommunications and electrical equipment, modifying existing line voltages, and reconnecting line segments to the appropriate

utility. The speed of work and maximum open trench length will be the same as the distribution express feeders, as discussed above. Construction of this Project component is anticipated to take approximately 24 months.

- **System Reinforcements:** This Project component would be implemented to maintain system reliability and the ability to restore power in the event of outages for utilities on either side of the San Francisco-San Mateo County Border. Underground construction activities as well as the speed of work and maximum open trench length for system reinforcements would be similar to those for the distribution express feeders and local distribution system separation. Construction of this Project component is anticipated to take approximately 28 months.

The Final phase of work analyzed in the DEIR are the other separation components include 1) modifications to retain PG&E access to non-electrical facilities, 2) operations control center, 3) operations and maintenance service yards; materials and equipment storage, and 4) telecommunications equipment. An existing building in the southeastern part of the City would be modified to house the proposed operations control center. Interior modifications for the operations control center, which are expected to take 14 months, would not require any heavy construction equipment. Except for the telecommunications equipment, which would be installed and subsumed under other excavation work (or in certain locations that would not require excavation), miscellaneous construction activities involving diesel construction equipment for these project components are not anticipated to last more than two months each.

Specific Comments

1. The Meteorological Data Utilized In The AERMOD Analysis Uses A Station That Is North Of The Project Site, Includes Only One Year Of Data, And Is A Significant Source Of Uncertainty.

22 - AQ-1

The selection of meteorological is critical to the integrity of air dispersion modeling results. According to the Air Quality Analysis and HRA: “Air dispersion modeling applications require the use of meteorological data that ideally are spatially and temporally representative of conditions in the immediate vicinity of the site under consideration. For this HRA, the Mission Bay meteorological data

for the year 2008 will be used. Both the San Francisco International Airport and Mission Bay meteorological stations present a similar pattern of wind conditions. However, the Mission Bay meteorological station was chosen because it is closer to the Project components, and it aligns with the Citywide HRA."[2] This rationale is not adequately supported.

The Mission Bay station is located approximately 4.25 miles north of the Project Site and is closer to the end of San Francisco Peninsula. This location is subject to wind patterns that are heavily influenced by the gap between Sausalito and San Fransico, and is downwind of the central San Francisco Peninsula. By contrast, the area Project Site lies a low-lying area between San Bruno Mountain and Mount Davidson, where wind dynamics are substantially different. Winds in this area tend to move through the gap and exit towards the southern end of San Francisco, suggesting that the wind environment at the Project site may not be adequately characterized by the Mission Bay station data.

The Air Quality Analysis and HRA claim that the meteorological data from the Mission Bay station is equivalent to the San Francisco Airport (SFO), but it does not provide a wind rose or other quantitative comparison to substantiate this claim. Without a wind rose or equivalent meteorological analysis, the assumption of equivalency lacks technical support and cannot be independently verified.

22 - AQ-1 cont.

Moreover, the use of only one year of data from a station that is not directly impacted by the Project is inconsistent with U.S. EPA Guidance. According to Section 8.4.2.1(e) of the *Revisions to the Guideline on Air Quality Models: Enhancements to the AERMOD Dispersion Modeling System and Incorporation of Approaches To Address Ozone and Fine Particulate Matter*,[3] (the gold standard for modeling): "The model user should acquire enough meteorological data to ensure that worst-case meteorological conditions are adequately represented in the model results. The use of 5 years of adequately representative NWS or comparable meteorological data, at least 1 year of site-specific, or at least 3 years of prognostic meteorological data, are required. If 1 year or more, up to 5 years, of site-specific data are available, these data are preferred for use in air quality analyses."

By relying solely on one year of data from a non-site-specific station, the analysis fails to demonstrate that the meteorological conditions at the Mission Bay station adequately represent

[2] Ibid. pg 11

[3] Federal Register. Vol. 82, No. 10/Tuesday, January 17, 2017/Rules and Regulations, https://www.govinfo.gov/content/pkg/FR-2017-01-17/pdf/2016-31747.pdf.

conditions at the Project site. This approach may understate potential impacts and does not meet the standard of representativeness recommended by the U.S. EPA.

22 - AQ-1 cont.

2. The Martin Substation Site Is Known To Have Hazardous Materials In The Soils And Groundwater, And Is Under A Land Use Covenant/Deed Restriction Regarding Any Excavations Within The Substation Facility. The LUC Does Not Include A Requirement To Monitor Dust During Excavations Onsite.

According to the DEIR,[4] "The Martin Substation is identified on multiple lists of hazardous materials sites compiled pursuant to Government Code section 65962.5. The following provides an overview of the history and status of environmental investigation at the Martin Substation, the location of project components within the subareas of investigation, and the land use covenants/deed restrictions that pertain to any excavations within the substation facilities." The soil beneath the site is contaminated with residues including benzene, polycyclic aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPH)-motor oil, and TPH-diesel.

Martin Service Center is a former manufactured gas plant (MGP) site and activities that may disturb subsurface soil are under oversight from the Department of Toxic Substances Control (DTSC). Areas of known MGP impacts have been documented across a large portion of the Site. MGP-impacted soils are managed in-place under a cap composed of asphalt, concrete, and/or chipseal.

23 - HZ-2

The DEIR references existing land use covenants, operations and maintenance agreements, and soil management requirements applicable to the Martin Substation separation and construction of the new City Substation and concludes these existing institutional controls and engineering measures are sufficient to prevent unacceptable risks to human health and the environment.[5] However, these measures are designed to manage residual contamination under stable conditions associated with existing operations. They were not developed to address the scale and intensity of intrusive-ground disturbing activities anticipated under the Project, including excavation, grading, utility trenching, and pile driving. Such activities have the potential to disturb contaminated soils, create new exposure

[4] DEIR, Appendix A, Initial Study. Pg 222,

[5] DEIR, Appendix A, Initial Study. Pgs. 222-226.

pathways, and facilitate contaminant mobilization into environmental media such as air, surface, and groundwater.

For example, a land use restriction is recorded for this Site includes a requirement that capped soils may not be disturbed without approval of a health and safety plan and an soil management plan by DTSC (DTSC and PG&E, October 17, 2002).



Figure 3: Areas Of Known Contamination

The Site is divided into several sections, including Daly City Yard, Brisbane Yard, Brisbane Yard Annex, Martin Substation, Levinson North Parcel, and the building located at 2850 Bayshore Blvd, Brisbane that was formerly the PSEA Clubhouse/Records Center and is now used as office and warehouse space for PG&E's General Construction Gas and Corporate Real Estate. From 1905 to 1916, an MGP operated on the Site at the current location of the PG&E Martin Service Center. Residual waste associated with the MGP operations, including lampblack and tar, is known to exist locally in the Site fill and on adjacent areas to the south and west. Previous environmental investigations conducted at the Site indicate that such waste variably exists under much of the Site to depths up to 16 feet below ground surface (bgs).

23 - HZ-2 cont.

Multiple soil investigation and characterization reports were prepared between 1987 and 2003. Data from the 1988 soil characterization report indicated that soil on portions of the Site was impacted with PAHs from MGP residues from 3 to 12 feet bgs, depending on the thickness of the overlying fill, with concentrations of total PAHs up to 6,951 milligrams per kilogram (mg/kg) (CH2M HILL, 1988). Total phenol concentrations in the soil samples ranged from 0.6 to 300 mg/kg and were detected in 11 out of the 25 borings. Benzene, toluene, ethylbenzene and xylenes (BTEX) concentrations ranged from 0.1 to 13.4 mg/kg. BTEX was detected in 7 of the 25 borings. The maximum concentration of cyanide was 7.11 mg/kg. Cyanide was detected in 16 of the borings, including 3 of the borings where field observations did not indicate the presence of MGP residues.

The Site has been divided into two Operable Units (OU-1 and OU-2). OU-1 includes the areas where the potential existed for contact with surface soil containing PAHs. These areas are on the western portion of the Site, including the bermed area along the southern boundary of the Daly City Yard and the Schwerin Street Strip. OU-2 encompasses the eastern portion of the Site and addresses the potential routes of PAH transport by surface water and groundwater. It includes the drainage ditch, storm drain and groundwater flowing offsite to the east.

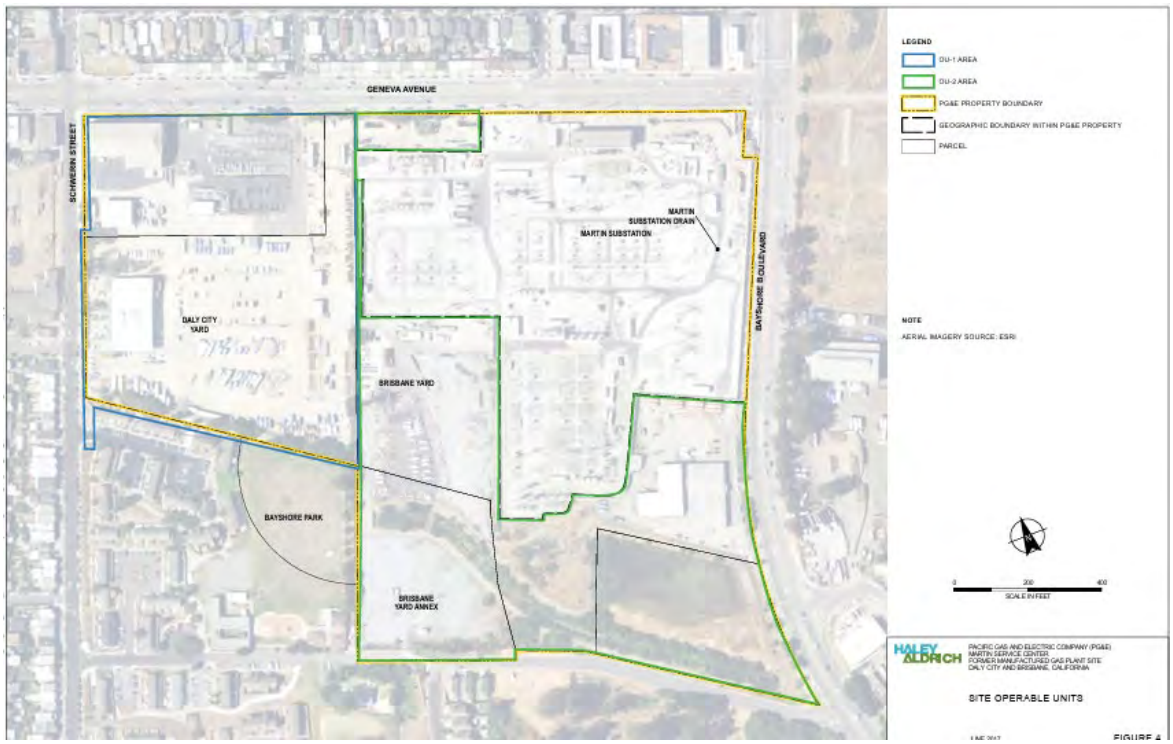


Figure 4: Operable Units

23 - HZ-2 cont.

PG&E then prepared a second remedial action plan in 1998 that further addressed potential routes of PAH transport offsite and included recordation of a second land use covenant to control future land use for the entirety of the Martin Service Center. The second land use covenant prohibits the following land uses: residence, hospital, public or private school, or day care center for children. The second land use covenant also expands the prohibition on soil disturbance without a soil management plan and health and safety plan approved by DTSC.

According to the DEIR, "The 1995 land use covenant applies only to the Daly City Yard. The 2002 land use covenant applies to the entire Martin Service Center. The covenants follow the land and notify landowners of site contaminants, restrict sensitive property uses, prohibit certain activities, require DTSC notice and approval of site construction, and require protection of site remediation remedial measures (e.g., caps and interceptor trench). As described above, both land use covenants prohibit activities that disturb soil below the caps without a soil management plan and health and safety plan approved by DTSC. The second land use covenant also requires that activities that may disturb the caps or the interceptor trench shall not be permitted without prior review and approval by the DTSC. All uses and development of the property must preserve the integrity of the cap and the interceptor trench."[6]

The 1995 land use covenant was based in part on the 1991 Human Health Risk Assessment[7] ("HHRA") assessed the risk to workers at the Martin Substation, the Daly Yard, the Brisbane Yard, the Brisbane Yard Annex, and the PSEA Clubhouse and Record Storage Facility. The assumptions in the HHRA did not envision the significant changes that will occur on-site under the DEIR, including excavation, grading, and construction activities below the cap. Nor did the HHRA include an assessment of the potential soil and groundwater contamination exposure to nearby residents or students and staff at the Bayshore Elementary School immediately adjacent to the Martin Substation.

23 - HZ-2 cont.

[6] DEIR, Appendix A, Initial Study. Pg 224

[7] CH2M Hill. 1991. Human Health And Environmental Risk Assessment Report PG&E Daly City Manufactured Gas Plant Site. Dated August 30, 1991, https://www.envirostor.dtsc.ca.gov/getfile?filename=/public%2Fdeliverable_documents%2F4419285416%2FPGE_Daly%20City%20HH-ERA%20vol%201.pdf.

Notably, according to the DTSC's Envirostor website, based on the 2015 Preliminary Endangerment Assessment[8] (PEA) of the school site, it was clear that polycyclic aromatic hydrocarbons (PAHs) from the PG&E manufactured gas plant (Martin Substation location) had impacted the school site.



Figure 5: Martin Substation And Surrounding Neighborhood

From Figure 5 (above) it is evident that the Martin Substation is surrounded by residential properties to the southwest, west, and north of the site. Residences along Main Street, Midway Drive, Schwerin Street and Geneva Avenue abut the Martin Substation property. In addition to the residences, Bayshore Elementary School is located immediately adjacent to the Martin Substation property.

Excavation in areas with known contamination could result in the release of volatile organic compounds ("VOCs") into the air, increasing inhalation risks for construction workers and adjacent sensitive receptors. Similarly, deep foundation work could breach existing contamination barriers or

23 - HZ-2 cont.

[8] Padre. 2015. Preliminary Environmental Assessment Bayshore Elementary School Reconstruction Project, 155 Oriente Street, Daly City, San Mateo County, California. Dated July 2015. Pg ES-1, https://www.envirostor.dtsc.ca.gov/getfile?filename=/public%2Fdeliverable_documents%2F3980558633%2FBayshore_FINAL_PEA.pdf.

create preferential pathways for contaminant migration into groundwater or nearby stormwater systems. The DEIR does not clarify whether the existing land use controls or engineering measures is sufficiently detailed or tailored to address the Project-specific construction activities. For example, the existing soil management plan prepared for routine operations and maintenance activities does not contain protocols necessary for managing large-scale earthwork, off-haul of contaminated soils, dewater, or other construction-phase environmental management needs. Without an updated, project-specific soil management plan or confirmation that the existing plan addresses the full range of construction activities, the DEIR's reliance on existing controls is misplaced.

Moreover, any dust generated onsite during the construction phase of the Project will impact these sensitive receptors, and the proposed air quality mitigation measures do not sufficiently protect nearby residents and students from potential migration of contaminated soil. Mitigation Measure M-AQ-2a requires implementation of basic best management practices ("BMPs") for controlling construction-related fugitive dust emissions. While basic BMPs may be appropriate for controlling nuisance dust from clean soils, they are not adequate for protecting public health when dust originates form soil known to contain hazardous substances.

For example, M-AQ-2a does not include enhanced protocols specifically tailored to hazardous dust, such as the use of soil binders or chemical stabilizers, application of impermeable tarps over excavated areas, or negative air pressure containment systems in high-risk zones. These are widely accepted practices for construction in contaminated areas but are entirely omitted.

23 - HZ-2 cont.

M-AQ-2 does not contain a requirement for real-time air quality monitoring of particulate matter or hazardous constituents during soul-disturbing activities. In addition, the currently approved remedial action plan does not include community air monitoring.[9] Without air monitoring, the Project cannot demonstrate that mitigation is effective or protects on-site workers and nearby receptors from exposure.

Finally, M-AQ-2 requires "All exposed surfaces (e.g., unpaved parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day." Watering the exposed area twice a day, reduces dust generation by 61%. Increasing the watering frequency to 3 times per day would reduce the total dust generation by 81%. The DEIR does not explain why a higher standard of control is not required in a setting with recognized contamination risks.

[9] DEIR, Appendix J, CDIM, Technical Memorandum, Site Management Requirements, PG&E Martin Service Station. Pg. 9.

3. The DEIR Does Not Disclose Vapor Intrusion Risks and the Health Risk Assessment Does Not Consider The Potential For Exposure To Soil Vapors

The DEIR fails to disclose and analyze the potential for vapor intrusion at the Martin Substation site. Based on the information presented, the DEIR neither provides sufficient site-specific data, nor incorporates scientifically sound methodology to assess the presence, extent, or implications of vapor intrusion risk, despite evidence showing subsurface contamination in proximity to and within the Project area. Vapor intrusion is a well-documented pathway by which VOCs and other hazardous vapors migrate from subsurface sources into overlying structures, potentially exposing occupants to carcinogenic and toxic compounds. Guidance from DTSC and U.S. EPA stresses the importance of vapor impact assessment in any redevelopment project involving former industrial, commercial, or brownfield sites.

The DEIR omits critical elements required for a credible vapor impact assessment, including the lack of risk modeling or mitigation measures. For example, the DEIR does not apply current screening levels for vapor risk (e.g., EPA's Vapor Intrusion Screening Level calculator or DTSC's Human Health Risk Assessment guidance). The DEIR should at a minimum reference the guidance from State and Federal authorities to ensure that all appropriate modeling and mitigation measures are accounted for. Those guidance include, but are not limited to: 24 - HZ-3

- CalEPA. 2015. Advisory – Active Soil Gas Investigations. California Environmental Protection Agency, Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, and San Francisco Bay Regional Water Quality Control Board. July.
- DoD [Department of Defense]. 2019. Matrix for Selecting Vapor Intrusion Investigation Technologies, DoD Vapor Intrusion Handbook Fact Sheet Update No: 007. July.
- DTSC. 2011a. Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). California Environmental Protection Agency, Department of Toxic Substances Control. October.
- DTSC. 2011b. Final Vapor Intrusion Mitigation Advisory, Revision 1. California Environmental Protection Agency, Department of Toxic Substances Control. October.
- ITRC [Interstate Technology & Regulatory Council]. 2007. Vapor Intrusion Pathway: A

Practical Guideline. VI-1. January.

- ITRC. 2014. Petroleum Vapor Intrusion: Fundamentals of Screening, Investigation, and Management. October.
- SF-RWQCB. 2022. Vapor Intrusion Mitigation Guidance, Technical Resource Document. San Francisco Bay Regional Water Quality Control Board. June 2022.
- USEPA. 2008. Engineering Issue: Indoor Air Vapor Intrusion Mitigation Approaches. EPA/600/R-08/115. October.
- USEPA. 2011a. Background Indoor Air Concentrations of Volatile Organic Compounds in North American Residences (1990–2005): A Compilation of Statistics for Assessing Vapor Intrusion. EPA 530-R-10-001. Office of Solid Waste and Emergency Response. June.
- USEPA. 2012a. Conceptual Model Scenarios for the Vapor Intrusion Pathway. Office of Solid Waste and Emergency Response. February.
- USEPA. 2012b. Petroleum Hydrocarbons and Chlorinated Solvents Differ in their Potential for Vapor Intrusion. Office of Underground Storage Tanks. March.
- USEPA. 2012c. U.S. EPA's Vapor Intrusion Database: Evaluation and Characterization of Attenuation Factors for Chlorinated Volatile Organic Compounds and Residential Buildings. Office of Solid Waste and Emergency Response. March 16.
- USEPA. 2013a. Evaluation of Empirical Data to Support Soil Vapor Intrusion Screening Criteria for Petroleum Hydrocarbon Compounds. U.S. Environmental Protection Agency, Office of Underground Storage Tanks. January.
- USEPA. 2013b. EPA Region 9 Guidelines and Supplemental Information Needed for Vapor Intrusion Evaluations at the South Bay National Priorities List (NPL) Sites. Letter to California Regional Water Quality Control Board – SF Bay Region. December 3.
- USEPA. 2014a. Engineering Issue: Challenges in Bulk Soil Sampling and Analysis for Vapor Intrusion Screening of Soil. USEPA Office of Research and Development, EPA/600/R-14-277, December.
- USEPA. 2014b. Engineering Issue: Passive Samplers for Investigations of Air Quality: Method Description, Implementation, and Comparison to Alternative Sampling Methods. USEPA Office of Research and Development, EPA/600/R-14-434, December.
- USEPA. 2015a. OSWER Technical Guide for Assessing and Mitigating the Vapor

24 - HZ-3 cont.

Intrusion Pathway from Subsurface Vapor Sources to Indoor Air.

- USEPA. 2015b. Technical Guide for Addressing Petroleum Vapor Intrusion at Leaking Underground Storage Tank Sites. Office of Underground Storage Tanks (OUST). EPA 510-R-15-001. June.
- USEPA. 2016. Petroleum Vapor Intrusion Modeling Assessment with PVI Screen. Office of Research and Development. EPA 600/R-16/175. August. USEPA. 2017a. Engineering Issue: Adsorption-based Treatment Systems for Removing Chemical Vapors from Indoor Air. US Environmental Protection Agency, Office of Research and Development. EPA/600/R-17/276. August.
- USEPA. 2017b. Documentation for EPA's Implementation of the Johnson and Ettinger Model to Evaluate Site Specific Vapor Intrusion into Buildings, Version 6.0. US Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. September.

Furthermore, the DEIR proposes no mitigation measures to address potential vapor intrusion impacts, such as vapor barriers or sub-slab depressurization systems, even on a contingency basis.

Moreover, the Health Risk Assessment (HRA) performed as part of the air quality impact analysis focused on the construction phase emissions of diesel particulate matter (DPM) from the construction activities at the Martin Substation, and linear components.[10] The HRA did not quantify the risks from construction emissions associated with 1) modifications to retain PG&E access to non-electrical facilities, 2) operations control center construction, 3) operations and maintenance service yards; materials and equipment storage, and 4) telecommunications equipment. Nor did the HRA did not quantify or analyze the health risks from soil vapors from volatile organic compounds and semi-volatile organic compounds that were left in place at the Martin Substation.

24 - HZ-3 cont.

According to the 2005 Environmental Characterization Sampling Report For The PG&E Martin and Jefferson Substations[11] (Secor), the subsurface at the Martin Substation is characterized as consisting either of sand with silt and gravel or gravelly silty sand (inferred fill materials) from the surface to approximately 4.5 to 8 feet bgs. This was underlain by gravelly sand, silty clayey sand, or silty sand to a depth of at least 8.25 to 16 feet bgs. Well-graded sand was encountered in B-1, B-2, and

[10] DEIR, Appendix F.

[11] Secor. 2005. Environmental Characterization Sampling Report PG&E Martin and Jefferson Substations Brisbane and Redwood City, California. Dated May 26, 2005. Pg 5.

B-3 between 8.25 and 14.5 feet bgs. Groundwater was encountered in each of the six soil borings at depths of between 4 and 5 feet bgs. As was noted above, data from the 1988 soil characterization reported benzene, toluene, ethylbenzene and xylenes (BTEX) concentrations ranged from 0.1 to 13.4 mg/kg in soils onsite. BTEX was detected in 7 of the 25 borings.

Benzene, toluene, ethylbenzene and xylenes are VOCs that readily transition from liquid to vapor phase under ambient environmental conditions. These compounds pose a well-documented risk of vapor intrusion, particularly within buildings constructed over or near VOC-impacted soil or within a subsurface vapor plume. Once vapor-phase contaminants migrate into enclosed structures, they can become concentrated in indoor air at levels significantly exceeding those found in ambient outdoor air, thereby exposing building occupants to elevated health risks. Construction workers are also at risk of inhalation exposure during site grading and subsurface disturbance activities.

24 - HZ-3 cont.

Despite this recognized hazard, none of the available investigations for the Martin Substation site report any collection or analysis of soil vapor data. CCSF's own consultant recognizes this gap.[12] The failure to conduct soil gas sampling or otherwise evaluate vapor-phase contamination represents a significant gap. Without this information, the extent and magnitude of VOC-related vapor intrusion risks remain unknown. The DEIR must consider the requirements of any and all investigation processes to define the lateral and vertical extent of any contamination prior to development of a site in a revised EIR.

4. The DEIR Does Not Evaluate Emissions from Construction Activities Required To Be Undertaken by PG&E To Make Its Grid Whole After the Proposed Acquisition

The DEIR fails to account for emissions associated with infrastructure construction activities that PG&E will be required to undertake because of CCSF's proposed acquisition of a portion of PG&E's electric grid. While the DEIR evaluates emission from direct construction and operation of the Project itself, it does not consider that PG&E will be required to undertake substantial construction work to reconfigure and stabilize its remaining system in response to the fragmentation caused by the acquisition. These reconfiguration activities may include rerouting distribution and transmission lines, constructing new substations or switching stations, reinforcing adjacent circuits, and performing

25 - PD-1 cont.

[12] DEIR, Appendix J, CDIM, Technical Memorandum, Site Management Requirements, PG&E Martin Service Station. Pg. 9. ("Neither the 1983 nor the 1998 RAP addresses vapor intrusion mitigation.")

network rebalancing. Each of these activities can entail extensive construction equipment use, haul truck trips, worker commute emissions, and fugitive dust, all of which contribute to the localized criteria air pollutant emissions and global greenhouse gas emissions. Emissions associated with these additional construction activities must be quantified and included in the air quality impact analysis.

25 - PD-1 cont.

5. The DEIR Underestimates Emissions from Hazardous Waste Rail Transport

The DEIR's air quality and health risk assessment includes emissions from the transport of hazardous waste materials using a combination of truck and rail transport.[13] However, the analysis significantly underestimates emissions by calculating one-way trip distances only to the edge of the San Francisco Bay Area Air Basin, rather than to the actual disposal site in Utah. Specifically, the DEIR assumes a truncated rail line-haul distance of 145 miles, which does not reflect the full length of the transport route. Publicly available data indicates that the actual landfill destination is located approximately 820 miles from the Project site. By failing to account for this full rail transport distance in its emissions modeling, the DEIR omits substantial air pollutant and greenhouse gas emissions associated with project-related waste disposal activities. This flaw leads to an underestimation of both criteria air pollutants (PM10, NOx) and health risk impacts from diesel particulate matter associated with rail haul emissions.

26 - AQ-3

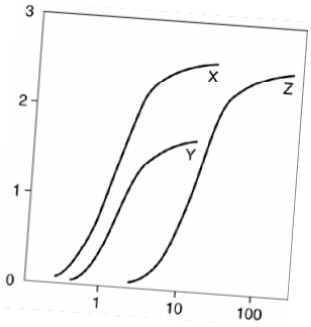
Conclusion

The facts identified and referenced in this comment letter lead me to reasonably conclude that the Project could result in significant impacts if allowed to proceed. A revised draft environmental impact report should be prepared to address these substantial concerns.

Sincerely,



[13] DEIR, Appendix F.



Clark & Associates
Environmental Consulting, Inc

OFFICE
12405 Venice Blvd.
Suite 331
Los Angeles, CA 90066

PHONE
310-907-6165

FAX
310-398-7626

EMAIL
jclark.assoc@gmail.com

James J. J. Clark, Ph.D.

Principal Toxicologist

Toxicology/Exposure Assessment Modeling

Risk Assessment/Analysis/Dispersion Modeling

Education:

Ph.D., Environmental Health Science, University of California, 1995
M.S., Environmental Health Science, University of California, 1993
B.S., Biophysical and Biochemical Sciences, University of Houston, 1987

Professional Experience:

Dr. Clark is a well recognized toxicologist, air modeler, and health scientist. He has 20 years of experience in researching the effects of environmental contaminants on human health including environmental fate and transport modeling (SCREEN3, AEROMOD, ISCST3, Johnson-Ettinger Vapor Intrusion Modeling); exposure assessment modeling (partitioning of contaminants in the environment as well as PBPK modeling); conducting and managing human health risk assessments for regulatory compliance and risk-based clean-up levels; and toxicological and medical literature research.

Significant projects performed by Dr. Clark include the following:

LITIGATION SUPPORT

Case: James Harold Caygle, et al, v. Drummond Company, Inc. Circuit Court for the Tenth Judicial Circuit, Jefferson County, Alabama. Civil Action. CV-2009

Client: Environmental Litgation Group, Birmingham, Alabama

Dr. Clark performed an air quality assessment of emissions from a coke factory located in Tarrant, Alabama. The assessment reviewed include a comprehensive review of air quality standards, measured concentrations of pollutants from factory, an inspection of the facility and detailed assessment of the impacts on the community. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Rose Roper V. Nissan North America, et al. Superior Court of the State Of California for the County Of Los Angeles – Central Civil West. Civil Action. NC041739

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to multiple chemicals, including benzene, who later developed a respiratory distress. A review of the individual's medical and occupational history was performed to prepare an exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to respiratory irritants. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: O'Neil V. Sherwin Williams, et al. United States District Court Central District of California

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to petroleum distillates who later developed a bladder cancer. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Summary judgment for defendants.

Case: Moore V., Shell Oil Company, et al. Superior Court of the State Of California for the County Of Los Angeles

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to chemicals while benzene who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Raymond Saltonstall V. Fuller O'Brien, KILZ, and Zinsser, et al. United States District Court Central District of California

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to benzene who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Richard Boyer and Elizabeth Boyer, husband and wife, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-7G.

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of a family exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: JoAnne R. Cook, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-9R

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of an individual exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Patrick Allen And Susan Allen, husband and wife, and Andrew Allen, a minor, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-W

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of a family exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Michael Fahey, Susan Fahey V. Atlantic Richfield Company, et al. United States District Court Central District of California Civil Action Number CV-06 7109 JCL.

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to refined petroleum hydrocarbons who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Constance Acevedo, et al., V. California Spray-Chemical Company, et al., Superior Court of the State Of California, County Of Santa Cruz. Case No. CV 146344

Dr. Clark performed a comprehensive exposure assessment of community members exposed to toxic metals from a former lead arsenate manufacturing facility. The former manufacturing site had undergone a DTSC mandated removal action/remediation for the presence of the toxic metals at the site. Opinions were presented regarding the elevated levels of arsenic and lead (in attic dust and soils) found throughout the community and the potential for harm to the plaintiffs in question.

Case Result: Settlement in favor of defendant.

Case: Michael Nawrocki V. The Coastal Corporation, Kurk Fuel Company, Pautler Oil Service, State of New York Supreme Court, County of Erie, Index Number I2001-11247

Client: Richard G. Berger Attorney At Law, Buffalo, New York

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to refined petroleum hydrocarbons who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the

known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Judgement in favor of defendant.

SELECTED AIR MODELING RESEARCH/PROJECTS

Client – Confidential

Dr. Clark performed a comprehensive evaluation of criteria pollutants, air toxins, and particulate matter emissions from a carbon black production facility to determine the impacts on the surrounding communities. The results of the dispersion model will be used to estimate acute and chronic exposure concentrations to multiple contaminants and will be incorporated into a comprehensive risk evaluation.

Client – Confidential

Dr. Clark performed a comprehensive evaluation of air toxins and particulate matter emissions from a railroad tie manufacturing facility to determine the impacts on the surrounding communities. The results of the dispersion model have been used to estimate acute and chronic exposure concentrations to multiple contaminants and have been incorporated into a comprehensive risk evaluation.

Client – Los Angeles Alliance for a New Economy (LAANE), Los Angeles, California

Dr. Clark is advising the LAANE on air quality issues related to current flight operations at the Los Angeles International Airport (LAX) operated by the Los Angeles World Airport (LAWA) Authority. He is working with the LAANE and LAX staff to develop a comprehensive strategy for meeting local community concerns over emissions from flight operations and to engage federal agencies on the issue of local impacts of community airports.

Client – City of Santa Monica, Santa Monica, California

Dr. Clark is advising the City of Santa Monica on air quality issues related to current flight operations at the facility. He is working with the City staff to develop a comprehensive strategy for meeting local community concerns over emissions from flight operations and to engage federal agencies on the issue of local impacts of community airports.

Client: Omnitrans, San Bernardino, California

Dr. Clark managed a public health survey of three communities near transit fueling facilities in San Bernardino and Montclair California in compliance with California Senate Bill 1927. The survey included an epidemiological survey of the effected communities, emission surveys of local businesses, dispersion modeling to determine potential emission concentrations within the communities, and a comprehensive risk assessment of each community. The results of the study were presented to the Governor as mandated by Senate Bill 1927.

Client: Confidential, San Francisco, California

Summarized cancer types associated with exposure to metals and smoking. Researched the specific types of cancers associated with exposure to metals and smoking. Provided causation analysis of the association between cancer types and exposure for use by non-public health professionals.

Client: Confidential, Minneapolis, Minnesota

Prepared human health risk assessment of workers exposed to VOCs from neighboring petroleum storage/transport facility. Reviewed the systems in place for distribution of petroleum hydrocarbons to identify chemicals of concern (COCs), prepared comprehensive toxicological summaries of COCs, and quantified potential risks from carcinogens and non-carcinogens to receptors at or adjacent to site. This evaluation was used in the support of litigation.

Client – United Kingdom Environmental Agency

Dr. Clark is part of team that performed comprehensive evaluation of soil vapor intrusion of VOCs from former landfill adjacent residences for the United Kingdom's Environment

Agency. The evaluation included collection of liquid and soil vapor samples at site, modeling of vapor migration using the Johnson Ettinger Vapor Intrusion model, and calculation of site-specific health based vapor thresholds for chlorinated solvents, aromatic hydrocarbons, and semi-volatile organic compounds. The evaluation also included a detailed evaluation of the use, chemical characteristics, fate and transport, and toxicology of chemicals of concern (COC). The results of the evaluation have been used as a briefing tool for public health professionals.

EMERGING/PERSISTENT CONTAMINANT RESEARCH/PROJECTS

Client: Ameren Services, St. Louis, Missouri

Managed the preparation of a comprehensive human health risk assessment of workers and residents at or near an NPL site in Missouri. The former operations at the Property included the servicing and repair of electrical transformers, which resulted in soils and groundwater beneath the Property and adjacent land becoming impacted with PCB and chlorinated solvent compounds. The results were submitted to U.S. EPA for evaluation and will be used in the final ROD.

Client: City of Santa Clarita, Santa Clarita, California

Dr. Clark is managing the oversight of the characterization, remediation and development activities of a former 1,000 acre munitions manufacturing facility for the City of Santa Clarita. The site is impacted with a number of contaminants including perchlorate, unexploded ordinance, and volatile organic compounds (VOCs). The site is currently under a number of regulatory consent orders, including an Immanent and Substantial Endangerment Order. Dr. Clark is assisting the impacted municipality with the development of remediation strategies, interaction with the responsible parties and stakeholders, as well as interfacing with the regulatory agency responsible for oversight of the site cleanup.

Client: Confidential, Los Angeles, California

Prepared comprehensive evaluation of perchlorate in environment. Dr. Clark evaluated the production, use, chemical characteristics, fate and transport, toxicology, and remediation of perchlorate. Perchlorates form the basis of solid rocket fuels and have recently been detected in water supplies in the United States. The results of this research

were presented to the USEPA, National GroundWater, and ultimately published in a recent book entitled *Perchlorate in the Environment*.

Client – Confidential, Los Angeles, California

Dr. Clark is performing a comprehensive review of the potential for pharmaceuticals and their by-products to impact groundwater and surface water supplies. This evaluation will include a review if available data on the history of pharmaceutical production in the United States; the chemical characteristics of various pharmaceuticals; environmental fate and transport; uptake by xenobiotics; the potential effects of pharmaceuticals on water treatment systems; and the potential threat to public health. The results of the evaluation may be used as a briefing tool for non-public health professionals.

PUBLIC HEALTH/TOXICOLOGY

Client: Brayton Purcell, Novato, California

Dr. Clark performed a toxicological assessment of residents exposed to methyl-tertiary butyl ether (MTBE) from leaking underground storage tanks (LUSTs) adjacent to the subject property. The symptomology of residents and guests of the subject property were evaluated against the known outcomes in published literature to exposure to MTBE. The study found that residents had been exposed to MTBE in their drinking water; that concentrations of MTBE detected at the site were above regulatory guidelines; and, that the symptoms and outcomes expressed by residents and guests were consistent with symptoms and outcomes documented in published literature.

Client: Confidential, San Francisco, California

Identified and analyzed fifty years of epidemiological literature on workplace exposures to heavy metals. This research resulted in a summary of the types of cancer and non-cancer diseases associated with occupational exposure to chromium as well as the mortality and morbidity rates.

Client: Confidential, San Francisco, California

Summarized major public health research in United States. Identified major public health research efforts within United States over last twenty years. Results were used as a briefing tool for non-public health professionals.

Client: Confidential, San Francisco, California

Quantified the potential multi-pathway dose received by humans from a pesticide applied indoors. Part of team that developed exposure model and evaluated exposure concentrations in a comprehensive report on the plausible range of doses received by a specific person. This evaluation was used in the support of litigation.

Client: Covanta Energy, Westwood, California

Evaluated health risk from metals in biosolids applied as soil amendment on agricultural lands. The biosolids were created at a forest waste cogeneration facility using 96% whole tree wood chips and 4 percent green waste. Mass loading calculations were used to estimate Cr(VI) concentrations in agricultural soils based on a maximum loading rate of 40 tons of biomass per acre of agricultural soil. The results of the study were used by the Regulatory agency to determine that the application of biosolids did not constitute a health risk to workers applying the biosolids or to residences near the agricultural lands.

Client – United Kingdom Environmental Agency

Oversaw a comprehensive toxicological evaluation of methyl-*tertiary* butyl ether (M*t*BE) for the United Kingdom's Environment Agency. The evaluation included available data on the production, use, chemical characteristics, fate and transport, toxicology, and remediation of M*t*BE. The results of the evaluation have been used as a briefing tool for public health professionals.

Client – Confidential, Los Angeles, California

Prepared comprehensive evaluation of *tertiary* butyl alcohol (TBA) in municipal drinking water system. TBA is the primary breakdown product of M*t*BE, and is suspected to be the primary cause of M*t*BE toxicity. This evaluation will include available information on the production, use, chemical characteristics, fate and transport in the environment, absorption, distribution, routes of detoxification, metabolites, carcinogenic potential, and remediation of TBA. The results of the evaluation were used as a briefing tool for non-public health professionals.

Client – Confidential, Los Angeles, California

Prepared comprehensive evaluation of methyl *tertiary* butyl ether (MTBE) in municipal drinking water system. MTBE is a chemical added to gasoline to increase the octane

rating and to meet Federally mandated emission criteria. The evaluation included available data on the production, use, chemical characteristics, fate and transport, toxicology, and remediation of MTBE. The results of the evaluation have been were used as a briefing tool for non-public health professionals.

Client – Ministry of Environment, Lands & Parks, British Columbia

Dr. Clark assisted in the development of water quality guidelines for methyl tertiary-butyl ether (MTBE) to protect water uses in British Columbia (BC). The water uses to be considered includes freshwater and marine life, wildlife, industrial, and agricultural (e.g., irrigation and livestock watering) water uses. Guidelines from other jurisdictions for the protection of drinking water, recreation and aesthetics were to be identified.

Client: Confidential, Los Angeles, California

Prepared physiologically based pharmacokinetic (PBPK) assessment of lead risk of receptors at middle school built over former industrial facility. This evaluation is being used to determine cleanup goals and will be basis for regulatory closure of site.

Client: Kaiser Venture Incorporated, Fontana, California

Prepared PBPK assessment of lead risk of receptors at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

RISK ASSESSMENTS/REMEDIAL INVESTIGATIONS

Client: Confidential, Atlanta, Georgia

Researched potential exposure and health risks to community members potentially exposed to creosote, polycyclic aromatic hydrocarbons, pentachlorophenol, and dioxin compounds used at a former wood treatment facility. Prepared a comprehensive toxicological summary of the chemicals of concern, including the chemical characteristics, absorption, distribution, and carcinogenic potential. Prepared risk characterization of the carcinogenic and non-carcinogenic chemicals based on the exposure assessment to quantify the potential risk to members of the surrounding community. This evaluation was used to help settle class-action tort.

Client: Confidential, Escondido, California

Prepared comprehensive Preliminary Endangerment Assessment (PEA) of dense non-aqueous liquid phase hydrocarbon (chlorinated solvents) contamination at a former printed circuit board manufacturing facility. This evaluation was used for litigation support and may be used as the basis for reaching closure of the site with the lead regulatory agency.

Client: Confidential, San Francisco, California

Summarized epidemiological evidence for connective tissue and autoimmune diseases for product liability litigation. Identified epidemiological research efforts on the health effects of medical prostheses. This research was used in a meta-analysis of the health effects and as a briefing tool for non-public health professionals.

Client: Confidential, Bogotá, Columbia

Prepared comprehensive evaluation of the potential health risks associated with the redevelopment of a 13.7 hectares plastic manufacturing facility in Bogotá, Colombia The risk assessment was used as the basis for the remedial goals and closure of the site.

Client: Confidential, Los Angeles, California

Prepared comprehensive human health risk assessment of students, staff, and residents potentially exposed to heavy metals (principally cadmium) and VOCs from soil and soil vapor at 12-acre former crude oilfield and municipal landfill. The site is currently used as a middle school housing approximately 3,000 children. The evaluation determined that the site was safe for the current and future uses and was used as the basis for regulatory closure of site.

Client: Confidential, Los Angeles, California

Managed remedial investigation (RI) of heavy metals and volatile organic chemicals (VOCs) for a 15-acre former manufacturing facility. The RI investigation of the site included over 800 different sampling locations and the collection of soil, soil gas, and groundwater samples. The site is currently used as a year round school housing approximately 3,000 children. The Remedial Investigation was performed in a manner

that did not interrupt school activities and met the time restrictions placed on the project by the overseeing regulatory agency. The RI Report identified the off-site source of metals that impacted groundwater beneath the site and the sources of VOCs in soil gas and groundwater. The RI included a numerical model of vapor intrusion into the buildings at the site from the vadose zone to determine exposure concentrations and an air dispersion model of VOCs from the proposed soil vapor treatment system. The Feasibility Study for the Site is currently being drafted and may be used as the basis for granting closure of the site by DTSC.

Client: Confidential, Los Angeles, California

Prepared comprehensive human health risk assessment of students, staff, and residents potentially exposed to heavy metals (principally lead), VOCs, SVOCs, and PCBs from soil, soil vapor, and groundwater at 15-acre former manufacturing facility. The site is currently used as a year round school housing approximately 3,000 children. The evaluation determined that the site was safe for the current and future uses and will be basis for regulatory closure of site.

Client: Confidential, Los Angeles, California

Prepared comprehensive evaluation of VOC vapor intrusion into classrooms of middle school that was former 15-acre industrial facility. Using the Johnson-Ettinger Vapor Intrusion model, the evaluation determined acceptable soil gas concentrations at the site that did not pose health threat to students, staff, and residents. This evaluation is being used to determine cleanup goals and will be basis for regulatory closure of site.

Client –Dominguez Energy, Carson, California

Prepared comprehensive evaluation of the potential health risks associated with the redevelopment of 6-acre portion of a 500-acre oil and natural gas production facility in Carson, California. The risk assessment was used as the basis for closure of the site.

Kaiser Ventures Incorporated, Fontana, California

Prepared health risk assessment of semi-volatile organic chemicals and metals for a fifty-year old wastewater treatment facility used at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

ANR Freight - Los Angeles, California

Prepared a comprehensive Preliminary Endangerment Assessment (PEA) of petroleum hydrocarbon and metal contamination of a former freight depot. This evaluation was as the basis for reaching closure of the site with lead regulatory agency.

Kaiser Ventures Incorporated, Fontana, California

Prepared comprehensive health risk assessment of semi-volatile organic chemicals and metals for 23-acre parcel of a 1,100-acre former steel mill. The health risk assessment was used to determine clean up goals and as the basis for granting closure of the site by lead regulatory agency. Air dispersion modeling using ISCST3 was performed to determine downwind exposure point concentrations at sensitive receptors within a 1 kilometer radius of the site. The results of the health risk assessment were presented at a public meeting sponsored by the Department of Toxic Substances Control (DTSC) in the community potentially affected by the site.

Unocal Corporation - Los Angeles, California

Prepared comprehensive assessment of petroleum hydrocarbons and metals for a former petroleum service station located next to sensitive population center (elementary school). The assessment used a probabilistic approach to estimate risks to the community and was used as the basis for granting closure of the site by lead regulatory agency.

Client: Confidential, Los Angeles, California

Managed oversight of remedial investigation most contaminated heavy metal site in California. Lead concentrations in soil excess of 68,000,000 parts per billion (ppb) have been measured at the site. This State Superfund Site was a former hard chrome plating operation that operated for approximately 40-years.

Client: Confidential, San Francisco, California

Coordinator of regional monitoring program to determine background concentrations of metals in air. Acted as liaison with SCAQMD and CARB to perform co-location sampling and comparison of accepted regulatory method with ASTM methodology.

Client: Confidential, San Francisco, California

Analyzed historical air monitoring data for South Coast Air Basin in Southern California and potential health risks related to ambient concentrations of carcinogenic metals and volatile organic compounds. Identified and reviewed the available literature and calculated risks from toxins in South Coast Air Basin.

IT Corporation, North Carolina

Prepared comprehensive evaluation of potential exposure of workers to air-borne VOCs at hazardous waste storage facility under SUPERFUND cleanup decree. Assessment used in developing health based clean-up levels.

Professional Associations

American Public Health Association (APHA)
Association for Environmental Health and Sciences (AEHS)
American Chemical Society (ACS)
California Redevelopment Association (CRA)
International Society of Environmental Forensics (ISEF)
Society of Environmental Toxicology and Chemistry (SETAC)

Publications and Presentations:

Books and Book Chapters

Sullivan, P., **J.J. J. Clark,** F.J. Agardy, and P.E. Rosenfeld. (2007). *Synthetic Toxins In The Food, Water and Air of American Cities.* Elsevier, Inc. Burlington, MA.

Sullivan, P. and **J.J. J. Clark**. 2006. *Choosing Safer Foods, A Guide To Minimizing Synthetic Chemicals In Your Diet.* Elsevier, Inc. Burlington, MA.

Sullivan, P., Agardy, F.J., and **J.J.J. Clark**. 2005. *The Environmental Science of Drinking Water*. Elsevier, Inc. Burlington, MA.

Sullivan, P.J., Agardy, F.J., **Clark, J.J.J.** 2002. *America's Threatened Drinking Water: Hazards and Solutions*. Trafford Publishing, Victoria B.C.

Clark, J.J.J. 2001. "TBA: Chemical Properties, Production & Use, Fate and Transport, Toxicology, Detection in Groundwater, and Regulatory Standards" in *Oxygenates in the Environment.* Art Diaz, Ed.. Oxford University Press: New York.

Clark, J.J.J. 2000. "Toxicology of Perchlorate" in *Perchlorate in the Environment.* Edward Urbansky, Ed. Kluwer/Plenum: New York.

Clark, J.J.J. 1995. Probabilistic Forecasting of Volatile Organic Compound Concentrations At The Soil Surface From Contaminated Groundwater. UMI.

Baker, J.; **Clark, J.J.J.**; Stanford, J.T. 1994. Ex Situ Remediation of Diesel Contaminated Railroad Sand by Soil Washing. Principles and Practices for Diesel Contaminated Soils, Volume III. P.T. Kostecki, E.J. Calabrese, and C.P.L. Barkan, eds. Amherst Scientific Publishers, Amherst, MA. pp 89-96.

Journal and Proceeding Articles

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008) A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equialency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. Organohalogen Compounds, Volume 70 (2008) page 002254.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008) Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. Organohalogen Compounds, Volume 70 (2008) page 000527

Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** (2007). "Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." *Environmental Research.* 105:194-199.

Rosenfeld, P.E., **Clark, J. J.,** Hensley, A.R., and Suffet, I.H. 2007. "The Use Of An Odor Wheel Classification For The Evaluation of Human Health Risk Criteria For Compost Facilities" Water Science & Technology. 55(5): 345-357.

Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** 2006. "Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006, August 21 – 25, 2006. Radisson SAS Scandinavia Hotel in Oslo Norway.

Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2005. "The Value Of An Odor Quality Classification Scheme For Compost Facility Evaluations" The U.S. Composting Council's 13th Annual Conference January 23 - 26, 2005, Crowne Plaza Riverwalk, San Antonio, TX.

Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2004. "The Value Of An Odor Quality Classification Scheme For Urban Odor" WEFTEC 2004. 77th Annual Technical Exhibition & Conference October 2 - 6, 2004, Ernest N. Morial Convention Center, New Orleans, Louisiana.

Clark, J.J.J. 2003. "Manufacturing, Use, Regulation, and Occurrence of a Known Endocrine Disrupting Chemical (EDC), 2,4-Dichlorophnoxyacetic Acid (2,4-D) in California Drinking Water Supplies." National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Minneapolis, MN. March 20, 2003.

Rosenfeld, P. and **J.J.J. Clark**. 2003. "Understanding Historical Use, Chemical Properties, Toxicity, and Regulatory Guidance" National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Phoenix, AZ. February 21, 2003.

Clark, J.J.J., Brown A. 1999. Perchlorate Contamination: Fate in the Environment and Treatment Options. In Situ and On-Site Bioremediation, Fifth International Symposium. San Diego, CA, April, 1999.

Clark, J.J.J. 1998. Health Effects of Perchlorate and the New Reference Dose (RfD). Proceedings From the Groundwater Resource Association Seventh Annual Meeting, Walnut Creek, CA, October 23, 1998.

Browne, T., **Clark, J.J.J.** 1998. Treatment Options For Perchlorate In Drinking Water. Proceedings From the Groundwater Resource Association Seventh Annual Meeting, Walnut Creek, CA, October 23, 1998.

Clark, J.J.J., Brown, A., Rodriguez, R. 1998. The Public Health Implications of MtBE and Perchlorate in Water: Risk Management Decisions for Water Purveyors. Proceedings of the National Ground Water Association, Anaheim, CA, June 3-4, 1998.

Clark J.J.J., Brown, A., Ulrey, A. 1997. Impacts of Perchlorate On Drinking Water In The Western United States. U.S. EPA Symposium on Biological and Chemical Reduction of Chlorate and Perchlorate, Cincinnati, OH, December 5, 1997.

Clark, J.J.J.; Corbett, G.E.; Kerger, B.D.; Finley, B.L.; Paustenbach, D.J. 1996. Dermal Uptake of Hexavalent Chromium In Human Volunteers: Measures of Systemic Uptake From Immersion in Water At 22 PPM. Toxicologist. 30(1):14.

Dodge, D.G.; **Clark, J.J.J.**; Kerger, B.D.; Richter, R.O.; Finley, B.L.; Paustenbach, D.J. 1996. Assessment of Airborne Hexavalent Chromium In The Home Following Use of Contaminated Tapwater. Toxicologist. 30(1):117-118.

Paulo, M.T.; Gong, H., Jr.; **Clark, J.J.J.** (1992). Effects of Pretreatment with Ipratroprium Bromide in COPD Patients Exposed to Ozone. American Review of Respiratory Disease. 145(4):A96.

Harber, P.H.; Gong, H., Jr.; Lachenbruch, A.; **Clark, J.**; Hsu, P. (1992). Respiratory Pattern Effect of Acute Sulfur Dioxide Exposure in Asthmatics. American Review of Respiratory Disease. 145(4):A88.

McManus, M.S.; Gong, H., Jr.; Clements, P.; **Clark, J.J.J.** (1991). Respiratory Response of Patients With Interstitial Lung Disease To Inhaled Ozone. American Review of Respiratory Disease. 143(4):A91.

Gong, H., Jr.; Simmons, M.S.; McManus, M.S.; Tashkin, D.P.; Clark, V.A.; Detels, R.; **Clark, J.J.** (1990). Relationship Between Responses to Chronic Oxidant and Acute

Ozone Exposures in Residents of Los Angeles County. American Review of Respiratory Disease. 141(4):A70.

Tierney, D.F. and **J.J.J. Clark.** (1990). Lung Polyamine Content Can Be Increased By Spermidine Infusions Into Hyperoxic Rats. American Review of Respiratory Disease. 139(4):A41.

ATTACHMENT C

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

CALIFORNIA
WASHINGTON
NEW YORK

WI #25-001.11

May 17, 2025

Andrew J. Graf, Esq.
Associate Attorney
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, California 94080

SUBJECT: PG&E Power Asset Acquisition Draft EIR, Comments on the Noise and Vibration Analysis

Dear Mr. Graf,

Per your request, I have reviewed the subject matter documents for the PG&E Power Asset (Project) Draft Environmental Impact Report (DEIR) located in San Francisco and San Mateo counties. We previously provided comments on the Preliminary Mitigated Negative Declaration (PMND). The DEIR includes a noise analysis in Chapter 3.2.

The Proposed Project would take over the power distribution within San Francisco county, and this will require the following components that would potentially generate noise or vibration impacts:

- Separate the system that would serve San Francisco City and County (SFCC) from the rest of the PG&E system at the Martin Substation in Brisbane,
- Install 3.8 miles of new distribution express feeders in five (segments),
- Modify local distribution systems at three areas along the San Francisco-San Mateo county borders so that the system serving SFCC is clearly separated from the PG&E system serving San Mateo county,
- Reinforce the system with installation of about 4.2 miles of underground duct banks,
- Modifications to non-electrical infrastructure to separate SFCC and PG&E systems including a new standby diesel generator at the Operations Control center,
- Reconfigure Martin Substation, located on Geneva Avenue near Bayshore Boulevard in Brisbane or, in the alternative, construct a new City Substation in the Daly City Yard

In our February 26, 2022 comment letter on the PMND, we identified shortcomings of the PMND. For the most part these items have been addressed in the DEIR except as noted below:

1. **Baseline noise levels were not clearly established in the PMND, and some issues remain in the DEIR:**
   The DEIR uses the term "ambient" consistent with general environmental analysis practices, referencing average noise levels (Leq). However, this usage conflicts with the specific

27 - NO-1

definition provided in the San Francisco Police Code (SFPC), which defines "ambient" as the "lowest sound level repeating itself during a minimum 10-minute period". In acoustical terms this is usually interpreted as the L_{90} or L_{99} metric – i.e., the noise level exceeded 90% or 99% of the time, respectively. The DEIR provides the L_{90} for only four of the five long-term measurement locations in DEIR Table 3.2-3, and it provides no L90 data for the twenty-two short-term measurements. This omission is significant because it prevents meaningful comparison between existing ambient noise levels as defined by the SFPC and project-generated noise.

Furthermore, the difference between Leq and L_{90} is significant. The Leq is a single number that represents the equivalent amount of time-varying sound that occurs over a given time. The Leq is directly affected by loud noises and frequently occurring intermittent noises such as cars passing by. The L_{90} is usually considered the background noise level over a given time, and it is usually controlled by continuous noise such as air-conditioners, distant freeway traffic, or other constant sources. SFPC compliance considers how a (new) noise source compares to the background ambient (L_{90}), not the equivalent level (Leq).

27 - NO-1 cont.

SEC. 2901. DEFINITIONS.

(a) "Ambient" means the lowest sound level repeating itself during a minimum ten-minute period as measured with a type 1, precision sound level meter, using slow response and "A " weighting. The minimum sound level shall be determined with the noise source at issue silent, and in the same location as the measurement of the noise level of the source or sources at issue. However, for purposes of this chapter, in no case shall the ambient be considered or determined to be less than: (1) Thirty-five dBA for interior residential noise, and (2) Forty-five dBA in all other locations. If a significant portion of the ambient is produced by one or more individual identifiable sources of noise that contribute cumulatively to the sound level and may be operating continuously during the minimum ten-minute measurement period, determination of the ambient shall be accomplished with these separate identifiable noise sources silent or otherwise removed or subtracted from the measured ambient sound level.

2. **Significance criteria were improperly established in the PMND and the issues have not been addressed in the DEIR:**
   As noted above, without documentation of the SFPC "ambient", the allowable noise limits are inaccurate for operational noise analyses in San Francisco.
3. **Operational noise analysis in the PMND had errors which have not been addressed in the DEIR:**
   Transformer noise: The DEIR relies on NEMA sound level data for transformer noise estimation; however, the analysis misapplies or incompletely applies NEMA TP 80050-2013 (R2024), formerly NEMA TR-1-2013. Importantly, the sound levels referenced in this standard do not directly represent either sound pressure levels (SPL) nor sound power levels (PWL). Rather they are reference sound levels that must be converted into SPL or PWL using the radiating surface area of the transformer enclosure, which the DEIR fails to consider.[1] Although Table 2-2 of the Project Description lists the voltage settings for the new transformers, the specific basic insulation level (BIL), power rating (MVA) and surface area dimensions (sq. ft. or sq m.) of the transformers are not provided. These three values are required to determine the pressure noise level using the NEMA methodology. According to

28a - NO-3

[1] Methods to calculate for far-field use are described in Ver and Beranek, "Noise and Vibration Control Engineering," and in the help notes for the Strutt Acoustics software, https://strutt.arup.com/help/Empirical/LMTransformer.htm

publicly available data from a Daelim transformer manufacturer, the power rating for a 230kV step down transformer may range from 10MVA to 25MVA, with a BIL of up to 900.[2] While the DEIR does not provide physical dimensions, images from the same source suggest that each vertical face of the transformer should be 50 to 100 sq ft., providing a total radiating surface area of approximately 300 square feet. Using these parameters, a transformer rated at 25,000 kVA would have a reference sound level of approximately 77 dBA. Applying standard acoustic propagation formulas, this corresponds to a SPL of 78 dBA at 6 feet distance, and a 60 dBA at 50 feet distance. For comparison, the FTA document cited in the DEIR analysis indicates that transit substations – which are similar in impact and scale – can generate a sound level of 63 dBA at 50 feet distance[3]. When extrapolated to a 6 feet distance, this equates to approximately 81 dBA. These two independent estimates both significantly exceed the DEIR's stated transformer noise level of 55 dBA at 6 feet, indicating that the DEIR underestimates potential transformer noise emissions.

28a - NO-3 cont.

Operations Control Center: Since it will be located within the City of San Francisco, the noise analysis must show compliance with a noise limit 8 dBA above the "ambient" (L90).

28b - NO-1

Backup Generators: Backup generators should be compared to daytime noise limits during testing. Other projects with backup generators within the City of San Francisco are subject to this limit, such as AT&T 430 Bush/555 Pine Street, 1455 Van Ness, and Seacliff No. 2 Pump Station.

28c - NO-3

HVAC: HVAC noise must be compared to the proper "ambient" noise limit (L90).

Service Yard: Service yard noise must be compared to "ambient" (L90) as appropriate for the time of days those activities would occur.

28d - NO-1

4. **Vibration analysis was inaccurate in the PMND; the DEIR corrected some deficiencies, but fails to account for soil and subsurface conditions in its vibration analysis:** The calculations in Table 3.2-17 and Table 3.2-18 appear to use the Caltrans recommended value of n=1.1 to determine the rate of change for vibration sources as a function of distance. While this assumption is typically conservative for distances greater than the reference distance of 25 feet, it may not be sufficiently protective in areas where pile driving would occur within 25 feet of existing structures. In such cases, more site-specific information regarding soil and subsurface conditions is needed to determine whether a higher propagation rate exponent (e.g., n=1.5) would be appropriate to account for potentially greater transmissivity to avoid structural damage. The DEIR does not prohibit future positioning of the new City Substation or other project components closer to existing on-site buildings. Therefore, nothing would prevent pile driving from occurring within 25 feet of existing structures.

   Page 3.2-55 of the DEIR acknowledges that impact pile driving would be needed for new City Substation Variant, but it does not provide a reference peak particle velocity (PPV) in the DEIR or in Appendix E (Noise and Vibration Technical Memorandum and Noise Methods Memorandum). The DEIR cites both Caltrans and FTA reference sources: Caltrans (section 7.1.1) provides a PPV of 0.65 in/sec at 25 feet, while the FTA provides an upper range value of 1.518 in/sec at 25 feet (FTA Table 7-4). The DEIR indicates that the nearest structure is a modern industrial/commercial building located 70 feet from the source. Using the Caltrans

29 - NO-5

[2] https://www.daelimtransformer.com/220kv-transformer.html
[3] Table 4-24, FTA 2018

reference level, predicted vibration would be 0.209 in/sec PPV, (Appendix E p. 57); using the FTA upper-range value, predicated vibration increases to approximately 0.489 in/sec PPV, which is just below the Caltrans criterion of 0.5 in/sec PPV for modern industrial/commercial buildings. The analysis indicates a buffer of only two feet between the projected vibration level and the damage criterion, suggesting that the margin of safety is minimal. The DEIR does not address this narrow margin, nor does it assess whether site-specific soil conditions warrant a more conservative propagation rate or whether the higher FTA reference should be used given uncertainty in the equipment-specific vibration characteristics.

29 - NO-5 cont.

Impacts NO-1 and NO-2: Noise Impacts from Construction

Mitigation Measure M-NO-1: Construction Noise Control for Generator Operations

The DEIR assumes that the construction generators would produce 87 dBA at 25 feet (Table 3.2-13). To mitigate this impact, the DEIR identifies M-NO-1, which requires the use of "quiet" generators or acoustical enclosures that ensure no more than 5 dBA above ambient levels during nighttime operation. The DEIR fails to define what constitutes a "quiet" generator or provide evidence demonstrating that quiet generators could meet the identified performance threshold.

Honda manufactures many models of portable generators. Their EB5000X provides 5000 watts and produces 65 dBA under full rated load at a distance of 23 feet.[4] Which is more than 20 dBA quieter than the unit used in the analysis. Scaled to the worst-case distance, the Honda EB5000X would generate 69 dBA at 15 feet which would be less than the 76 dBA ambient-based noise limit used by the DEIR for the Trenchless Construction (p. 3.2-33). Thus, based on the Honda information, EB5000X (5000 watts) or similar "quiet" generators could meet the 76 dBA noise limit for a single unit in operation. However, the noise inside the residence would be 54 dBA assuming open windows, or 44 dBA assuming closed windows; the "quiet" generators would potentially exceed the 45 dBA interior noise limit during nighttime hours depending on the generator size and noise level.

30 - NO-4

M-NO-1 also does not explain how compliance will be verified. The DEIR does not discuss how noise impacts will be measured, what monitoring procedures will be implemented, or enforcement actions that will be taken if noise thresholds are exceeded. Without these details, there is no assurance that generator-related noise will be effectively controlled.

Finally, M-NO-1 does not clearly define "acoustical enclosure." Typically, enclosures refer to 3 to 6-sided material (such as plywood) that achieves 1.5 pound per square foot or better. However, a temporary sound curtain or a sound tent can be installed around the pit to provide additional shielding, especially during nighttime hours. With a minimum of 1.5 PSF sound barrier material (e.g., limp mass barrier), this curtain/tent could reduce the noise by at least 5 dBA, and possibly more, depending on the site-specific circumstances. Clear sound blocking materials are available if they are needed to provide some visibility for drivers compared to opaque materials.

- **Mitigation Measure M-NO-1** should require the use of "quiet" generators, provide a clear definition of acceptable generator equipment (including allowable noise ratings at specific distances) and acoustical enclosures, and outline a robust monitoring and enforcement plan. The measure should also require pre-construction ambient noise surveys, on-site verification

[4]Sound Level Comparison chart at https://powerequipment.honda.com/generators

of generator noise, and corrective actions if measured noise levels exceed the performance standard. Acoustic enclosures may be needed as additional measures on a site-specific basis.

30 - NO-4 cont.

The DEIR claims that the launch pit will reduce noise from the augur drill which "would be shielded within the bottom of the launch pit" by 15 dBA, citing a reference for an earthen berm. However, this comparison is not technically appropriate. An earthen berm is effective when it provides horizontal shielding for a receiver at a similar height as the source, while a launch pit is only effective when the edge of the pit blocks line of sight from the source and its reflections within the pit to nearby a receivers – receivers at second floors and higher would receive little or no shielding, and these are materially different in acoustic performance. Moreover, the DEIR does not specify the depth of the launch pit. Assuming the augur drill is located at a depth of10 feet, and at the bottom of the pit, nearby residences located 15 feet away may experience approximately 15 dBA of noise reduction based on point source barrier geometry (e.g., Maekawa). However, if the nearby residences are two stories or taller, the effective shielding would be significantly reduced to at most a 10 dBA reduction because the elevated height limits the barrier's effectiveness. If there are multi-story buildings in the vicinity of the proposed launch pits, noise levels could reach 74 dBA.

31 - NO-2

- **Mitigation Measure M-NO-1** should require noise control, such as enhanced barriers, enclosures, or restrictions on operating hours, for the augur drill in the launch pit to reduce potentially significant noise impacts.

Impact NO-3: Noise Impacts from Operations

Mitigation Measure M-NO-3a (Operational Noise Analysis and Attenuation for Stationary Noise Sources)

Since the noise limit is lower (or not yet determined) based on the discussion above regarding SFPC ambient (L90) and sound source assumptions for the transformers and backup generators, the DEIR analysis must be revised to evaluate whether additional mitigation is required to reduce potential noise impacts to a less than significant level.

- **Mitigation Measure M-NO-3a:** additional mitigation, such as site-specific noise barrier heights, may need to be identified when the baseline conditions are correctly identified. The mitigation measure must include noise limits for the equipment which are feasible to procure.

Mitigation Measure M-NO-3b: Operational Noise Analysis and Attenuation for Service Yards

32 - NO-1

Since the noise limit is lower (or not yet determined) based on the discussion above regarding SFPC ambient (L90), the DEIR analysis must be revised to evaluate whether additional mitigation is required to reduce potential noise impacts to a less than significant level. Sleep disturbance is widely recognized as a significant and unacceptable environmental impact. Noise can disturb sleep by making it more difficult to fall asleep, by waking someone after they are asleep, or by altering their sleep stage, e.g., reducing the amount of rapid eye movement (REM) sleep. Additionally, nighttime noise exposure has also been linked to increased blood pressure, increased heart rate, increase in body movements, and other physiological effects. Not surprisingly, people whose sleep is disturbed by noise often experience secondary effects such as cognitive decline, increased fatigue, depressed mood, and decreased work performance.

- **Mitigation Measure M-NO-3b:** additional mitigation, such as site-specific noise barrier heights, may need to be identified when baseline conditions are correctly identified. The

mitigation measure must include noise limits for the equipment that operates in the yards which are feasible to procure.

32 - NO-1 cont.

Impact NO-4: Vibration Impacts from Construction

Mitigation Measure M-NO-4a (Protection of Adjacent Buildings/Structures and Vibration Monitoring During Construction)

As noted above, information regarding soil and subsurface conditions is necessary to determine potential vibration impacts and protections measures given that there is no condition prohibiting pile driving activities from occurring within 25 feet of existing onsite buildings.

- **Mitigation Measure M-NO-4a** must include consultation with a geotechnical engineer to ensure that appropriate actions are taken for protection measures where buildings are within 25 feet from pile driving activities.

The New City Substation Project Variant would include impact pile driving. The DEIR identified the closest building at 70 feet from the pile driving,[5] but the buffer distance to avoid impacts using the FTA vibration sources is 60 feet.[6]

- **Mitigation Measure M-NO-4a** must include language to verify the appropriate impact pile driving vibration level and update the buffer distance shown on page 3.2-55 in the Vibration Management and Monitoring Plan to confirm whether protection measures would be needed near the New City Substation.

33 - NO-5

Conclusions

The noise analysis for DEIR contains several omissions and errors. Correcting these issues would potentially require additional mitigation measures to control construction noise and vibration and operational noise.

Please feel free to contact me with any questions regarding this information.

Very truly yours,

WILSON IHRIG

Deborah Jue
Signer ID: IDIQFOL113...

Deborah A. Jue, INCE-USA
Principal

[5] DEIR at p. 3.2-61.
[6] DEIR at p. 3.2-55.

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION



DEBORAH JUE

Principal

Since joining Wilson Ihrig in 1990, Ms. Jue has been involved in with many projects from environmental assessments and entitlements, through design development, construction documents and construction administration support. As an acoustical consultant, she has provided noise measurement, analysis and recommendations to control noise and vibration both at the interior of the project and at the neighboring properties. She has authored many reports concerning compliance with the requirements of California Noise Insulation Standards, Title 24, local Noise Elements, environmental assessments and Federal noise criteria, and is well aware of the additional design and construction technique requirements to achieve industry standards. Ms. Jue has authored or provided input for many environmental documents and technical studies in accordance with NEPA and California's CEQA regulations, most of them related to surface transportation, and she gives presentations to public officials when necessary to explain construction noise problems, noise mitigation goals, and noise control methods. She can develop construction noise and vibration criteria to address vibration damage potential to nearby buildings and sensitive structures, and vibration annoyance or disruption potential for occupants of nearby buildings.

Education

- M.S. in Mechanical Engineering, University of California, Berkeley, 1998
- B.S. in General Engineering: Acoustics, Stanford University, 1988

Professional Associations (Member)

- American Society of Mechanical Engineers
- Acoustical Society of America
- National Council of Acoustical Consultants
- Institute of Noise Control Engineering
- WTS
- Transportation Research Board, AEP80 Standing Committee Member (2021-2024)

Research and Published Papers

- ACRP Report 175, ACRP 07-14, *Improving Intelligibility of Airport Terminal Public Address Systems*
- NCHRP 25-25, *Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects*
- *Transportation Research Record*, V. 2502, "Considerations to Establish Ground-Borne Noise Criteria to Define Mitigation for Noise-Sensitive Spaces"

Relevant Experience

- California High Speed Rail Caltrain Corridor EIR/EIS, San Francisco to San Jose
- UC Berkeley Northgate Hall A/V Renovations, Berkeley
- MacArthur Station, *long-term construction noise and vibration monitoring*, Oakland
- Safeway @ Claremont & College, *HVAC noise and construction noise monitoring*, Oakland
- ACTC I-80/Ashby, *interchange traffic noise analysis*, Berkeley and Emeryville
- ACTC I-680 Express Lanes, *traffic noise analysis*, Contra Costa County, CA
- Chase Arena, *construction noise and vibration monitoring*, San Francisco

COX CASTLE

Cox, Castle & Nicholson LLP
50 California Street, Suite 3200
San Francisco, California 94111-4710
P: 415.262.5100 **F**: 415.262.5199

Christian H. Cebrian
415.262.5123
ccebrian@coxcastle.com

File No. 100590

April 2, 2025

VIA EMAIL

Julie Moore
Principal Environmental Planner
49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103
Email: julie.moore@sfgov.org
CPC.PGEPowerAssetsEIR@sfgov.org

Re: Case No. 2023-005370ENV –Draft Environmental Impact Report for the PG&E Power Asset Acquisition Project - Request for Extension of Time

Dear Ms. Moore:

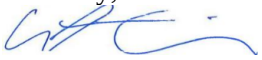
Our firm represents Pacific Gas and Electric Company ("PG&E") related to the above referenced project. On behalf of PG&E, we request that the comment period on the Draft Environmental Impact Report for the PG&E Power Acquisition Project (Case No. 2023-005370ENV) ("DEIR") be extended 15 days to May 20, 2025.

The technical nature of the separation work and substation upgrades and the large geographic scope of the proposed project requires significant review and analysis by PG&E's employees in addition to their regular employment duties. PG&E's technical review of the DEIR's proposed electrical grid changes is necessary to determine if there are constraints on the feasibility of the proposed project and the proposed alternatives. The technical review is also required to determine if the proposed components of the project would achieve required reliability and redundancy standards for the proposed separated San Francisco and San Mateo County systems.

To PG&E's knowledge, a limited 15-day extension to the comment period would not significantly impact the timeline of the project or create any other significant burden on the San Francisco Public Utilities Commission. However, the requested extension would reduce the substantial burden on PG&E's employees who are now diligently reviewing the DEIR. Providing PG&E and the public a 60-day comment period would afford the opportunity for more robust public participation and a more thorough environmental review. Thank you for your consideration.

1 - GC-2

Sincerely,



Christian H. Cebrian

CHC

100590\18497970v2

COX CASTLE

Cox, Castle & Nicholson LLP
50 California Street, Suite 3200
San Francisco, California 94111-4710
P: 415.262.5100 **F**: 415.262.5199

Christian H. Cebrian
415.262.5123
ccebrian@coxcastle.com

File No. 100590

May 19, 2025

VIA E-MAIL

Julie Moore
Principal Environmental Planner
49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103
Email: julie.moore@sfgov.org
CPC.PGEPowerAssetsEIR@sfgov.org

Re: Case No. 2023-005370ENV – Comments on Draft Environmental Impact Report for the PG&E Power Asset Acquisition Project

Dear Ms. Moore:

Our Firm submits these comments on the Draft Environmental Impact Report ("DEIR") for the PG&E Power Asset Acquisition Project ("Project") in the City and County of San Francisco ("CCSF") on behalf of Pacific Gas and Electric Company ("PG&E"). PG&E has long invested in and been an integral member of not only the CCSF community, but also the surrounding cities (*e.g.*, Daly City, Brisbane) and the greater Northern and Central California region.[1] Accordingly, PG&E seeks to ensure that any environmental effects and changes to CCSF and the greater region from the Project are sufficiently analyzed and addressed.

Despite the passage of nearly three years since CCSF determined the previously published Mitigated Negative Declaration ("MND") was an inadequate California Environmental Quality Act ("CEQA") document for the Project, and a DEIR was required[2], our review of the DEIR indicates that CCSF remains non-compliant with CEQA in its assessment of the Project. It appears that CCSF remains committed to pushing forward its CEQA review of the Project even though the Project planning is incomplete and the approval of the Project by the *proper* lead agency, the California Public Utilities Commission ("CPUC"), remains years away. This has resulted in a DEIR that does not present to the public or relevant decision makers a meaningful opportunity for environmental review. A review of the DEIR provides the impression that CCSF's environmental review team has not been adequately informed (or informed at all) by CCSF staff involved in CPUC proceedings as to the likely scope of the

1 - OC-2

2 - PD-6

[1] Since its formation in 1905, PG&E has grown to service approximately 16 million people throughout a 70,000-square-mile *inter-connected* service area in Northern and Central California. (*See* https://www.pge.com/en/about/company-information/company-profile.html [last accessed April 2025].)

[2] *See* Letter from Lisa Gibson (CCSF Environmental Review Officer) to Barbara Hale (CCSF Assistant General Manager, Power Enterprise), dated July 8, 2022—entitled "Appeals of PG&E Power Asset Acquisition Project Preliminary Mitigated Negative Declaration Case No. 2019-017272ENV."

Project. Despite the fact that the CPUC proceedings involve the exact same underlying acquisition and separation as the Project, there are significant discrepancies in CCSF's approach in the CPUC proceedings and in the DEIR. For example, the DEIR's Project description focuses on the separation work at the Martin Substation that would be necessary to divide PG&E's existing substation facilities there. However, the DEIR's proposed separation plan for PG&E's Martin Substation is not the same approach that CCSF proposed in the testimony it filed on April 10, 2023 in support of the Petition for Valuation CCSF filed at the CPUC in July 2021.[3] Nor is the approach in the DEIR consistent with the proposal that CCSF is currently putting forth as its most likely approach at the CPUC in its valuation proceeding. Instead, CCSF in ongoing CPUC proceedings proposes that PG&E construct a new substation to implement the effective separation of the two electric systems. This alternative is found nowhere in the DEIR, let alone the Project description. The Project description also includes a "Variant" that would require construction of a new CCSF substation located on the parcel where PG&E's Martin Service Center currently resides. The sizing of the Variant relies on a gas insulated switchgear ("GIS") technology that is now unlawful for new equipment due to its impacts on climate change. The DEIR must be revised to account for the environmental impacts of a Variant and alternatives sized using lawful technology, which will require a larger footprint.

2 - PD-6 cont.

Also, despite taking three years to prepare the DEIR, CCSF has not taken the reasonable step of determining a preferred alignment for the linear components of the Project (*e.g.*, local distribution system separation and system reinforcements). Instead, CCSF improperly treats those necessary construction components at a programmatic level even though they would need to be implemented concurrently with the components of the Project analyzed at a project level. CCSF cannot treat the Project as a multi-phase programmatic action when all components of the Project must be completed and the DEIR assumes will all be commenced concurrently, even if there is some uncertainty on final alignments, prior to the PG&E and CCSF electric systems being separated. Other areas of non-compliance with CEQA include:

3 - PD-2

- The DEIR fails to analyze the impacts to electric system reliability and safety resulting from the Project's impacts to PG&E's critical service yard facility.

4 - PD-5

- The DEIR fails to provide essential design information related to the Martin Substation separation to demonstrate that this component of the Project is feasible given the severe space limitations within the substation.

5 - PD-3

- The DEIR fails to describe the extensive construction required for PG&E to continue to provide safe and reliable service to San Mateo County if the transmission and distribution assets are severed.

6 - PD-1

- The DEIR subjects San Mateo County residents to a higher cancer risk threshold than San Francisco residents.

7 - AQ-1

- The DEIR fails to account for the construction staging area needed to support the proposed Variant.

8 - PD-4

[3] *See* CPUC Docket No. P.21-07-012.

- The DEIR does not disclose that the Project or Variant will render the Martin Service Center temporarily or permanently unusable to support numerous PG&E lines of business in CCSF and San Mateo County. The potential for environmental impacts related to the relocation of the Martin Service Center operations are therefore not disclosed or considered. 9 - PD-5

- The DEIR fails to include a reasonable range of alternatives due to at least the following reasons: (i) its inclusion of an alternative (New Brisbane Baylands Substation Alternative D) that would be unlawful; (ii) its omission of an administrative alternative that includes a resolution of CCSF's protest in FERC proceedings to the mutual satisfaction of PG&E and CCSF along with CCSF's continued use of Community Choice Aggregation; and (iii) its omission of (as discussed above) CCSF's currently preferred Martin Substation alternative that is under negotiation with the CPUC and PG&E. 10 - AL-1

"If an EIR fails to include relevant information and precludes informed decisionmaking and public participation, the goals of CEQA are thwarted." (*Save Our Peninsula Comm. v. Monterey Cnty. Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 128.) As discussed in greater detail below, given the extensive informational and analytical deficiencies with the DEIR, we urge CCSF to revise the DEIR to address these shortcomings and recirculate the DEIR to ensure full public review of these revisions in compliance with CEQA. If the DEIR is not recirculated, the public would be deprived of a meaningful opportunity to understand and comment on the substantial adverse environmental effects of the Project or feasible ways to mitigate or avoid those effects. (*Id.*, at p. 134.)

I. General CEQA Background

"The foremost principle under CEQA is that the Legislature intended the act 'to be interpreted in such manner as to afford the fullest protection of the environment within the reasonable scope of the statutory language.'" (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 390.) To that end, CEQA's basic goal of protecting the environment has two broad purposes. First, CEQA is designed to inform decision-makers and the public about the potential, significant environmental effects of a project. (CEQA Guidelines, § 15002(a)(1), (4); *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 402 [stating CEQA's fundamental goal is fostering informed decision-making].) Second, CEQA requires public agencies to avoid or reduce environmental damage when feasible by requiring environmentally superior alternatives and all feasible mitigation measures. (CEQA Guidelines, § 15002(a)(2)–(3); *Protecting Our Water & Envt'l Resources v Stanislaus County* (2020) 10 Cal.5th 479, 488 (internal quotations omitted) ["CEQA embodies a central state policy requiring state and local governmental entities to perform their duties so that major consideration is given to preventing environmental damage."].)

CEQA is concerned with a project's ultimate "impact on the environment" (*see Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 283) and requires environmental impacts be considered at the "earliest stage [of a project] before it gains irreversible momentum" (*Id.* at 284, fn. 28) "at [such] a point in the planning process where genuine flexibility remains." (*Sundstrom v. Mendocino County* (1988) 202 Cal.App.3d 296, 307.) When evaluating the significance of a project's environmental effects, a public agency must consider both the direct physical changes as well as *the reasonably foreseeable indirect physical changes* in the

environment which may be caused by the project. (CEQA Guidelines, §§ 15064(d), 15360(d); *Stanislaus Audubon Soc'y, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144[4] [EIR required for golf course project because adverse impacts would result indirectly from later residential development that might be attracted to area by development of golf course]; *see also* CEQA Guidelines, § 15064(e) ["[w]here a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project…."].)

II. Inadequacies of the CCSF's Environmental Review of the Project under CEQA

A. CCSF is an Improper Lead Agency for the Project

A lead agency has the principal responsibility for carrying out or approving a project and prepares the appropriate CEQA review document for the project. (Pub. Res. Code, § 21067; CEQA Guidelines, § 15367.) A responsible agency is an agency, other than the lead agency, that proposes to carry out or approve the project. (Pub. Res. Code, § 21069; CEQA Guidelines, § 15381.)

The proper lead agency is ordinarily the agency with the principal responsibility measured in regard to the *total* environment. (*See, e.g., Planning & Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892, 906-907 [regional contractor held improper lead agency when state agency charged with statutory responsibility, and in turn principal responsibility, over the supply of water resources impacted by the project was the logical choice for lead agency because its statewide perspective and expertise made it aptly suited to analyze the environmental effects of the project on the *total* environment].) Here, that agency is the CPUC, not CCSF.

11 - OC-1

It is undeniable that the Project is subject to CPUC approval. (*See* DEIR, pp. 2-57 [CPUC "[a]pproval for transfer of utility assets"], 1-10 [CCSF submitted petition to CPUC in July 2021].) More specifically, in order for the Project to ultimately go forward the CPUC must make a "Section 851 Determination"[5] that the Project (*e.g.*, the asset transfer) serves the public

---

[4] This case's holding that an entity that has prior experience and expertise in an area and subject studied in an environmental document is qualified to assess the data presented and to render opinions thereon is directly pertinent to the comments herein from PG&E, which indisputably has the experience and expertise relevant to the analysis within the DEIR. (*See Stanislaus Audubon Soc'y, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 155; *see also* Evid. Code, § 720 ["[a] person is qualified to testify as an expert if he has special knowledge, skill, experience, training, or education sufficient to qualify him as an expert on the subject to which his testimony relates"].)

[5] Public Utilities Code section 851(a) provides that a public utility (such as PG&E) "shall not sell, lease, assign, mortgage, or otherwise dispose of or encumber the whole or any part of its ... property necessary or useful in the performance of its duties to the public ... without first having [] secured an order from the [CPUC] authorizing it to do so[.]" Public Utilities Code section 851(b)(1) provides that section 851(a) applies to "any transaction described in subparagraph (F) of paragraph (1) of subdivision (b) of Section 854.2[,]" which subparagraph covers "[a] voluntary or involuntary change in ownership of assets from an electrical or gas corporation to ownership by a public entity." In other words, either a voluntary transfer and/or involuntary change of ownership (*e.g.*, condemnation) require CPUC approval under section

interest (*e.g.*, among the various factors and criteria that the CPUC will consider that the assets to be transferred will be used for other productive purposes without interfering with the utility's operations or affecting utility customers). In other words, the CPUC necessarily needs to assess the total *inter-connected* system of PG&E (inclusive of the surrounding region) in determining whether the Project serves the public interest, and as such has the significantly greater purview in assessing the *total* environmental impact of the Project. Rather than confronting this reality, CCSF appears to be manufacturing a trigger for CEQA ahead of the CPUC determination, so it can assume the role of lead agency and gain control over the CEQA process and its timeline (potentially influencing the outcome of the environmental review). (*See* DEIR, p. 2-58 [generalized statements of "[a]pproval of the [P]roject" and "[c]ertification of the [DEIR]" for local CCSF actions and approvals].)

Despite taking three years to publish the DEIR, CCSF continues to obfuscate over what the actual first-in-time CCSF "project approval" that will rely on the DEIR would be. (*See, e.g.*, DEIR, p. 2-58 [SFPUC and SF Board of Supervisor actions described as "approval of the project"].) PG&E understands that the first "approval" that will rely on the DEIR to comply with CEQA is not a CCSF action, but the CPUC's Section 851 determination that would conclude whether the Project is in the public interest or not. If CCSF will "approve" the Project prior to the CPUC's Section 851 approval, the DEIR should clearly state how, so that the public can determine if the DEIR is adequate to support that approval. If CCSF will not take an approval action prior to the CPUC, that is further support for the CPUC being the proper lead agency to complete the environmental review for the Project prior to the first Project "approval."

11 - OC-1 cont.

We understand that CCSF consulted with the CPUC, which confirmed to CCSF that CCSF should be designated the lead agency for the Project. (*See* DEIR, pp. 1-13, 3.1-4.) However, even an agreement between agencies cannot justify a lead agency designation when such designation does not comply with CEQA. (*Planning & Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892, 905–907 [agreement to designate regional water contractor as lead agency rather than the Department of Water Resources ("DWR") was improper, including because DWR had statewide perspective and expertise over the project].) The CPUC is plainly the proper lead agency to undertake the CEQA review of the whole of the Project and to consider its total environmental impact prior to making a potential Section 851 determination.

B. CPUC-Specific Environmental Concerns are Legally Required to be Analyzed in the DEIR and CCSF's Comments Otherwise Cause the DEIR to Fail as an Informational Document Hindering Public Participation

---

851(a)—and by long-standing tradition, when reviewing an action under section 851(a), the CPUC applies the public interest standard. Further, notably, the CPUC has previously acted as lead agency related to Section 851 Determinations. (*See, e.g.*, Application of Pac. Gas & Elec. Co. (Sept. 3, 1997) 75 CPUC 2d 340; see also In Re Commission's Rules of Practice & Procedure (Apr. 3, 1973) 75 CPUC 133 ["[w]hile other agencies may have jurisdiction over certain aspects of the proposed project (see Orange County Air Pol. Con. Dist. v Public Util. Com'n. (1971) 4 Cal 3d 945), the primary determination-whether the project is necessary, considering social, economic, environmental, and technical factors-is to be determined by the Commission. [Citation omitted.] When an EIR is required in connection with an electric generating plant project, the Commission would be the lead agency"].)

As a threshold matter, CCSF's assertions that it is not legally required to consider CPUC-specific environmental concerns because they are not included on CCSF's environmental checklist are incorrect. (DEIR, pp. 1-13, 3.1-4.) "An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting." (CEQA Guidelines, § 15064(b).) "Compliance with [a] threshold [of significance] does not relieve a lead agency of the obligation to consider substantial evidence indicating that the project's environmental effects may still be significant." (CEQA Guidelines, § 15064(c).) "[T]hresholds cannot be used to determine automatically whether a given effect will or will not be significant. Instead, threshold of significance can be used only as a measure of whether a certain environmental effect 'will *normally* be determined to be significant' or '*normally* will be determined to be less than significant by the agency." (*Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1109, emphasis in the original.) "Thus, in preparing an EIR, the agency must consider and resolve every fair argument that can be made about the possible significant environmental effects of a project, irrespective of whether an established threshold of significance has been met with respect to any given effect." (*Id.*, at p. 1110.)

12 - AA-1

The CPUC-specific environmental concerns are undoubtedly highly relevant to the Project, such as whether the Project would expose workers or the public to excessive shock hazards. After all, the CPUC is the agency that necessarily oversees projects in the nature of the Project and has developed expertise in understanding the potential environmental impacts they present. Accordingly, CCSF cannot simply disclaim legal responsibility for evaluating these specific concerns by asserting that its own checklist does not address them. Such an approach is too narrowly focused under CEQA for the Project in question. The fact that CCSF has assertedly considered these issues within the DEIR does not cure the informational defect that CCSF has created.[6] CCSF's position that it is not legally required to consider these concerns creates the false impression that these concerns are outside the scope of CEQA review—misleading the public (and potentially decision-makers) by downplaying the significance of these issues that undoubtedly are highly relevant to projects in the nature of the Project.

CCSF should remedy the issue by recirculating the DEIR and clearly informing the public that these are (at least equally) important concerns requiring assessment and warranting equal attention in reviewing the Project.

---

[6] We note that the Initial Study often does not separately list each additional PEA Guidelines impact question, but instead integrates them into other impact discussions. (*See* DEIR, Appendix A [Initial Study], p. 151 [biological resources], p. 234 [energy], p. 210 [hazards and hazardous materials], p. 128 [recreation], pp. 72–73 [transportation and circulation], p. 135 [utilities and service systems].) This makes it difficult for the public to ascertain whether the DEIR has adequately addressed these additional items.

Further, as discussed above, only one CEQA review document is generally prepared for a project, and that document is normally intended to be used by all the agencies carrying out or approving the project. (Pub. Res. Code, § 21080.1(a); CEQA Guidelines, § 15050(c).) As such, a lead agency must take a comprehensive view in its environmental document, which must include enough information to meet the requirements of the review and approval needs of another agency that is to use its discretion toward the project. (*Banning Ranch Conservancy v. City of Newport Beach* (2017) 2 Cal.5th 918, 941.) Accordingly, the omission of the CPUC-specific environmental concerns would violate the review requirements of the CPUC as a responsible agency and, under *Banning Ranch*, would violate CEQA. This concern extends to the proposal CCSF is currently supporting at the CPUC where PG&E constructs a new substation to implement the separation of the two electric systems. This proposal is not analyzed in the EIR and as such the CPUC would not be able to rely on the DEIR for its approval of the Project if that is the selected course of action. In short, this is another reason why CCSF was legally required (notwithstanding its comments otherwise) to integrate the CPUC-specific environmental concerns into the DEIR.

12 - AA-1

13 - PD-6

C. CEQA Requires Full Disclosure and Analysis in the DEIR, Not in an Initial Study Attached as an Appendix

"CEQA is essentially an environmental full disclosure statute, and the EIR is the method by which this disclosure is made." (*Rural Landowners Ass'n v. City Council* (1983) 143 Cal.App.3d 1013, 1020.) "The purpose of an [EIR] is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project." (Pub. Res. Code, § 21061.) "An adequate description of adverse environmental effects is necessary to inform the critical discussion of mitigation measures and project alternatives at the core of the EIR." (*Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 515 [citing CEQA Guidelines, § 15151].) For this reason, "an EIR's designation of a particular adverse environmental effect as 'significant' does not excuse the EIR's failure to reasonably describe the nature and magnitude of the adverse effect." (*Id.*, at pp. 514–515 [citing *Berkeley Keep Jets Over the Bay Com. v. Board of Port Cmrs.* (2001) 91 Cal.App.4th 1344, 1371].) Likewise, toward the other end of the environmental effect spectrum, an EIR's designation of an environmental effect as "less than significant with mitigation incorporated" without separately identifying and analyzing the significance of the impacts without mitigation is an impermissible shortcut of CEQA requirements. (*Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 653–658.) This is because such a shortcut "precludes both identification of potential environmental consequences arising from the project and also thoughtful analysis of the sufficiency of measures to mitigate those consequences." (*Id.*, at p. 658.)

"Following preliminary review, the [l]ead [a]gency shall conduct an Initial Study to determine if the project may have a significant effect on the environment. If the [l]ead [a]gency can determine that an EIR will clearly be required for the project, an Initial Study is not required

14 - AA-2

but may still be desirable."[7] (CEQA Guidelines, § 15063(a).) Where, as here, an initial study is used in the preparation of an EIR, it should be used to focus the EIR "on the effects determined to be significant" and identifying "the effects determined not to be significant." (CEQA Guidelines, § 15063(c)(3).)

Here, CCSF "prepared an initial study to identify topics for which the [P]roject's effects **would be less than significant** and not require further analysis, and those topics that warrant more detailed environmental analysis in an EIR." (DEIR, p. 1-3 [emphasis added].) Further, "[b]ased on the findings of the initial study, [the] EIR [only] focused on air quality and noise and vibration." (*Id.*) In other words, here, CCSF has relegated nearly all of the Project's environmental analysis to the Project's initial study (the "Initial Study" or "IS"), even for impacts that would be significant without mitigation. As discussed below, this approach violates CEQA.

As a threshold matter, we note that any reliance CCSF would put on *Ocean Street Extension Neighborhood Assn. v. City of Santa Cruz* (2021) 73 Cal.App.5th 985 ("*Ocean Street*") to support its bifurcated environmental analysis and discussion approach would be misplaced. *Ocean Street* involved a procedurally distinct situation than that here. In *Ocean Street*, the local agency circulated the initial study alongside the notice of preparation ("NOP") for the EIR for a 30-day comment period. (*Ocean Street* at p. 997.) The initial study highlighted potentially significant impact areas as well as those that were potentially significant unless mitigation were incorporated. (*Id.* at p. 999.) The initial study concluded an EIR was required and identified topics to be discussed in the EIR, none of which were factors identified as potentially significant unless mitigation were incorporated. (*Id.*) The public was able to focus its comments exclusively on the initial study and the analysis therein. (*Id.* at p. 997.) The local agency addressed those focused comments. (*Id.*) After the public's input in framing the EIR scope, the local agency released a draft EIR for public comment that included the initial study as an appendix. (*Id.*)

14 - AA-2

In contrast, CCSF has not undertaken such a transparent and involved process. CCSF did not circulate the Initial Study alongside the DEIR's NOP. Nor has CCSF focused input on the Initial Study. Rather, CCSF has simply appended the Initial Study to the DEIR only at the time of its publication of the DEIR. (*See* DEIR, Appendix A, p. 269 [Initial Study determination that EIR is required dated the same day (March 19, 2025) as the DEIR publication date].) If anything, CCSF's approach has focused comment away from the environmental topic sections within the Initial Study. By analyzing only certain environmental topic sections (air quality and noise and vibration) within the DEIR and everything else within an appendix Initial Study, CCSF has created the false impression that the environmental topic sections addressed solely in the

[7] CCSF acknowledged in July 2022 that an EIR was required for the Project. (*See* Letter from Lisa Gibson (CCSF Environmental Review Officer) to Barbara Hale (CCSF Assistant General Manager, Power Enterprise), dated July 8, 2022—entitled "Appeals of PG&E Power Asset Acquisition Project Preliminary Mitigated Negative Declaration Case No. 2019-017272ENV.")

Initial Study are of less significance (both colloquially and from a CEQA perspective). After all, because information in appendices may not be sufficiently highlighted, there is a general CEQA principle that members of the public should not be forced to sift through appendices to review environmental impacts. (*Banning Ranch Conservancy v. City of Newport Beach* (2017) 2 Cal.5th 918, 941; *California Oak Foundation v. City of Santa Clarita* (2005) 133 Cal.App.4th 1219, 1239–1240.) This disparate approach has undermined CEQA's core functions of full environmental disclosure and informed public participation. For example, the mitigation measures proposed to reduce significant environmental impacts, and the rationale for why CCSF purports they are adequate, is not presented to the public in the main body of the DEIR where a reader would normally focus its review.

There appears to be no discernable rationale for the City's selective treatment of two environmental topic areas within the DEIR and the balance within the Initial Study. While the DEIR identifies significant and unavoidable noise and vibration impacts (DEIR, pp. 3.2-33, 3.2-35, 3.2-41, 3.2-43, 3.2-45, 3.2-47, 3.2-48, 3.2-51, 3.2-54, 3.2-62, 3.2-63), air quality is not presented with such significant and unavoidable impacts (DEIR, § 3.3), yet receives the full DEIR treatment. In fact, air quality impacts are determined to be mitigated to a less-than-significant level (DEIR, pp. 3.3-34, 3.3-38, 3.3-46, 3.3-55), but the impacts on several environmental topic areas—biological resources, cultural resources, tribal cultural resources, geology and paleontological resources—are likewise determined to be less-than-significant only with mitigation. In other words, the Initial Study determines each of these impact areas to be significant, which according to the DEIR would be a basis to analyze it in the DEIR, but then proposes mitigation that is used to justify not including those impact areas in the DEIR.

14 - AA-2 cont.

The Initial Study spills much ink on potentially significant impacts without mitigation and the accordant mitigation measures the DEIR relies on for less-than-significant determinations for these environmental topic areas. (*See* DEIR, Appendix A [Initial Study], § E.4 [Cultural Resources], pp. 40, 41, 43, 44, 45, 49, 50, 51, 64, 65, 66, 67; § E.5 [Tribal Cultural Resources], pp. 70, 71, 72; § E.15 [Biological Resources], pp. 163, 167, 172, 175, 177, 180, 182, 183, 184; § E.16 [Geology and Soils], pp. 197, 198.) The DEIR, however, fails to explain (at the very least) why these mitigation-dependent topic areas are excluded from the analysis in the DEIR, especially when the similarly situated air quality topic area is fully addressed in the DEIR. The public should not be misled to believe that the Project does not have significant risks to the environment solely as a result of CCSF minimizing the importance of such impact areas by relegating their discussion to the Initial Study.

Moreover, the framework of the assessment of environmental topic sections within the DEIR contrasts with those left to the Initial Study. Illustrative is that DEIR section 3.1.2 lays out a structured format that enables the public and decision-makers to engage meaningfully with CCSF's analysis of the environmental topic sections within the DEIR (as opposed to the Initial Study) and evaluate the adequacy of the analysis. (DEIR, pp. 3.1-2–3.) That section details that the environmental topic sections within the DEIR (as opposed to the Initial Study) contain an introduction, description of the environmental setting, regulatory framework, and discussion of

the significance criteria, the analysis, the impacts, and the mitigation measures, as well as of cumulative impacts. (DEIR, pp. 3.1-2–3.) This framework is noticeably missing from the environmental topic sections solely analyzed within the Initial Study, even though several of those sections rely on mitigation for a determination of less than significance. (*See, e.g.*, DEIR, Appendix A [Initial Study], § E.2 [Aesthetics section, which effectively dives right into discussion of "impacts and mitigation measures" following brief "concepts and terminology" discussion], § E.5 [Tribal Cultural Resources section, with immediate discussion of mitigations measures]; *see also* CPUC PEA Guidelines[8], pp. 42–74 [requiring environmental analysis for each environmental topic to follow a set framework that includes a description of the environmental setting, regulatory setting, impact criteria, impact analyses, and mitigation measures].) As described above, no matter the ultimate significance conclusion, the CEQA EIR process cannot be short-circuited. (*See Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 515; *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 653–658; *see also Farmland Protection Alliance v. County of Yolo* (2021) 71 Cal.App.5th 300, 310, emphasis in original ["[w]e find nothing in the text of [CEQA] or common law interpreting [CEQA] suggesting a project's impact analysis may be divided across the second and third tiers of environmental review such that some impacts are analyzed in a mitigated negative declaration and others are analyzed in an environmental impact report. … Rather, as explained *ante*, if *any* aspect of the project triggers preparation of an environmental impact report, a full environmental impact report must be prepared."].) The DEIR framework is imperative for informed public participation (and informed agency decision-making)—as without it meaningful evaluation of the adequacy of the DEIR, inclusive of the mitigation and feasibility of alternatives, is lacking.

14 - AA-2 cont.

CCSF cannot take the position that because the Initial Study is attached and incorporated into the DEIR, it has satisfied CEQA's disclosure requirements. CCSF's approach fails to meet the requirement that the information in the EIR be "presented in a manner calculated to adequately inform the decisionmakers and the public." (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442.)

CCSF should remedy the issue by revising and recirculating the DEIR to include the environmental topic sections that have been limited to the Initial Study but that include proposed mitigation measures, utilizing the analysis framework contained in the DEIR (thereby enabling meaningful evaluation of CCSF's environmental analysis).

D. Program Level Review Inverts the Purpose of a Program DEIR

The DEIR states that it "evaluate[d] proposed [P]roject activities at a level of detail consistent with the best available information and specificity available at the time of EIR preparation" and that this justifies having analyzed certain Project components at a "project

15 - PD-2

[8] California Public Utilities Commission, *Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments,* November 2019.

level" and others at a "program level." (DEIR, p. 3.1-3.) Specifically, CCSF suggests that it was justified analyzing the following Project components at a "program level": (1) the local distribution system separation, (2) system reinforcements, (3) operations control center, (4) operations and maintenance service yards, (5) and remaining Project components (collectively, the "Program Level Components"). (*Id.*) But CCSF's alleged concern and its proposed solution is a problem of its own making. The DEIR contains no explanation for why, three years after publication of the MND, there is insufficient information or specificity about these components to perform a project level analysis. And, if, in fact, there is insufficient information, there is no explanation in the DEIR for why CCSF felt compelled to rush issuance of its DEIR rather than waiting to collect sufficient information about these components before issuing the DEIR. In order to allow for a fulsome evaluation of the environmental impacts of these components and of the Project as a whole, CCSF should reissue the DEIR when this information becomes available, in order to allow the DEIR to analyze these integral projects at the project level. CCSF cannot be permitted to take shortcuts when it has control over the alleged obstacles it depends upon to justify the shortcut it proposed to take here.

CEQA Guidelines section 15146(a) provides "[a]n EIR on a construction project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy." (CEQA Guidelines, § 15146(a).) Accordingly, the CEQA guidelines prescribe different types of EIRs, including a project level EIR and a program level EIR. (CEQA Guidelines, §§ 15161, 15168.) The core purpose of a program level EIR is to consolidate the review of multiple interrelated activities that, if addressed in isolation, might obscure cumulative impacts, alternatives, and mitigation, overlook broader policy considerations, or generate duplicative paperwork. (*See* CEQA Guidelines, § 15168(b).) This purpose hinges on the presumption that the program level EIR is capturing a genuinely broad "program," such as in connection with issuance of rules or plans to govern further implementing actions or as logical parts in the chain of contemplated actions. (*See* CEQA Guidelines, § 15168(a); *see Center for Biological Diversity v. Department of Conservation* (2019) 36 Cal.App.5th 210, 230 ["Program EIRs are commonly used in conjunction with the process of tiering."].) This is not the case here. The Program Level Components are essential parts of the Project—components that are part and parcel of the same construction project that is part of CCSF's "approval" of the singular Project. As such, CCSF needed to treat each of them at the project level. In fact, because CCSF appears to be manufacturing an approval trigger for CEQA it is not clear what, if any, subsequent approvals CCSF will undertake to ensure the impacts from the Program Level Components are ultimately sufficiently analyzed at a project level. (CEQA Guidelines, § 15168(c), emphasis added ["[l]ater activities in the program ***must*** be examined in the light of the program EIR to determine whether an additional environmental document must be prepared"]; DEIR, p. 2-58 [generalized statements of "[a]pproval of the [P]roject" and "[c]ertification of the [DEIR]" for local CCSF actions and approvals].) No component of the Project has any independent utility because each component is required for CCSF to acquire PG&E's system and for separate electric systems to reliably operate thereafter. If CCSF moves forward with the Project, according to the DEIR,

15 - PD-2 cont.

each and every component **will** occur during the three-to-five-year construction period that CCSF asserts in the DEIR will begin next year. This is in contrast to an EIR to a specific plan where certain properties lack pending applications and may never develop and are therefore properly considered at a programmatic level.

Moreover, given the proposed Project construction start in 2026, there would be no time to conduct the necessary subsequent CEQA review for the Program Level Components even if there were subsequent approvals. (DEIR, p. 2-40 [Table 2-9].) More to that point, while CEQA permits some degree of flexibility where information is genuinely uncertain, given that the DEIR was three years in the making and the DEIR asserts that Project construction will commence next year, the Program Level Components cannot reasonably be seen as abstract or uncertain undertakings. This is demonstrated in DEIR Table 2-9 where all project components analyzed at a programmatic level are assumed to commence in the **first year of construction** which is now less than a year away according to CCSF's stated schedule. CCSF must already have something more specific in mind.[9] Therefore, CCSF, at a minimum, should have identified the *preferred* alignments and locations for the Program Level Components in the DEIR and analyzed that at a project level.

15 - PD-2 cont.

It appears that the DEIR inappropriately invokes program level review specifically to exclude key components of the single Project from detailed analysis. Stated differently, rather than using the program level review to provide a more integrated environmental analysis (as the CEQA Guidelines intend), the DEIR uses the program level distinction to withhold analysis of integral components of the Project. (*See* Grassetti Environmental Consulting DEIR peer review letter ("GECo Letter"[10]) (which is attached hereto as **Exhibit A**), pp. 2–3.) In effect, the DEIR has improperly inverted the purpose of program level review.

As described in PG&E's supporting technical memorandum attached hereto as **Exhibit B**, based on PG&E's understanding that there are approximately 100 distribution separation points (at both the distribution primary and secondary voltage levels) along the border between San Francisco and San Mateo counties, and assuming standard distribution planning processes performed by two distribution planners with 10-15 years of experience, the effort to identify a precise plan would conservatively take the two planners three months to complete. (Exhibit B, p. B-9.) It is unclear why CCSF did not undertake this effort in the three years spent preparing the DEIR, especially given that the construction of the programmatic components will commence concurrently with the project level components of the Project. The DEIR fails in its

[9] PG&E disagrees that 2026 is a reasonable estimated start of construction since the required approvals to commence construction are still years away and the CPUC valuation proceedings is expected to proceed well into 2026. CCSF's haste to publish the DEIR ahead of CCSF determining its preferred project in the CPUC valuation proceeding has led to an unstable project description as well as non-substantive analysis of critical project components, as described in more detail elsewhere in this letter.

[10] The GECo Letter was prepared by GECo's principal Richard Grassetti, who has over 40 years of technical experience preparing and reviewing CEQA documents. (*See* Exhibit A, Attachment A [Grasseti Qualifications].)

informational purposes due to this unreasonable lack of detail. Because this is a unified construction project, the DEIR must be revised to analyze all Project components at a project level and recirculated for public review and comment. (*See* CEQA Guidelines § 15146(a) ["[a]n EIR on a construction project will necessarily be more detailed in the specific effects of the project…"].)

15 - PD-2 cont.

Moreover, as further explained in Exhibit B, the DEIR fails to acknowledge, let alone analyze, the significant amount of work and construction that will be required of PG&E due to the Project. The DEIR's nearly exclusive focus on CCSF's work under the Project provides only a partial view of the Project's potentially significant impacts. The work that must be performed by PG&E due to the Project must be included in the revised Project analysis as well.

16 - PD-1

1. Human Health Risk Assessment

The DEIR's failure to analyze the linear components of the Project at a project level of detail impacts the adequacy of the DEIR's analyses of environmental effects. For example, the DEIR states on pages 3.3-43 and -44 that the alignment of the linear components is unknown and therefore the DEIR assumes the Maximally Exposed Individual (MEI) "for this hypothetical HRA configuration is the nearest receptor downwind of the midpoint of the 2,000-foot straight line; however, this does not represent a specific, physical receptor location but rather a hypothetical MEI." This seems to mean the HRA assumes that an MEI would be located 1,000 feet from the emission sources related to construction of the linear components of the Project. Neither the DEIR nor its appendices include a figure related to the linear components health risk assessments to aid a reader in interpreting the "hypothetical" analysis. A 1,000-foot distance to a receptor would appear to be an illogical assumption given that linear components work would primarily occur in roadways immediately adjacent to peoples' homes and businesses. Analyzing actual, rather than "hypothetical," alignments would provide a meaningful risk analysis and would be feasible if CCSF properly treated the Project as the unified action that it factually is. In fact, the border between San Francisco and San Mateo counties and the exact location of PG&E's existing electrical infrastructure that would need to be severed as part of the Project to allow CCSF to serve customers within CCSF has been known to CCSF for years.

17 - AQ-1

The DEIR should be revised to include a project level air impact analysis and health risk assessment for all components of the Project as was done with the Cormorant Battery Storage Facility referenced on page 3.3-49 of the DEIR. Even though the final alignment of linear project components was not known at the time of approval of the CEQA document for that project, the health risk assessment analyzed potential alignments of those features and the health risk to actual, rather than hypothetical, sensitive receptors (*e.g.*, *see* Figure 1 of Cormorant HRA).[11] The health risk assessment analyzed the cancer risk of each potential alignment (see,

[11] The Cormorant Energy Storage Project Health Risk Assessment, also known as the 2150 Geneva Avenue Battery Storage project, is available at https://files.ceqanet.opr.ca.gov/308406-1/attachment/A6hvbD_nBkCgjVu9yI-

e.g., Table 4 Cormorant HRA) which provided valuable information to the decision-makers and public of the potential health risks of each potential alignment. That information is wholly lacking in the DEIR. The DEIR should be revised and recirculated to include a project level analysis of the health risk of all project components.

17 - AQ-1 cont.

E. The DEIR's Deficient Project Description

An "indispensable component" of an EIR is an accurate description of the project at issue. (*Western Placer Citizens for an Agricultural & Rural Environment v. County of Placer* (2006) 144 Cal.App.4th 890, 898; *see also San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 655 ["[o]nly through an accurate view of the project may the public and interested parties and public agencies balance the proposed project's benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives."].) Courts have, thus, uniformly demanded that an EIR's description of the project be "accurate, stable and finite." (*E.g.*, *stopthemilleniumhollywood.com v. City of Los Angeles* (2019) 39 Cal.App.5th 1, 16 ("*stopthemillenium*"). This means that the description must set forth the entirety of the project. (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 654; CEQA Guidelines, Guidelines § 15378(a) [a "project" under CEQA is the "whole of an action" that may result in a direct or *reasonably foreseeable indirect physical change in the environment*].)

However, despite the importance of the project description, the DEIR simultaneously takes a rather expansive and amorphous view of the Project on the one hand in terms of presenting the Project as one of two options (*i.e.*, variants) and a very limited and narrow view of the Project on the other hand in terms of failing to describe the "whole of the action." As discussed below, each of these flaws independently causes the DEIR to violate CEQA's requirement that the project description be "accurate, stable and finite."

18 - PD-6

1. Unstable Project Description Due to the New City Substation Project Variant

The DEIR's inclusion of the New City Substation as a "project variant" renders the Project description unstable—in violation of CEQA. The cases of *stopthemillenium*, *South of Market Community Action Network v. City and County of San Francisco* (2019) 33 Cal.App.5th 321 ("*SOMCAN*"), and *Washoe Meadows Community v. Department of Parks & Recreation* (2017) 17 Cal.App.5th 277 ("*Washoe Meadows*") affirm this to be the case. In *stopthemillenium* and *Washoe Meadows* the courts found the EIRs deficient where no specific project was

---

L2QHRePDzq_BiPrnFs2Kj6lzIOqzUphodL0gvh9e00aTNEyPv4gfvRli4DS6G0. The Cormorant Energy Storage Project Initial Study is available at https://files.ceqanet.opr.ca.gov/308406-1/attachment/SYOB4ZlzlpY49QKiwvtXHmVUUIuH2X3Eyua_dC__vvlhemAJ8y-C43e4xBMZsPZttHGtHuysVW8FvBez0.

identified—only illustrative development scenarios that established a maximum environmental impact (in the case of *stopthemillenium*) or different alternatives from which a project would later be selected (in the case of *Washoe Meadows*). (*stopthemillenium* at p. 18–19; *Washoe Meadows* at p. 288–289.) The lack of a defined project failed CEQA's mandate for an "accurate, stable, and finite" project description. (*Id.*) By contrast, in *SOMCAN*, the court upheld a project description with multiple options because the variations analyzed were minor in difference (as both options were on the same site and had similar footprints, but simply shifted allocation of residential and office components) and, as such, the presentation of the project as multiple options could not cause confusion. (*SOMCAN* at pp. 332–334.) In fact, the court found the "project description here enhanced, rather than obscured, the information available to the public." (*Id.*, at p. 334.)

Here the DEIR's Project description more closely mirrors that of the amorphous, distinct, and noncommittal project descriptions in *stopthemillenium and Washoe Meadows*. The DEIR presents two materially distinct variants (for a single component of the Project)—the Martin Substation Separation and the New City Substation Project Variant—as interchangeable "Project" and "Project Variant" options. (*See* DEIR, pp. S-3, S-8, 2-6, 2-9–13, 2-49–56.) However, the DEIR fails to clearly identify which of these two constitute the proposed Project. (*See, e.g.*, DEIR, p. 2-57 ["[t]he permits and approvals anticipated to be required for the project or project variant …"].) The Project and Project Variant have different footprints (which could differ the relation to sensitive receptors), different features (unlawful SF6 gas-insulated switchgear buildings for the Project Variant and an outdoor, air insulated system for the Project) that would significantly impact both construction and operations, and different transmission and distribution lines (including the extents of excavation for such lines—3,500 feet for the Project and 9,000 feet for the Project Variant). (DEIR pp. 2-9–13, 2-49–56, 5-22.) The material differences between the two here certainly skew the analogy away from the project description upheld in *SOMCAN* where the variations were minor in nature.

18 - PD-6 cont.

The ambiguity in the DEIR's presentation of both the Project and the Project Variant is compounded by the DEIR's failure to explain why the New City Substation is considered a variant rather than a formal alternative, despite its similarities to another "New City Substation" alternative—Alternative D: New Brisbane Baylands Substation. (DEIR, pp. 5-22–23; *see also* DEIR, pp. 5-31–32 [Alternative D achieves all of the same Project objectives as the Project Variant].) The overall result is a Project description that violates CEQA's mandate for an "accurate, stable, and finite" project description—and confuses the scope of review. Because the DEIR does not "adequately apprise all interested parties of the true scope of the project for intelligent weighing of the environmental consequences of the project" the DEIR is inadequate as a matter of law. (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 734.)

a. <u>SF6 Variant is Not Feasible and As Such Will Need to Switch to Air Insulation Which Requires a Larger Footprint</u>

19 - PD-4

The DEIR's Project description is also inadequate because the Project Variant as described would be unlawful. The DEIR states that the New City Substation would use sulfur hexaflouride gas (SF6) as the insulating medium. (DEIR, p. 2-51.) The DEIR states that SF6 has two to three times the insulating ability of air, "allowing of a compact footprint for the new City Substation." (*Id.*) What the DEIR buries in the attached Initial Study is that SF6 is the most potent greenhouse gas that exists on Earth with an airborne lifespan of a millennium. (*See* Initial Study, p. 123 ["SF6 gas has 23,900 times the global warming potential of CO2"]; **Exhibit C** [United States Environmental Protection Agency "Sulfur Hexafluoride (SF6) Basics"].) This means "a relatively small amount of SF6 can have a significant impact on global climate change." (Exhibit C.)

Because SF6 equipment is known to leak this potent greenhouse gas, PG&E has already begun voluntarily phasing out its use of SF6 in its existing facilities. The State of California has also now adopted regulations mandating that no new SF6 equipment with up to 145 kV capacity be permitted after January 1, 2025, and no new SF6 equipment with up to 245 kV capacity be permitted after January 1, 2027. (17 C.C.R. § 95352.) The proposed New City Substation would include both 115 kV and 230 kV equipment (DEIR, p. 2-51), thus, the construction of the Variant would be unlawful. As explained in Exhibit B, the footprint of the Variant using the industry-preferred substitute technology would require an approximately 25% increased footprint. (Exhibit B, p. B-16.) That is a material change that must be considered and analyzed in a revised DEIR.

19 - PD-4 cont.

Thus, the DEIR must be revised to include a Project description and range of feasible alternatives (Alternative D also proposes SF6 technology) that are not facially unlawful. (CEQA Guidelines, § 15364, emphasis added ["'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, *legal*, social, and technological factors"].) As such, the Project description should remove the Variant. CCSF must decide whether its preferred Project involves the separation of the Martin Substation or a new substation. If a new substation is the preferred Project, a legal insulation technology should be proposed and the proposed facility should include a feasible footprint that also takes into account the required laydown area for construction. This will allow CCSF to appropriately analyze and disclose the potential environmental impacts of the Project. If the DEIR is not revised and recirculated, it will not serve as an adequate informational document to inform the public and the decision-makers of the potential environmental impacts that could result if a New City Substation project on the Martin Service Yard or Alternative D is approved. (*San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.App.4th at 734.)

2. The DEIR Fails to Include an Accurate Description of the Work Required for Severance

A "project" under CEQA is the "whole of an action" that may result in a direct or *reasonably foreseeable indirect physical change in the environment*. (CEQA Guidelines §

15378(a) [emphasis added].) A complete project description is necessary to ensure that the environmental impacts of the whole of the action are considered. Project descriptions have been rejected as inadequate where the project description was too narrowly defined (thus limiting the scope of environmental review, understating the project's impacts, and undermining public review) in numerous cases. (*See, e.g., Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818, 829-830 [the "omission [of] some important ramifications of the proposed project remain[ing] hidden from view at the time the project was being discussed and approved [] frustrates one of the core goals of CEQA"].)

As further detailed in the PG&E supporting technical memorandum attached hereto as Exhibit B, the Project description fails to disclose and analyze all of the work, and its footprint, necessary to separate the Martin Substation. As explained in Exhibit B, there is inadequate space within the substation to include additional new facilities and infrastructure associated with the Project that would be needed to have a CCSF-controlled facility adjacent to a PG&E facility. There is also no proposal in the DEIR on whether or how PG&E would access the 60kV facility necessary to serve its San Mateo County customers or if PG&E would need to construct a second 60 kV system. The result of these deficiencies and errors in the Project Description is that the DEIR underestimates the area that would be needed to properly sever the substation and then restore service. This results in an under disclosure of air impacts, noise impacts, and hazard impacts because work would need to occur in a larger area than disclosed. 20 - PD-3

An additional fault of the Project description, as further detailed in Exhibit B, is that there is no description of how or where PG&E would relocate its operations at the Martin Service Center (referred to as the Daly City Yard in the DEIR) which will be a necessary first step before any construction at the Martin Substation could occur. The Martin Service Center supports operations, maintenance, and various project work for more than 10 different PG&E lines of business serving CCSF and San Mateo County customers as far south as San Mateo Substation. These include electric distribution, transmission and substation construction and maintenance; gas construction and maintenance; fleet services, and materials services. PG&E's Martin Service Center location is of high importance because it is geographically positioned to support PG&E service territory to the north and south and is freeway accessible for rapid emergency and maintenance responses. It also provides adequate access for large vehicles with heavy loads and wide turning requirements. In order to allow PG&E to provide adequate maintenance and emergency responses it is necessary to co-locate office, maintenance shop, emergency response storage, and outdoor storage/staging at the site. 21 - PD-5

Even if CCSF acquires PG&E's electric service as part of the Project, PG&E will still need to provide service coverage to San Francisco for gas and other services. PG&E is unaware of any light industrial property located near the border of CCSF and San Mateo County with the size or location needed to bridge the disruption that would be caused by the Project. This is especially true because over $100 million dollars of construction projects are already planned to utilize the Martin Service Center and Substation, and this work will soon occupy any presently excess space needed for construction laydown areas and new facilities as part of CCSF's project.

Such impacts would at least be doubled for the Variant because CCSF would need to permanently take a portion of the Martin Service Center and temporarily take an additional portion of the Martin Service Center for a construction laydown area. But despite these significant challenges triggered by the Project, the DEIR is silent on the need for such a laydown area for both the Variant and Alternative D. CCSF should immediately retain a broker to determine whether any adequate space is available to host or relocate the Martin Service Center operations on the timeline needed for the Project, and should revise the DEIR to include the specific properties that CCSF deems adequate to relocate PG&E operations as part of the Project so that PG&E can analyze whether those locations would be sufficient or risk service disruptions and impacts to PG&E's ability to respond to emergencies such as earthquakes.

21 - PD-5 cont.

3. The Project Description Omits Additional Information Necessary for a Complete and Meaningful Analysis of the Project

A project description needs to provide information necessary for evaluation and review of the project's environmental impacts. (CEQA Guidelines, § 15124; *RiverWatch v. Olivenhain Municipal Water Dist.* (2009) 170 Cal.App.4th 1186, 1207 [the "'ultimate decision of whether to approve [] a project, be that decision right or wrong, is a nullity if based upon an [environmental document] that does not provide the decision-makers, and the public, with the information about the project that is required by CEQA.'"].) Here, as further detailed in the GECo Letter, the DEIR's Project Description omits several Project details and other information necessary to assure an adequate impacts analysis of the Project (*e.g.*, no site plan for Martin Substation work, no consideration of laydown areas for the Project Variant, no identification of locations and massings of above-ground Project components, lack of detailed trench locations, widths, and depths, no maps showing specific streets where overhead and underground line work, pole work, and vault work will be performed, etc.). (*See* Exhibit A, pp. 3–5.) In turn, these omissions cause the DEIR to fail at providing the public and decision-makers with the information necessary to accurately understand the potential environmental impacts of the Project. (*See, e.g.*, § II.G, below.)

22 - PD-2

Furthermore, notably absent from the DEIR is a list of assets that CCSF proposes to condemn from PG&E as part of the Project. In the MND, CCSF provided that "[a] full list of assets proposed for acquisition is presented in Appendix A []. This list may change, depending upon the outcome of negotiations with PG&E. [] Subsequent changes to the list of assets that the SFPUC would acquire as part of the Project may require further [CEQA] review." (*See* MND, p. 7; *see also* MND, Appendix A.) As mentioned above, three years have elapsed since CCSF determined the MND was an inadequate CEQA document for the Project and an EIR was required, yet CCSF has taken a step backward in describing the Project because without explanation or justification, the DEIR fails to provide any list of targeted assets.

Accordingly, the DEIR does not fulfill its required public accountability function since it does not reasonably disclose what the actual Project will or will not contain so that the public and other agencies can clearly know what CCSF has authorized, meaningfully and completely

assess the Project's potential environmental impacts, and fashion mitigation measures that appropriately address those impacts. The Project description needs to be updated to include, at a minimum, the omitted information identified as necessary for an adequate Project description in Exhibit A (GECo Letter) and Exhibit B (PG&E supporting technical memorandum).

22 - PD-2 cont.

F. The DEIR's Alternatives Analysis is Inadequate

"The purpose of the CEQA alternatives analysis is to identify potentially feasible[12] alternatives that could avoid or substantially lessen the significant impacts identified by the [P]roject while still meeting most of the [P]roject objectives." (DEIR, p. 5-1; *accord* CEQA Guidelines, § 15126.6, subd. (a).) "An EIR need not consider every conceivable alternative but must consider and discuss a reasonable range of feasible alternatives in a manner that will foster informed decision-making and public participation. The 'rule of reason' governs the selection and consideration of EIR alternatives, requiring that an EIR set forth only those alternatives necessary to permit a reasoned choice." (DEIR, p. 5-1; *accord* CEQA Guidelines, § 15126.6, subd. (f).)

As discussed below, the DEIR's alternatives analysis fails in multiple regards—by (1) omitting consideration of feasible alternatives necessary to permit a reasoned choice, (2) failing to provide sufficient detail to meaningfully compare the alternatives included in the DEIR with the Project, and (3) improperly rejecting the "No Project" Alternative based on a narrow conception of Project objectives.

1. The DEIR's Omission of Certain Alternatives Violates the "Rule of Reason"

23 - AL-1

CCSF has determined that the following four alternatives constitute a reasonable range of alternatives—the (1) "No Project" Alternative (*i.e.*, Alternative A); (2) "Meter Transmission at Martin Substation" Alternative (*i.e.*, Alternative B); (3) "Reduced Transmission Acquisition" Alternative (*i.e.*, Alternative C); and (4) "New Brisbane Baylands Substation" Alternative (*i.e.*, Alternative D). (DEIR, p. 5-7.) Notably absent from this range, or the alternatives that were initially evaluated but not carried forward for further analysis is an option that is feasible, would avoid the significant impacts of the Project (*i.e.*, is more environmentally protective) and would meet most of the Project objectives: an administrative[13] solution. CCSF's description of the "challenges and problems with the current arrangement" found in Section 1.4.2.2 of the DEIR

---

[12] A feasible alternative is one that is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal, and technological factors. (Pub. Res. Code, § 21061.1; CEQA Guidelines, § 15364; *see also* CEQA Guidelines, § 15126.6, subd. (f)(1).)

[13] Notably, CCSF was open to considering a partial administrative solution as part of the alternatives that were initially evaluated but not carried forward for further analysis. (*See* DEIR, p. 5-43 [discussion of "Fringe Area Service Agreements" alternative].)

obfuscate that the tension between CCSF and PG&E is driven by CCSF's dissatisfaction with the wholesale services PG&E provides under its applicable tariffs, which is different than the bilateral arrangement that CCSF previously enjoyed. In the FERC proceedings referenced in DEIR footnote 23, CCSF protested its obligation under PG&E's tariff to install its own facilities to transform high-voltage electricity delivered by PG&E in order to provide secondary distribution level voltage to CCSF customers. An alternative that includes a mutual resolution of that protest with PG&E combined with CCSF's continued use of Community Choice Aggregation for power supply to the vast majority of electric customers and majority share of the power consumption in San Francisco would satisfy most of the project objectives and eliminate the Project's environmental impacts because it would not require any new facilities. More specifically, this alternative would meet, at least, the following Project objectives identified in the DEIR:

> 2. Use public funds efficiently and prudently to maintain and improve San Francisco's existing electricity infrastructure over the long term.
>
> 3. Use existing electric facilities that are already serving customers in San Francisco and avoid, where feasible, the construction of unnecessary and duplicative electric facilities.
>
> 6. Provide cost-effective, timely, and reliable interconnections to San Francisco's electric grid for all electricity users in San Francisco.
>
> 7. Establish local accountability for the long-term performance and affordability of San Francisco's electricity infrastructure.
>
> 8. Minimize disruption to local communities. (DEIR, p. 2-3, pp. 5-31–32 [Table 5-3].)

23 - AL-1 cont.

And it would do so while reducing all impacts, let alone significant impacts, of the Project.[14] (*Cf.* DEIR, p. 5-13 ["the No Project Alternative would avoid all construction and operational impacts that were identified for the [P]roject or [P]roject variant"], p. 5-30

[14] Substantial evidence does not support that the Proposed project and Variant would "use public funds efficiently and prudently to maintain and improve" electricity infrastructure because no cost estimates are provided for the amount of public funds required to condemn PG&E's system or to construct or acquire each project component. This will be in the billions of dollars (*see* Exhibit D [in 2019, CCSF offered $2.5 billion for PG&E's distribution system, an amount PG&E deems less than fair market value. CCSF now seeks to acquire transmission assets in addition to distribution assets and would be also required to pay substantial construction and severance costs]). The examples of alleged excessive costs for connection of restrooms provided in the DEIR pales in comparison.

[discussion of the No Project Alternative as the environmentally superior alternative], pp. 5-33–38 [reduced impacts of No Project Alternative for all environmental topic sections].) The feasibility of this alternative cannot reasonably be questioned as demonstrated by SFPUC's recent recommendation that CCSF settle its dispute with PG&E over service under PG&E's wholesale tariff.[15] Nor can CCSF simply discard it outright to the extent CCSF prefers the Project or another alternative. (*See Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 736 [an agency cannot avoid an objective consideration of an alternative simply because, prior to commencing CEQA review, an applicant made substantial investments in the hope of gaining approval for a particular alternative].)

The DEIR also fails to discuss the CCSF currently preferred alternative that is under discussion with the CPUC and PG&E in the CPUC valuation proceeding. In the most recent Commission staff workshop, in January 2025, CCSF presented its leading scenarios and acknowledged that those scenarios would involve PG&E building a new substation outside of the Martin Substation. CCSF presentation materials noted that there were several different types of substations that might need to be built depending on the scope of CCSF's taking at Martin and its plan for separation of existing PG&E facilities. The size of a new PG&E substation, and its possible locations, would be influenced by those details. (*See* Exhibit B.) Yet, this approach, which CCSF has most recently expressed as its preferred approach in the CPUC valuation proceeding is wholly absent from the DEIR's alternatives analysis. If such alternatives are reasonable enough to warrant extensive exploration outside the CEQA context, and are apparently CCSF's current primary preference about how to implement the Project, it is plainly unreasonable to exclude their discussion and disclosure within the DEIR in either the Project description or within the reasonable range of alternatives. (Pub. Res. Code, § 21006 [CEQA is part of an agency's decision-making process].) Because the same Project forms the basis of both

23 - AL-1 cont.

[15] *See* February 25, 2025 SFPUC meeting minutes, Items 18 and 19 ["Proposed settlement of litigated cases related to the terms and conditions of wholesale service PG&E provides to San Francisco, subject to final approval by the Board of Supervisors . . . President Stacy stated that the Commission recommends the Board of Supervisors approve the settlement referenced under Item 18"], available at https://www.sfpuc.gov/sites/default/files/about-us/commission/2.25.2025_M.pdf. Another possible Project alternative that would avoid environmental impacts would have CCSF negotiate a mutually agreeable arrangement between CCSF and PG&E that would avoid the apparent need for CCSF to acquire PG&E's assets. One recent example of this approach can be seen in the arrangement recently reached between the City of San José and PG&E in which, based upon certain commitments made by PG&E, the City of San José determined that it would not be necessary to establish its own municipal utility to provide electric service. (*See* February 28, 2025 Cooperation Agreement Between Pacific Gas and Electric Company and the City of San Jose for Electric Infrastructure Development, available at 20250228 Cooperation Agreement Between Pacific Gas and Electric Company 2.pdf and March 21, 2005 City Council Draft Meeting Minutes, available at https://sanjose.legistar.com/View.ashx?M=M&ID=1213840&GUID=69C3F8E5-23C5-4A31-9C04-FCE45494FE8C ["Adopt[ing] a resolution authorizing the City Manager or her designee to negotiate and execute the PG&E – City of San José Implementation Agreement"].)

the CPUC valuation proceeding and this CEQA process, the CEQA analysis here must evaluate the same Project that the CPUC is considering.

Rather than provide a reasonable range of alternatives, the DEIR includes a technologically and legally infeasible alternative (Alternative D using SF6 technology), and reduced size alternatives that CCSF is not considering in current discussions with PG&E in the CPUC valuation proceeding (Alternatives B and C). The Alternatives chapter must be revised to include a contractual alternative with PG&E, a new PG&E-constructed substation, and an approach that matches the project being considered by the CPUC in the valuation proceeding. The existing Alternatives chapter appears drafted to simply attempt to check the box on CEQA compliance, rather than to inform decision-makers and the public of reasonable, feasible, and likely alternatives to the significant environmental impacts of, and extraordinary expenses of, the proposed Project.

23 - AL-1 cont.

2. <u>The DEIR's Alternatives are Inadequately Described and Assessed</u>

The DEIR "shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." (CEQA Guidelines, § 15126.6(d).) As discussed in the GECo Letter, the DEIR fails this charge in several respects. (*See* Exhibit A, pp. 16–17.) For example, the descriptions of each of the "build" alternatives is inadequate because they provide no plans, locations or descriptions of the physical features proposed in each of the "build" alternatives. (*Id.*) Even more specifically, the "New Brisbane Baylands Substation" Alternative (*i.e.*, Alternative D) fails to identify a laydown/staging area for the new substation work under that alternative. (*Id.*; *compare* DEIR, Figure 5-1 [Brisbane Baylands Substation with no indication of where the laydown area would be] *with* DEIR, Figure 2-2 [Martin Substation Project Site and Construction Staging Area].) This lack of information makes it impossible to meaningfully evaluate the impacts of the alternatives and then compare those to the Project.

Moreover, in regards to the New Brisbane Baylands Substation Alternative, the DEIR acknowledges that the "Brisbane Baylands Specific Plan development (*i.e.*, the planned adjacent housing)" could be completed prior to construction of the Project. (*E.g.*, DEIR, p. 5-24.) Yet the DEIR's discussion of this alternative fails to analyze land use compatibility issues and impacts to future residents in the planned adjacent housing that would result from this alternative, which would introduce (another) industrial use on vacant land in an area that has already been planned for housing. (*See* DEIR, p. 5-29.) These concerns are significant, because the DEIR acknowledges that residences would be located within 50 feet of the substation (DEIR, p. 5-25) but rejected other alternatives as infeasible because they would be located within 100 feet of sensitive receptors. (DEIR, pp. 5-40–41). Because Alternative D is facially infeasible because of its location and its unlawful insulation technology, it does not contribute to a reasonable range of alternatives and should be removed from the DEIR and replaced with an appropriate alternative.

24 - AL-2

3. The DEIR Improperly Rejects the "No Project" Alternative Because of Artificially Narrow Project Objectives

The DEIR details the stated purposes of the Project—namely to "(1) allow the City to provide and deliver Hetch Hetchy hydropower, and other clean power, to all customers in San Francisco; (2) improve the cost and efficiency of new electrical grid connections for critical City functions, such as public safety, affordable housing production, transportation, utility infrastructure, and schools; and (3) allow the City to own and manage the City's electric system with transparency and accountability, consistent with a cost-based, not-for-profit business model that will prioritize affordable, cost-effective, reliable, safe, and timely service in San Francisco." (DEIR, p. 2-3.)[16]

The DEIR then lists eight Project objectives to achieve those stated purposes:

> 1. Expand San Francisco's publicly owned, not-for-profit electricity services to meet the electricity needs of all electric customers in San Francisco.
>
> 2. Use public funds efficiently and prudently to maintain and improve San Francisco's existing electricity infrastructure over the long term.
>
> 3. Use existing electric facilities that are already serving customers in San Francisco and avoid, where feasible, the construction of unnecessary and duplicative electric facilities.
>
> 4. Provide the City with [de facto] operational control of San Francisco's electric grid to allow the City to provide safe, reliable, sustainable, and affordable electricity service for all of San Francisco.
>
> 5. Facilitate the development of community-based electric service goals and provide programs that are based on community input, support the City's climate action goals, and promote equity and racial justice.

[16] The first two purposes can be achieved through use of CCSF's existing Community Choice Aggregation utility, CleanPowerSF without imposing any environmental impacts that may result from the Project. Customers of CleanPowerSF receive delivery of CCSF's Hetch Hetchy Power (or other power acquired or generated by CCSF) using existing electric facilities. Alternatively, these purposes could be achieved by relying upon the administrative alternative described above in Section F.1, but not addressed in the DEIR. The third purpose can also be achieved independently, without the Project.

6. Provide cost-effective, timely, and reliable interconnections to San Francisco's electric grid for all electricity users in San Francisco.

7. Establish local accountability for the long-term performance and affordability of San Francisco's electricity infrastructure.

8. Minimize disruption to local communities. (DEIR, p. 2-3, *see also* DEIR, pp. 5-31–32 [Table 5-3].)

A lead agency may not give a project's objectives an artificially narrow prescription. (*North Coast Rivers Alliance v. Kawamura* (2015) 243 Cal.App.4th 647, 668.) In *North Coast Rivers Alliance*, the California Department of Food and Agriculture prepared an EIR for a program whose stated objective was to "eradicate [Light Brown Apple Moths] from California." (*Id.*, at p. 656.) The EIR rejected out of hand any alternative that would not achieve complete eradication. (*Id.*, at pp. 667–668.) However, the court held that the agency improperly focused on its stated objective or eradication, rather than considering the project's actual purpose—to protect crops and plants. (*Id.*, at pp. 668–669.) On that basis, the court found that the EIR violated CEQA by failing to study a control-based alternative that could have accomplished the project's purpose. (*Id.*, at pp. 669–670.)

The most problematic objective is to "Provide the City with operational control of San Francisco's electric grid to allow the City to provide safe, reliable, sustainable, and affordable electricity service for all of San Francisco." Focusing on CCSF's operational control as an objective excludes all alternatives other than CCSF acquiring PG&E's system, rendering the other objectives meaningless for purposes of the DEIR—even though many could be achieved without transferring PG&E assets to CCSF. In other words, the objective and the Project are one and the same: ownership of PG&E's electric assets. At a minimum, this objective should be revised to include only its goal – "safe, reliable, sustainable, and affordable electricity service for all of San Francisco," rather than a singular, specific presumed means to achieve that goal – acquiring operational control of PG&E's system.

25 - AL-3

The DEIR dismisses out of hand the "No Project" Alternative because it fails to achieve the listed Project *objectives*. (DEIR, pp. S-12, 5-10, 5-30.) However, each of the three stated Project *purposes*—specifically related to ensuring delivery of Hetch Hetchy hydropower, and other clean power to San Francisco and improving cost and efficiency of interconnections to customers in San Francisco and improving operations of the portion of the CCSF grid that is owned by CCSF—could be achieved under the No Project Alternative. The DEIR emphasizes (whether accurately and completely reflected or not) that the Project is necessitated by "excessive" costs from current (PG&E) requirements. (*See, e.g.*, DEIR, p. 1-9 [slanted discussion of $650,000 cost for current required equipment for a restroom].) As such, given that cost savings is a true purpose of the Project, then, at a bare minimum, the DEIR needs to describe that the No Project Alternative could achieve that purpose—as the Project's cost (*e.g.*,

the cost to acquire PG&E power assets and construct and operate a separated grid) would be magnitudes greater than the cost savings emphasized in the DEIR.[17] By failing to meaningfully consider the No Project Alternative, the DEIR improperly conflates a byproduct—operational control—with its actual stated purpose of achieving cost-efficient provision of Hetch Hetchy (and other clean) energy to electric customers in San Francisco, which can be achieved with no environmental impact using the existing electric infrastructure and San Francisco's CCA, CleanPowerSF.

25 - AL-3 cont.

G. The DEIR's Deficient Environmental Impact Analysis

As further detailed in Exhibit A, the environmental impact analysis of the DEIR (inclusive of the Initial Study) is substantively deficient in several respects: (1) lack of detailed analyses; (2) inadequate technical analyses, inclusive of conclusions not based on substantial evidence; and (3) inadequate mitigation, including improper deferral of mitigation.

1. Lack of Detailed Analyses

As discussed above, the deficiencies in the DEIR's Project description result in a corresponding deficiency of the environmental analysis throughout the DEIR. (*See Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal.App.4th 1437, 1448; *Sierra Club v. City of Orange* (2008) 163 Cal.App.4th 523, 533 [an accurate, stable, and finite project description is necessary so that the lead agency and the public have enough information to "ascertain the project's environmentally significant effects, assess ways of mitigating them, and consider project alternatives"].) In other words, given the lack of detail in the Project description (discussed above in § II.E), it is unclear, for public participation and decision-making purposes, what the *total* potential environmental impacts of the Project are because it is not possible to analyze impacts beyond the narrow level of specificity provided in the Project description. This has resulted in imprecise and vague impact assessments, including, but not limited to, the DEIR's noise, vibration, cultural resource, and hazards and hazardous materials analyses, and generic assessments of all trench-route analyses, all site-specific impacts associated with the proposed maintenance and operations yard(s), all impacts associated with the laydown area for the Project Variant, as well as what would be expected to be material impacts at the Martin Substation. (*See* Exhibit A, inclusive of the appended technical studies and reports, for specific deficiencies.) CEQA's principle purposes—(1) of avoiding or reducing environmental damage when feasible and (2) of informed disclosure to the public and informed decision-making by CCSF—demands more. (CEQA Guidelines, § 15002(a).)

26 - PD-2

2. Inadequate Technical Analyses

[17] *See* DEIR Table 5-3 which states that the No Project Alternative would not use public funds efficiently and prudently. This is incorrect as the proposed Project would require the expenditure of billions of dollars of public funds while the No Project Alternative would not.

Technical experts have reviewed the DEIR (inclusive of the Initial Study) and concluded that it fails to accurately assess the potential intensity of the Project's impacts across several environmental topic areas—and, as such, the DEIR cannot adequately inform the public and decision-makers of the Project's impacts and cannot serve as substantial evidence for the DEIR's conclusions. This section highlights just a few of the experts' conclusions, which are provided in greater detail within Exhibit A. CCSF must also review and consider in good faith all of the environmental deficiencies identified in Exhibit A (as well as all of the deficiencies with the DEIR identified in Exhibit B), which includes deficiencies related to aesthetics, archaeological and historic resources, air quality, noise, hazards and hazardous materials, biological resources, geology and soils, transportation and circulation (*e.g.*, traffic), and utilities and service systems.

a. Archaeological and Historic Resources

The DEIR's archaeological and historic resources analysis is deficient, among other reasons, because:

- The cultural resources section is fundamentally deficient from an informational standpoint due to the unavailability of the underlying Cultural Resources Report or a redacted copy of that Report. Without this Report, there is insufficient information in the DEIR to determine whether the impacts have been adequately identified, studied, and mitigated. CCSF must circulate a copy of the underlying Cultural Resources Report, or, at a minimum, an appropriately redacted version, to ensure that the public and decision-makers have sufficient information to evaluate the Project's potential impacts on cultural resources. — 27a - CR-1
- The DEIR (including the IS) improperly treats the public right-of-way (ROW) as automatically culturally sterile. This assumption is flawed, as archaeological resources are known to exist throughout San Francisco, including within roadways.. — 27b - CR-3
- The locations of the Operations and Maintenance Service Yards must be identified in the DEIR, not deferred to a later phase. Without clearly defined locations and footprints, it is not possible to meaningfully evaluate the Project's potential impacts on cultural resources. — 27c - CR-1
- The stop-work radius of 25 feet in MM M-CR-2a is significantly smaller than the standard 50 feet stop-work radius typically required in similar mitigation measures for other projects. This difference is material as expanding the radius to 50 feet would provide significantly better protection of cultural resources or human remains discovered during construction. — 27d - CR-3

b. Air Quality

The DEIR's air quality analysis is deficient, among other reasons, because:

- The DEIR applies different cancer risk thresholds for Project activities occurring within — 28 - AQ-1

and outside of CCSF, with CCSF providing a more health protective threshold to its own residents versus those outside its jurisdiction (7 in a million [see, e.g., DEIR Table 3.3-14] versus 10 in a million [see, e.g., DEIR Table 3.3-13]). This distinction is unreasonable, as human biology or the significance to a person of an increased risk of cancer does not vary depending on a county line.

28 - AQ-1 cont.

- DEIR Mitigation Measure M-AQ-2b states, "Where access to alternative sources of power are available, portable diesel engines shall be prohibited." Given the urbanized nature of the project area, this prohibition should be incorporated into the Project design. There should be little to no need for generators, as the Project's design can prioritize direct electrical grid connections. This approach would substantially reduce the noise and air quality impacts of the Project. The DEIR should be revised with this feasible approach to minimize the need for generators.

29 - AQ-2

- The DEIR needs to identify whether additional generator(s) would be required at PG&E's relocation site for substation activities displaced by the Project (whether temporarily under the Project or permanently under the Project Variant).

30 - PD-5

- The air quality toxic air contaminants ("TAC") assessment in the DEIR relies on a mitigation measure that has no TAC prescriptive values. Without clear performance standards for measuring and ensuring the effectiveness of this measure, the DEIR cannot assume that impacts from TACs will be adequately mitigated to a less than significant level.

31 - AQ-2

- As discussed above (*see* § II.D.1), the DEIR's failure to analyze actual linear components of the Project at a project level causes the DEIR's HRA to be deficient and not substantial evidence.

32 - AQ-1

- The DEIR's Air Quality Cumulative Impacts states that quantitative data is not available for the cumulative projects. This, however, ignores that immediately adjacent Cormorant Battery Energy Project, for which detailed environmental review is readily available. The data from that environmental review should be used to determine cumulative impacts due to the similar timeline of that project and the Project.

33 - AQ-4

c. <u>Noise</u>

The DEIR's noise analysis is deficient, among other reasons, because:

- The DEIR's Noise Setting section exhibits a basic misunderstanding of acoustical concepts, contains erroneous/redundant information, and is incomplete. The DEIR's selected noise significance criteria are not protective of public health, as follows:
    - While it is appropriate that the analysis, methodologies, and impacts standards of the Federal Transit Administration (FTA; *Transit Noise and Vibration Impact Assessment Manual* 2018) be mentioned in the DEIR Setting and used in the DEIR's analysis, the DEIR improperly uses the FTA's *General Assessment* noise

34 - NO-1

criteria for evaluating project construction noise impacts, rather than the more appropriate *Detailed Assessment* criteria. The FTA recommends the latter as *"warranted when many noise-sensitive sites are adjacent to a construction project or where contractors are faced with stringent local ordinances or heightened public concerns expressed in early outreach efforts,"* which clearly applies to the Project.

- The DEIR's selection of the *General Assessment* construction noise criteria (i.e., 90 decibels for residential receptors) provides a lower level of protection than the *Detailed Assessment* criteria. This selection is unprotective of the environment and permits an additional 10 decibels of noise exposure before a significant impact determination can be made—thus, understating the Project's true noise impacts.
- The DEIR's choice of the 90 decibel threshold for construction noise also puts it into potential conflict with the US Environmental Protection Agency (EPA) recommendations (i.e., *Noise Levels Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*), which are cited in the DEIR Setting. An exposure to noise at 90 decibels over one hour is equivalent to a 76 decibel exposure over 24 hours, which would exceed the EPA's recommended 70 decibel limit over 24 hours intended to ensure protection against the potential for hearing loss.
- The 90 DB threshold is the Police Department's threshold for taking action. This threshold it is not indicative of potential CEQA noise impacts. For example, the FTA Manual also includes significance criteria for incremental construction and operational motor vehicle traffic (i.e., FTA Manual, Figure 4.3 and Figure 4.4, *Increase in Cumulative Noise Levels Allowed by Criteria*), but these are not included in the DEIR, and their existence is not even mentioned. Rather, the DEIR cites erroneous fixed 3-5 decibel increments as defining significant noise increases from any baseline level instead of endorsing the FTA's position that *"people already exposed to high levels of noise should be expected to tolerate only a small increase in the amount of noise in their community"*.

  Note that the City of Los Angeles has nighttime noise thresholds based on sleep protection. These are: *The nighttime thresholds are focused on sleep disturbance and address this via two standards: a maximum absolute sound level of between 55 to 70 dBA Leq, as well as a maximum increase over ambient noise levels of 5 dBA Leq. These absolute sound level limits occur on a sliding scale from 55 to 70 dBA Leq to be sensitive to residential areas, including hillside areas, to ensure minimal impact on sleep and health, with a more stringent noise limit and lower exterior noise levels for sensitive uses within older buildings (with single-glazed windows) than for new buildings (with double-paned windows). Both the daytime and nighttime thresholds are protective of public health and based on substantial*

34 - NO-1 cont.

evidence.[18]

The DEIR should use similar nighttime noise thresholds rather than arbitrary Police Code thresholds. Los Angeles also has adopted an 80-dBA threshold for daytime construction noise, again based on being protective of the environment, and not an arbitrary Police Code.

- The DEIR uses an operational noise criteria of a 8 dBA increase (see p. 3.2-27). But the actual criteria per Table 3.2-12 is "For single-family residential, noise levels shall not be more than 10 dBA above ambient **for a cumulative period of more than 10 minutes per hour"** [emphasis added]. This is a lower threshold than a continuous 8 dBA threshold. And neither threshold is protective of the environment because noise impacts are significant far below a doubling of loudness, which is an arbitrary level unrelated to actual impacts.
- The noise impacts of pile drivers and other impact tools where they are proposed to be used should not be arbitrarily exempted from the noise significance criteria, and be evaluated under the same San Francisco Police Code standards as other construction equipment. The Police Code's exemption of pile driving is not relevant to CEQA, which evaluates impacts to the physical environment, and not just code compliance (*see Berkeley Keep Jets Over the Bay v. Board of Port Commissioners*).
- The most egregious example of the DEIR's non-protective noise thresholds is with respect to the Bayshore Elementary School, which would be subject to noise increases from the existing 72 dBA to a total noise level of 80 dBA, for weeks or months during construction (see Table 3.2-16, p. 3.2-46). At these levels, education and students would be significantly impacted.

34 - NO-1 cont.

- Noise mitigation measures are inadequate, as follows:
  - The DEIR imposes no mitigation for extreme noise levels because of erroneous significance thresholds. Noise significance thresholds are variously set at 100, 90, 86, 80, 65, 76, 45, and other quasi-random decibel levels (see Table 3.2-12), with no analysis or supporting documentation to show which levels are actually protective of human health. The need for mitigation should be reconsidered based on the revised set of quantitative significance criteria included in the Setting and new information on construction activities introduced by additions/revisions to the Project Description.
  - The DEIR fails to consider potentially feasible mitigation measures for work near sensitive receptors, including residences and schools. This may include use of line power rather than generators for dewatering.
  - The Noise Control Plan is not included in the DEIR but deferred to post approval,

35 - NO-4

[18] https://planning.lacity.gov/odocument/e36cc04c-bfcd-44e6-a020-5806d61146dc/Updated_CEQA_Thresholds_Fact_Sheet.pdf.

which is improper deferral given the lack of clear performance standards for measuring and ensuring the effectiveness of the Noise Control Plan. More specifically, Noise Control Plan components outlined in the DEIR are vague and some of the measures to be included are caveated "if feasible." The DEIR includes no calculations showing the effectiveness of the measures. Further, the Plan's goal is to achieve noise below 90-100 dBA and a 10 dBA average increase. As detailed above, those noise levels are not protective of the environment or human health.

35 - NO-4 cont.

- Vibration impacts to both structures and residents are impossible to determine because of the DEIR fails to provide of a Martin Substation site plan and lack of specifics regarding jack-and-bore and vault pit locations, as well as the location of storage and maintenance yard(s).

36 - NO-5

d. Hazards and Hazardous Materials

The DEIR's hazards and hazardous materials analysis is deficient, among other reasons, because:

- Project activity and facility locations need to be identified and clearly mapped to allow an adequate hazardous-materials-impacts analysis. Project description deficiencies likely have resulted in failure to fully identify impacts. For example, the exact locations of underground work at Martin Substation and the Martin Service Center (which would require impacting existing caps covering contaminated soil) and for the local distribution system separation components, system reinforcements components, operations control center, and operations and maintenance service yards have not been identified, and their proximity to known hazardous material sites and Maher Ordinance areas cannot be determined.
- The DEIR (IS) states, "The exact locations of underground work for the local distribution system separation and system reinforcements are not known but could occur within 500 feet of most of the sites identified in Table 1." The close proximity to identified sites further emphasizes the need for the project locations to be clearly identified; without adequately noting project disturbance areas, the currently noted criteria are insufficient for determining if and when supplemental analyses and plans will be provided (e.g., site history/Phase I environmental site assessment report, soil and groundwater sampling prior to roadway excavation and stockpiling, and site mitigation plan(s) for handling and disposal of contaminated materials).

37 - HZ-1

- The DEIR (IS) assumes regulatory compliance will eliminate the potential for significant impacts. This general assumption is common among projects of this type but insufficient in terms of first needing to identify potential project-specific significant impacts and then needing to mitigate the identified impacts.

38 - HZ-2

e. Biological Resources

The DEIR's biological resources analysis is deficient, among other reasons, because:

- The DEIR's failure to clearly identify all of the Project facilities and construction work makes the DEIR inadequate in its assessment of the Project's potential impacts to biological resources. 39 - PD-2

- The DEIR does not address the proposed Project's potential impacts to the special status Crotch's bumblebees. Note that the Biological Resources Technical Memorandum (Appendix H) omits analysis of this bumblebee species, and states that the potential for the Obscure and Western bumblebees to be low because of minimal observed occurrences in the Project area. However, this information is contradicted by the October 2024 DEIR on the proposed Guadalupe Quarry Redevelopment Project (SCH # 2022060358), located less than a mile to the south of the Martin Substation, which states that the western bumblebee, obscure bumblebee, and Stages dufourine bee all may occur in that Project's area.

  Given the Martin Substation's proximity to San Bruno Mountain, and the fact that construction would occur elsewhere on the edge of the Mountain as well as in open space areas such as the Olympic Club gold course, it is possible that such species may be present on or near the project construction areas.

  Further, the Biological Resources Memo completely omits the potential for Crotch's bumblebee to occur in the Project area and be affected by Project construction. The Guadalupe Project EIR had a similar omission, resulting in an extensive comment letter from the California Department of Fish and Wildlife[19], (CDFW) stating in part: 40- BI-1

  > The current range of CBB, a species listed as candidate endangered under the CESA, encompasses the proposed Project area. Bumble bees, including CBB, are found in a wide variety of natural, agricultural, urban and rural habitats, and require suitable nesting and overwintering sites as well as availability of nectar and pollen from floral resources (Hatfield et al. 2018). Proposed Project activities as described in the draft EIR could impact bumble bees if they are present on-site.
  >
  > **Evidence the impact would be significant:** The Project as described in the DEIR would impact approximately 4.8 acres of potentially suitable bumblebee habitat, consisting of grassy and scrub mosaic habitats which could potentially provide nesting and/or foraging habitat for CBB. Bumble bee nests are most often located underground in abandoned holes made by ground squirrels and rodents, and occasionally in abandoned bird nests. Any near-surface or subsurface ground disturbance could result in the direct take of bumble bee colonies or overwintering

[19] Letter from Erin Chappell, Regional Manager, Bay Delta Region, California Department of Fish and Wildlife re: Guadalupe Quarry Redevelopment Project, Draft Environmental Impact Report, SCH No 2022060358, City of Brisbane, San Mateo County, to Julia Ayers, Principal Planner, City of Brisbane, December 5, 2024.

queens. Project activities involving removal of floral resources would also impact survival of resident bumble bees, given that bumble bees visit native and non-native flowering plants alike to collect the pollen and nectar resources needed to sustain their colonies and provision nest cells. Further, the use of pesticides and herbicides in landscaping during Project operation could cause direct or indirect mortality of special-status bees, including CBB.

Many bumble bee species, once common in the western United States, have undergone a dramatic decline in both distribution and abundance and are now extirpated from much of their historic ranges. Many bumble bees are threatened with extinction due primarily to reductions in habitat from urbanization, intensive agricultural practices, and invasive species introductions. CBB is a candidate species under CESA and therefore should be considered a threatened, endangered, or rare species under CEQA pursuant to CEQA Guidelines section 15380. Therefore, if CBB occur at the Project site and Project impacts to CBB would occur, this may result in a substantial reduction in the species' population, which would be a mandatory finding of significance (CEQA Guidelines Section 15065).

40 - BI-1 cont.

The CDFW letter goes on to list extensive mitigation including habitat assessment, bee surveys, nesting colony avoidance, take authorization, and compensatory mitigation. All of this must be considered with respect to proposed Project impacts to this species.

In addition, the project's potential impacts on the Western and Obscure bumblebees should be reconsidered in light of the detailed analyses of those species and mitigation required, in the Guadalupe Project EIR.

f. Utilities and Service Systems

The DEIR's utilities and service systems analysis is deficient, among other reasons, because:

- The DEIR determines that Impact UT-1 is less than significant based on the assumption that no new facilities are needed. (Initial Study, pp. 135–136.) Even with the noted deficiencies in the DEIR it is apparent that this is factually incorrect. (*See* Exhibit B.) Accordingly, this determination is not supported by substantial evidence.

41 - PD-1

3. Improper Deferral of Mitigation and Otherwise Inadequate Mitigation

It is generally inappropriate to defer studies to determine presence and the details of mitigation measures to the future (*e.g.*, removed from the environmental review process). (CEQA Guidelines, § 15126.4(a)(1)(B); *see, e.g., Save the Agoura Cornell Knoll v. City of Agoura Hills* (2020) 46 Cal.App.5th 665, 688, 693, 791 [mitigation measures calling for future surveys and future formulation of various components of mitigation measures found to be improper deferral of mitigation.]) Deferral will be found improper if no reason is given or

42 - OC-2

justification for why the deferral is appropriate. (*See, e.g.*, 1 Kostka & Zischke, Practice Under the Cal. Envtl. Quality Act (Cont.Ed.Bar 2025) ("Kostka & Zischke"), § 14.12 ["[d]eferral can be found improper if no reason for it is given."].) Moreover, a mitigation measure: (1) needs to be fully enforceable (CEQA Guidelines § 15126.4(a)(2)); (2) needs to be feasible (*e.g.*, viable and effective) (CEQA Guidelines § 15126.4(a)(1); and (3) cannot be too vague to ensure it will be viable and effective (*Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1116). In this sense, deferred studies must include clear performance standards for measuring the effectiveness of the mitigation in committing the agency to mitigating impacts. (Kostka & Zischke, § 14.12.)

Much of the "mitigation" in the DEIR does not meet these standards. Instead, the DEIR often relies on SFPUC's admittedly generalized Standard Construction Measures and/or future plans (*e.g.*, Noise Control Plan) as a form of mitigation in merely determining no significant impact. This does not provide sufficient analysis and disclosure of the Project's impacts to the public, responsible agencies, and the decision-makers. (*See also* Exhibit A [further discussing inadequate mitigation and improper deferral of studies].)

42 - OC-2 cont.

Furthermore, several of the DEIR's mitigation measures as well as SFPUC's Standard Construction Measures, lack an enforcement mechanism and lack clear performance standards for measuring and ensuring the effectiveness of deferred plans—and ultimately do not ensure feasibility (*e.g.*, effectiveness) in mitigating impacts. As detailed throughout Exhibit A, examples of improperly deferred mitigation due to the lack of clear performance standards include the DEIR's inclusion of measures within the Noise Control Plan only if feasible and the failure of the DEIR to identify calculations showing the effectiveness of the measures that may be included within the Noise Control Plan.

III. Conclusion

On behalf of PG&E, we appreciate your consideration of these comments on the DEIR.

Sincerely,

Cox, Castle & Nicholson LLP

Christian H. Cebrian

cc: David Kraska, PG&E Chief Counsel, Environmental.

Enclosures:
Exhibit A: Grassetti Environmental Consulting DEIR Peer Review Letter ("GECo Letter");
Exhibit B: PG&E Supporting Technical Memorandum;
Exhibit C: U.S. Environmental Protection Agency, "Sulfur Hexafluoride (SF6) Basics";
Exhibit D: CCSF Acquisition Offers and PG&E Response.

EXHIBIT A

GECO
Grassetti Environmental Consulting

Christian Cebrian
Cox, Castle, Nicholson
50 California Street, Suite 3200
San Francisco, CA 94111

May 15, 2025

SUBJECT: PEER REVIEW OF THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE PG&E POWER ASSET ACQUISITION PROJECT

Dear Mr. Cebrian;

Grassetti Environmental Consulting (GECo) has conducted a peer review of the City and County of San Francisco's (CCSF's) Draft Environmental Impact Report (DEIR) for CCSF's PG&E Power Asset Acquisition Project (Project). With 43 years of experience preparing and reviewing CEQA documents, as well as experience teaching both professional and university courses on CEQA, I conducted this review to determine whether, in my professional judgment, the DEIR complies with the basic requirements of CEQA and its implementing CEQA Guidelines. My qualifications are included as Attachment A to this letter.

The DEIR's (inclusive of the Initial Study's) analysis of Hazards and Hazardous Materials, Noise and Vibration, and Cultural Resources analyses were additionally reviewed by dedicated experts in those fields—namely, Kevin Torres and Lia Holden at Northgate Environmental Management, Inc, Geofrey Hornek, Atmospheric Scientist, and Charlane Gross at Terraphase Engineering, respectively. Their findings have been incorporated into this letter, and their full comment letters are included as Attachment B, Attachment C, and Attachment D.

The comments herein are based on a review of the DEIR and associated Appendices posted on the San Francisco Planning Department's website. As detailed in this letter, the DEIR contains several substantive deficiencies that undermine its adequacy under CEQA. The deficiencies fall into four general categories: (1) mischaracterization of Project and Program EIR components, (2) other Project description issues, (3) inadequate mitigation and improper deferral of study to mitigation due to the absence of clear performance standards, and (4) inadequate impact analyses and technical study deficiencies, particularly with respect to the noise, hazardous materials, and cultural resources assessments among other environmental topic areas.

Program vs. Project EIR/Project Piecemealing

The DEIR separates the Project components into two categories for review. Certain Project components are assessed at a "Project" level, while other Project components are assessed at a "Program" level. CEQA Guidelines section 15168 states:

1. (a) General. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

   (1) Geographically,

   (2) As logical parts in the chain of contemplated actions,

   (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or

> (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

Notwithstanding this guidance, the DEIR assesses only the Martin Substation, Distribution Express Feeders, and Modifications to Retain PG&E Access at a "Project" level, and relegates the Local Distribution System Separation, System Reinforcements associated with Separation of the Distribution System, operations control center, operations and maintenance yard service yards, materials and equipment storage areas, and telecom equipment to "Program" level review. This approach is flawed. These components of the Project are not "logical parts in a chain of contemplated actions," but rather integral and essential components of a single contemplated action—the acquisition of applicable PG&E facilities, and the separation, construction, and operation of associated facilities necessary to achieve CCSF's stated goals of owning and maintaining an electrical power system separate from PG&E. Simply stated, there is no "chain of contemplated actions"; rather, there is just a single action, all of the components of which are essential to its functioning. Given the proposed Project construction start in 2026 and completion in 2028 (see DEIR Table 2-9), there would be no time for further phased CEQA review of the components omitted from Project level review (for example the 150,000 sq. ft. operations and maintenance yard), making it clear that these components are intended as a single cohesive action.

Given the above, and as further detailed under Project Description Issues section below, the program/project approach used in the DEIR effectively results in impermissible segmentation or piecemealing of the proposed project's CEQA review. CEQA defines a project as "the whole of an action, which has a potential for resulting in ... a physical change in the environment." (Guidelines Section 15378(a).) CEQA piecemealing refers to breaking a large project into smaller components to avoid thorough environmental review and potentially reduce the apparent impact of the project. This practice is prohibited under CEQA, as it can obscure the full environmental consequences of a development by reviewing smaller, seemingly insignificant parts separately rather than analyzing the whole project. In using the program/project distinction, the DEIR arbitrarily omits any detail of necessary components of the Project based on this improper distinction, thereby effectively piecemealing the project with respect to CEQA review.

43 - PD-2

The program/project distinction, and the associated piecemealing of the project for CEQA review, results in a failure to actually identify, describe, and analyze the potential impacts of essential parts of the Project (and in turn the entire Project). In other words, the DEIR uses the improper program/project distinction to avoid identifying and describing not just the Project components, but also the Project's impacts. While CEQA permits limited project segmentation if the components are not essential to the project's operation and have independent utility, that is not the case here. Each of the components analyzed at a Program level (with descriptions and analyses deferred to some future review) are essential to the overall Project's operation and in that regard do not have independent utility. Thus, the DEIR's improper program/project distinction and the resultant impermissible deferral of the review of Program level components at a Project level to some future, undefined phase (or potentially exemption of never-fully described or analyzed components of the Project from CEQA review entirely) is done in violation of CEQA.

To remedy this deficiency, the DEIR must be revised to treat all components of the Project at a Project level of review.

Project Description Issues

As discussed above, the DEIR's Project Description section is deficient due to its omission of essential information on certain Project components resulting from the DEIR's arbitrary program/project distinction. Further, the Project Description assesses most of the "Project" level

Project components in a programmatic manner. Specifically, the following information essential to conducting an adequate impact analysis has been omitted from the Project Description:

- Lack of Site Plan and Inadequate Description of Martin Substation Work: The DEIR lacks a site plan for the Martin Substation work, preventing accurate assessment of potential aesthetic, hazards and hazardous materials, noise, air quality, and cultural resources impacts. There is no physical description of the proposed new control building and transformers, nor of their locations or work required to install them. The DEIR's technical descriptions of lines and transformers (i.e. in terms of kV, fuse, meters, etc.) but absent physical size and location parameters do not provide necessary information for layperson as well as experts to assess potential impacts. In addition, there are no descriptions or locations for the proposed new control building and switching building at Martin Yard.
- Unspecified Construction Laydown Area for the Project Variant: The DEIR fails to identify the location and extent (e.g., associated activities) of required laydown areas for construction of the Project Variant.
- Undefined Facility Locations: The DEIR fails to identify the actual locations of the proposed facilities—both on the substation sites and for the cable routes. In order to meaningfully assess impacts and significance, a 30% design should be used—which would show the locations and massings of the Project's above-ground facilities at the substations as well as trench locations, widths, and depths for subsurface installations.
- Omission of Jack-and-Bore Pits and Vault Locations: The DEIR fails to identify locations for jack-and-bore pits or vaults. This omission precludes meaningful site-specific impact analyses on historic buildings, noise, and air quality.
- Undefined Corporation/Maintenance Yards: The DEIR discusses the need to secure 150,000 to 200,000 square feet of maintenance and storage facilities to house equipment, trucks, and parking, and to provide offices for workers in an existing building. (DEIR, p. 2-29.) While Table 2-1 indicates that this component would just be modifications to existing yards, the description on page 2-29 indicates otherwise[1]. The DEIR fails to identify where the 150,000 sq. ft. (approximately 3.5 acres) corporation/maintenance yards associated with the Project would be located. Curiously the DEIR had detailed earth moving quantities for new maintenance/storage yards, even though the DEIR fails to identify any site(s) for these yards.
- Failure to Address PG&E's Need to Relocate Its Operations Due to CCSF's Construction Staging Area: The DEIR fails to identify where PG&E will relocate its operations from the PG&E yard area that is displaced by the proposed Project laydown (construction staging) area.
- Failure to Address Required PG&E's System Reinforcements: The DEIR fails to provide discussion of any PG&E work required to restore service, construct and reinforce lines, etc. after the Project is implemented. At a minimum, this work could involve significant trenching.
- Lack of Maps for Meaningful Localized Assessment: The DEIR fails to include maps that show specific streets where above- and under-ground line work, pole work, and vault work will be performed. This prevents a meaningful assessment of potential localized impacts.
- Failure to Identify Excavated Material Storage Locations: The DEIR fails to identify

44 - PD-1

[1] DEIR, p. 2-29 states: The City would secure 150,000 to 200,000 square feet of maintenance and storage facilities to house equipment, trucks, and parking, and to provide offices for workers in an existing building. The City would use one or more City-owned or -controlled properties in the southeastern part of San Francisco, other acquired commercial or industrial properties in the southeastern part of San Francisco, or space at acquired substations.

locations where excavated material would be stored prior to off haul, precluding analysis of potential impacts related to, including, but not limited to, dust, erosion, and traffic.

- Pile Driving Methods are Inadequately Described: The DEIR fails to identify the pile driving methods that will be utilized by the Project—and accordingly the noise and vibration impacts from pile driving are not adequately addressed.

44 - PD-1 cont.

As further discussed below, this Project information is essential to identifying and assessing the **Project's impacts, such as with respect to noise, cultural resources, geotechnical, air quality, and biological resources** impacts.

Inadequate Mitigation and Improper Deferral of Studies to Mitigation

The DEIR (inclusive of the Initial Study (IS)) improperly relies on SFPUC Standard Construction Measures as mitigation. Many of those measures require additional study which is necessary to adequately analyze the Project impacts. The measures fail to include clear performance standards for measuring and ensuring the effectiveness of the measures in mitigating the accordant potentially significant impacts to a less than significant level. By deferring those studies to after Project approval, the public and decision-makers, including responsible agencies, are deprived of the opportunity to meaningfully comment on and consider the potential impacts of the Project. Examples of improper deferred mitigation due to the absence of clear performance standards include, but are not limited to, deferral of **all** hazardous materials and archaeological/historical resources studies until after Project approval. The studies identified in the specific comments below should be completed at this stage of the environmental review and included in a revised and recirculated DEIR.

45 - OC-2

Lack of Detailed Impact Analyses

In evaluating a project under CEQA analysis, it is only possible to analyze impacts based on the specificity provided in the Project Description. The vagueness of the DEIR's Project description (as discussed above) results in similarly vague and imprecise impact assessments. These include, but are not limited to, imprecise noise, vibration, cultural resource, and hazardous materials analyses, as well as generic assessments of all trench-route analyses, all site-specific impacts associated with the proposed maintenance and operations yard(s), all impacts associated with the laydown area for the Project Variant, as well as unaddressed impacts from the Martin Substation component. Without a sufficiently detailed Project description, the DEIR cannot and, as detailed below, does not adequately assess potential environmental impacts and fails to inform the public and decision-**makers of the Project's potential environmental impacts.**

Inadequate Technical Analyses

As detailed below, the DEIR's environmental setting, impacts, and mitigation sections (including those in the IS) contain numerous substantive deficiencies, many of which stem from the improper program/project approach (discussed above) and other Project Description deficiencies (discussed above). Specific deficiencies are identified below.

Aesthetics

- **Due to the DEIR's omission of site** plans and failure to disclose or identify transformer and building locations and design at the substation, the aesthetic impacts of those facilities cannot be (and are not) meaningfully evaluated.
- The **DEIR's failure to identify even the** specific street corridors where new poles and local transformers would be installed, precludes the aesthetic impacts (e.g., potential of visual change) of those facilities from being meaningfully evaluated.

46 - AE-1

Archaeological and Historic Resources

- The DEIR's Project Description is inadequate to determine potential impacts to either historic structures or archaeological resources because of the DEIR's lack of a site plan for the Martin Substation, lack of storage/maintenance yard location and plans, lack of locations for subsurface work (i.e. vaults, tranches, foundation work, and jack-and-bore pits) and lack of a detailed vibration impacts analysis to the Martin Substation Building,
- The cultural resources section is fundamentally deficient from an informational standpoint due to the unavailability of the underlying Cultural Resources Report or a redacted copy of that Report. Without this Report, there is insufficient information in the DEIR to determine whether the impacts have been adequately identified, studied, and mitigated. CCSF must circulate a copy of the underlying Cultural Resources Report for review by a qualified historian and/or archaeologist, or, at a minimum, an appropriately redacted version for public review, to ensure that the public and decision-makers have sufficient information to evaluate the Project's potential impacts on cultural resources.

47 - CR-1

- The DEIR (including the IS) fails to include a figure showing the different impact areas, the different project areas, and the locations of the Historical Resources and districts in relation to those areas. The verbal descriptions in the DEIR are inadequate to convey any potential visual impacts resulting from changes to the setting near CRHR-eligible resources. The DEIR must include appropriate figures addressing the above.

48 - CR-2

- The DEIR (including the IS) treats the public right-of-way (ROW) as automatically culturally sterile. This assumption is flawed, as archaeological resources are known to exist throughout San Francisco, including within roadways. The statement that there is nothing in the ROW is a misleading and inappropriate conclusory assumption. The DEIR lacks a clear description of background research conducted to identify potentially significant sub-surface historic-era resources. The information presented in the DEIR is inadequate for determining impacts. More specifically, the DEIR omits mention of examination of historic maps, bird's-eye views, etc. Given the length of the Cultural Resources section in the DEIR, it would be appropriate for the DEIR to overlay Project elements onto a historic map so that the public (inclusive of technical experts) reviewing the DEIR can see drainages, proximity to the Bay, early structures, etc.—all of which have bearing on the potential for significant cultural resources to be present within the Project area. Further, an assessment should also include a buried site sensitivity analysis, based on a geoarchaeological model and review of historic maps.

49 - CR-3

- While the DEIR lists historic districts, the DEIR omits any description, character-defining features, discussion, or analysis of features of these historic districts that may be impacted by the Project. This analysis of historic districts needs to be included for CEQA compliance.
- MM M-CR-1c does not ensure adequate protection of cultural resources as it continues the pattern of improper deferred mitigation without clear performance standards for measuring and ensuring the effectiveness of the measure, which deferred mitigation deficiency is present throughout the DEIR (IS).

50 - CR-2

- The Project's systems reinforcements description suffers from a general lack of specificity and the DEIR's assumption that simply because this Project component is to occur in the ROW, there are no subsurface cultural materials is entirely unsupported by substantial evidence.

51 - CR-3

- The locations of the Operations and Maintenance Service Yards must be identified in the DEIR, not deferred to a later phase. Without clearly defined locations and footprints, it is not possible to meaningfully evaluate the Project's potential impacts on cultural resources.

52 - CR-1

- The predictive modeling described under DEIR (IS) Impact CR-2 indicates that the Project site is located much farther from the current Bayshore than is considered to be

53 - CR-3

within the range of increased sensitivity. However, there are repeated references to high sensitivity throughout the discussion. The DEIR (IS) should include specific discussion of local waterways, changes in the distance to the Bay, distance to shellmound sites, distance to other prehistoric resources, and should include a table listing known prehistoric sites within a 0.5 (minimum) mile radius of the Project site or potential corridors that involve any ground-disturbing activity. This can be easily done without giving away precise resource locations, and is a standard component of cultural resource assessments in CEQA documents. 53 - CR-3 cont.

- The DEIR (IS) lacks a sufficient description of background methods and findings. Given all of the deferred data collection/testing, the DEIR (IS) needs to be substantially updated with actual information that allows for meaningful evaluation by the public. 54 - CR-1
- The DEIR (IS) Impact CR-2 conclusion of "any component could affect any kind of resource" is broad, uninformative, and does not convey the data needed to create an informed opinion regarding potential Project impacts. The conclusion improperly relies on deferred analysis.
- The stop-work radius of 25 feet in MM M-CR-2a is significantly smaller than the standard 50 feet stop-work radius typically required in similar mitigation measures for other projects. This difference is material as expanding the radius to 50 feet would provide significantly better protection of cultural resources or human remains discovered during construction.
- MM M-CR-2b is impact analysis improperly deferred as mitigation without clear performance standards for measuring and ensuring the effectiveness of the measure. Testing and evaluation of resources must be completed prior to approval of the Project. This includes testing and evaluation of all elements of the project—*e.g.*, Martin Substation, Local Distribution System Separation, System Reinforcements, Operations Control Center, Operation and Maintenance Service Yards. 55 - CR-3

Air Quality

- The DEIR applies different cancer risk thresholds for Project activities occurring within and outside of CCSF. This distinction is unreasonable, as human biology does not vary depending on jurisdiction. 56 - AQ-1
- DEIR Mitigation Measure M-AQ-2b states: "Where access to alternative sources of power are available, portable diesel engines shall be prohibited." Yet the DEIR fails to discuss or identify where this could apply or what criteria should be used to determine "where an alternative source of power" may apply. This deficiency also affects noise impacts. 57 - AQ-2
- The DEIR at page 3.3-37 undercuts (and makes essentially meaningless) many of the air quality mitigation measures by discussing possible waivers to them that may be granted by CCSF. The effectiveness and enforceability of the air quality mitigation measures are called into question due to the existence of these waivers.
- The DEIR's Air Quality Cumulative Impacts discussion uses project impact thresholds as the cumulative impacts thresholds. This is a misapplication of the cumulative impacts concept, which requires a lower threshold than for project-level impacts (i.e. "cumulatively considerable contribution" threshold). 58 - AQ-4
- The Air Quality impacts for the Project's storage/maintenance yard component cannot be determined absent a location and site plan for that yard. 59 - AQ-5
- DEIR Mitigation Measure M-AQ-2b states, "Where access to alternative sources of power are available, portable diesel engines shall be prohibited." Given the urbanized nature of the project area, this prohibition should be incorporated into the Project design. There should be little to no need for generators, as the Project's design can 60 - AQ-2

prioritize direct electrical grid connections. This approach would substantially reduce the noise and air quality impacts of the Project. The DEIR should be revised with this feasible approach to minimize the need for generators. 60 - AQ-2 cont.

- The DEIR needs to identify whether additional generator(s) would be required at PG&E's relocation site for substation activities displaced by the project (whether temporarily under the Project or permanently under the Project Variant). This information should be carried forward to the DEIR's air quality and noise analyses. 61 - PD-5

- The air quality TAC assessment in the DEIR relies on a mitigation measure that has no TAC prescriptive values. Without clear performance standards for measuring and ensuring the effectiveness of this measure, the DEIR cannot assume that impacts from TACs will be adequately mitigated to a less than significant level. 62 - AQ-2

- The DEIR's failure to analyze the linear components of the Project at a project level of detail impacts the adequacy of the DEIR's analyses of environmental effects. For example, the DEIR states on pages 3.3-43 and -44 that the alignment of the linear components is unknown and therefore the DEIR assumes the Maximally Exposed Individual (MEI) "for this hypothetical HRA configuration is the nearest receptor downwind of the midpoint of the 2,000-foot straight line; however this does not represent a specific, physical receptor location but rather a hypothetical MEI."

  Thus, the HRA assumes that an MEI would be located within 1,000 feet from the emission sources related to construction of the linear components of the Project. Neither the DEIR nor its appendices include a figure related to the linear components health risk assessments to aid a reader in interpreting the "hypothetical" analysis. While the DEIR assumes a maximum distance of 1,000 feet in either direction from construction for analysis, it does not inform the reader of the minimum distance to an MEI for the linear facilities and also fails to assess the project's health risks on children at Bayview School. Tables 22 and 23 in the HRA do not identify the distance from construction activities on linear facilities to the MEI (nor is that identified elsewhere in the HRA), but rather state that the analyses apply to "hypothetical locations of maximum impact." 63 - AQ-1

  However, the Noise analysis in the DEIR (p. 3.2-32) states: "The operation of generators would result in nighttime noise levels of up to 88 dBA Leq at a worst-case *distance of 15 feet from the work area to the nearest property boundary [emphasis added]*, which for conservative analysis purposes is assumed to be a residential use. Given that this information is available from the Noise analysis analyzing actual, rather than "hypothetical," alignments is feasible and would provide a much more meaningful risk analysis, and should be included in the DEIR.

- The DEIR's Air Quality Cumulative Impacts states that quantitative data is not available for the cumulative projects. this, however, ignores that the immediately adjacent Cormorant Battery Energy Project, for which detailed environmental review is readily available. The data from that environmental review should be used to determine cumulative impacts due to the similar timeline of that project and the Project. 64 - AQ-4

Noise

- The DEIR's Noise Setting section exhibits a basic misunderstanding of acoustical concepts, contains erroneous/redundant information, and is incomplete. The DEIR's selected noise significance criteria are not protective of public health, as follows: 65 - NO-1

  - The DEIR's listing of major sources in "Existing Noise Sources" section does not include San Francisco International Airport – one of the largest airports in the US, located a few miles south/east of the project site, and having its major aircraft departure route passing over/near Daly City and southwest San Francisco (which include portions of the project site and sensitive receptors affected by project and cumulative noise sources). The airport should be listed in the DEIR and its contribution to significant project-level or cumulative noise impacts refuted or

confirmed in the analysis.

- While it is appropriate that the analysis, methodologies, and impacts standards of the Federal Transit Administration (FTA; *Transit Noise and Vibration Impact Assessment Manual* 2018) be mentioned in the DEIR Setting and used in the DEIR's analysis, the DEIR improperly **uses the FTA's** *General Assessment* noise criteria for evaluating project construction noise impacts, rather than the more appropriate *Detailed Assessment* criteria. The FTA recommends the latter as ***"warranted when many noise****-sensitive sites are adjacent to a construction project or where contractors are faced with stringent local ordinances or heightened public concerns* ***expressed in early outreach efforts,"*** which clearly applies to the Project.

- The DEIR's selection of the *General Assessment* construction noise criteria (i.e., 90 decibels for residential receptors) provides a lower level of protection than the *Detailed Assessment* criteria. This selection is unprotective of the environment and permits an additional 10 decibels of noise exposure before a significant impact determination can be made—**thus, understating the Project's true noise impacts.**

- The **DEIR's choice of the 90-decibel** threshold for construction noise also puts it into potential conflict with the US Environmental Protection Agency (EPA) recommendations (i.e., *Noise Levels Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*), which are cited in the DEIR Setting. An exposure to noise at 90 decibels over one hour is equivalent to a 76-decibel **exposure over 24 hours, which would exceed the EPA's recommended 70 decibel** limit over 24 hours intended to ensure protection against the potential for hearing loss.

- The **90 DB threshold is the Police Department's threshold for taking action** against particularly noisy events. This threshold is not indicative of potential CEQA noise impacts. For example, the FTA Manual also includes significance criteria for incremental construction and operational motor vehicle traffic (i.e., FTA Manual, Figure 4.3 and Figure 4.4, *Increase in Cumulative Noise Levels Allowed by Criteria*), but these are not included in the DEIR, and their existence is not even mentioned. Rather, the DEIR cites erroneous fixed 3-5 decibel increments as defining significant noise increases from any baseline level instead of endorsing **the FTA's position that** ***"people already exposed to high levels of noise should be*** *expected to tolerate only a small increase in the amount of noise in their community."*

  Note that the City of Los Angeles has nighttime noise thresholds based on sleep protection. These are: *The nighttime thresholds are focused on sleep disturbance and address this via two standards: a maximum absolute sound level of between 55 to 70 dBA Leq, as well as a maximum increase over ambient noise levels of 5 dBA Leq. These absolute sound level limits occur on a sliding scale from 55 to 70 dBA Leq to be sensitive to residential areas, including hillside areas, to ensure minimal impact on sleep and health, with a more stringent noise limit and lower exterior noise levels for sensitive uses within older buildings (with single-glazed windows) than for new buildings (with double-paned windows). Both the daytime and nighttime thresholds are protective of public health and based on substantial evidence.*[2]

  The DEIR should use similar nighttime noise thresholds rather than arbitrary Police Code thresholds. Los Angeles also has adopted an 80-dBA threshold for daytime construction noise, again based on being protective of the environment, and not an arbitrary Police Code aimed at worst-case events.

- The DEIR uses an operational noise criteria of a 8 dBA increase (see p. 3.2-27). But the actual criteria per Table 3.2-**12 is** "For single-family residential, noise levels shall not be more than 10 dBA above ambient **for a cumulative period of**

65 - NO-1 cont.

[2] https://planning.lacity.gov/odocument/e36cc04c-bfcd-44e6-a020 5806d61146dc/Updated_CEQA_Thresholds_Fact_Sheet.pdf

more than 10 minutes per hour" [emphasis added]. This is a lower threshold than a continuous 8 dBA threshold. And neither threshold is protective of the environment because noise impacts are significant far below a doubling of loudness, which is an arbitrary level unrelated to actual impacts.

- For Construction Roadway Noise, the DEIR uses thresholds of 3 to 5 dBA. However, the DEIR uses a considerably higher 8-10 dBA threshold for other construction activities. This inconsistency needs to be explained.
- The DEIR (at page 3.2-25), **states that,** "To assess nighttime construction noise impacts, the analysis quantitatively evaluates whether construction would generate interior noise levels of 45 dBA or more at sensitive receptor locations. As discussed above, interior noise levels of 45 dBA or lower are generally necessary to prevent sleep disturbance. If estimated interior noise levels meet or exceed 45 dBA." **Yet the DEIR uses no such criteria in determining impacts.** Instead, it uses only the 10- and 8 dBA thresholds in the Police Code.
- The DEIR's **Regulatory Background (Section 3.2.3) contains detailed text (nine** pages of it) of Federal, State and Local noise control policies and quantitative standards. This text is then pasted without substantial summary into two tables (i.e., Table 3.2-11 *Ordinances Applicable to the Project or Project Variant* and Table 3.2-12 *Noise and Vibration Analysis Quantitative Criteria*) in the **DEIR's Impacts and** Mitigation Measures section. This is repetitive and confusing. The first table should be eliminated since its information has already been stated in the Setting and the second table should be modified to include and apply to all sensitive receptors only the most protective of the standards from among all the Federal, State and Local regulations (which has already been partially done in the DEIR; Table 3.2-12 already notes that: *"The analysis applies the same quantitative criteria as in San Francisco because Daly City and San Mateo County municipal codes do not include quantitative criteria"*).
- The noise impacts of pile drivers and other impact tools where they are proposed to be used should not be arbitrarily exempted from the noise significance criteria, and be evaluated under the same San Francisco Police Code standards as other construction equipment. **The Police Code's exemption of pile driving is not** relevant to CEQA, which evaluates impacts to the physical environment, and not just code compliance (see Berkeley Keep Jets Over the Bay v. Board of Port Commissioners, 2001 decision).
- Exposure of numerous residences on Geneva Avenue to high construction noise levels is indicated on Table 3.2-15, yet this impact is considered less than significant due to the arbitrary 10-dBA noise increase threshold.
- The **most egregious example of the DEIR's non**-protective noise thresholds is with respect to the Bayshore Elementary School, which would be subject to noise increases from the existing 72 dBA to a total noise level of 80 dBA, for weeks or months during construction (see Table 3.2-16, p. 3.2-46). At these levels, education and students would be significantly impacted.

65 - NO-1 cont.

- **The DEIR's** Noise Impact analysis is based on erroneous and incomplete information on Federal, State and local noise regulation/standards and on incomplete project description data that together or separately underestimates noise impacts, as follows:
  - Noise impacts are not correctly characterized due to erroneous, incomplete and contradictory regulations and significance criteria, as discussed above.
  - The potential for noise impacts remains undetermined because of lack of a site plan for the Martin Substation, lack of storage/maintenance yard location and plans, lack of locations for subsurface work (i.e. vaults, tranches, foundation work, and jack-and-bore pits), lack of alignment for the distribution and hardening components, and other information not included in the Project

66 - NO-1

67 - NO-2

Description.

- Noise of pile driving are impermissibly omitted from the analysis in the DEIR.

- Noise mitigation measures are inadequate, as follows:
  - The DEIR imposes no mitigation for extreme noise levels because of erroneous significance thresholds. Noise significance thresholds are variously set at 100, 90, 86, 80, 65, 76, 45, and other quasi-random decibel levels (see Table 3.2-12), with no analysis or supporting documentation to show which levels are actually protective of human health. The need for mitigation should be reconsidered based on the revised set of quantitative significance criteria included in the Setting and new information on construction activities introduced by additions/revisions to the Project Description.
  - The DEIR fails to consider potentially feasible mitigation measures for work near sensitive receptors, including residences and schools. This may include use of line power rather than generators for dewatering.
  - The Noise Control Plan is not included in the DEIR but deferred to post approval, which is improper deferral given the lack of clear performance standards for measuring and ensuring the effectiveness of the Noise Control Plan. More specifically, the Noise Control Plan components outlined in the DEIR are vague and some of the measures to be included **are caveated "if feasible."** The DEIR includes no calculations showing the effectiveness of the measures. **Further, the Plan's goal is to achieve noise below 90**-100 dBA and a 10 dBA average increase. As detailed above, those noise levels are not protective of the environment or human health.
  - **The project's cumulative noise contribution is assumed to be less than significant** even though the DEIR for an adjacent project identified significant cumulative impacts and the project could contribute substantially to those impacts, depending on construction schedules.

- Vibration impacts to both structures and residents are impossible to determine because the DEIR fails to provide a Martin Substation site plan and lack of specifics regarding jack-and-bore and vault pit locations, as well as the location of storage and maintenance yard(s).

Hazardous Materials

- Project activity and facility locations need to be identified and clearly mapped to allow an adequate hazardous-materials-impacts analysis. Project description deficiencies likely have resulted in failure to fully identify impacts. For example, the exact locations of underground work at Martin Substation and for the local distribution system separation components, system reinforcements components, operations control center, and operations and maintenance service yards have not been identified, and their proximity to known hazardous material sites and Maher Ordinance areas cannot be determined.

- The DEIR (IS) states, "The exact locations of underground work for the local distribution system separation and system reinforcements are not known but could occur within 500 **feet of most of the sites identified in Table 1." The close proximity to identified sites** further emphasizes the need for the project locations to be clearly identified; without adequately noting project disturbance areas, the currently noted criteria are insufficient for determining if and when supplemental analyses and plans will be provided (e.g., site history/Phase I environmental site assessment report, soil and groundwater sampling prior to roadway excavation and stockpiling, and site mitigation plan(s) for handling and disposal of contaminated materials).

- The DEIR gives no consideration to unregulated, potentially contaminated sites such as historical gasoline service stations and dry cleaner facilities that may be adjacent to or

67 - NO-2 cont.
68 - NO-2
69 - NO-1
70 - NO-4
71 - NO-2
72 - NO-5
73 - HZ-1

within project excavation areas. Specifically, adjacent sites need to be evaluated in relation to the actual proposed project footprint, which is inadequately defined in the DEIR.

73 - HZ-1 cont.

- Regulatory compliance includes future preparation of a site-specific health and safety plan for project construction. The potential site-specific impacts to human health and safety must be included and evaluated in the DEIR, along with the specific safety mitigation measures that will be addressed by developing the health and safety plan(s). The failure to include clear performance standards precludes assurance that impacts would be mitigated to a less than significant level.

74 - HZ-2

- The DEIR (IS) assumes regulatory compliance will eliminate the potential for significant impacts. This general assumption is common among projects of this type but insufficient in terms of first needing to identify potential project-specific significant impacts and then needing to mitigate the identified impacts.

- Possible disposal of contaminated groundwater into Bayshore Sanitary District sewer system is proposed. Regulatory requirements for disposal to the sewer system should be provided in the DEIR. However, there is no discussion of the discharge compliance criteria or process plan contingencies, sampling, potential pre-discharge storage with secondary containment and/or pre-discharge treatment, and potential discharge limits.

75 - HZ-2

Biological Resources

- The butterfly habitat study is impermissibly deferred to mitigation given that the DEIR fails to disclose the Project's actual impacts on the special-status butterflies, and lacks clear performance standards for measuring and ensuring the effectiveness of the measure.

76 - BI-4

- The DEIR's failure to clearly identify all of the Project facilities and construction work, makes the DEIR inadequate in its assessment of the Project's potential impacts to biological resources.

77 - BI-4

- The nesting bird impacts and mitigation appear to overlook construction noise impacts (see Mitigation M-BI-4). This oversight needs to be addressed to ensure no significant impacts.

78 - BI-3

- The DEIR does not address the proposed Project's potential impacts to the special status Crotch's bumblebees. Note that the Biological Resources Technical Memorandum (Appendix H) omits analysis of this bumblebee species, and states that the potential for the Obscure and Western bumblebees to be low because of minimal observed occurrences in the Project area. However, this information is contradicted by the October 2024 DEIR on the proposed Guadalupe Quarry Redevelopment Project (SCH # 2022060358), located less than a mile to the south of the Martin Substation, which states that the western bumblebee, obscure bumblebee, and Stages dufourine bee all may occur in that Project's area.

  Given the Martin Substation's proximity to San Bruno Mountain, and the fact that construction would occur elsewhere on the edge of the Mountain as well as in open space areas such as the Olympic Club gold course, it is possible that such species may be present on or near the project construction areas.

  Further, the Biological Resources Memo completely omits the potential for Crotch's bumblebee to occur in the Project area and be affected by Project construction. The Guadalupe Project EIR had a similar omission, resulting in an extensive comment letter from the California Department of Fish and Wildlife[3], (CDFW) stating in part:

79 - BI-1

[3] Letter from Erin Chappell, Regional Manager, Bay Delta Region, California Department of Fish and Wildlife re: Guadalupe Quarry Redevelopment Project, Draft Environmental Impact Report, SCH No

The current range of CBB, a species listed as candidate endangered under the CESA, encompasses the proposed Project area. Bumble bees, including CBB, are found in a wide variety of natural, agricultural, urban and rural habitats, and require suitable nesting and overwintering sites as well as availability of nectar and pollen from floral resources (Hatfield et al. 2018). Proposed Project activities as described in the draft EIR could impact bumble bees if they are present on-site.

Evidence the impact would be significant: The Project as described in the draft EIR would impact approximately 4.8 acres of potentially suitable bumblebee habitat, consisting of grassy and scrub mosaic habitats which could potentially provide nesting and/or foraging habitat for CBB. Bumble bee nests are most often located underground in abandoned holes made by ground squirrels and rodents, and occasionally in abandoned bird nests. Any near-surface or subsurface ground disturbance could result in the direct take of bumble bee colonies or overwintering queens. Project activities involving removal of floral resources would also impact survival of resident bumble bees, given that bumble bees visit native and non-native flowering plants alike to collect the pollen and nectar resources needed to sustain their colonies and provision nest cells. Further, the use of pesticides and herbicides in landscaping during Project operation could cause direct or indirect mortality of special-status bees, including CBB.

Many bumble bee species, once common in the western United States, have undergone a dramatic decline in both distribution and abundance and are now extirpated from much of their historic ranges. Many bumble bees are threatened with extinction due primarily to reductions in habitat from urbanization, intensive agricultural practices, and invasive species introductions. CBB is a candidate species under CESA and therefore should be considered a threatened, endangered, or rare species under CEQA pursuant to CEQA Guidelines section 15380. Therefore, if CBB occur at the Project site and Project impacts to CBB would occur, this may result in a substantial **reduction in the species' population,** which would be a mandatory finding of significance (CEQA Guidelines Section 15065).

The CDFW letter goes on to list extensive mitigation including habitat assessment, bee surveys, nesting colony avoidance, take authorization, and compensatory mitigation. All of this must be considered with respect to proposed Project impacts to this species.

In addition, the project's potential impacts on the Western and Obscure bumblebees should be reconsidered in light of the detailed analyses of those species and mitigation required, in the Guadalupe Project EIR.

79 - BI-1 cont.

- Given the extent of facilities proposed and the land area potentially affected by the Project, it is unclear how a two-day biological resources study could completely and accurately capture potential site-specific project impacts. This is a likely consequence of **the "programmatic' approach** in the DEIR.

80 - BI-4

Geology/Soils

- The DEIR (IS) contains no site-specific evaluation of potential paleontological impacts. Rather, this analysis has been impermissibly deferred to mitigation given the lack of clear performance standards for measuring and ensuring the effectiveness of this mitigation.
- The geologic analysis fails to address potential impacts on foundations and structures from trenching up to 11 feet deep that may be excavated directly adjacent to older structures. The DEIR, thus, fails from an informational standpoint and lacks substantial evidence of no such potential impacts.

81 - GE-1

2022060358, City of Brisbane, San Mateo County, to Julia Ayers, Principal Planner, City of Brisbane, December 5, 2024.

Traffic

- The DEIR must include a detailed site plan for the Martin Substation and for the SF maintenance/storage yard to enable an adequate assessment of safe access and circulation for those sites. This omission prevents an adequate assessment of traffic impacts. — 82 - TR-1
- The traffic analysis in the DEIR fails to include adequate information to analyze potential conflicts with bicycle route during construction. This omission prevents an adequate assessment of traffic impacts.

Alternatives

- Lack of Detailed Information for "Build" Alternatives: Similar to the deficiencies with the Project description discussed above, the DEIR's descriptions of each of the "build" alternatives is inadequate because it lacks critical detail, including site plans, locations, and descriptions of the physical features proposed in each of the "build" alternatives. Without this information, the public is unable to discern the physical differences between the alternatives. This omission precludes evaluation of whether the impacts analyses for the "build" alternatives are adequate or accurate. — 83 - AL-2
- No Explanation for Distinction between Alternative and Project Variant: The DEIR fails to explain why the Baylands Substation is considered an Alternative but the City Substation is considered a Project Variant. This inconsistency results in an inconsistency of level of description and analysis between two similar types of options (see below), which can confuse the public and decision-makers. — 84 - PD-6
- Lack of Detailed Information for Baylands Substation Alternative: The Baylands Substation alternative lacks a site plan or other design details. Without this information it is unclear where each of this alternative's facilities would be located or whether the construction laydown area would be located. Further, it is unclear what types of construction activities would occur, including how much soil would need to be moved. In order to adequately evaluate potential impacts of this alternative, this information needs to be presented within the DEIR. Laydown space is not described in the alternative nor are the environmental impacts associated with that space necessary for construction evaluated. — 85 - AL-2
- Unsupported Rejection of Cow Palace Substation Alternative: The DEIR summarily rejects the Cow Palace Substation alternative. This rejection, however, is unsupported by any fact or analysis in the DEIR. The DEIR's conclusory statements that impacts would be the same as at the Martin Substation lack analytical rigor and are not based on any supporting evidence.
- Contradictory Fringing Area Service Agreement Alternative: The DEIR's discussion of the Fringing Area Service Agreement Alternative description is contradictory. The first paragraph states this alternative is an "administrative solution," but the second paragraph provides "*However, this concept would not clearly reduce the noise, air quality, cultural resources, tribal cultural resources, and paleontological resources impacts of the project because the other project components, and some local distribution system separation work and system reinforcements, would still be required.*" The actual advantages, disadvantages, and reduction in environmental effects of this alternative cannot be meaningfully evaluated because it is unclear what this alternative actually entails. — 86 - AL-4

Conclusions

As discussed above, the DEIR has numerous deficiencies that need to be remedied prior to Project approval in order for CCSF to comply with CEQA. In my professional opinion, these deficiencies require recirculation of the entire DEIR in accordance with CEQA Guidelines section 15088.5 after the DEIR has been appropriately revised and recirculated. Please feel free to contact me if you have any questions regarding this analysis.

Sincerely;



Richard Grassetti
Principal

ATTACHMENT A: GRASSETTI QUALIFICATIONS

A. INTRODUCTION TO THE FIRM

Grassetti Environmental Consulting (GECo) is a specialty environmental planning firm with expertise in environmental assessment, CEQA/NEPA compliance analyses, third party review, CEQA project management, and preparation of geologic and water resource studies. The firm focuses on working with clients towards full disclosure of environmental impacts and development of practical mitigation measures for those impacts. Our working ethic is to efficiently ensure full compliance with CEQA/NEPA regulations and guidelines while minimizing duplicative studies and regulatory confusion. We are proficient in preparing responsive environmental documentation for technically complex projects, and can provide our clients with a working understanding of the appropriate level of effort needed to comply with applicable environmental regulations. We strive to provide our clients with a level of personal service not generally found in larger firms.

The firm's Principal, Mr. Richard Grassetti, has over 30 years of experience preparing and reviewing environmental documents throughout California. Mr. Grassetti has worked on over 200 environmental impact reports, initial studies, environmental assessments, and environmental impact statements. He has substantial expertise reviewing environmental assessments for regulatory compliance and technical adequacy, has conducted over 40 peer reviews of NEPA and CEQA documents, and has testified as an expert witness regarding CEQA adequacy issues. He also has prepared various other environmental analyses including environmental constraint assessments and feasibility studies. Mr. Grassetti has experience in both technical analysis and project management for environmental impact assessments of many types of projects including industrial development, power generation projects, airports, waste management and pollution control projects, mixed use urban development, residential projects, recreation/resort developments, planning studies, transportation improvements, and other infrastructure development.

GECo works with a group of affiliated environmental professionals on a regular basis. This collaboration provides our clients with a broad range of expertise, without the overhead burden of a large consulting firm. Our goal is to provide our clients with personalized service tailored to their specific needs. Each individual included on a GECo project team is a highly experienced, senior-level professional with extensive experience working for both public- and private-sector clients. Our services range from initial project scoping through project implementation and monitoring. Our staff and affiliates are highly qualified to assist clients in negotiating the maze of environmental compliance regulations. Through these reciprocal working arrangements, we offer technical experts of the highest caliber at modest cost. Our combined skills and experience offer a complete range of environmental assessment services.

B. REPRESENTATIVE PROJECT EXPERIENCE

CEQA/NEPA COMPLIANCE SEMINARS

Mr. Grassetti has conducted numerous CEQA and NEPA compliance seminars for entities including:

- West Bay Sanitary District
- North Coast Resource Management, Inc.
- Tetra Tech Inc.
- Impact Sciences Inc.
- Northwest Environmental Training Center (over 20 workshops)

PEER REVIEW AND EXPERT WITNESS WORK – SELECTED PROJECTS

John Smith Road Landfill Expansion EIR Peer Review. GECo is currently preparing a peer review of an applicant-prepared EIR on large and controversial landfill expansion in San Benito County. Major issues included air quality, noise, traffic, health risk, land use, and biological resources. Client: San Benito County Resource management Agency

Alameda County Solar Projects EIRs Peer Review. GECo prepared peer reviews and comment letters on EIRs on two solar energy projects in agricultural open space lands in eastern Alameda County. Major issues included biological resources, visual quality, and land use planning compliance. Client: Private party in advance of potential litigation.

Harris Quarry EIR Peer Reviews. GECo, in association with The RCH Group, conducted peer reviews of two CEQA EIRs for proposed expansions of the Harris Quarry in Mendocino County. The first EIR was rejected by the courts partially on the basis of our review. Client: Keep the Code (Citizens Group).

BLM Southern Nevada Water Project NEPA EIS Peer Review. GECo conducted a peer review of a Bureau of Land Management Environmental Impact Statement for a large-scale project to extract and transport water from rural areas throughout the state of Nevada for use in the Las Vegas area. Major issues were water supply, biological resources, dust/air quality, and loss of agriculture. Client: Confederated Tribes of the Goshute Indian Reservation

Carroll Canyon Burn Facility CEQA Compliance Review. GECo prepared a CEQA process review for a proposed Negative Declaration on a planned contaminated-earth burning facility in the City of San Diego. Client: Law Offices of William Mackersie.

Lawson's Landing EIR Peer Review. GECo conducted detailed per reviews of numerous CEQA documents, including the Draft and Final EIRs, for the proposed master plan for the Lawson's Landing mobile home park and campground in Marin County. Major issues included wastewater treatment and biological resources. Client: Environmental Action Committee of West Marin.

Jackson State Forest CEQA Review. GECo prepared a detailed analysis of the CEQA adequacy of the California Department of Forestry's EIR on a new management plan for the 40,000-acre Jackson State Forest. Major issues included forestry practices, water quality, and biological resources. Client: Dharma Cloud Foundation

SFPUC PG&E Asset Acquisition Project
Draft EIR Peer Review

Fairfax/Artesa Vineyards Conversion EIR Peer Review. GECo conducted a peer review of an EIR von conversion of forest lands to vineyards in northern Sonoma County. Major issues were biological resources, hydrology/water supply, and land use compatibility. Client: Friends of the Gualala River.

Grist Creek Gravel Mining Project Initial Study Peer Review. GECo conducted a peer review of an Initial Study on a proposed gravel mine in Sonoma County. Major issues were fisheries, water supply, and cultural resources. Client: Round Valley Indian Tribes.

Morongo Mining Projects Environmental Reviews. GECo provided CEQA, NEPA, and technical consulting to the Morongo Band of Mission Indians regarding two aggregate mines adjacent to their reservation in Riverside County, CA. Client: Law Office of Alexander & Karshmer.

Headwaters Forest EIR/EIS Peer Review. GECo prepared detailed comments (32 pages of comments) on the Draft Environmental Impact Statement/Environmental Impact Report for the Headwaters Forest Acquisition and the Palco Sustained Yield Plan and Habitat Conservation Plan for several hundred thousand acres of redwood forests in Humboldt County for use in potential litigation. Client: Environmental Protection Information Center and Sierra Club.

Monterey Bay Marine Lab CEQA Compliance Review: GECo assisted attorneys in review of a CEQA Negative Declaration, NEPA Environmental Assessment, and associated documents for the relocation of the Monterey Bay Marine Laboratory. Issues included the effectiveness of mitigation to cultural and biological resources, the appropriateness of the Negative Declaration versus an EIR, and other CEQA issues. Client: Law Offices of Alexander & Karshmer.

City of Oakland Creek Protection Ordinance Litigation. GECo is providing ongoing expert CEQA and Creek Protection Ordinance consulting for litigation regarding failure to enforce the City of Oakland's Creek Protection Ordinance. Client: North Hills Phoenix Association.

Metropolitan Oakland International Airport Development Plan Environmental Impact Report CEQA Review. GECo performed a critical review and assisted in the preparation of comments and ultimately successful litigation regarding the proposed expansion of Metropolitan Oakland International Airport. Major issues included noise, cumulative impacts, and alternatives selection/analyses. Client: Law Office of John Shordike.

Sonora Mining Corporation Jamestown Mine Expansion Project EIR Review. GECo conducted a review and critique of CEQA compliance for the proposed expansion of Sonora Mining Corporation's Jamestown Gold Mine in Tuolumne County, California. Client: Law Office of Alexander Henson.

Save Our Forests and Rangelands Expert Review and Witness Services. GECo provided expert review, consulting services, and expert witness testimony on CEQA issues for a successful legal challenge to an EIR and Area Plan for 200,000 acres in the Central Mountain Sub-region of San Diego County. Client: Law Offices of Milberg, Weiss, Bershad, Specthrie, & Lerach.

San Francisco International Airport Environmental Liaison Office Consulting. GECO conducted various internal peer review tasks associated with environmental studies being prepared for SFIA's proposed runway expansion. Client: LSA Associates, Inc.

Alamo Gate Permitting Review. GECo performed a critical review and prepared expert testimony and correspondence regarding the adequacy of CEQA and land use permitting and studies for a proposed gate on Las Trampas Road, which would preclude vehicular access to an EBRPD regional park staging area. Client: Las Trampas Trails Advocates.

SFPUC PG&E Asset Acquisition Project
Draft EIR Peer Review

Richard Grassetti

PRINCIPAL

Expertise

- CEQA/NEPA Environmental Assessment
- Project Management
- Geologic and Hydrologic Analysis

Principal Professional Responsibilities

Mr. Grassetti is an environmental planner with over 38 years of experience in environmental impact analysis, project management, and regulatory compliance. He is a recognized expert on California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) processes, and has served as an expert witness on CEQA and planning issues. Mr. Grassetti regularly conducts peer review and QC/QA for all types of environmental impact analyses, and works frequently with public agencies, citizens groups, and applicants. He has managed the preparation of over 50 CEQA and NEPA documents, as well as numerous local agency planning and permitting documents. Mr. Grassetti has prepared over 200 hydrologic, geologic, and other technical analyses for CEQA and NEPA documents. He has analyzed the environmental impacts of a wide range of projects including residential developments, waste management projects, mixed-use developments, infrastructure improvements, energy development, military base reuse projects, and recreational facilities throughout the western U.S. In addition to his consulting practice, for 15 years Mr. Grassetti was an adjunct professor at California State University, East Bay, where he taught courses on environmental impact assessment, among others.

Professional Services

- Management and preparation of all types of environmental impact assessment and documentation for public agencies, applicants, citizens groups, and attorneys
- Peer review of environmental documents for technical adequacy and regulatory compliance
- Expert witness services
- Assisting clients in CEQA and NEPA process compliance
- Preparation of hydrologic and geologic analyses for EIRs and EISs
- Preparation of project feasibility, opportunities, and constraints analyses, and mitigation monitoring and reporting plans

Education

University of Oregon, Eugene, Department of Geography, M.A., Geography (Emphasis on Fluvial Geomorphology and Water Resources Planning), 1981.

University of California, Berkeley, Department of Geography, B.A., Physical Geography, 1978.

SFPUC PG&E Asset Acquisition Project
Draft EIR Peer Review

Professional Experience	1992-Present	Principal, GECo Environmental Consulting, Berkeley, CA
	1994-2016	Lecturer, Department of Geography and Environmental Studies, California State University, Hayward, CA
	1988-1992	Environmental Group Co-Manager/ Senior Project Manager, LSA Associates, Inc. Richmond, CA
	1987-1988	Independent Environmental Consultant, Berkeley, CA
	1986-1987	Environmental/Urban Planner, City of Richmond, CA
	1982-1986	Senior Technical Associate - Hydrology and Geology - Environmental Science Associates, Inc. San Francisco, CA
	1979-1981	Graduate Teaching Fellow, Department of Geography, University of Oregon, Eugene, OR
	1978	Intern, California Division of Mines and Geology, San Francisco, CA

Professional Certifications	Member and Past Chapter Director, Association of *Affiliations and* Environmental Professionals, San Francisco Bay Chapter Member, International Association for Impact Assessment

Professional Publications and Presentations

Grassetti, R. *Round Up the Usual Suspects: Common Deficiencies in US and California Environmental Impact assessments.* Paper Presented at International Association for Impact Assessment Conference, Vancouver, Canada. May 2004.

Grassetti, R. *Understanding Environmental Impact Assessment – A **Layperson's Guide to Environmental Impact Documents and Processes.*** (in press).

Grassetti, R. *Developing a Citizens Handbook for Impact Assessment.* Paper Presented at International Association for Impact Assessment Conference, Marrakech, Morocco. June 2003

Grassetti, R. *CEQA and Sustainability.* Paper Presented at Association of Environmental Professionals Conference, Palm Springs, California. April 2002.

Grassetti, R. and M. Kent. *Certifying Green Development, an Incentive-Based Application of Environmental Impact Assessment*. Paper Presented at International Association for Impact Assessment Conference, Cartagena, Colombia. May 2001

Grassetti, Richard. *Report from the Headwaters: Promises and Failures of **Strategic Environmental Assessment in Preserving California's Ancient** Redwoods.* Paper Presented at International Association for Impact Assessment Conference, Glasgow, Scotland. June 1999.

Grassetti, R. A., N. Dennis, and R. Odland. *An Analytical Framework for Sustainable Development in EIA in the USA*. Paper Presented at International Association for Impact Assessment Conference, Christchurch, New Zealand. April 1998.

Grassetti, R. A. *Ethics, Public Policy, and the Environmental Professional.* Presentation at the Association of Environmental Professionals Annual Conference, San Diego. May 1992.

Grassetti, R. A. *Regulation and Development of Urban Area Wetlands in the United States: The San Francisco Bay Area Case Study*. Water Quality Bulletin, United Nations/World Health Organization Collaborating Centre on Surface and Ground Water Quality. April 1989.

Grassetti, R. A. *Cumulative Impacts Analysis, An Overview*. Journal of Pesticide Reform. Fall 1986.

1986, 1987. Guest Lecturer, Environmental Studies Program, University of California, Berkeley.

ATTACHMENT B- NORTHGATE ENVIRONMENTAL MANAGEMENT PEER REVIEW LETTER AND QUALIFICATIONS

northgate environmental management, inc.

TECHNICAL MEMORANDUM

From: Kevin Torres, Senior Scientist
Northgate Environmental Management

Date: April 28, 2025

To: Richard Grassetti, Principal
Grassetti Environmental Consulting

RE: Peer Review of Hazards and Hazardous Materials Related Sections of the Draft Environmental Impact Report (EIR) for the PG&E Power Asset Acquisition Project

---

SCOPE OF REVIEW

Northgate Environmental Management (Northgate) reviewed the sections of the Draft Environmental Impact Report (EIR) for the PG&E Power Asset Acquisition Project (San Francisco Planning, 2025) concerning the assessment of impacts related to Hazards and Hazardous Materials. Specifically, the following sections were reviewed, with special attention to those subsections pertaining to the assessment of impacts related to Hazards and Hazardous Materials:

- Summary
- Chapter 2 – Project Description
- Chapter 3 – Environmental Setting, Impacts, and Mitigation Measures: Overview (Section 3.1)
- Chapter 5 – Alternatives: Alternative D: New Brisbane Baylands Substation (Section 5.3.4)
- Appendix A – Initial Study: Hazards and Hazardous Materials (Section E.18)
- Appendix J – Hazards and Hazardous Materials Supporting Documentation: Hazardous Materials Study (Section J.1)

GENERAL COMMENTS

The level of detail in some parts of the Project Description is inadequate to provide a basis for fully assessing project impacts. First, exact locations of the local distribution system separation components, system reinforcements components, operations control center, and operations and maintenance service yards have not been identified. Second, the description of proposed construction on the PG&E Martin Service Center is incomplete, including the scope details that pertain to the extent of excavation or other soil disturbance, where on the site excavation would occur, and the construction methods that would be used (e.g., pile driving, trenching, cut-and-fill

87 - HZ-1

428 13th Street, 4th Floor
Oakland, California 94612
tel 510.839.0688

92 Argonaut, Suite 100
Aliso Viejo, California 92656
tel 949.716.0050

47 East All Saints Street
Frederick, Maryland 21701
tel 301.528.1500

www.ngem.com

excavation, footing excavation). Without complete descriptions and mapped locations of these project components, their proximity to known hazardous material storage, waste, or cleanup sites, and to contaminated areas and soil depth intervals at the Martin Service Center, cannot be determined, and therefore exposure to potentially contaminated soil or groundwater in these construction areas cannot be adequately assessed.

87 - HZ-1 cont.

SPECIFIC COMMENTS

The comments below identify specific deficiencies identified in the Draft EIR.

1. Project Description (Chapter 2), *Earthwork and Haul Trips* (Section 2.5.4):
    - This section states that excavated soil from Martin Substation would be exported to a permitted landfill due to potential contamination. Please clarify that excavated soils at Martin Substation will be tested for contaminants prior to disposal, and, if necessary, excavated soils would be disposed of at a landfill licensed to accept hazardous waste, as stated in *Hazardous Materials Handling* (Section 2.5.4.1).
    - This section also states that for distribution express feeders, local distribution separation, system reinforcements, and other construction activities, half of the excavated soil would be exported to the nearest landfill and the other half would be suitable for reuse as backfill. Please justify the basis for this assumption.

88 - HZ-2

2. Initial Study (Appendix A, Section E.18), Impact HZ-1:
    - The locations of project areas where soil excavation would occur have not been fully identified. Specifically, the exact locations of underground work for the local distribution system separation and system reinforcements are not known. Section HZ-1 states that excavations for these components could occur within 500 feet of known hazardous material storage, waste, or cleanup sites identified in Table 1 of the Hazardous Materials Study (Appendix J.1). In addition, the locations of the operations control center and operations and maintenance service yards are not known. Without specific mapped areas at which soil excavation for these project components would occur, adequate assessment of Impact HZ-1 is not feasible.
    - Multiple mapped Maher Ordinance areas under Article 22A of the San Francisco Health Code (i.e., areas identified as associated with fill and industrial activities) also occur within 500 feet of various project areas. These Maher Ordinance areas are shown in Figure 4 of the Hazardous Materials Study (Appendix J.1). However, since the exact locations of the local distribution system separation and system reinforcements components have not been identified, the likelihood of exposure

89 - HZ-1

to potentially contaminated soil in Maher Ordinance areas during underground work for these project components cannot be fully assessed under Impact HZ-1.

89 - HZ-1 cont.

- The Impact HZ-1 discussion on page 217 states that under the Maher Ordinance requirements, a site history/Phase I environmental site assessment report, soil and groundwater sampling, and a site mitigation plan describing the handling and disposal of contaminated materials *may be* required. This section should more explicitly state whether and under what conditions such Maher Ordinance measures would be required, or how their necessity will be determined.
- The Impact HZ-1 discussion on page 217 states that a site-specific health and safety plan must be prepared to address potential workplace hazards, including encountering hazardous substances in soil or groundwater. The health and safety plan cannot be adequately site-specific unless the locations of the local distribution system separation components, system reinforcements components, operations control center, and operations and maintenance service yards are known.
- The Hazards and Hazardous Materials section of the Initial Study (Appendix A, Section E.18), and the Hazardous Materials Study (Appendix J.1) upon which it is based, lists a total of 155 known hazardous material storage, waste or cleanup sites located within 500 feet of the project components. These regulated sites were identified from the California Environmental Protection Agency (CalEPA) Cortese List Data Resources, California Department of Toxic Substances Control (DTSC) EnviroStor database, and State Water Resources Control Board (SWRCB) GeoTracker database, as appropriate. This information was used to assess exposure to potentially contaminated soil or groundwater as part of Impact HZ-1, as well as project locations on Cortese List sites as part of Impact HZ-3. However, to fully assess Impact HZ-1, there is also a potential for other unregulated sites such as historical gasoline service stations and dry cleaner facilities to be located adjacent to proposed project areas. If any such historical facilities are located adjacent to planned excavation areas, a review of their dates of operation and other available information should be conducted to assess the need for sampling prior to excavation to identify unknown contamination that could impact the health of construction workers and the public. If the results of that review provide justification that sampling is or is not warranted, describe the criteria for making the determination. Listings of such historical facilities are available from searches by standard commercial regulatory agency database/site history listings services.

90 - HZ-1

- After **sites'** remediation and/or case closure, residual soil contamination may still be present on private parcels adjacent to project excavation areas along roadways; contamination associated with open sites also may have migrated from private

parcels to roadways and have potential to impact project construction. Aside from testing already excavated soils for hazardous waste profiling prior to offsite disposal, provisions for soil sampling in project areas prior to roadway excavation should be established to protect the health of construction workers and the public and justify the determination of a less than significant Impact HZ-1. A process for determining if and when such sampling is justified, based on the presence of known or suspected hazardous material storage, waste, or cleanup sites, should be explicitly stated.

90 - HZ-1 cont.

3. Initial Study (Appendix A, Section E.18), Impact HZ-3:

   - For the assessment of construction impacts of the Martin Substation separation or the new City Substation (project variant) on pages 223-224, more detail in the narrative or figures should be given to the areas of proposed excavation and other soil disturbance relative to the horizontal and vertical extent of contamination at the Martin Service Center.
   - The soil management plan measures to be applied before, during, and after disturbance of soil at the Martin Service Center are summarized on pages 225-226. This summary does not provide an adequate basis for providing assurance that the plan would be health protective. What would be the likely methods to address risk during construction, and how would different soil waste types be managed prior to removal?
   - For the Martin Substation separation or the new City Substation (project variant), potentially contaminated groundwater extracted from dewatering of excavations would require appropriate disposal. Although the Revised Operation and Monitoring Agreement is provided in Appendix J, a more explicit discussion of the process and requirements for determining whether potentially contaminated groundwater can be discharged to the Bayshore Sanitary District sewer system should be provided in the EIR (e.g., provisions of the wastewater discharge permit, testing requirements, water quality criteria and system capacity requirements). If pre-discharge storage within secondary containment may be required, provide a discussion on type, volume, footprint staging areas and security, potential duration, spill prevention measures, and evaluated contingencies.

91 - HZ-2

REFERENCE

San Francisco Planning, 2025. Draft Environmental Impact Report (EIR), PG&E Power Asset Acquisition Project. Case No. 2023-005370ENV. March 19.

northgate
environmental management, inc.

HAZARDOUS MATERIALS ASSESSMENT AND COMPLIANCE SERVICES

Northgate Environmental Management. Inc. (Northgate) is a full-service environmental engineering firm specializing in the assessment, restoration, and redevelopment of contaminated property. Established in 1999, our turnkey services include all aspects of property restoration, from Phase I Environmental Site Assessments (ESAs) to contamination characterization, full site remediation, and closure, working for both public and private entities including utilities, developers and law firms, municipalities, transportation authorities, ports, and water districts.

Northgate provides CEQA and NEPA support in the areas of hazardous materials, geology, water quality, air, noise, and greenhouse gas. Our hazardous materials services include all aspects of assessment, environmental permitting and compliance, management, and asbestos, lead-based paint, and mold evaluation. Northgate staff have a thorough understanding of federal, state, and local regulatory framework and requirements related to hazardous materials and produce well-written, legally defensible reports that can be read and understood by a wide audience with divergent backgrounds.

Northgate staff have worked on projects throughout California including the San Francisco Bay Area, Sacramento Valley, and San Joaquin Valley. They have direct experience supporting the preparation of planning documents for linear corridor projects for both PG&E and Caltrans. These projects include preparation of Hazards and Hazardous Materials sections of the Proponents Environmental Assessments (PEAs) for five PG&E transmission line rebuild projects. These sections entailed in-depth review of project environmental settings, existing hazardous materials sites located near project construction, use of hazardous materials during construction, and regulations covering hazardous materials and waste. Northgate staff evaluated potential impacts related to existing hazardous materials sites, planned construction, wildland fire, and emergency response, and identified applicant-proposed measures to reduce potential for impacts.

Northgate staff have performed hundreds of Phase I ESAs in support of real estate acquisition and management. Our Phase I ESAs have also supported airport and water treatment plant construction projects, wetland restoration, and other projects that must comply with CEQA requirements. Additionally, Northgate staff provide compliance support for the storage, handling, and disposal of hazardous materials and waste. These services include conducting inventories and inspections of hazardous materials storage areas, ensuring employee training requirements are satisfied, and submitting Hazardous Materials Business Plans.

Northgate firmly believes that the accuracy of any assessment ultimately depends on the qualifications, experience, and dedication of the assessment team. Our senior professionals each have more than 25 years of experience in performing hazardous materials assessments and compliance. A senior professional directly oversees each assessment to ensure that potential environmental liabilities are well understood and accurately reflected in our reports.

February 2025

KEVIN C. TORRES, M.S.
SENIOR SCIENTIST

Mr. Torres has 24 years of experience in the fields of Phase I environmental site assessments (ESAs), hazardous materials compliance, environmental impact assessment and California Environmental Quality Act (CEQA) compliance, stormwater compliance, ecological (ERA) and human health risk assessments (HHRAs), water and sediment quality, toxicology, vapor intrusion, and biology. Mr. Torres has performed multiple Phase I ESAs in accordance with ASTM and USEPA Standards. He has assessed environmental impacts and identified mitigation and applicant-proposed measures for Hazards and Hazardous Materials and Hydrology and Water Quality sections of EIRs. He has supported municipalities with a variety of analyses and reporting requirements for hazardous materials and stormwater compliance. Mr. Torres has experience conducting ERAs and HHRAs for a wide variety of sites. He is familiar with environmental regulations and guidance for hazardous materials and stormwater permitting compliance, CEQA, National Environmental Policy Act (NEPA), risk assessment, and site investigation (CERCLA, RCRA).

REPRESENTATIVE EXPERIENCE

- ***Phase I Environmental Site Assessments –*** Mr. Torres has performed more than 20 Phase I ESAs in accordance with ASTM and USEPA Standards, including review and analysis of regulatory agency database listings, regulatory and local agency records, site history, conducting vapor encroachment screens, conducting site inspections, and conducting interviews. Project sites have consisted of commercial, industrial, airport, residential, wetlands, and former agricultural land uses.
- ***Sobrante Water Treatment Plant Reliability Improvements Project – East Bay Municipal Utility District, El Sobrante, CA*** – Mr. Torres conducted a Phase I ESA for a water treatment plant covering existing and historical conditions prior to new construction. He reviewed regulatory agency database listings and local agency files; conducted a vapor encroachment screen; reviewed land use history and previous facility reports; interviewed EBMUD personnel; and conducted a reconnaissance of the site and vicinity. The assessment provided information needed to ensure that the project is CEQA-compliant and completed on schedule. He also coordinated a pre-demolition hazardous materials survey to support the CEQA impact assessment.
- ***Hayward Marsh Restoration, City of Hayward, CA –*** Mr. Torres conducted a Phase I ESA for the restoration of Hayward Marsh, a 145-acre fresh and brackish water marsh. The project will restore portions of the marsh to seasonal wetlands, muted tidal marsh, and/or fully tidal marsh. The project goals include enhancing wildlife habitat and public viewing, as well as assuring adequate hydrology to minimize siltation and stagnant water and reduce mosquito habitat.
- ***Technical Support and Preparation of Proponent Environmental Assessments (PEAs), Confidential Transmission Line Projects, San Francisco, California —*** Mr. Torres prepared Proponent Environmental Assessment (PEA) sections for three transmission line projects in the San Francisco Bay Area ranging in size from 1,200 to 3,500 acres. He prepared

the Hazards and Hazardous Materials sections including the environmental setting, review and evaluation of potential impacts associated with hazardous waste sites in the vicinity of the transmission line corridors, and applicant-proposed measures (APMs) to reduce the potential for impacts. He also prepared the Hydrology and Water Quality sections, which entailed the evaluation of potential impacts associated with degradation of water quality, depletion of groundwater supplies, exceedance of stormwater drainage capacity, and subjection of property to flood risk, along with identification of APMs to reduce the potential for impacts.

- ***Hazardous Waste and Materials Assessment for Environmental Impact Report, Lagunitas Creek Bridge, California Department of Transportation, California —*** Mr. Torres assessed environmental impacts associated with hazardous waste and materials for a bridge demolition and reconstruction project. He reviewed environmental consequences for multiple project alternatives related to the potential release of hazardous waste and materials from the existing bridge structure and soils and creek sediments potentially disturbed by the project. He identified appropriate avoidance, minimization, and mitigation measures, including sampling and chemical analyses, health and safety measures, and soil and sediment management measures.
- ***Initial Study and Mitigated Negative Declaration, Ivanhoe Public Utility District (PUD) Well No. 9 and Conveyance Pipeline Project, California State Water Resources Control Board, Sacramento, California —*** Mr. Torres was the main author of an Initial Study and Mitigated Negative Declaration (IS/MND) for a water supply project proposed by Ivanhoe PUD, which serves an disadvantaged community in Tulare County, California. The project would upgrade the Ivanhoe PUD's water supply and distribution system to increase the water supply capacity to help it meet existing and projected future water demands and satisfy water quality requirements. Mr. Torres wrote the project description, identified construction best management practices, and reviewed the project's potential impact on more than 20 environmental factors as required by CEQA. He helped identify appropriate mitigation measures to ensure that project impacts on sensitive and special-status species are less than significant. Mr. Torres also wrote a Mitigation Monitoring and Reporting Program and other CEQA documentation for the project.
- ***California State University, Sacramento Institute for Water, Energy, Sustainability, and Technology (iWEST), California State Water Resources Control Board, Sacramento, California —*** Mr. Torres has supported several projects preparing CEQA and related environmental documentation for improvements to drinking water and waste water systems in disadvantaged communities. His tasks have included support of Initial Studies, Mitigated Negative Declarations, project application forms documenting multiple CEQA impact areas, and reviews of biological assessments.
- ***City of Lynwood Site Discovery Project, Source and Potential Responsible Party Investigation, California State Water Resources Control Board and University Enterprises, Inc. –*** Mr. Torres investigated potential source sites and potential responsible parties (PRPs) for contamination that has impacted the groundwater quality of several municipal water supply wells in the City of Lynwood, California, and surrounding community. The water supply wells have been impacted by trichloroethene, tetrachloroethene, 1,4-dioxane, and other compounds from one or more unidentified sources in an area that has included numerous current and historical industrial and commercial facilities. Mr. Torres reviewed and synthesized information on approximately 200 sites from regulatory agency database listings, regulatory agency documents, and site investigations and groundwater

monitoring reports. He identified 38 high priority regulated and unregulated potential source sites that will be the focus of a follow-up preliminary investigation and site assessments by the Regional Water Quality Control Board and PRPs.

- ***As-Needed Environmental Consulting, Hydrology, and Stormwater Services, City of Oakland, Oakland, CA*** – Mr. Torres provides stormwater compliance support to the City of Oakland (City), including assisting with the preparation of the City's Annual Reports for compliance with the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit (MRP) annually since 2016. Tasks include trash cleanup credit calculations; compilation, review, and reporting of the City's execution of numerous permit provisions; and document production. Since 2018 Mr. Torres has supported the City's reporting of green infrastructure and other stormwater treatment projects for new development and redevelopment under MRP Provision C.3, including data entry into an ArcGIS online tracking tool to facilitate estimation of pollutant load reductions. Since 2019 he has conducted on-land visual trash assessments on streets and sidewalks to support estimates of trash load reduction by the City.
- ***On-Call Environmental Consulting Services, City of Berkeley, Berkeley, California*** – Mr. Torres provides on-call stormwater compliance support to the City of Berkeley. He has assisted with the preparation of the City's 2016, 2017, and 2018 MRP Annual Reports by identifying and reporting public projects reviewed or planned for green infrastructure, and identifying facilities as potential non-filers under the Industrial General Permit. Mr. Torres also conducted hazardous materials inspections for the City to update its Hazardous Materials Business Plan (HMBP). He identified and inventoried hazardous materials at multiple sites within the City, updated hazardous material maps, and assisted in uploading the information into the California Environmental Reporting System.
- ***PCB Load Reduction Planning, Alameda Countywide Clean Water Program, California*** — Mr. Torres assisted the Alameda Countywide Clean Water Program in planning for compliance with load reduction goals associated with stormwater permits and the total maximum daily load (TMDL) for PCBs entering San Francisco Bay. Mr. Torres conducted a review of sites impacted by historical releases of PCBs to summarize and assess potential sources of PCBs in stormwater runoff and potential reductions in loads from remedial actions. Case study assessments were conducted for several sites in which baseline (i.e., pre-remediation) and post-remediation loads of PCBs were estimated via sediment transport modeling. Estimated PCB load reductions for case study sites and recommended methodologies for assessing load reductions.
- ***Ecological Risk Assessments, Lockheed Martin Corporation, Beaumont, California*** — Mr. Torres conducted predictive (i.e., baseline) ERAs for two properties consisting of over 11,000 acres of open space. The sites were used for solid rocket motor assembly and testing, ballistics testing, burning of process chemicals and waste rocket propellants, and maintenance activities. The ERAs addressed potential risks to ecological receptors resulting from contamination of soils, groundwater, and other media. Mr. Torres evaluated a total of 19 exposure areas, several habitat types, and 16 ecological receptors including the endangered Stephens' kangaroo rat. The ERAs provided a cost-effective approach for identifying potential risks and developing risk-based cleanup goals for remedial alternatives.
- ***Predictive Ecological Risk Assessments, U.S. Air Force, Vandenberg AFB, California*** — Mr. Torres conducted ERAs in support of remedial investigation/feasibility studies (RI/FS) for more than 20 sites at Vandenberg Air Force Base, California. He completed site-specific

risk assessments for a variety of habitats including wetlands, aquatic ponds, valley foothill riparian, grassland, coastal sage scrub, and chaparral habitats. Chemicals of concern included metals, PCBs, dioxins, and a variety of semivolatile and volatile organic compounds. Mr. Torres defined areas and receptors of concern, developed toxicity reference values, oversaw risk calculations, served as lead author of ERAs in RI/FS reports, and conducted a field validation study. He coordinated report preparation with site characterization, fate and transport modeling, and human health risk assessment teams to ensure a coherent product. Mr. Torres was the technical lead for negotiating with representatives of California state regulatory agencies to reach a consensus on toxicity reference values used in the ERAs at Vandenberg AFB.

- **Ecological Risk Assessment, Port of Los Angeles, Berths 70-71, Los Angeles, California —** Mr. Torres conducted an ecological risk screening evaluation for a tank farm at a pier of the Port of Los Angeles. He reviewed environmental reports for neighboring facilities to identify and describe the biological resources in harbor channel waters and sediments that may be potentially exposed to site-related releases. Mr. Torres conducted a risk evaluation for marine organisms for chemicals of potential concern including chlorinated solvents, other volatile organic compounds, and semivolatile organic compounds. A key challenge for the risk assessment was to distinguish constituents with site-related sources from those with other likely sources in the port. Mr. Torres used multiple data sources and lines of evidence to identify spatial patterns of sediment contamination and relationships with groundwater plumes and sediment runoff sources, helping to focus the risk assessment conclusions on those issues attributable to the site.
- ***Preliminary Screening of Hazardous Waste Sites, Confidential Client, San Francisco, California —*** Mr. Torres conducted a preliminary screening of hazardous waste sites to identify locations of known Superfund, RCRA, or landfill contaminated properties within areas considered for the planning and siting of utility infrastructure. He reviewed the California Department of Toxic Substances Control's Envirostor database and the State Water Resources Control Board's Geotracker database and assessed the status of more than 50 sites, including regulatory and cleanup status, contamination issues, existing land use restrictions and remedies in place, and overall potential for constraining the development of project infrastructure.
- **Idaho Power Company Plant and Wildlife Surveys, Oregon and Idaho —** Mr. Torres participated in biological field surveys in support of a planned power transmission line in eastern Oregon and western Idaho. He surveyed for plants along walking transects in multiple sagebrush, desert, and grassland habitats. Data collected included plant species, percent cover, and substrate parameters. Mr. Torres also surveyed for owls at nocturnal calling stations in coniferous forests in the Blue Mountains of eastern Oregon. The species of interest included the great grey owl, flammulated owl, great horned owl, and saw whet owl.
- **Mohave Ground Squirrel Survey, Edwards Air Force Base, California —** Mr. Torres participated in a study designed to identify the relative abundance of and test survey protocols for the Mojave ground squirrel at Edwards Air force Base. The Mojave ground squirrel is listed as a threatened species in the State of California. The study employed track identification and measurements along track station transects in a variety of habitat types on the base. Mr. Torres helped compile a database for distinguishing the co-occurring Mohave and antelope ground squirrels.

- **Large Mammal Survey, Edwards Air Force Base, California —** Mr. Torres was the field crew leader and co-author of a large mammal survey for Edwards AFB. The study investigated the relative abundance and seasonal movements of carnivorous mammals. Methods employed were walking transects for tracks and other signs, track stations, motion cameras, and spotlight surveys. The species of interest include the coyote, desert kit fox, gray fox, mountain lion, bobcat, American badger, western spotted skunk, weasel, and ringtail. Four quarterly surveys were designed to identify seasonal patterns.
- **Small Mammal Demography Study —** Mr. Torres studied the demography of a small mammal community in tidal and seasonal wetlands along San Pablo Bay, California, as part of his graduate research program. He live-trapped salt marsh harvest mice, western harvest mice, California voles, and shrews over an 18-month to record population trends at Mare Island. In support of this study, Mr. Torres has held a scientific collecting permit issued by the California Department of Fish and Game that authorized live trapping of the endangered salt marsh harvest mouse.

EDUCATION

M.S., Ecology (Ecotoxicology emphasis), University of California, Davis, 2000
B.A., Integrative Biology, University of California, Berkeley, 1992

PROFESSIONAL HISTORY

Northgate Environmental Management, Inc., Senior Scientist, September 2014–present
Tetra Tech, Inc., Staff and Senior Scientist, 1993-1995, 1999-2013

PUBLICATIONS

Torres, K. and M. Johnson. 2001. Bioaccumulation of metals in plants, arthropods, and mice at a seasonal wetland. Environ Toxicol Chem. 20(11): 2617-2626.

Torres, K. and M. Johnson. 2001. Testing of metal bioaccumulation models with measured body burdens in mice. Environ Toxicol Chem. 20(11): 2627-2638.

Torres, K., Kephart, B., Clark, D., Shibata, M., Rigby, M., Donn, T., and Waitman, K. 2002. *Bioaccumulation of Metals in Terrestrial Plants and Invertebrates at Vandenberg AFB, California*. Poster Presentation, 23rd Annual Meeting of the Society of Environmental Toxicology and Chemistry, Salt Lake City, UT, November 16-20, 2002.

Torres, K. and M. Johnson. 2005. *Bioaccumulation in Small Mammals*, 26th Annual Meeting of the Society of Environmental Toxicology and Chemistry North America, Baltimore, MD, November 13-17, 2005.

LIA N. HOLDEN, PG
ASSOCIATE GEOLOGIST

Ms. Holden is a California-licensed Professional Geologist with over 20 years of experience in environmental consulting and environmental, health, and safety (EHS). She has managed more than 130 environmental cases, many of which involved active remediation in progress or at various stages of strategic development and implementation. She is proficient in waste management, characterization, and profiling, and has provided support for the development of spill prevention control and countermeasures (SPCC) plans for a variety of railroad projects. Ms. Holden has completed courses on hazardous waste management and transport, hazard recognition, job safety analysis (JSA) or job hazard analysis (JHA), risk assessment and management, team leadership, personnel management, and effective communication. Ms. Holden has designed and implemented numerous site environmental assessments and remedial strategies for underground storage tank (UST) cases (retail petroleum and currently or formerly railroad-owned properties). At sites in various counties across California, she has designed in-situ-sampling plans to conduct pre-construction waste characterization for waste management planning, contaminant delineation and large volume excavation for secondary source removal. She has worked with Certified Unified Program Agencies (CUPA) and Local Oversight Program (LOP) agencies on compliance for cases which environmental challenges encompass a wide range of contaminants from a variety of aboveground and underground sources. Additionally, she is familiar with soil-vapor assessments as well as an array of soil and groundwater field investigative/sampling and remedial techniques. Ms. Holden excels at making crucial connections with regulatory caseworkers and client decision makers to help assess and prioritize their needs, meet compliance goals, identify challenges, develop potential solutions , and close compliance gaps.

REPRESENTATIVE EXPERIENCE

- ***Health and Safety Oversight and Management –*** Managed Permit procurement for assessment and remediation activities and ensure compliance with requirements. Advised client and directed project activities to ensure compliance with local, state, and federal laws and regulations. Identified project-specific needs while supervising project progression toward planned milestones and clean-up goals. Prepared and reviewed technical reports, including site assessment and remedial progress reports, site assessment work plans, corrective and remedial action plans, case closure summary forms and sensitive receptor studies. Worked closely with regulatory case workers to complete site characterization and corrective action for the protection of human health and the environment.
- ***Managed Land Use Covenant (LUC) Sites – Various Clients, California*** — Senior Project Manager, California Class I Railroad Program. Leader responsible for developing a streamlined, cost-effective program, refining program approach and procedures, and overall program management. Managed Land Use Covenant (LUC) sites involving various hazardous materials such as polychlorinated biphenyls (PCBs), asbestos, low-pH soils, and hydrocarbons. Devised a program to incorporate multiple LUCs throughout the state to streamline annual inspections, reporting, and on-site maintenance required by the Department of Toxic Substances Control (DTSC) and Federal Environmental Protection Agency (EPA).
- ***EHS Coordinator, Safety Assessments and Hazardous Materials Business Plans (HMBPs) – Various Silicon Valley Tech Clients, California*** — EHS coordinator for 30+ retail tech-product stores throughout California, Hawaii, and Nevada. Conducted annual safety checks, emergency response plan (ERP) preparation, and safety training for hundreds of tech-company employees.

Assisted with health and safety audits and gap assessments, compiling chemical inventories, HMBP preparation, and planning multi-scenario emergency drills.

- ***Multi-site Portfolio Management of UST Sites – Various Locations, California –*** Cost forecasting and management of several UST removal sampling projects and interim remediation projects, which included ozone injection, dual-phase extraction, and soil vapor extraction to successfully push sites to case closure. Worked with the CUPA and LOPs as the lead manager for UST removals, remedial excavation, and remediation system installations and upgrades. The project was the first to receive agency approval in Santa Clara County for a **firm's patented use of Epsom** salt (magnesium sulfate) for the purpose of remediating petroleum hydrocarbons and constituents (under anoxic conditions) in groundwater.
- ***Former Fueling Reservoirs Program —Various States –*** Program Manager. Established the program and managed research on the expedited historic rail yard, non-intrusive investigation, and follow-up intrusive investigations of this multi-site, multi-state program to locate former fueling infrastructure and other underground contaminant sources associated with the post-coal industry. This program required rapid coordination with rail operations, direct-bill excavation contractors, and collaboration with a team of multiple client consulting companies in a multi-state regulatory framework.
- ***Active Caltrain Rail Facility, San Jose, CA –*** Senior Project Manager. Managed replacement of a widespread groundwater monitoring well network following the decommissioning of a Class I rail yard and subsequent construction of a Caltrain rail facility. The project required extensive coordination with Caltrans Facility Operations, track protection, drilling contractors, and field personnel to address safety concerns and minimize impacts to daily facility operations.
- ***Demolition of Former Bunker C Fueling System, Oxnard, CA –*** Senior Project Manager. This former fueling system included a buried trackside railcar previously used as an UST, an 80,000-gallon concrete bunker C vault, oil line, and 55,000-gallon concrete oil sump. The project entailed management of UST removal, including vault and sump evacuation, cleaning, and backfilling; investigative and confirmatory soil sampling; agency negotiation for in-situ abandonment of the connecting oil line due to the surrounding dense network of underground utilities; and follow-up site assessment to define remaining subsurface impacts supporting a risk-based case closure evaluation that received regulatory concurrence and subsequent case closure.

EDUCATION

Bachelor of Science in Earth Sciences - University of California, Santa Cruz (June 2004)

PROFESSIONAL HISTORY

Northgate Environmental Management, Inc., Senior II Geologist, 2022–Present
Golder Associates, Inc. and Golder Associates (member of WSP), Senior Geologist, 2020-2022
Delta Environmental Consultants/Delta Consultants/Antea Group, Senior Project Manager 2004-2019

REGISTRATIONS

California Professional Geologist (P.G.) No. 8584

AWARDS

Environmental Professional Project Manager of the Year (May 2015- Union Pacific Railroad), nominee and final award recipient
Association of Women Geoscientists (AWG) Outstanding Student Award (Apr 2004)
Recipient of the Weber/Holt Award (Spring 2004)
Outstanding Earth Sciences Senior Award - University of California, Santa Cruz (June 2004)

ATTACHMENT C – GEOFFREY HORNEK, ATMOSPHERIC SCIENTIST PEER REVIEW LETTER AND QUALIFICATIONS

GEOFFREY H. HORNEK
Environmental Air Quality and Acoustical Consulting
1032 Irving Street #768
San Francisco, CA 94122
(414) 241-0236
ghornek@sonic.net

May 1, 2025

Subject: PG&E Power Asset Acquisition Project Draft Environmental Impact Report (March 19, 2025) – Comments on the DEIR's Noise and Vibration Analyses, Significance Findings and Proposed Mitigations

Richard Grassetti
Grassetti Environmental Consulting
7008 Bristol Drive
Berkeley, CA 94705

Dear Mr. Grassetti:

At your request, I have reviewed the *PG&E Power Asset Acquisition Project Ranch Quarry Draft Environmental Impact Report (Project DEIR), focusing on the adequacy of the noise and vibration analyses*. For this Project, the City and County of San Francisco proposes to purchase and augment as needed the following Pacific Gas and Electric Company (PG&E)-owned electrical transmission and distribution assets located in San Francisco and San Mateo counties to provide electric service to customers within San Francisco:

- PG&E's distribution assets within San Francisco (i.e., distribution-level substations, metering, customer-serving distribution lines, and related facilities)
- PG&E's 115 kilovolt (kV) and 230 kV transmission assets within San Francisco and portions in San Mateo County (i.e., substations, transmission lines, transformers, and related facilities needed for operations)
- Certain PG&E distribution lines in Brisbane emanating from the Martin Substation that serve customers in San Francisco
- A portion of the Martin Substation facilities (located in Brisbane) or interconnections needed to enable the San Francisco Public Utilities Commission (SFPUC) to operate the transmission and distribution system from Martin Substation into San Francisco
- Other systems and equipment, operating and maintenance facilities, and other properties as necessary for safe and reliable operation, maintenance, repair, control, and protection of the acquired transmission and distribution system

PG&E Power Asset Acquisition Project DEIR Noise & Vibration Review

This review is based on my 40+ years of experience preparing and reviewing noise and vibration analyses for CEQA documents and other environmental assessments for many projects including large-scale utility infrastructure installations and transportation facility expansions. Perhaps most relevant to this review is my specific experience with evaluating environmental impacts from construction of East Bay Municipal Utility District water distribution pipelines and pumping stations (i.e., MacArthur/Davenport and Grand Avenue pipeline projects, and the Montclair pumping plant replacement project) and construction of improvements to the Santa Clara Valley Transportation Authority's (VTA) light rail transit (LRT) system (i.e., Light Rail Efficiency Project Phase II, the double-tracking of the VTA's Green Line between State Route 85 and the Whisman LRT Station).

My review of the DEIR was limited to its Noise and Vibration section, which includes Environmental Setting, Regulatory Framework, Significance Criteria, Impact findings, and Mitigation Measure specifications. In the DEIR and other source document text quoted below, underline has been added to text sections that are the focus of this letter's comments.

Comments

1. **The DEIR's inclusion of Federal Transit Administration (FTA) significance criteria for noise impacts is appropriate, but the particular choice of construction noise criteria is erroneous, and FTA operational criteria have been left out entirely.**

In Section 3.2.3.1, Page 3.2-12, the DEIR states:

> *"While the Transit Noise and Vibration Impact Assessment Manual of the Federal Transit Administration (FTA) is developed for determining significant noise and vibration impacts for transit projects and is not a regulation, it is one of the few federal sources that suggest both a methodology and criteria for assessing construction noise impacts. The FTA noise impact criteria used to assess construction impacts are identified in Table 3.2-6"*

92 - NO-1

Table 3.2-6 [from the DEIR] Federal Transit Administration (FTA) Construction Noise Impact Criteria

	Leq (1-hour)	
Land Use	***Day***	***Night***
Residential	*90*	*80*
Commercial	*100*	*100*
Industrial	*100*	*100*

What the DEIR does not state is that the FTA specifies two categories of construction noise assessment where the methodology and significance standards vary depending on project circumstances.

In Section 7.1, Page 177 of the FTA Manual:

- *"A general assessment of construction noise is warranted for projects in an early assessment stage when the equipment roster and schedule are undefined and only a rough estimate of construction noise levels is practical.*
- *"A detailed analysis of construction noise is warranted when many noise-sensitive sites are adjacent to a construction project or where contractors are faced with stringent local ordinances or heightened public concerns expressed in early outreach efforts".*

Then on Page 179 of the FTA Manual:

> ***"Option A: General Assessment** – Compare the combined Leq equipment (1-hour)for the two noisiest pieces of equipment for each phase of construction determined in Section 7.1, Step 3 to the criteria below. Then, identify locations where the level exceeds the criteria.*
>
> ***Table 7-2 General Assessment Construction Noise Criteria [of the FTA Manual]"***

	Leq (1-hour)	
Land Use	**Day**	**Night**
Residential	90	80
Commercial	100	100
Industrial	100	100

> ***"Option B: Detailed Analysis** – Compare the combine Leq equipment (8-hour) for all equipment for each phase of construction determined in Section 7.1, Step 3 to the criteria below. Then, identify locations where the level exceeds the criteria.*
>
> ***"Table 7-3 Detailed Assessment Construction Noise Criteria [of the FTA Manual]"***

	Leq (8-hour)		Ldn (30 day)
Land Use	**Day**	**Night**	
Residential	80	70	75
Commercial	85	85	80
Industrial	90	90	85

The DEIR wrongly uses the FTA's "General Assessment" noise criteria for evaluating project construction noise impacts, rather than the more appropriate Detailed Assessment criteria. The FTA recommends the latter as:

> *" … warranted when many noise-sensitive sites are adjacent to a construction project or where contractors are faced with stringent local ordinances or heightened public concerns expressed in early outreach efforts"*

92 - NO-1 cont.

This is clearly more applicable to the specific Project characteristics than the General Analysis methodology.

The EIR's erroneous choice of the General Assessment construction noise criteria (i.e., 90 decibels for residential receptors) assures a lesser level of protection than the "Detailed Analysis" criteria would, by allowing 10 decibels more noise exposure before the DEIR could make a significance call.

The EIR's choice of the 90-decibel threshold for construction noise also puts it into potential conflict with the US Environmental Protection Agency (EPA) recommendations (i.e., Noise Levels Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety).

From DEIR page 3.2-12:

> *"U.S. EPA found that to prevent hearing loss over the lifetime of a receptor, the yearly average Leq should not exceed 70 dBA"*

[***Note: an exposure to noise at 90 decibels over one hour is equivalent to a 76-decibel exposure over 24 hours***]

A. The FTA Manual also includes analytical methodology and noise exposure standards for operational noise sources, which the DEIR does not mention or use in the Project impact analysis.

92 - NO-1 cont.

On Page 25 of the FTA Manual:

> *"FTA criteria for [operational] noise impact] … are based on well-documented research on human response to community noise and represent a reasonable balance between community benefit and project costs … this table [Table 4-6 of the FTA Manual included below] shows that as the existing noise exposure increases from 45 dBA to 75 dBA, the allowed project noise exposure increases from 51 dBA to 65 dBA. However, the allowed increase in the cumulative noise level decreases from 7 dB to 0 dB (rounded to the nearest whole decibel). The justification for this is that people already exposed to high levels of noise should be expected to tolerate only a small increase in the amount of noise in their community. In contrast, if the existing noise levels are quite low, it is reasonable to allow a greater change in the community noise for the equivalent difference in annoyance [FTA page 30]."*

Rather than include these variable noise impact criteria from the FTA Manual, the DEIR cites erroneous fixed 1-3-5-10 decibel increments as defining significant noise increases from any baseline level. Thus, differing with the FTA's position that *"people already exposed to high levels of noise should be expected to tolerate only a small increase in the amount of noise in their community"*.

Table 4-6 Noise Impact Criteria: Effect on Cumulative Noise Exposure Ldn or Leq(1hr) in dBA rounded to nearest whole decibel			
Existing Noise Exposure	***Allowable Project Noise Exposure Before Moderate Impact***	***Allowable Combined Total Noise Exposure***	***Allowable Noise Exposure Increase Before Moderate Impact***
45	*51*	*52*	*7*
50	*53*	*55*	*5*
55	*55*	*58*	*3*
60	*57*	*62*	*2*
65	*60*	*66*	*1*
70	*64*	*71*	*1*
75	*65*	*75*	*0*

92 - NO-1 cont.

2. The DEIR mischaracterizes the checklist items from Appendix G of the CEQA Guidelines as "significance criteria" and also ignores the presence of San Francisco International Airport (SFO) in its Impact analysis (which the 3rd checklist item requires).

The DEIR on page 3.2-20 includes the following environmental checklist items for noise and vibration supposedly taken verbatim from Appendix G of the CEQA Guidelines

- *"For a project located within the vicinity of a private airstrip or an airport land use plan area, or where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, cause an increase of 1.5 dB or greater in aircraft noise, in noise-sensitive areas exposed to 65 CNEL or greater, as compared to existing baseline conditions".*

93 - NO-1

The DEIR makes the following statement on page 3.2-21:

> *"The project is not within the vicinity of a private airstrip or airport land use plan area, or within two miles of a public airport. Therefore, the topic of long-term exposure of people residing or working in the area to excessive airport-related noise levels is not applicable to the project or project variant and is not discussed further in this EIR."*

The Project site vicinity includes Daly City, Brisbane and portions of unincorporated San Mateo County, which ***are included in the Airport Land Use Plan*** (ALUP) for SFO. And the DEIR's listing of major sources in "Existing Noise Sources" section (on page 3.2-6) ***does not include SFO*** – one of the largest airports in the US and located a few miles south/east of the Project site. The major aircraft departure route passing over/near Daly City and southwest San Francisco (which include portions of the project site and sensitive receptors affected by Project noise

sources); it should be listed in the EIR as a major local noise source and its contribution to significant project-level or cumulative noise impacts refuted or confirmed in the analysis.

Also, the third checklist item contains text specifying 1.5 dB as the CEQA Appendix G's official incremental aircraft noise impact standard. It is not. The original checklist item makes no such quantitative definition. This standard has been added by the San Francisco Planning Department and is not a reasonably protective-case criterion that would guarantee that potentially significant aircraft noise impacts would not occur.

93 - NO-1 cont.

3. **The DEIR Setting is padded with unnecessary regulatory detail and fails to distil/focus the material to give simple significance criteria protective of all sensitive receptors in all jurisdictions from Project noise and vibration impacts.**

It is common practice for CEQA noise and vibration analyses to be done acknowledging the public health research of the US Environmental Protection Agency (EPA) and World Health Organization (WHO) using the impact screening methodology/models of the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) with significance criteria based on EPA/WHO recommendations or taken from City/County General Plan noise control policies or Noise Ordinance restrictions. ***However, this EIR does not correctly utilize these screening criteria.***

The EIR's Regulatory Background (Section 3.2.3) contains detailed text (nine pages) of federal, state and local noise control policies and quantitative standards. This text is then pasted without substantial summary into two tables (i.e., Table 3.2-11 Ordinances Applicable to the Project or Project Variant and Table 3.2-12 Noise and Vibration Analysis Quantitative Criteria) in the EIR's Impacts and Mitigation Measures section. This is repetitive and confusing. Much of the Regulatory Background text should be moved into an expanded Table 3.2-11; while the multi-jurisdictional quantitative standards in Table 3.2.12 should be distilled down to include the most protective standards from all jurisdictions applicable to all sensitive receptors.

94 - NO-1

Applying significance criteria according to the jurisdiction of the sensitive receptors seems to benefit the Project sponsor rather than offering equal protection to the local residents. Applying the most protective adopted standards to all receptors is required to achieve CEQA's stated objectives of "...freedom from excessive noise." (CEQA Section 21001(b)).

We have annotated DEIR Table 3.2-12 (included below) for recommended changes to the listing of noise and vibration significance criteria to be applied to all Project receptors.

Table 3.2-12 Noise and Vibration Analysis Quantitative Criteria (from DEIR)

	QUANTITATIVE CRITERIA APPLIED IN SAN FRANCISCO
Daytime Construction Noise No Project equipment will exceed 80 dBA at 100 feet according to DEIR table. Use FTA "Detailed Analysis" standards. The >10 dBA increment is not an FTA standard. It is acceptable to use in	• ~~Noise levels greater than 80 dBA at 100 feet from single equipment per the San Francisco noise ordinance~~ • Combined noise levels greater than ~~90 dBA~~ 80 dBA for residential and other noise-sensitive uses and ~~100 dBA~~ 90 dBA for commercial and industrial land uses, using FTA combined equipment approach

PG&E Power Asset Acquisition Project DEIR Noise & Vibration Review

areas where background levels are < 60 dBA. But when > 65 dBA, 1-3 dBA would be more protective (e.g., Bayshore Elementary School)	• Combined noise levels greater than 10 dBA above ambient at residential and other noise-sensitive uses, ~~using FTA combined equipment approach~~
Nighttime Construction Noise	• >45 dBA indoor noise levels at night, per recommendations of World Health Organization. • San Francisco Police Code section 2908 prohibits nighttime construction (between 8 p.m. and 7 a.m.) that generates noise exceeding the ambient noise level by 5 dBA at the nearest property line unless a special permit has been issued by the City and County of San Francisco.
Construction Roadway Noise Use FTA "sliding scale" as incremental significance standards.	• ~~3 dBA or greater increase when sensitive receptors are located in noise-degraded environments~~ • ~~5 dBA or greater increase for commercial/industrial receptors, unless existing noise level exceeds 70 dBA~~
Operational Stationary Noise The > 8 dBA increment is not based on any research findings on noise disruptions. The 45/55 levels are based in EPA recommendations, but may be difficult to satisfy in SF's urban environment.	• ~~>8 dBA increase at any point outside of the property plane~~ • >45 dBA at interior of nearest noise-sensitive receptor at night per San Francisco Noise ordinance • >55 dBA at interior of nearest noise-sensitive receptor during the day per San Francisco Noise ordinance
Operational Roadway Noise Use FTA "sliding scale" as incremental significance standards.	• ~~3 dBA or greater increase when sensitive receptors are located in noise-degraded environments~~ • ~~5 dBA or greater increase for commercial/industrial receptors, unless existing noise level exceeds 70 dBA~~
Construction Vibration FTA also has damage criteria.	• Building damage criteria per Caltrans criteria presented in Table 3.2-8 • FTA criteria for vibration annoyance presented in Table 3.2-7
	QUANTITATIVE CRITERIA APPLIED IN DALY CITY AND UNINCORPORATED SAN MATEO COUNTY
Apply the most restrictive standard by comparing those from all jurisdictions.	• The analysis applies the same quantitative criteria as in San Francisco because Daly City and San Mateo County municipal codes do not include quantitative criteria
	QUANTITATIVE CRITERIA APPLIED IN BRISBANE

Construction Noise
No Project construction equipment exceeds the stated limit.
Use FTA "Detailed Analysis" standards.
The > 10 dBA increment is not an FTA standard.
	• Construction noise is allowed as long as construction meets at least one of the following criteria:
	  ○ ~~No individual piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 25 feet from the source thereof.~~
	  ○ The noise level at any point outside of the property plane of the project shall not exceed 86 dBA.
	• Combined noise levels greater than ~~90 dBA~~ 80 dBA for residential uses and other noise sensitive uses and 90 dBA ~~100 dBA~~ for commercial and industrial land uses, using FTA combined equipment approach
	• Combined noise levels greater than 10 dBA above ambient at residential and other noise-sensitive uses~~,~~ ~~using FTA combined equipment approach~~

Operational Noise	• ~~For single-family residential, noise levels shall not be more than 10 dBA above ambient for a cumulative~~

94 - NO-1 cont.

These are applicable only to stationary noise sources, but none are introduced by the Project. State that in the DEIR text and do not include in the table. Use FTA "sliding scale" for all operational sources in the project area.	~~period of more than 10 minutes per hour or more than 20 dBA above ambient for more than 3 minutes per hour.~~ • ~~For multi-family residential, noise levels shall not be more than 10 dBA above ambient 3 feet from any wall, floor, or ceiling in any dwelling unit for more than 20 dBA above ambient for more than 3 minutes per hour.~~ • ~~For commercial and industrial uses, noise levels shall not be more than 10 dBA above ambient for a cumulative period of more than 10 minutes per hour or more than 20 dBA above ambient for more than 3 minutes per hour~~

Some specific examples of the problems associated with the use of erroneous, unprotective noise significance thresholds include:

- Exposure of numerous residences on Geneva Avenue (3100 Block) to high construction noise levels is indicated on Table 3.2-15, yet this impact is considered less than significant due to the universal 10-dBA incremental threshold. The existing background exceeds 65 dBA (according to measurements taken). This is already a level where communication through relaxed speech is difficult. A more protective standard (i.e., 1-3 dBA) is called for here (following the lead of FTA standards for incremental operational noise impact). This impact should be declared significant and unavoidable.

- Perhaps the most egregious example of the DEIR's non-protective noise thresholds is with respect to the Bayshore Elementary School, which would be subject to noise increases from the existing 72 dBA to a total noise level of 80 dBA for weeks or months during construction (see Table 3.2-16, p. 3.2-46). Long-term noise intrusions at this level could substantially interfere with education at this school.

94 - NO-1 cont.

4. The DEIR Noise Impact analysis is based on incomplete project description data that, together with the erroneous application of noise criteria discussed above, results in the DEIR underestimating potentially significant noise impacts

The potential for noise impacts remains undetermined because of lack of adequate Project Description information:

- Noise impacts near the Martin Substation cannot be accurately estimated because of lack of a site plan
- Noise impacts from storage and maintenance yards cannot be determined because of lack of storage/maintenance yard location and plans
- Noise impacts from subsurface work cannot be accurately assessed because of lack of locations for subsurface work (i.e. vaults, tranches, foundation work, and jack-and-bore pitss).

95 - NO-1

5. Other Omissions in Noise and Vibration Analyses

In addition, the DEIR does not address the noise of pile driving and back-up beepers. The noise impacts of pile drivers and other impact tools where they are proposed to be used should not be arbitrarily exempted from the noise significance criteria, and be evaluated under the same San Francisco Police Code standards as other construction equipment. The Police Code's exemption of pile driving is not relevant to CEQA, which evaluates impacts by their effects on the physical environment, not just by code compliance (i.e., Berkeley Keep Jets Over the Bay v. Board of Port Commissioners, 2001 decision).

96 - NO-2

6. Inadequate Mitigation Measures

The DEIR fails to consider all potentially feasible mitigation measures for work near sensitive receptor, including residences and schools. These may include:

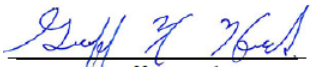
- The use of line power rather than diesel-powered generators or compressors.
- For noise impacts to schools, a mitigation that may reduce the severity of impact would be coordination of construction activities between the Project contractor and school authorities on a daily or weekly basis so that educational and outdoor activities could move to lesser effected indoor or outdoor parts of the school site during the more disruptive noise-producing construction phases.

97 - NO-4

7. Conclusions

As indicated in my comments above, the DEIR noise and vibration analyses are flawed such that it fails to completely analyze impacts to nearby residential receptors or to specify adequate mitigations. The DEIR Noise impact analysis needs to be redone after the revisions noted above are made to its regulatory background, analytic methodology and significance criteria. It also appears from my review that if the recommended changes to regulations, methodology and significance criteria were implemented, new significant impacts would likely result from the Project and would need to be identified in a recirculated DEIR.

Sincerely,



Geoffrey H. Hornek

Geoffrey H. Hornek

414-241-0236
ghornek@sonic.net

Education

M.S., Applied Science/Engineering, University of California, Davis/Livermore, 1980
B.A., Physics, Queens College CUNY, 1974

Professional Affiliations

American Physical Society
Air and Waste Management Association

Mr. Hornek is an environmental scientist with more than 20 years of experience in environmental and occupational air quality and noise analysis. He has prepared many technical reports for a wide variety of industrial, commercial, transportation, and urban development projects and is well-versed in the federal, state, and local regulatory framework that guides development. He has excellent working relationships with public agency contacts and environmental professionals in urban and transportation planning, and in a wide variety of government and industry sectors.

Mr. Hornek's technical capabilities include measuring ambient air pollutant and noise levels, performing computer-based air dispersion and noise attenuation modeling, conducting air toxic health risk assessments, and designing environmentally superior alternatives to mitigate air pollutant and noise problems and their related health impacts. He has completed study towards a master of public health degree in environmental health from the University of Minnesota School of Public Health. His thesis research involved methods for reconstructing occupational air pollutant exposure histories using computer models and statistical techniques.

Much of his most recent work has been on CEQA/NEPA studies in northern California for a variety of lead agencies. Here are selected projects for which noise was the primary focus for the environmental analysis:

- **Crystal Geyser Bottling Plant Project, Mount Shasta CA** (review of DEIR noise analysis for the Gateway Neighborhood Association)
- **1200 Dwight Way Residential Project, Berkeley CA** (review of Berkeley Planning Department noise concerns for project architect)
- **Water Pipeline Construction Noise, Oakland CA (c**omparison of standard noise model predictions with measurements at actual pipeline construction sites, a focused, special study commissioned by the East Bay Municipal Utilities District)
- **Wildcat Pumping Plant Noise Technical Report, San Pablo CA** (East Bay Municipal Utilities District)
- **Montclair Pumping Plant Noise Technical Report, Oakland CA** (East Bay Municipal Utilities District)
- **Southern Marin Long Range Acoustic Device (LRAD) Emergency Notification Network Project** (noise measurements evaluating actual system alert levels in the field with manufacturer's specifications for signal horn performance, done for the Marin Wildfire Prevention Authority)
- **Transcendence Theater Special Events Permit Project, Jack London State Historic Park, Sonoma County CA.** (concert noise measurements and comparison with County General Plan noise standards, done for the California Department of Parks and Recreation)
- **San Pablo Avenue Bridge Replacement Project Noise Technical Memorandum** (City of Pinole CA)
- **Georgia-Pacific Antioch Gypsum Plant Wharf Replacement Project** (construction, including pile driver noise, done for the California State Lands Commission)

ATTACHMENT D – TERRAPHASE CULTURAL RESOURCES REVIEW LETTER AND QUALIFICATIONS

terraphase engineering

MEMORANDUM

To:	Richard Grassetti **Grassetti Environmental Consulting** 7008 Bristol Dr. Berkeley, CA 94705	From:	Charlane Gross, Sr. Archaeologist Terraphase Engineering Inc.
Date:	April 8, 2025	Project No.:	C093.001

Subject: **Cultural Resources Peer Review**

Grassetti Environmental Consulting is assisting Cox, Castle and Nicholson to complete a peer review of the draft Environmental Impact Report (EIR) for the San Francisco Public Utility Commission's PG&E Power Asset Acquisition Project. As part of that effort, Grassetti Environmental Consulting has contracted with Terraphase Engineering, Inc. to complete a peer review of the cultural resources portion of the document. Because the Initial Study (IS) prepared for the EIR (EIR Appendix A) includes the cultural resources information, the bulk of the comments are focused on the IS.

General Comments

The IS repeatedly defers the identification, evaluation, and amelioration of impacts to cultural resources to a subsequent mitigation stage such that the IS/EIR is missing substantial information necessary to identify cultural resources impacts and their significance. While it is understood that some project locations are difficult to access due to extant hardscaping and not all project element locations have been defined, deferred analysis and mitigation leads to incomplete identification and evaluation of potentially significant impacts. Deferring analysis until a resource is encountered during construction causes damage to the resource, potentially destroying the characteristics which make it eligible for listing on the California Register of Historical Resources (CRHR) or National Register of Historic Places (NRHP). There will always be unanticipated finds made during construction, but the lack of an adequate identification effort as part of regulatory document preparation enhances the opportunities for significant and what could have been avoidable impacts. Therefore, the cultural resources section of the IS/EIR is inadequate and it is inappropriate to dismiss cultural resources from further consideration within the EIR.

97b - CR-1

Initial Study

1) Resources eligible to the CRHR are called Historical Resources; resources eligible to the NRHP are called Historic Properties. In the main, the IS/EIR cultural resources section does not use correct terminology – the IS/EIR continually describes CRHR-eligible buildings and structures as historic resources; the IS/EIR should clarify definitions for public review and define Historical

98 - CR-2

Resources (eligible to the CRHR) and Historic Properties (eligible to the NRHP). The IS/EIR should also remove uses of the phrase "adverse effects" since that language is used to describe significant impacts under the National Historic Preservation Act rather than CEQA.

2) The figures presented in the EIR Project Description (and referred to in the IS) are not adequate to identify the range of potential significant historic resource impacts described in the IS/EIR. There should be a figure showing the different portions of the project with the locations of the Historical Resources and Historical Districts in relation to those areas. The verbal descriptions are inadequate to convey any potential visual impacts resulting from permanent changes to the visual setting near CRHR-eligible resources or districts.

3) CEQA's Cultural Resources significance evaluation criteria list for CEQA (PRC Section 5024.1 – see below) are not presented in the IS/EIR, which instead had just brief mentions in association with various resources. The public cannot understand the impact evaluations without seeing the entirety of the four criteria. If San Francisco and San Mateo Counties have relevant Cultural Resources policies, they should be listed as well and used to screen potential impacts:

> CA Public Resources Code Section 5024.1 defines eligibility requirements and states that a resource may be eligible for inclusion in the CRHR if it:
>
> 1. **Is associated with events that have made a significant contribution to the broad patterns of California's** history and cultural heritage;
> 2. Is associated with the lives of persons important in our past;
> 3. Embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values; or
> 4. Has yielded, or may be likely to yield, information important in prehistory or history.

4) Cultural resources mitigation measures refer to the Secretary of the Interior's Standards, but don't offer an explanation of what those standards entail; these standards need to be identified so the reviewing public can fully understand treatment of impacts on Historical Resources under CEQA. It is presumed that the IS/EIR is referring to The Secretary of the Interior's Standards for the Treatment of Historic Properties using the Standards and Guidelines for Preservation, Rehabilitation, Restoration & Reconstruction. If so, it should be clearly stated and should include a brief description of what it would mean specifically, particularly regarding the Martin Substation and Warehouse buildings (14 CCR § 15126.4(b)(1)), e.g. new construction should contain similar characteristics but be distinguishable from the original.

5) The IS/EIR treats public right-of-way (ROW) as automatically culturally sterile; but archaeological resources are known to exist throughout San Francisco, including within roadways . The statement that there is nothing in the ROW is a misleading and inappropriate conclusory assumption.

6) The IS/EIR does not include a copy of the cultural resources or a redacted copy of that report or research documents prepared for the project and does an inadequate job of describing the extent and results of background research (e.g. identification of potentially significant sub-surface resources. Any examination of historic maps, bird's-eye views, etc.) should be mentioned. Project elements should be overlain onto one or more early maps of the region so that reviewers and the public could see drainages, proximity to the Bayshore, early structures,

98 - CR-2 cont.

99 - CR-3

100 - CR-3

etc. to help evaluate potential impacts. The assessment should also include a buried site sensitivity analysis, based on a geoarchaeological model and review of historic maps. — 100 - CR-3 cont.

7) There is a list of historic districts in the project vicinity but no description or discussion of district character-defining features which might be impacted by the project; this should be included.

8) The provisions within MM M-CR-1c continue the pattern of deferred mitigation without clear performance standards for measuring and ensuring the effectiveness of the measure that is present throughout the IS.

9) There is no description of the Operations Control Center as it currently exists and therefore no way to judge the adequacy or necessity of MM M-CR-1d. — 101 - CR-2

10) The Systems Reinforcements description suffers from the same general lack of specificity and the assumption that just because it's in the City's ROW, there are no subsurface cultural materials. — 102 - CR-3

11) The locations of Operations and Maintenance Service Yards need to be identified now and not deferred to a later phase. Without clearly defined locations and footprints, it is not possible to meaningfully evaluate the project's potential impacts on cultural resources. — 103 - CR-1

12) MM M-CR-1e is basically a repeat of M-CR-1b, better to refer to that rather than duplicating it. — 104 - CR-2

13) The EIR does not provide the qualifications for the two people who prepared the Cultural Resources Review memorandum, and without being able to review the PAR study or the results of the NWIC record searches, we have no idea whether the information derived from those sources is appropriately conveyed in the IS by people with the correct background experience. — 105 - CR-1

14) The project site appears to be much farther from the current Bayshore than is considered to be within the range of increased sensitivity according to predictive modeling described under Impact CR-2. There are repeated references to high sensitivity - the IS should include some specific discussion of local waterways, changes in the distance to the Bay, distance to shellmound sites, distance to other prehistoric resources, and help the reader understand why these locations are sensitive for cultural resources. There should also be a table listing known prehistoric sites within a 0.5 (minimum) mile radius of the project site or potential corridors that involve any ground-disturbing activity. This can be easily done without giving away precise resource locations, is included in record searches (unless the searches are requested by non-archaeologists), is a standard component of any regulatory document, and can be used to help convey the sensitivity of the project area. — 106 - CR-3

15) Because Cultural Resources were dismissed from further consideration in the EIR, a much more specific description of background methods and findings is needed; given all of the deferred data collection/testing, the IS needs to be updated drastically with actual information. — 107 - CR-1

16) The Impact CR-2 conclusion of "any component could affect any kind of resource" is broad, uninformative, and does not convey the data needed to create an informed opinion regarding potential project impacts. The conclusion improperly relies on deferred analysis. — 108 - CR-3

17) MM CR-2a – the stop-work radius of 25 feet is much smaller than the standard 50 feet; 50 feet offers much better protection of a resource or human remains discovered during construction. If the find is comparatively small, the stop work radius can later be reduced while the find is treated.

18) MM CR-2b is deferred mitigation without clear performance standards for measuring and ensuring the effectiveness of the measure; testing and evaluation of resources needs to be completed prior to issuance of a Final EIR; this includes all elements of the project – Martin Substation, Local Distribution System Separation, System Reinforcements, Operations Control Center, Operation and Maintenance Service Yards.

19) MM CR 2c should refer back to MM CR-2b as well as 2a.

108 - CR-3 cont.

As detailed above, the IS/EIR presents incomplete information regarding location, type, and style of improvements to be completed as part of the project. The lack of location information in particular makes it impossible to meaningfully **assess the project's impacts to known built environment and** archaeological resources. While unexpected finds may occur during construction no matter what level of effort is applied during the planning stage, a proper program of resource identification and evaluation is required under CEQA, and would guide construction away from the most sensitive resources and offer the opportunity to reduce impacts to less-than-significant levels. The EIR dismisses consideration of cultural resources based on a flawed and incomplete study and therefore does not constitute substantial evidence and does not adequately assess potential significant impacts on the environment created by implementation of the project. Furthermore, the information presented in the IS/EIR fails to provide the public and decision-makers **with sufficient information to evaluate the project's potential** impacts on cultural resources

109 - CR-1

Charlane Gross, M.A., RPA
Senior Archaeologist

Charlane Gross, MA, RPA

Senior Archaeologist

Charlane Gross has over 35 years of management, field, and research experience on a wide variety of projects, and is well versed in all aspects of historic-era and prehistoric resource investigations and the requirements of the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act (NHPA), and the California Environmental Quality Act (CEQA). She meets the Secretary of the Interior Professional Qualifications Standards under 36 CFR Part 61 and develops cultural resources recordation and management documents including survey, testing, and data recovery reports, and National Register of Historic Places (NRHP) evaluations. She has prepared cultural resources chapters for regulatory documents, treatment plans, and management plans and has extensive experience with Tribal, agency, and stakeholder consultation.

Ms. Gross's range of experience has been acquired by working both in the field and office managing projects, coordinating with specialists in other fields, preparing proposals, working with clients and agencies, and specializing in Tribal consultation. Her geographic expertise includes Alabama, Alaska, Arizona, Arkansas, California, Delaware, Florida, Guam, Hawaii, Illinois, Michigan, Mississippi, Nevada, New Jersey, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, South Carolina, Texas, Washington, West Virginia, and Wisconsin. This exposure has resulted in the widest possible range of experience at all levels of archaeological investigation and allows Ms. Gross to meet professional expertise requirements when completing projects in new geographies. Additionally, Ms. Gross specializes in Human Osteology, the excavation and analysis of human skeletal remains.

Education

MA in Anthropology, San Jose State University, 1991

BA in Anthropology, University of California-Berkeley, 1987

Years of Experience

35+

Joined Terraphase

2023

Professional History

Terraphase Engineering Inc., Senior Archaeologist, 2023 – present

Montrose Environmental (formerly Analytical Environmental Services), Senior Archaeologist, 2014 – 2023

GrassRoots Environmental, Senior Archaeologist, 2011 – 2014

AECOM (formerly EDAW), Senior Archaeologist, 2001 – 2011

Licenses/Registrations

Register of Professional Archaeologists, No. 11854

CEQA/NEPA Experience

CEQA and NEPA process expertise includes management of administrative processes, impact analysis, development of commensurate mitigation, response to comments, public/agency presentations, and technical oversight. Technical areas of expertise include hazardous materials, environmental data analysis, tribal NEPA processes, wastewater, recycled water, air quality analysis, hydrology and water quality, geology and soils, traffic, and noise. Ms. Gross has expanded her areas of expertise, providing management of CEQA and NEPA projects, completing Phase I Environmental Site Assessments for properties in multiple states while continuing to complete cultural resource investigations on projects throughout the United States.

Agencies worked with include:

- Bureau of Indian Affairs
- U.S. Army Corps of Engineers
- Indian Health Services
- Bureau of Land Management
- Bureau of Reclamation
- U.S. Forest Service
- Department of Defense
- California Department of Transportation
- Pacific Gas & Electric
- Numerous counties, cities, townships, and water agencies

Charlane Gross, MA, RPA

Representative Project Experience

- Pit River Tribe Environmental Assessment, Shasta County, California
- Colusa Rancheria Housing and Commercial Development Project, Colusa County, California, Colusa Rancheria
- Shoshone-Bannock Casino Development and Fee-to-Trust Project, Elmore County, Idaho
- Southern Sierra Miwuk Nation Fuels Reduction Project, Mariposa County, California
- Skokomish Indian Tribe Timber Harvest Project, Kitsap County, Washington
- Menominee Tribe of Wisconsin Site Investigation for Future Development, Kenosha County, Wisconsin
- Picayune Rancheria of the Chukchansi Indians Fee-to-Trust Project, Merced County, California
- North Fork Rancheria of Mono Indians of California HUD Project, Madera County, California
- Chickasaw Nation Development Project, Marshall County, Oklahoma
- Health Clinic Expansion Project, Douglas County, Nevada, Washoe Tribe of Nevada and California
- Coquille Indian Tribe Fee-to-Trust Project, Jackson County, Oregon
- Little River Band of Ottawa Indians Fee-to-Trust Project, Muskegon County, Michigan
- US Coast Guard Property Transfer Project, Centerville Beach, California
- MMA Program/Naval Air Station (NAS), Whidbey Island, Washington
- Phase I Archaeological Survey, Fort Dix, New Jersey
- Jena Band of Choctaw Indians Environmental Assessments/Environmental Overviews, Grant and La Salle Parishes, LA
- Phase I Archaeological Testing at Dover AFB, Dover, Delaware
- Foley Family Farms Water Rights Permitting Project, Napa County, California
- American River Pipeline Project, Sacramento County, California
- Feather River Levee Repair Project EIR and EIS, Yuba County, California
- Upper Truckee River and Marsh Restoration Project, South Lake Tahoe, California
- Guadalupe River Flood Protection Project and Guadalupe Creek Restoration Project, Santa Clara County, California
- Eon Vision Windfarm Project, Kern County, California
- ExxonMobile Alaska Natural Gas Pipeline Project, Northeastern Alaska
- Santa Ynez Band of Mission Indians Museum Archaeological Testing Project, Santa Barbara County, California
- Residences at Napa Junction Development Project, Napa County, California
- Alabama and Florida Conservation Easements Project, Elmore and Escambia Counties, Alabama, and Polk County, Florida
- Del Rio Dairy Biodigester Project, Parmer County, Texas
- Paloma Dairy Biodigester Project, Maricopa County, Arizona
- Medicinal Cannabis - Yolo Bypass Project, Yolo County, California
- Winery Development Project, Lake County, California
- Central Valley Independent Network Fiber-Optic Project, 17 Counties, California
- Central Los Angeles High School #9, Los Angeles, California
- Christiana Care Hospital/Cathedral Cemetery Project, Wilmington, Delaware
- Four Seasons Development Project, Kapalua, Maui, Hawaii
- Condominium, Hotel, Multiple Golf Courses, and Recreational Lake Development Project, Guam
- Negro's Burial Ground/Foley Square Project, Manhattan, New York
- Seneca Rocks Visitor Center, Seneca Rocks National Recreation Area, Greenbrier County, West Virginia
- I-10 Bypass Project, Riverside County, California
- Sacramento Rail Yard Remediation Project, Sacramento County, California
- Monongahela Village Excavation, Meyersdale, Pennsylvania
- Old Spanish Trail Identification and Evaluation, Las Vegas, Nevada
- Sulfur Bank Mercury Mine California Superfund Site Remediation, Clear Lake, California
- Derewel Chemical Company Superfund Site Remediation, New Jersey
- Nimbus Dam Radial Gate Repair Project, Sacramento County, California
- Sacramento River Archaeological Site/Bank Stabilization Project, Sacramento, California

EXHIBIT B



Pacific Gas and Electric Company

PG&E MEMORANDUM:

City and County of San Francisco's Draft Environmental Impact Report for PG&E Power Asset Acquisition Project

Developed by:

Transmission and Substation Asset Management

Substation Asset Implementation

Electric Transmission System Planning

Electric Distribution Asset Planning

Transmission and Substation Protection and Automation

Transmission Operations Engineering

In Consultation With: Quanta Technology, LLC

May 19, 2025

DEIR Overview

On March 19, 2025, the City and County of San Francisco (CCSF) published a Draft Environmental Impact Report (DEIR) describing the environmental impacts of its proposed PG&E Power Asset Acquisition Project (Project). The Project involves CCSF's proposed purchase of PG&E's electric transmission and distribution assets located in CCSF and San Mateo County that are needed to provide electric service to CCSF customers, as well as the activities necessary to separate these assets from PG&E's broader electricity system; to create an independent, CCSF-owned electricity system; and, after separation, to restore PG&E's broader electric system so that the two systems provide reliable service to their customers.

Issues Identified

In consultation with Quanta Technology, LLC, PG&E has conducted a review of the DEIR and has identified numerous fundamental concerns and deficiencies in the description of the Project and its feasibility, as described in the following sections. This memorandum summarizes the most notable deficiencies, but it is not an exhaustive list. Additional considerations regarding electric distribution and transmission lines outside of the Martin site were discussed in PG&E's March 7, 2022 comments on CCSF's Mitigated Negative Declaration (and which were again submitted on July 27, 2023 as comment on the Notice of Preparation for the DEIR) and are not repeated below.

CCSF should issue a revised DEIR that addresses and fixes the deficiencies PG&E has identified herein and elsewhere. A feasible project, with adequate details, must be provided so that CCSF's own decision-makers, PG&E, the public, and other relevant stakeholders can accurately assess the environmental impacts of this Project.

1. The Project and Alternatives Do Not Cover the Actual Planned Project.

As a threshold matter, the described Project and Alternatives do not correspond to the project that CCSF seems to be pursuing in the California Public Utilities Commission (CPUC) valuation proceeding CCSF initiated in July 2021 for a determination of the "just compensation" that CCSF would owe for its proposed taking of PG&E's assets. The most noteworthy discrepancy (among many) between the Project and alternatives in the DEIR and the proposal in the CPUC proceeding is the need for PG&E to build a new substation.

The CPUC staff has hosted workshops between CCSF and PG&E, a large part of which have focused on attempting to identify and refine the particular taking scenario that CCSF will select—especially with respect to PG&E's Martin Substation. In the most recent CPUC staff workshop, in January 2025, CCSF presented its leading scenarios for separation, which would involve CCSF taking the entirety of the Martin Substation and PG&E constructing a completely new substation. CCSF presentation materials noted that there were several different types of new substations that PG&E might need to build depending on the scope of CCSF's taking at Martin and its plan for separation. The size of the new substation, and its possible locations, would be determined by the scope and details of CCSF's acquisition.

The DEIR does not include as a Project component or as an Alternative CCSF taking the entirety of Martin and PG&E constructing a new substation. If this taking remains CCSF's preference, as

110 - PD-6

PG&E believes it to be, the DEIR must be amended to include this situation as the Project or an Alternative. Even if not CCSF's preference, because CCSF considers this approach potentially feasible (as demonstrated by its active promulgation in the CPUC proceeding), the DEIR must be amended to include this situation as the Project or an Alternative.

110 - PD-6 cont.

2. Space Constraints Make the Project's Martin Substation Separation Infeasible.

A major component of the Project is the Martin Substation Separation, which **entails reconfiguring** and partitioning PG&E's existing Martin Substation into two interconnected substations and associated utility systems—one serving CCSF and one serving PG&E's remaining customers in San Mateo County. (See, e.g., DEIR, page 2-6.) The DEIR, however, fails to adequately account for the **significant space constraints** and other limiting conditions at the Martin Substation listed below. Once these conditions are accounted for, it becomes clear that there is simply not enough space at the Martin Substation for PG&E's existing equipment, the new equipment that CCSF would need to install, the required clearances for the equipment, and the walls and fences necessary to separate PG&E's portion of the substation from CCSF's portion. For this reason, the Project's proposed Martin Substation Separation is infeasible. Additional detail regarding feasibility issues related to the Project are included in the PG&E presentation materials previously provided to CCSF through CPUC workshop proceedings attached as Exhibit B-1 to this memorandum (with its original **confidential footer removed).**

- **Challenges Associated with New 230kV Breakers and Required Clearances:** The Project requires the installation of at least two 230kV breakers, among other things, which require a minimum amount of space that is not available at the Martin Substation. The substation is highly congested with existing equipment, leaving no available space to install new 230kV breakers with the required clearances and physical separation necessary for this equipment. (See Figure below.)

  Clearances, or spacing around electrical equipment, are necessary to account for safety and maintenance needs and other technical operational considerations. The Institute of Electrical and Electronics Engineers (IEEE), which publishes widely used industry standards, requires a minimum of 15 feet of clearance for 230kV energized equipment. (IEEE standard 1427.) PG&E determines additional design clearance requirements for each individual substation based on site-**specific substation layout configurations and** operational considerations. Under these clearance requirements, and allowing additional space for required disconnect switches and riser structures, the total space required for a 230kV breaker at Martin Substation is 100 feet wide and 50 feet long.

  The diagram below depicts certain key categories of electrical equipment within the Martin Substation, which any additional equipment would need to fit around with adequate clearances. Simply put, there is not even one available 100-foot-by-50-foot open space within the substation, much less the two such spaces that would be needed for the two required 230kV breakers.

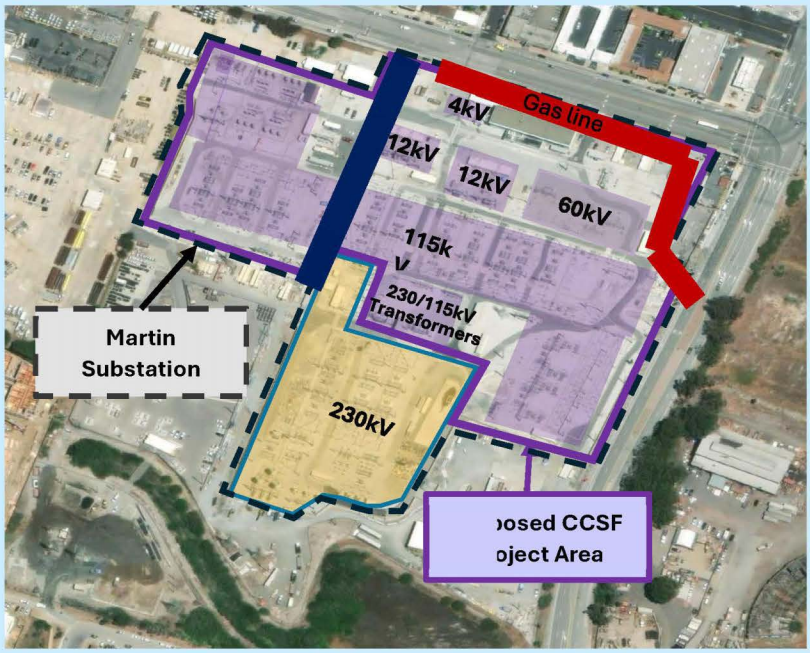
111 - PD-3

. 1: Inadequate Space for Physical & Electrical Separation

Area of Martin

Project Area of ~561,245 ft^2
Currently Occupied by:

- 230kV/115kV Transformers
- 115kV bus structures line exits and breakers and control buildings
- 115kV Capacitor Banks
- 60kV Bus work, transformer, and control building
- 12kV bus work transformers and control building
- 4kV Bus work and control building
- Other buildings and control cable trenches
- Access roads
- Perimeter Wall and clearance
- 40 ft wide Clearance for Water and gas lines



- **Challenges Associated with Project's Perimeter Wall, Access Road, and Electrical Clearances:** The Project requires an internal perimeter wall or walls to be installed around the portions of the Martin Substation site that would be separately owned and operated after CCSF's taking. It is unclear from the DEIR where such wall(s) would be needed/located, but it is obvious that one would be needed between the 230kV section to be retained by PG&E and the portions to the north taken by CCSF. There is not sufficient space for that required wall in light of clearances, access, and necessary new equipment.

  Significant electrical clearances are required for such a wall or walls. The National Electric Safety Code (NESC) requires at least 15.5 feet between 230kV equipment and a perimeter wall, and at least 13 feet between 115kV equipment and a perimeter wall. (NESC Rule 234.) Installation of such wall(s) in accordance with the required clearances would place the wall(s) in or across existing access roads and/or in spaces where electrical equipment already exists or will be required. (See Figure above; see also Attachment A, pages 10–14.)

  Building a wall across existing access roads within the Martin Substation would impair both routine and emergency operations within the substation. **Cutting off the access roads** would prevent necessary maintenance and construction vehicles from moving around the substation. Compromising the substation's existing access roads would also impair the use of emergency equipment such as mobile transformers. For example, in the event of failure of one of the substation's 115kV/12kV banks, an emergency 45MVA 115kV/12kV

111 - PD-3 cont.

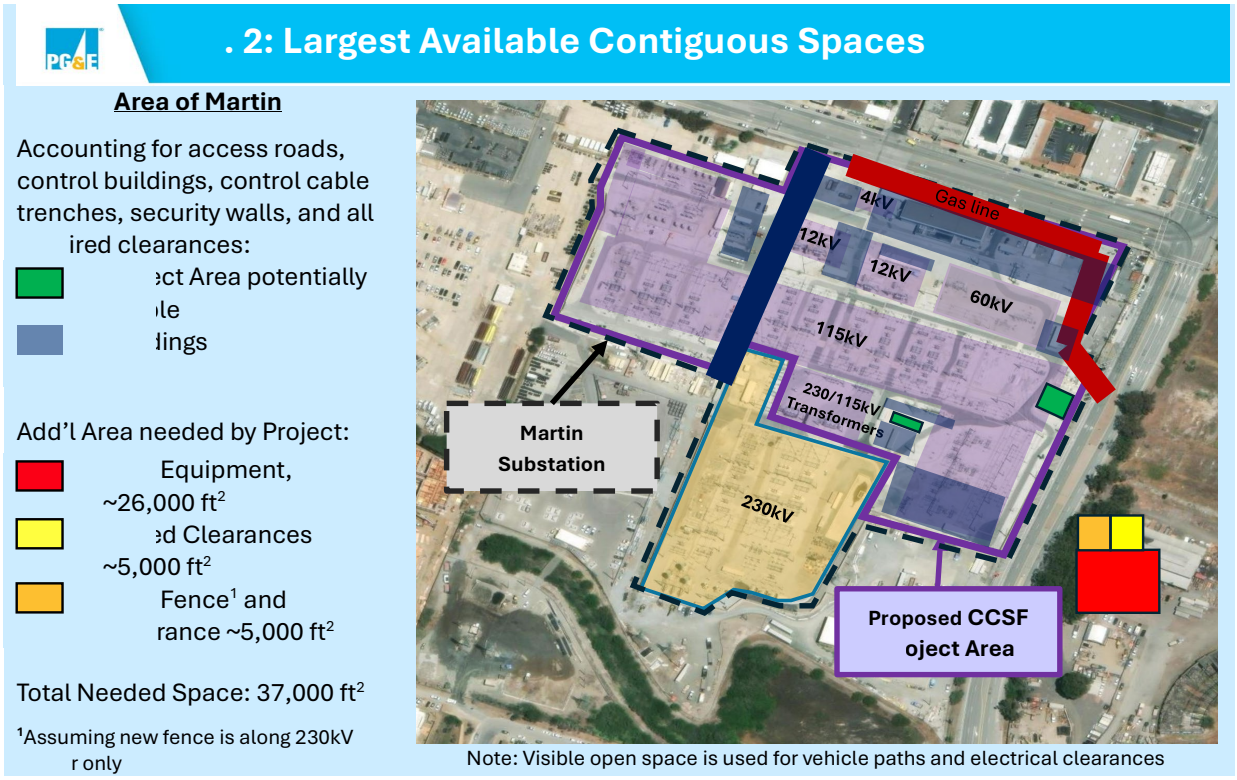
mobile transformer, which is a 92-foot-long tractor and mobile substation, would need to be installed on the access road immediately adjacent to the failed substation bank. Turning radiuses within the substation for this equipment need to be maintained where applicable and require preservation of existing access roads.

In addition, the DEIR proposes dividing other parts of the substation, such as the 115 kV banks, in unspecified manners and locations. These divisions would require further barriers to be built between the portions to be taken by CCSF and the portions to be retained by PG&E. It is highly likely that there will be insufficient space for such barriers.

- **Challenges Associated with Additional Required Equipment and Clearances Not Described in DEIR:** The Project's proposed separation will require installation of additional electric assets at the Martin Substation beyond those described in the DEIR, such as meters, disconnects, and circuit breakers at the new boundary between PG&E and CCSF facilities. (See, e.g., Attachment A, page 15.) Further, PG&E telecom and protection circuits are commingled across the footprint of the existing substation and in existing cable trenches. To maintain reliable and safe operations and to comply with the applicable rules from the North American Electric Reliability Corporation (NERC), PG&E and CCSF would not be permitted to commingle assets. (NERC CIP-002.)

  Though not acknowledged by the DEIR, the Project would require complete physical and electrical separation of PG&E's substation assets and CCSF's substation assets, including but not limited to equipment, control building, protection, automation, and telecommunication infrastructure. Further, all circuits (i.e., station service, protection and control, SCADA, etc.) must be separated into newly constructed, separately owned and maintained cable trenches. As shown in the Figures herein and throughout Attachment A, there is insufficient space at the Martin Substation for the new equipment, clearances required for new proposed facilities, and a new perimeter wall/fence.

111 - PD-3 cont.



Note: Visible open space is used for vehicle paths and electrical clearances

111 - PD-3 cont.

- **Challenges Relating to Shunt Reactors and Relay-and-Control Building:** The close proximity of shunt reactors for PG&E's Embarcadero 230kV cable to Martin's 115kV yard and the relay-and-control building pose significant additional space constraints. (See Attachment A, page 14.) New trenches required by the Project to separate protection and control circuits and station power would require approximately 30 feet of space, but only 12 feet is available. (*Id.*) This further demonstrates that the significant space constraints at the Martin Substation make it infeasible to accommodate the Project as contemplated by the DEIR.

- **Challenges Associated with Buried Utilities:** Space constraints at Martin Substation also exist below ground. Not only are there significant underground electrical transmission lines, but there are also buried natural gas transmission and water lines, as well as cable trenches and a ground grid lying beneath the Project's proposed taking area. (See Figures above; see also Attachment A, page 17 [buried natural gas and underground water lines], page 16 [discussion of cable trenches], and page 7 [underground electrical transmission lines].) The PG&E gas line is a critical, high-priority subsurface installation requiring extreme care to ensure integrity, safety, and accessibility. Hand digging is required within 2 feet of the gas line. Additionally, the San Francisco Water Company's 44-inch water line crosses the property, further constraining construction activities at the site. The presence of these critical underground lines, not considered by the DEIR, further complicates the

space constraints at the Martin Substation, making the Project even more infeasible, and also would require significant additional work not discussed in the DEIR.

111 - PD-3 cont.

In sum, the DEIR needs to be revised to account for the above space constraints at the Martin Substation to provide a realistic assessment of the Project's feasibility and potential impacts arising from each of these constraints.

3. The DEIR's Plans for the 60kV Assets at Martin Substation May Cause Service Impacts and Necessitate Additional Construction.

The DEIR indicates that CCSF will take the 60kV assets at Martin Substation. (DEIR pages 2-9–2-13.) However, PG&E's 60kV assets at the Martin Substation exclusively serve PG&E customers in San Mateo County and should not be owned by CCSF as proposed by the Project. If CCSF nonetheless takes the 60kV assets, that taking could negatively impact PG&E's remaining customer service and operational reliability. CCSF's taking of PG&E's 60kV assets would necessitate extensive new construction to re-establish service to PG&E's impacted customers. (See Attachment A, page 19.) This effort will include the need for PG&E to construct new primary line extensions, separation of secondaries, reconductoring, and deployment of distribution automation technology. Given the complexity of this work, the work would also cause multiple planned customer outages. None of this is addressed by the DEIR.

112 - PD-3

Moreover, even if CCSF amends its planned Project such that it does *not* take the 60kV assets, its planned separation with respect to the 60kV assets remains problematic and infeasible. If the Martin Substation is separated pursuant to the Project but PG&E retains the existing 60kV system, that 60kV system will be located on the portion of the substation that would be owned by CCSF. Such a comingling of assets is impermissible. For PG&E to own and operate the 60kV assets, it would need to fence and provide secure pedestrian and vehicle access to the 60kV system, and there is simply insufficient space to do so. Instead, PG&E would need to construct a new 60kV facility to reestablish service for its customers. The DEIR should discuss the anticipated direct and indirect impacts associated with such construction.

4. The DEIR is Missing Critical Project Details and Ambiguously Describes the Infrastructure Taking.

The DEIR lacks crucial details about the required separation of the anticipated CCSF system from the PG&E system.

For example, the DEIR does not adequately describe the protection and communications re-wiring required for the Project. This re-wiring is critical to maintaining the reliability and security of the electric grid. Electrical system failures can trigger the need for temporary backup diesel generators as well as emergency services and traffic disruptions and associated environmental impacts. Detailed planning and coordination are necessary to ensure that all circuits are properly separated and reconfigured. Specifically, the following key analyses would be required:

113 - UT-1

- **A System Impact Study (SIS)** that assesses the system configuration change from a transmission planning and protection perspective and identifies all changes required to the system resulting from the Project. A SIS typically takes 90 days to complete.
- **A Facility Study**, including a substation work scope and cost estimate that provides a detailed bill of material, to fully develop the scope of work and costs associated with the project. A Facility Study also includes a detailed review of the substation configurations and protection changes required. A Facility Study typically takes 90 days to complete assuming no reconfigurations are identified in the SIS that would warrant a change and subsequent SIS.
- **A full design package**, which would be developed and shared with PG&E's team to conduct an outage coordination study to determine outage requirement to complete the Project work. The full design package can require up to 90 days to complete, and if issues are identified, this process will need to be repeated. Once all outage requirements are identified, those outages are subject to approval and scheduling with the California Independent System Operator (CAISO). CAISO may not grant those outages, or it may schedule those outages in a way that does not align with the project's planned in-service date due to system conditions and other planned work.

113 - UT-1 cont.

None of these studies can be performed because of the deficiencies in the DEIR. Once CCSF reveals additional information about its plans, these studies will be required.

The DEIR is also deficient because it fails to sufficiently describe the Project's treatment of the following:

- **Division of 115kV Banks:** The DEIR does not explain which 115 kV banks would be PG&E's and which would be CCSF's upon separation, or how that section of the Martin substation would be reconfigured to split these duct banks between PG&E and CCSF.
- **230kV/115kV Transformer:** The DEIR includes ambiguous language regarding CCSF's intent to take Martin Substation's 230kV/115kV transformers. Taking these transformers would require installation of two 230kV breakers, but there is insufficient space available at the substation (as described above) to install new breakers. Clear and precise definitions of the infrastructure to be taken as part of the Project are needed for an adequate Project description, to understand the environmental impacts of the Project, and to determine whether the Project is technically feasible.
- **Undisclosed Footprint and Location:** The DEIR does not disclose the anticipated footprint or location of CCSF's planned taking at Martin Substation as part of the Project; in other words, the DEIR does not clarify what parts of the Project Area would be taken by CCSF and what parts retained by PG&E. This missing detail makes it impossible to adequately assess the Project's feasibility, impact on existing infrastructure, and potential environmental impacts.
- **Outage Risks:** The DEIR does not address planned system reconfigurations anticipated to be required to perform the complex work of separating the PG&E assets, reconfiguring the substation and then restoring service to PG&E customers and new CCSF customers. Based on the minimal information in the DEIR, there is a likelihood of reliability risk to San

114 - PD-3

Francisco and San Mateo customers for multiple years **as these reconfigurations decrease** the redundancy for the duration of the performed work increasing likelihood of customer outages. **The specific outages required for this work are unknown without a detailed configuration plan** from CCSF and would be an output of the SIS and Facility Studies discussed above. Had CCSF provided the required plan, PG&E could better assess the required outages **that would flow from a separation of Martin Substation**.

- **Backup Generation:** The DEIR does not address the potential need for temporary generation to support outages, which will likely have environmental impacts.

The DEIR and Project description should be revised to more accurately describe the Project and account for these deficiencies.

114 - PD-3 cont.

5. The DEIR Must Provide Answers to Critical Open Questions.

Relatedly, for CCSF's decision-makers and the public to adequately analyze whether the Project is feasible, as well as the potential environmental impacts of the Project, CCSF must provide substantially more information about its Project plans within Martin Substation. At the very least, CCSF should answer the following questions in a recirculated DEIR.

1. With respect to the 12 new 115kV circuit breakers referenced at page 2-12 of the DEIR:
    a. Describe and diagram the exact anticipated locations of those circuit breakers.
    b. Describe for each whether it would be on the portion of the site to be taken by CCSF or the portion to be owned by PG&E at the time of the taking.
    c. Describe the anticipated sizes and associated clearances for those circuit breakers.
2. With respect to the 6 new revenue meters referenced at page 2-12 of the DEIR:
    a. Describe and diagram the exact anticipated locations of those meters.
    b. Describe for each whether it would be on the portion of the site to be taken by CCSF or the portion to be owned by PG&E at the time of the taking.
    c. Describe the anticipated above-ground sizes of those meters and associated structures, and describe the anticipated clearances around those facilities.
3. With respect to the two new switchgear buildings referenced at page 2-12 of the DEIR, describe and diagram the exact anticipated locations of those buildings.
4. With respect to the new control house referenced at page 2-12 of the DEIR, describe and diagram the exact anticipated locations of that building.
5. With respect to the DEIR Figure 2-2, page 2-11:
    a. Provide a detailed diagram and description of what parts of the Martin Substation Project area would be located in the areas that CCSF proposes to take in connection with the Project;
    b. Provide a detailed description of what assets at the Martin Substation Project area CCSF proposes to take, and what assets would not be taken;

115 - PD-3

c. Provide a detailed diagram of where all fencing would be located within the Martin Substation Project area, with sufficient detail to be able to ascertain the locations of all such fencing to within five feet.

6. With respect to the DEIR Figure 2-2, page 2-11, what is the significance of having the 230/115kV transformers within the project area, including but not limited to a statement as to whether they would be part of CCSF's proposed taking?

7. With respect to the DEIR Figure 2-3 (page 2-14), describe the voltage level(s) of the depicted equipment, and describe how that relates to (a) the voltages at Martin Substation and (b) the amounts of space taken up by, and/or clearances required by, equipment that is located at Martin or would be located at Martin following CCSF's proposed taking.

8. With respect to the DEIR page 1-4, describe the route of the 60kV line referenced and what purpose or customers CCSF believes that it serves in San Francisco.

9. With respect to the DEIR, Figure 1-1 (page 1-5), provide the names of the two 115kV lines exiting the Martin substation in that figure.

10. With respect to the DEIR Figure 2-4 (page 2-15), provide the voltage level(s) being depicted.

11. With respect to the DEIR, at page 2-31, what transformers are being relocated (i.e., from where), and where are they being relocated to?

12. With respect to the DEIR's reference to the Daly City Yard (aka Martin Service Center Yard), describe in detail CCSF's contemplated taking and use of that area, including how much and what portions would be taken and the length of time that it would be taken.

115 - PD-3 cont.

6. The DEIR's Construction Timeline is Unrealistic and Misleading.

The DEIR's three-year construction timeline (see DEIR page S-7) is unrealistic, as it fails to account for critical factors that will significantly extend the Project timeline. The DEIR overlooks the infeasibility of some of the Project's proposals due to the existing configuration of the Martin Substation, long lead times for equipment, complex construction sequencing required because of the aforementioned space constraints, and the need for clearances required for safety (examples of which are listed on Attachment A, page 18). Further, the DEIR construction timeline does not include sufficient time to analyze the environmental impacts of the trenching work within and outside the Martin Substation. This trenching work is required for the separation, protection, and communication re-wiring efforts. Because of the extent of the trenching work, more outages and a longer construction schedule would likely be required.

In PG&E's assessment, a 10-year construction timeline is more likely. (See Attachment A, page 18.) A detailed, feasible, and accurate construction timeline is essential to mitigate disruptions, ensure compliance with environmental regulations, and assess the Project's potential environmental impacts. An unrealistic construction timeline fails to disclose to the public and decision-makers the actual scope of the Project.

116 - PD-6

7. The DEIR Ignores Impacts from Relocation of PG&E Equipment.

The DEIR project description mentions the relocation of CCSF equipment (e.g., DEIR, page S-3), albeit with inadequate specificity as to locations, but does not address the required relocation of PG&E equipment, such as the 115kV structures and lines, control buildings, and wiring as a component of the Project. This relocation work may require trenching inside the Martin Substation as well as construction of temporary access facilities and construction laydown yards that are separate from CCSF's designated laydown yard identified in the DEIR. The DEIR and Project description should be revised to include PG&E's required work within the Martin Substation as well as an identification of a construction laydown area for PG&E. In addition, the DEIR should be revised to acknowledge and analyze the impacts of those additions, such as increased required off-haul of contaminated soils, increased noise, and increased air quality impacts.

117 - PD-3

8. The DEIR Fails to Fully Capture the Impacts of CCSF's Proposed Construction Laydown Yard at the Martin Service Center.

The DEIR's plan for CCSF to stage a construction laydown yard at the Martin Service Center (MSC) will require PG&E to find and replace that area for its operations. Under the Project as well as the Project Variant, PG&E will need to relocate its operations at the MSC (either permanently or over an extended period) because it will become inaccessible and unusable for the duration of the Project's construction (which, as discussed above, would likely take much longer than the time period CCSF has conveyed in the DEIR).

MSC is currently used by PG&E to support operations, maintenance, and various project work for gas, electric, and other lines of business serving CCSF and San Mateo County as far south as the San Mateo Substation. The MSC, which occupies a total of approximately 14 acres, includes:

- A service center building, which **provides approximately 120,000 square feet of office space** for Operations/Maintenance (O/M) **workers, management, and administrative support staff** supporting gas, electric, and other lines of business;
- Fleet service facilities;
- Exterior space for employee parking, O/M equipment parking, O/M materials storage, various projects staging/storage, compressed natural gas (CNG) filling, and (future) electric vehicle charging stations; and
- Adjacent storage yard includes electric and gas storage, warehousing, general storage buildings, and emergency response (earthquake preparedness) storage.

118 - PD-5

The MSC is uniquely positioned to accommodate the above uses for PG&E. It is optimally located to house and serve multiple lines of business (e.g., gas service and electric service) both north and south on the peninsula, and it is near the freeway to allow for faster customer service. MSC is accessible to, and has internal maneuverability space for, large equipment, bulk materials, and large vehicles with heavy loads and wide turning requirements. It also allows **office** operations, maintenance operations, emergency response storage, and outdoor storage/staging, among other important operations, to be co-located; dispersal of those services would significantly complicate

logistics and increase drive times, resulting in a reduction in routine service times and emergency response.

Relocating these functions would not be simple or straightforward, and would involve significant work as well as additional vehicle traffic. To the contrary, there are several barriers to finding a suitable replacement for MSC operations, none of which are address in the DEIR:

- Existing PG&E facilities lack space for absorbing the multiple components of MSC separately or in aggregate. PG&E's Harrison Service Center in San Francisco already exceeds capacity, does not have equivalent access, and is distant from service territory in San Mateo. The nearest PG&E service center to the south in San Carlos already exceeds capacity and is located 18 miles away.
- Almost no suitable light-industrial properties exist in geographic locations that serve PG&E's gas and electric customers currently supported by the MSC. For example, PG&E has looked for years to find suitable space to expand its San Francisco Hoedown Yard and has been unsuccessful. Local zoning restrictions on light-industrial uses generally prohibit establishment of an equivalent multi-purpose facility with exterior storage space.
- Local entitlement processes are challenging and time consuming.

The DEIR fails to address any of this. Temporary or permanent relocation of MSC functions is not identified as essential Project component and therefore not analyzed at any level. But the relocation of PG&E's MSC facilities, either temporarily or permanently, *is* a necessary Project component under the DEIR. Therefore, the DEIR must provide details on how and where PG&E will relocate its critical MSC operations temporarily, for the duration of the Project's construction (under the Project) or permanently (under the Project Variant), and assess the relevant environmental impacts.

118 - PD-5 cont.

In addressing these considerations, several aspects of the DEIR will likely change. For example:

- Currently, the DEIR identifies less than significant impact for relocation of electric power utilities in relation to Impact UT-1, claiming: "Overall, the project or project variant would not affect electric power supply and therefore would not require or result in the relocation or construction of new or expanded electric power facilities other than the facilities proposed as part of the project." (Initial Study, pages 135 – 136.) The analysis will likely change, however, after accounting for a temporary or permanent relocation of PG&E's MSC facilities.
- The Project Variant does not account for a staging area for construction of a substation at the MSC. Upon properly accounting for a staging area, the required space for the Variant would require at least double the space identified, with one area for the proposed new substation and a second area for staging.
- The DEIR's schedule does not accurately reflect the time required to temporarily or permanently relocate the MSC, including the time needed to plan, permit, acquire an alternative site. Starting construction on the Project in 2026 is neither realistic nor feasible.

In sum, the DEIR must identify a feasible relocation site for the displaced PG&E MSC operations and analyze the environmental impacts of that relocation as part of the Project, consistent with the California Environmental Quality Act's (CEQA) requirements to assess the whole of the action. Moreover, if an updated DEIR cannot adequately identify a suitable relocation space, the Project and Project Variant may both be infeasible.

118 - PD-5 cont.

9. The DEIR Fails to Identify All Required Permits and Approvals for the Project, Which Render its Proposed Schedule Even More Unrealistic.

While section 2.8.3 of the DEIR identifies more than 14 permits and approvals anticipated for CCSF to execute the proposed Project, Variant, and alternatives, this is not an exhaustive list. Other potential permits and approvals are buried in various mitigation measures proposed in the DEIR, such as deferred pre-construction surveys, impact analyses, and potential agency consultations (e.g., Mitigation Measure M-BI-1c: Special-Status Butterfly Protection Measures). The DEIR should be updated to contain these additional permits. Moreover, it seems infeasible that these deferred surveys, agency consultations, and any resulting permits or approvals would be concluded prior to the anticipated construction start date in 2026.

Further, section 2.8.3 of the DEIR does not identify or acknowledge critical permits and approvals required for PG&E to execute a complex scope of work that is missing from the DEIR but required by the Project. A glaring omission is PG&E's need for a Permit to Construct (PTC) from the CPUC in accordance with General Order 131-E. The CPUC's *Transmission Project Review (TPR) Data FACT SHEET* (August 2024) reports the average time for permitting to be 30 months following submittal of the application. Preparation of the application cannot begin without designs and construction plans sufficient to inform the environmental analysis. The *FACT SHEET* reports the average pre-application phase to be 36 months. Thus, the CPUC estimates that permitting of typical projects has averaged 5.5 years. The PG&E Egbert Substation Project in San Francisco took roughly 7 years to plan and permit. The DEIR unrealistically identifies a construction start date in 2026, less than 8 months away.

119 - PD-6

Many other environmental permits and approvals anticipated to support the complex PG&E scope of work precipitated by the Project are long-lead processes (e.g., Coastal Development Permits) that would typically leverage existing CEQA documentation. Because the DEIR fails to include or address the PG&E scope of work as part of the Project, the DEIR would not likely be adequate to support issuance of necessary PG&E permits from other agencies. For example, the DEIR clearly does not meet the requirements identified in CPUC's *Guidelines for Energy Project Applications Requiring CEQA compliance: Pre-filing and Proponent's Environment Assessment* (November 2019). As a result, PG&E would need to prepare a separate CEQA document to comply with GO 131-E, as discussed above.

Several non-environmental permits, approvals, and land rights would be required following the conclusion of the PTC CEQA process. As identified in the DEIR, the Federal Energy Regulatory Commission (FERC) may be required to approve interconnection of a new or expanded substation, and the CPUC would be required to approve the transfer of utility assets. Neither of these approvals can reasonably be expected to be complete in time for a 2026 start of construction. Also not factored into the DEIR schedule are the modifications of existing land rights or the acquisition

of new land rights that might be required to support the PG&E scope of work caused by the Project. This process would not commence until the FERC and CPUC approvals processes are complete and could take considerable time, depending on the extent and nature of the rights needed.

119 - PD-6 cont.

10. The DEIR Unjustifiably Omits a Project Level Distribution Separation Plan.

In the CPUC proceeding on valuation, PG&E long ago produced to CCSF the distribution models that would have allowed CCSF to evaluate **specific** physical points of separation along the border. (As an illustration, see the Figure below from an August 2024 CCSF presentation in a CPUC workshop). However, CCSF's DEIR fails to provide a detailed **identification or** evaluation of the Project's distribution system separation—instead analyzing this component of the Project at a program level.

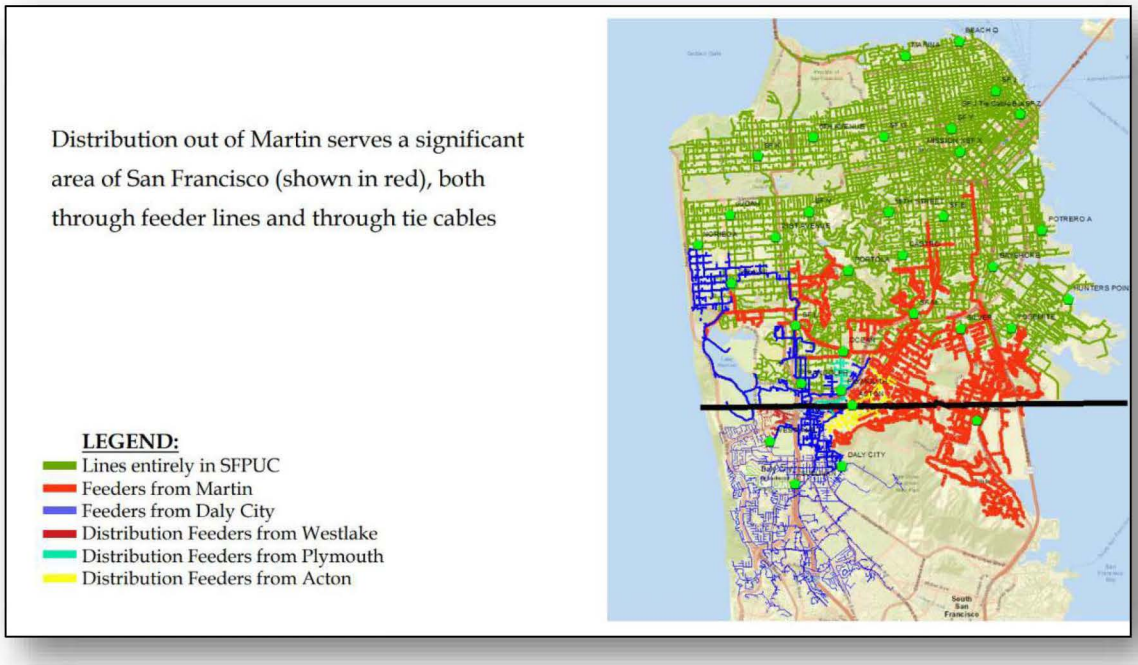


Figure 1. Slide 18 from CCSF August 2024 Workshop Presentation

120 - PD-2

Because the DEIR fails to include sufficient details on proposed separation points, neither PG&E nor the public can adequately evaluate the Project. Moreover, PG&E cannot evaluate or anticipate its own work scope required to maintain or restore service to its customers after separation of the assets. Given CCSF's possession of the necessary information and the time it has spent preparing its DEIR, the DEIR should have **identified** project-level details for the distribution separation scope. The distribution separations were summarized in PG&E's March 7, 2022 comments on CCSF's Mitigated Negative Declaration (and which were again submitted on July 27, 2023 as comment on the Notice of Preparation for the DEIR). As discussed below, it was certainly feasible for CCSF to undertake this analysis and include it within the DEIR at this time. CCSF should amend the DEIR to

include this critical information so that it, and the consequential environmental impacts, can be adequately evaluated by the public and decisionmakers.

Based on PG&E's understanding that there are approximately 100 electric distribution points that will need to be severed (at both the distribution primary and secondary voltage levels) along the border between San Francisco and San Mateo counties, and assuming standard distribution planning processes performed by two PG&E distribution planners with 10-15 years of experience, the effort to identify a precise plan would conservatively take two planners three months to complete. This three-month period is broken down as follows:

Breakdown of Tasks

1. **Identification of Separation Points (1 week)**
   Separation points are locations where the distribution circuit crosses the CCSF and San Mateo County boundary. Each location must be modified to create a physical and electrical separation between the post-separation CCSF and PG&E distributions systems. This task involves a desktop analysis performed using a combination of satellite imagery, distribution inventory maps, and GIS viewers loaded with the separation boundary. The output of this task is a set of separation points for which scope will be developed during the following two tasks.
2. **Field Investigation of Separation Points (1 week)**
   After the separation points have been identified, a field investigation of each point is conducted to identify any field conditions that will influence the separation scope. Pictures are often taken to support future scope development. Field conditions that can impact separation scope include actual physical location of poles, conductors, guys (i.e., guy-wire or guy lines), and other equipment that may need to be moved; available space for additional equipment; and existing or required rights-of-way or easements.
3. **Determination of Separation Scope (2 weeks)**
   A method of physical separation is identified for each separation point. For overhead separation points, the scope may be as simple as removing a span of conductor. However, underground separation points may require installation of additional underground structures. Ultimately, the scope at each separation point will be driven by the specifics of the existing circuitry, construction and design standards, and the field location. This task is a desktop analysis, and the output of this task is a high-level scope of work for each separation point.
4. **Development of Scope to Serve Stranded Customers (1 month)**
   Separating the existing PG&E system into two physically and electrically separate systems along the CCSF boundary will result in some customers being stranded, of left without a continuous path of service from a distribution substation. As a result, a construction scope must be identified to ensure each stranded customer maintains electric service post-separation through a new service. All future CCSF customers will need to be served via a CCSF-owned substation; likewise, all existing and future PG&E customers will need to be served via a PG&E-owned substation. CCSF has indicated in past presentations that it

120 - PD-2 cont.

intends to convert all 4kV distribution circuits to 12kV, which can require extensive construction, none of which is discussed or addressed in the DEIR. CCSF's communicated intention indicates that some analysis has been performed to inform the development of project-level details. This task is a desktop analysis involving load flow analysis using distribution analysis software. The output of this task is a set of project scopes that are required to maintain service to all customers post-separation.

5. **Development of Scope to Restore Service Levels (1 month)**
   The last task focuses on retaining or restoring reliable service for all customers post separation. The existing PG&E distribution system is designed with a network of switches, reclosers, and back ties that, along with its Fault Location, Isolation, and Service Restoration (FLISR) system, reduce the impact of outages and provide flexibility to operators. This task is a desktop analysis involving load flow and reliability analysis using distribution analysis software. The output of this task is a set of project scopes that restore the reliability of electric service for impacted customers.

120 - PD-2 cont.

There is no justification for the DEIR's assessment of the local distribution system separation Project component at a program level when it was clearly feasible and appropriate for CCSF to assess this at a project level. The DEIR should be revised to include a project level analysis (at least for a preferred route) and to address the anticipated work necessary to restore service after lines are severed.

11. The Project, Project Variant, and the Alternatives All Fail to Include the Responsive Work PG&E Will Need to Undertake.

As the above sections illustrate, a common theme in the DEIR—across the Project, Project Variant, and Project Alternatives—is the failure to capture the totality of work the Project requires of PG&E. Additional PG&E work is missing from the scope and schedule for each of these items. This includes, among other things, the required installation of new facilities and reconfiguration of equipment. Missing information is detailed in the following table.

DEIR Name	PG&E Work Excluded from DEIR
Project	The Project description mentions relocation of CCSF equipment but does not include relocation of PG&E equipment, including 115kV structures and lines, control buildings and wiring, communications buildings, and wiring. This work may require trenching inside the substation and constructing temporary access facilities and construction laydown yards separate from CCSF's designated laydown yard. The identified CCSF construction laydown yard discussion does not include consideration for PG&E to find and replace the area that will be inaccessible for the duration of the Project.

121 - PD-3

Variant	The proposed New City Substation would require a 230kV line from the Martin 230kV portion of the Martin Substation. Currently the Martin Substation does not have a 230kV bay available for this and would need to be expanded to accommodate a 230kV connection from the Martin Substation to the New City Substation. This work would also require a construction laydown yard for PG&E. The laydown yard would be in addition to CCSF's planned construction laydown yard, which is not specified for the Project Variant. The identified CCSF New City Substation does not include consideration for PG&E to find and replace the area that will be inaccessible and unusable due to the Variant. Further, the Variant proposes to utilize an SF6 Gas Insulated Switchgear (GIS) substation, which it is anticipated will be prohibited by law by the time of construction of the Variant. A non-SF6 clean air/vacuum alternative will be approximately 25-percent larger in size than the SF6 GIS. As such, the DEIR underestimates the true footprint of the Variant. This needs to be fully described and addressed in a revised DEIR. Further, this increased footprint could have downstream effects on PG&E's work. In addition, GIS has a more negative impact on greenhouse gas levels than the alternatives. Indeed, PG&E and the state of California are in the process of phasing out SF6 GIS precisely because of these climate concerns.	122 - PD-4
Alternative A	N/A	
Alternative B	Alternative B states 'there will be interconnection metering at the 115kV/12kV transformers in the Martin Substation.' Under this alternative, PG&E would need to install new 115kV/12kV facilities to serve PG&E customers separately from the existing transformer. Also, this alternative says that two 230kV metering buildings and six 115kV Metering buildings will be installed. Doing so will require significant PG&E work to build and accommodate these buildings and may involve reconfiguration of equipment to provide proper clearances. The DEIR should be supplemented to address these impacts.	123 - AL-1
Alternative C	Same work excluded as Alternative B	
Alternative D	The proposed New City Substation would require a new 230kV line from the 230kV portion of the Martin Substation. Currently the Martin Substation does not have a 230kV bay available for this. As a result, the substation would need to be expanded to accommodate a 230kV connection from the Martin Substation to the New City Substation. Currently there is no available space in the 230kV yard for adding a new line connection. The DEIR should be supplemented to account for this requirement. This work would also require a construction laydown yard for PG&E in addition to what CCSF plans to use for a construction laydown yard, which is not specified for Alternative D or addressed in the DEIR.	124 - PD-4

Summary

As detailed above, the DEIR **is deficient** in several material respects. It fails to consider impacts from and related to, among other things: space constraints at the Martin Substation, service impacts to San Mateo customers, an unrealistic construction timeline, the required relocation of PG&E's current operations at the MSC, work required by PG&E to implement the Project and then to ensure its system continues to operate reliably after the separation, and failure to provide a project level review of the Project's local distribution system separation component. The DEIR needs to be **revised to address each of the identified deficiencies** to properly assess the environmental impacts of the Project.

EXHIBIT B-1

Evaluation of CCSF's Martin Scenario 1

WORKSHOP REGARDING CCSF'S PROPOSED TAKING OF CERTAIN PG&E ELECTRIC SYSTEM ASSETS AT MARTIN SUBSTATION

Petition 21-07-012: Petition of the City and County of San Francisco for a Valuation of Certain Pacific Gas & Electric Company Property Pursuant to Public Utilities Code Sections 1401-1421

August 1, 2024



Background

- CCSF has presented 3 scenarios that vary based on the portions of Martin Substation proposed to be taken
- At October 2023 Workshop
  - CCSF told PG&E to focus on Scenario 1
  - CCSF has not withdrawn testimony on or potential pursuit of other scenarios
- Energy Division requested PG&E view on Scenario 1
- Lack of details to date
  - Pending CEQA
  - Pending discovery to CCSF
  - No CCSF proposed plans and engineering studies
- Unknown impacts of future regulatory reviews
  - FERC, CPUC; CAISO; CEQA; others



Entry Gate at Martin Substation

Martin Site Overview

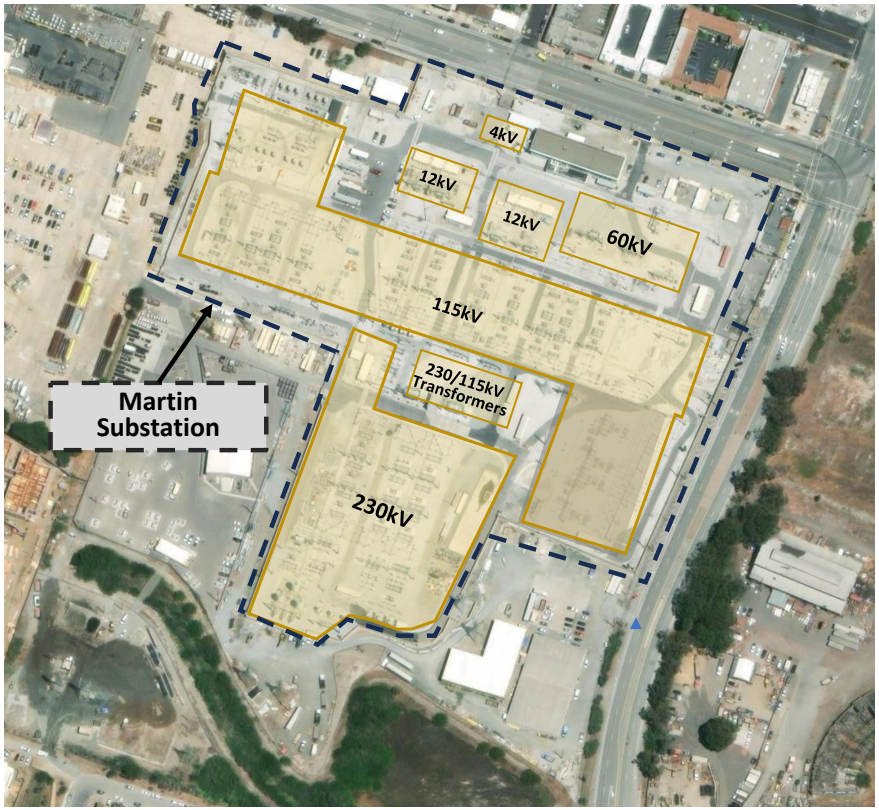


PG&E's ~50-acre Martin Site comprises:

- **Martin Substation** - 230kV, 115kV, 60kV, 12kV, and 4kV equipment; NERC regulated Bulk Electric Substation ("BES")[1]
- **Martin Service Center** - primary maintenance center for San Mateo County; multiple service departments, fleet garage, and compressed natural gas ("CNG") filling station
- **Martin Storage Yard** - ~120,000 ft^2 electric storage, gas department storage, hazardous materials supplies, evidence building, warehousing, general storage buildings, and emergency response (e.g. earthquake) storage
- **Other site considerations**
  - Need to avoid groundwater contamination from chemicals
  - Substation and 3rd party interconnections, commingled assets, shared trenching, overhead and underground lines

1. The North American Electric Reliability Corporation's ("NERC") mission is to ensure the effective and efficient reduction of impacts to the reliability and security of the electric grid over 100kV. NERC develops and enforces Reliability Standards. Note that CAISO operates all voltages above 60kV.
2. Capacity, reliability, contingency, and other planning studies that will needed to evaluate any scenario have not been performed.

Martin Site Overview
Substation Description



Overview of Service

- Supplies 70% of the power for PG&E's 420,000 CCSF customers
- Feeds power to five substations serving San Mateo distribution
- Serves ~90,000 customers in San Mateo

Dense, Integrated Facility

- Designed and optimized to be highly integrated from space, operational and electrical design perspectives
- Very congested, and not designed to be split

Buried Utilities

- Electric lines, crossing each party's anticipated parcel
- Commingled communications, substation protection
- 24" natural gas transmission pipeline
- Water lines

Description of CCSF Scenario 1

CCSF's testimony presents 3 scenarios[1]:

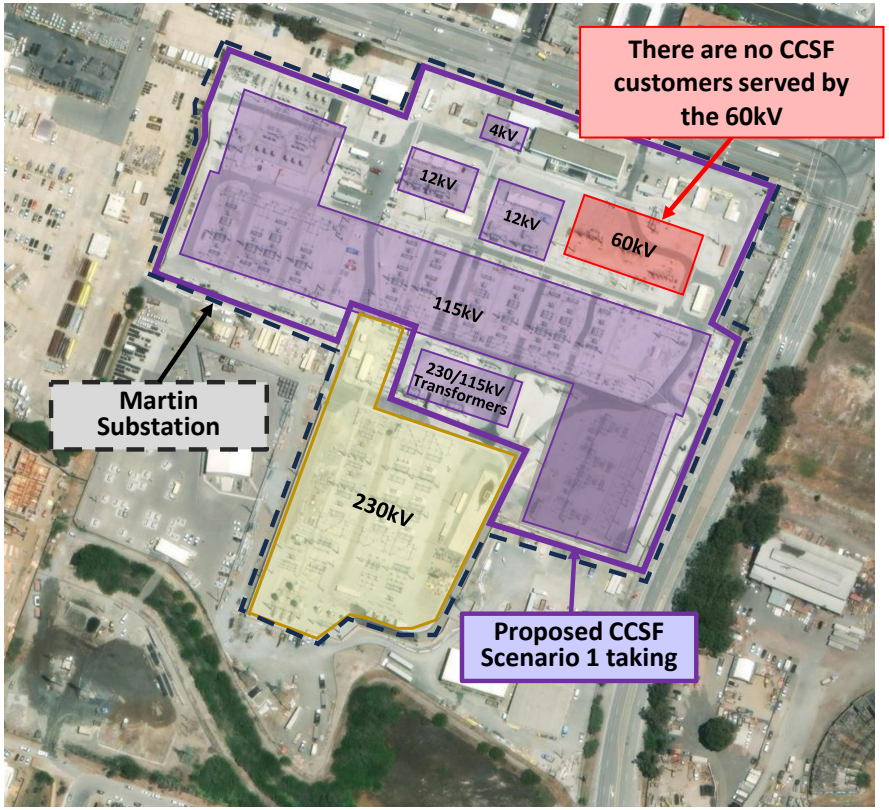
- **Scenario 1** – CCSF takes the 230kV transformers, as well as the 115kV, 60kV, 12kV, and 4kV sections of Martin Substation; PG&E retains the remaining 230kV
- **Scenario 2** – CCSF takes a smaller portion of Martin[2]
- **Scenario 3** – CCSF does not take any of Martin

Power from Martin is supplied to CCSF via

- 2 - 230kV underground lines to Embarcadero Substation
- 6 - 115kV underground lines to other in-city substations
- 4 - 4kV and 11 - 12kV distribution circuits

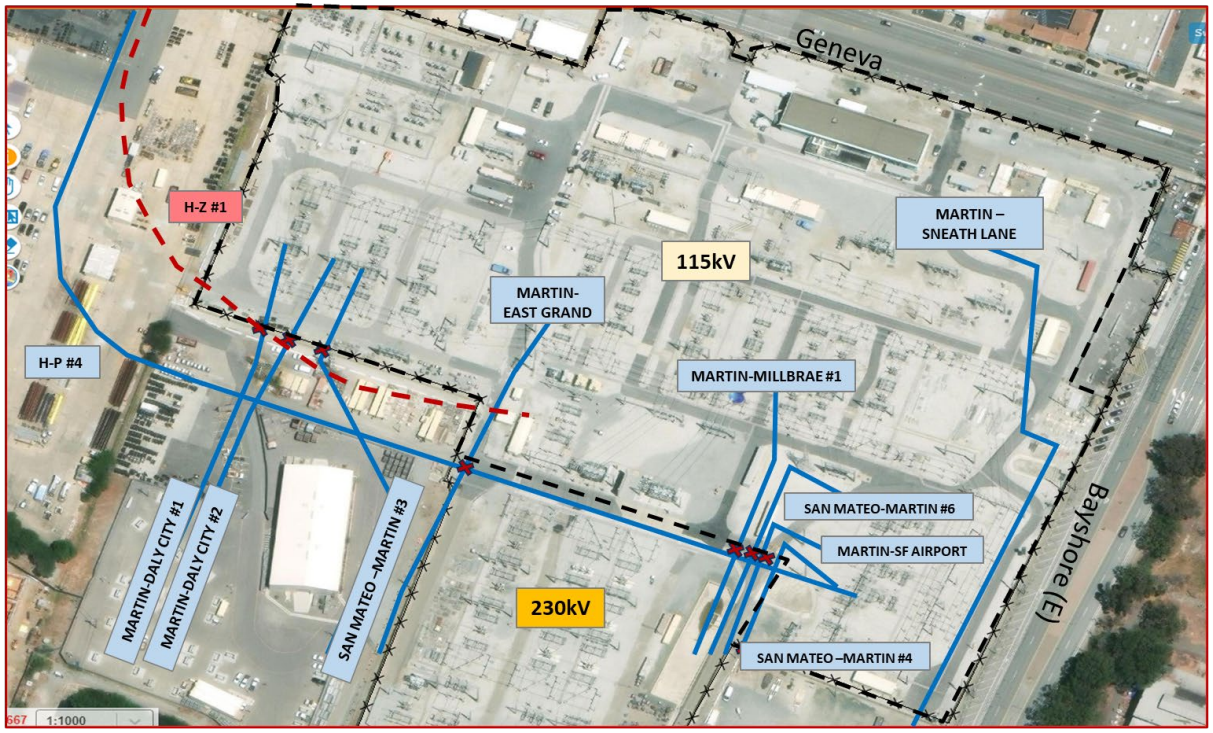
Power from Martin is also supplied to San Mateo customers via

- 2 - 115kV lines to Daly City and Serramonte Substations
- 1 - 60kV line, which does not serve any CCSF customers
- 4 - 4kV and 13 - 12kV distribution circuits



1. CCSF Opening Testimony, of NewGen, at 7 (P21-07-012, California PUC.)
2. Unlike Scenario 1, does not take part of 115kV or 115kV/60kV transformer and related 60kV

Cross-Boundary Transmission Lines



Underground transmission lines cross what would be PG&E's and CCSF's respective properties within a separated Martin

- Involves 11 transmission lines (1 overhead)[1]
- Requires revenue metering with limited available space
- All work must avoid damaging buried lines

The depicted blue and green lines do not exclusively serve CCSF customers

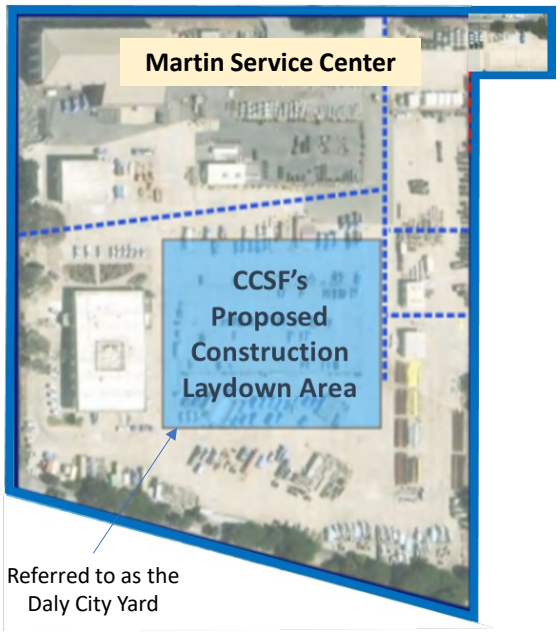
- The 115kV lines all serve non-CCSF customers
- The 60kV yard exclusively serves non-CCSF customers (service to Sneath Lane)

[1] Figure only shows transmission lines that are crossing the PG&E/CCSF boundary. There are additional lines in the vicinity that are not shown here.

125 - PD-3

Description of CCSF Scenario 1
Potential Impacts at Martin Service Center

- CCSF stated at a past workshop that it will not seek to take any portion of Martin Service Center by eminent domain
- CCSF has elsewhere proposed using part of Martin Service Center as a construction laydown area
- Even a CCSF temporary laydown area would make Martin Service Center unusable to PG&E
  - Area used for maintenance/construction vehicles and associated supplies/equipment, and parking for the service center employees
  - Center operations could not continue
  - Need to obtain and move to a new site in a highly-developed and congested area
  - Multi-year relocation effort









CCSF Martin Scenario 1 is Unprecedented and Infeasible

- **To maintain reliable and safe operations, as well as NERC compliance, complete physical and electrical separation with no commingled assets, is required**
  - Separation of equipment, control building, protection/automation and telecommunication infrastructure
  - Installation of separate security wall and equipment to demarcate point of interconnection
  - No ownership/possession transfer until after completion of reconfiguration construction
- **Severe space constraints make separation into two Bulk Electric System substations infeasible**
  - Insufficient space to accommodate necessary additional assets
  - Difficulty in ground grid configuration
  - Construction of new substation, transmission and distribution lines may be required for PG&E to maintain reliable service
- **Even if feasible, construction sequencing and clearances would be extremely complex, costly and lengthy**
  - Significant reliability risks to San Francisco and San Mateo customers for multiple years
  - Use of adjacent Martin Service Center for construction laydown would disrupt PG&E operations and customer service
  - High risk construction work due to tight work spacing adjacent to energized components
  - Coordination of maintenance, standard operations, and emergency restoration activities would be very challenging

Inadequate Space for Physical and Electrical Separation

- Physical separation will require a perimeter wall along the separation boundary which requires significant electrical clearances (NESC 234)
  - 15.5' from 230kV
  - 13' from 115kV
- The separation boundary will require complex reconfiguration of the substation layout
  - Additional electric assets (e.g., meters, disconnects, circuit breakers) will be required at boundary
- Telecom and protection circuits are commingled across substation and in existing cable trenches
  - All circuits will need to be separated
  - Additional control buildings will be required
- Real estate within the substation is limited
  - Unoccupied space is used for access roads
  - Access roads will still be required after separation
  - Other gas and water utility lines cross the Martin Site

Additional Space Required for Separation

Equipment	Area Required	Quantity	Total
230 kV Interconnection – Meter, Disconnect, Circuit Breaker	45 ft x 16 ft = 720 ft^2	2	1,440 ft^2
230 kV Metering/Control Building	10 ft x 10 ft = 100 ft^2	1	100 ft^2
115 kV Metering/Control Building	10 ft x 10 ft = 100 ft^2	3	100 ft^2
60 kV Metering/Control Building	10 ft x 10 ft = 100 ft^2	1	100 ft^2
230 kV Telecom Building	25 ft x 10 ft = 250 ft^2	1	250 ft^2
Perimeter wall (includes clearances)	32 ft x 350 ft = 720 ft^2	1	11,200 ft^2
Total			***13,190 ft^2***

125 - PD-3

Martin Space Constraints - Physical Security

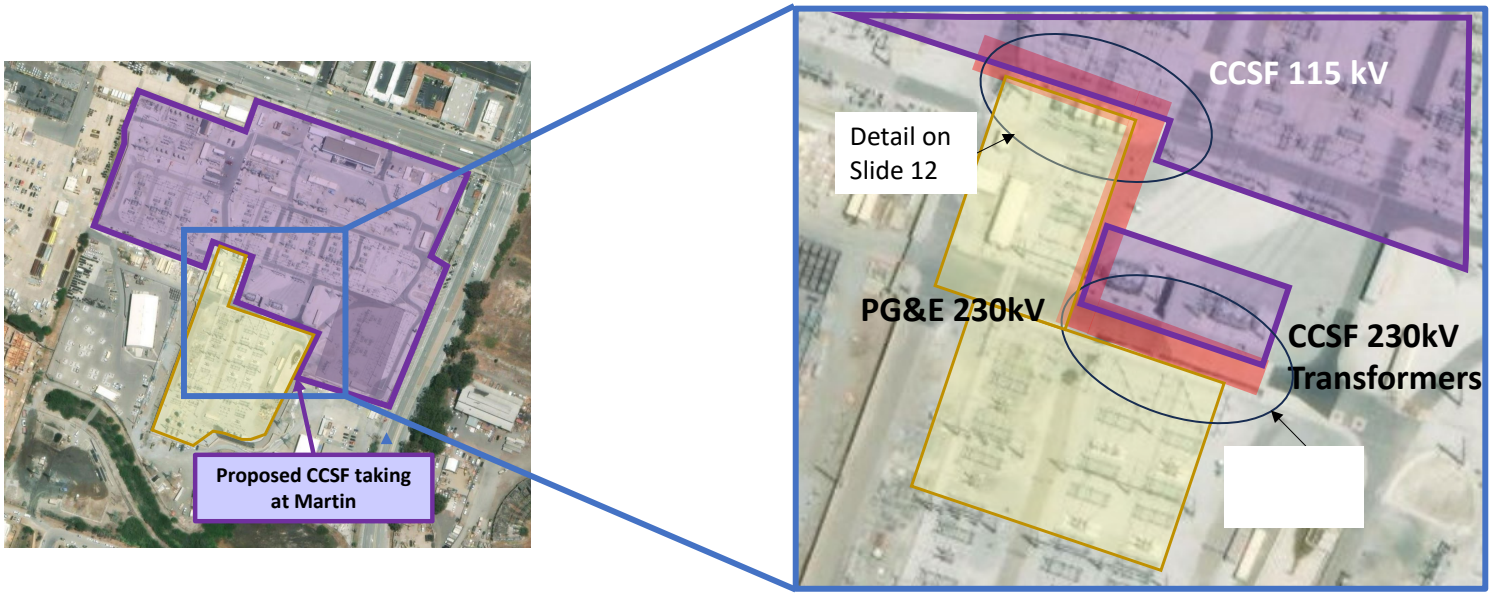
- Martin was identified as a critical substation per CPUC Proceeding R.15-06-009 (Physical Security of Electric Infrastructure) requiring higher level of security standards
- These standards include:
  - Ballistic protection
  - Intrusion and gunshot detection
  - Comprehensive video surveillance
  - Automated crash-rated gates
- Inadequate space exists at separation points to install a new, compliant perimeter wall
- Separation will also require separation of monitoring devices such as security cameras





Martin Space Constraints - Physical Security

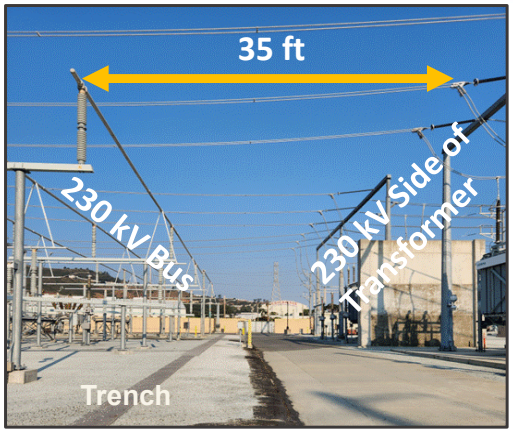
The security wall and electrical clearances would occupy existing access roads and cross through limited space where electrical equipment already exists or will be required.

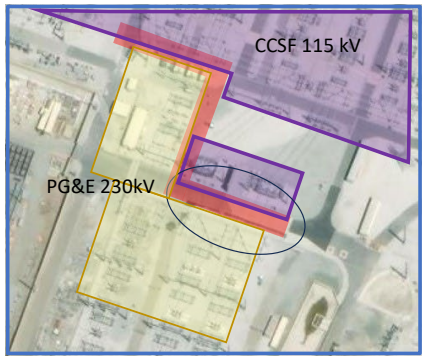


Martin Space Constraints
Adjacent to 230kV Transformers

Necessary equipment required physical spacing exceeding existing 35-foot space

- PG&E must retain access road
- Install two new 230kV breakers and disconnect switches
- New metering/control building(s)
- New perimeter security wall





Total distance required: at least 80 ft ---- Total space available: 35 feet



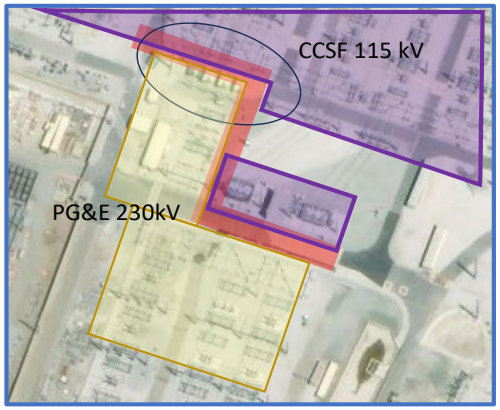
32 ft for security perimeter wall with clearances

25 ft access road for maintenance and emergency repairs

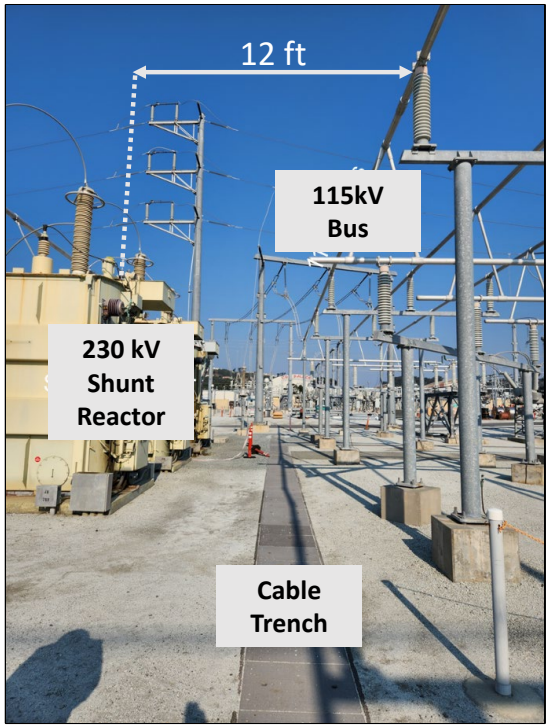
Martin Space Constraints
Adjacent to 230kV and 115kV Area

Multiple space constraints exist throughout Martin

- Shunt reactors for the Embarcadero 230 kV cable are already very close to the 115 kV yard, where construction must occur
- Would require significant new equipment and relocation of the relay-and-control building
- Lacks space for necessary perimeter wall and new trenches to enable separation (~30 ft required with only ~12 ft available)

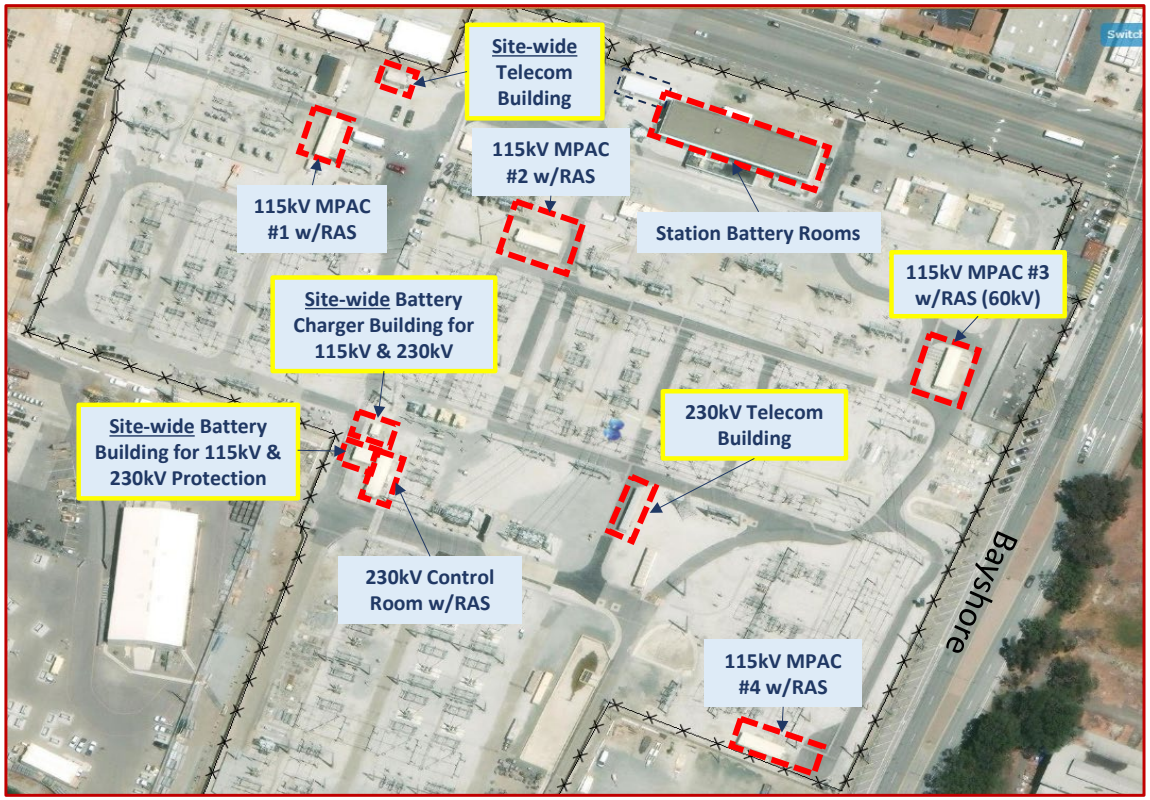






Shunt reactor proximity to 115 kV Bus

Martin Space Constraints
Protective Relays and Communications



Outlined boxes reflect buildings that will require separation of assets into both parties' areas

Modular Protection, Automation, and Control buildings, control room, and telecom building are essential to reliable operation

- Must meet rigid NERC Protection and Control Standards
- Each entity will require their own separate systems:
  - Protective relays and controls
  - RAS equipment
  - 125VDC batteries and chargers
  - Station power
  - Telecom
- **Requires additional space and will also require many outages to reconfigure**

125 - PD-3

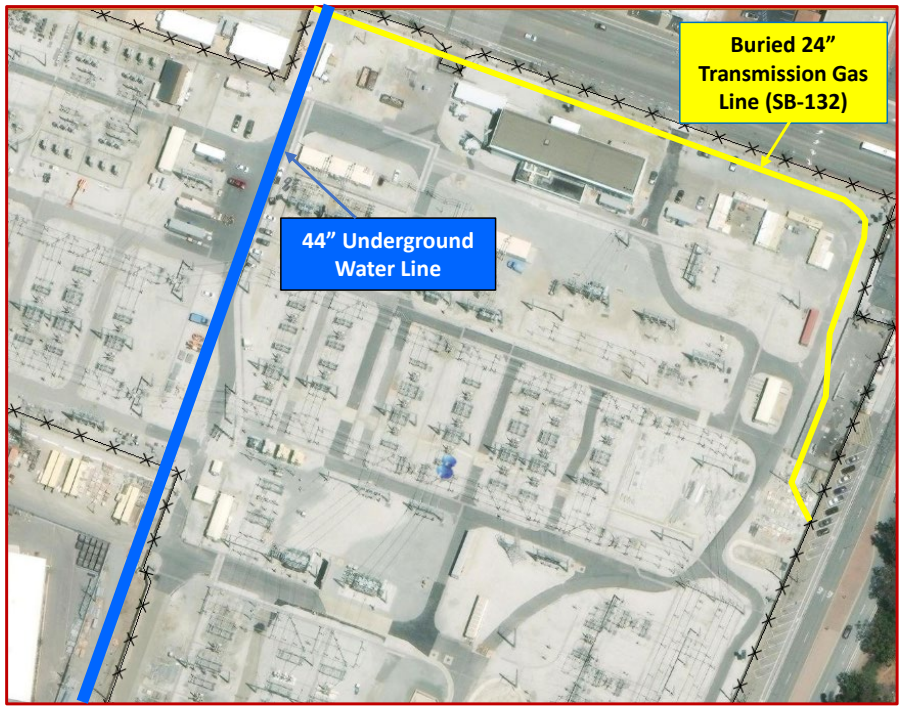
Martin Space Constraints
Cable Trenches

Martin Substation includes hundreds of circuits running through extensive trenching

- Circuits would have to be separated requiring new trenches throughout the substation
- Significant space constraints making feasibility uncertain
- Multi-year, disruptive and costly process
- Significant reliability risks to both CCSF and San Mateo County customers



Martin Space Constraints
Other Underground Utilities



Buried natural gas transmission and water lines lie beneath the proposed taking area

PG&E Gas Line

- "Critical high priority" subsurface installation under CA law, requiring extreme care to ensure integrity, safety and accessibility
- PG&E must have access to the gas line at all times, requiring operational coordination
- Hand digging is required within 2 feet of the gas line

Water

- San Francisco Water Company's 44" water line crosses the property

Construction, trenching, and equipment relocations may be constrained (or made impractical) by these facilities

Construction Challenges
Long, Disruptive Construction Period

CCSF's estimate of 1.5 to 3 years for execution is unrealistic

More likely to take ~10 years

- Space constraints will require extensive and complex construction sequencing
- Extensive clearances will be required for safety
- Clearances must be scheduled to minimize load-at-risk which extends the construction timeframe
- Significant disruption may also occur outside the substation to separate distribution systems

• Installation of new physical security walls
• Construction of new trenches to separate protection and control circuits and station power
• Installation of new 230kV breakers and metering
• Modifications to, and testing of, protective relaying changes, RAS changes, and telecommunication reprovisioning
• Rearrangements of IT telecom systems, SCADA, and other communications circuits

Construction Challenges
Stranded San Mateo Customers

Scenario 1 strands 13 circuits in San Mateo County

- New construction necessary for impacted circuits
- Includes primary line extensions, separation of secondaries, reconductoring, and distribution automation technology
- Each of these distribution line projects is complex and will require multiple customer outages

SUBSTATION	CIRCUIT	TO	IMPACT	CUSTOMERS (METERS) ISOLATED
Acton	0401	Lowell, Bellevue	Partially Isolated	74
Plymouth	0401	Bepler, Flournoy, St. Jose	Partially Isolated	210
Acton	0402	Acton, Hanover	Partially Isolated	1,580
Martin	0402	Geneva	Partially Isolated	273
Martin	0403	Talbert, Bayshore	Partially Isolated	72
Martin	0404	MacDonald	Partially Isolated	9
Martin	1101	Bayshore, MacDonald	Partially Isolated	71
Martin	1103	Recycle, Harney	Partially Isolated	19
Martin	1105	Whitter, Pope, Cow Place	Partially Isolated	3,350
Martin	1106	Castillo, Allan	Partially Isolated	110
Daly City	1106	San Diego Ave	Partially Isolated	3
Martin	1107	Mission	Partially Isolated	117
Martin	1110	Geneva, Allan	Fully Isolated	2,626
			Total	**8,514**

127 - PD-2 Type tex

Construction Challenges
Permits / Approvals

Scenario 1 will require numerous governmental approvals, including the below.

	Permitting Authority	Potential Permit Requirements and Approvals
1	Federal Energy Regulatory Commission	Transfer of FERC-jurisdictional facilities under Federal Power Act Section 203, public interest approval
2	California Public Utilities Commission	Approval for transfer of utility assets (Public Utilities Code Section 851); GO-131D approval or waiver
3	CA Independent System Operator (CAISO)	Approval of registration of CCSF as a Transmission Owner
4	San Mateo County	Coastal Development Permit for construction within the County Coastal Zone; encroachment permit; may oppose construction plans and/or having CCSF be the electricity provider for its residents
5	Regional Water Quality Control Board, SF Bay	Construction permit, stormwater pollution prevention plan if land is disturbed outside the sewer system
6	CA Department of Toxic Substances Control	Approval of soil management plan, excavation guidelines, and health & safety plan for excavation at Martin
7	CA Coastal Commission Coastal Development	Coastal Development Permit for construction within the coastal zone (retained jurisdiction)
8	CA Department of Transportation (Caltrans)	Encroachment permits, access permits
9	San Francisco Planning Commission	Certification of the PG&E Asset Acquisition Project EIR
10	San Francisco Public Utilities Commission	Adoption of CEQA findings and mitigation monitoring and reporting program
11	Board of Supervisors	Adoption of CEQA findings and mitigation monitoring and reporting program adopted by the SFPUC
12	Daly City	Coastal Development Permit for construction within Daly City Coastal Zone; encroachment permit
13	City of Brisbane	Encroachment permit; may oppose construction plans and/or having CCSF be the electricity provider for its residents

Proposed Areas of Focus for Site Visit - Better sense of interconnectedness and severe space constraints

- Physical Security Wall
- Additional equipment for electrical demarcation
  - Location of new 220kV breakers, disconnects, and metering
  - Shunt Reactors near 115kV switchgear
  - Various access roads within the substation
- Protection, Control, and Communications systems
  - Control buildings
  - Cable trenches
- Battery Backup and Station Service



EXHIBIT C

Sulfur Hexafluoride (SF6) Basics

On this page:

- Greenhouse gas <https://epa.gov/eps-partnership/sulfur-hexafluoride-sf6-basics#ghg>
- Use in electric power systems <https://epa.gov/eps-partnership/sulfur-hexafluoride-sf6-basics#use>
- Emissions in electric power systems <https://epa.gov/eps-partnership/sulfur-hexafluoride-sf6-basics#emissions>
- Other common SF_6 emission sources <https://epa.gov/eps-partnership/sulfur-hexafluoride-sf6-basics#sources>

Greenhouse Gas

Sulfur hexafluoride (SF_6) is a synthetic fluorinated compound with an extremely stable molecular structure. Because of its unique dielectric properties, electric utilities rely heavily on SF_6 in electric power systems for voltage electrical insulation, current interruption, and arc quenching in the transmission and distribution of electricity. Yet it is also the most potent greenhouse gas known to date. Over a 100-year period, SF_6 is 23,500 times more effective at trapping infrared radiation than an equivalent amount of carbon dioxide (CO_2). SF_6 is also a very stable chemical, with an atmospheric lifetime of greater than 1,000 years. As the gas is emitted, it accumulates in the atmosphere in an essentially undegraded state for many centuries. Thus, a relatively small amount of SF_6 can have a significant impact on global climate change.

More information on long-lived fluorinated greenhouse gases, their emissions, emission sources, and trends is available on EPA's overview of greenhouse gases <https://epa.gov/ghgemissions/overview-greenhouse-gases#f-gases>.

Use in Electric Power Systems

Since the 1950s, the U.S. electric power industry has used SF_6 in circuit breakers, gas-insulated substations, and other switchgear used in the transmission system to manage the high voltages carried between generating stations and customer load centers. For more information on the electric power sector visit EPA's Electric Power Sector Basics <https://epa.gov/power-sector/electric-power-sector-basics>.

- The largest use of SF_6 occurs in high-voltage circuit breakers. In addition to providing insulation, SF_6 is used to quench the arc formed when an energized circuit breaker is opened.
- Gas-insulated substations use a significant amount of SF_6, and house SF_6-insulated circuit breakers, busbars, and monitoring equipment.
- Other pieces of equipment using smaller amounts of SF_6 include disconnectors and ground switches that use SF_6 primarily for insulation. These devices isolate portions of the transmission system where current flow has been interrupted (using a circuit breaker).

Emissions of SF_6 in Electric Power Systems

The most common use for and largest emission source of SF_6, both domestically and internationally, is as an electrical insulator in high-voltage equipment that transmits and distributes electricity. Approximately 67% of all SF_6 emissions in the United States is attributed to the electrical transmission and distribution sector in 2022 based on the Inventory of U.S. Greenhouse Gas Emissions and Sinks <https://epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>.

SF_6-containing equipment is designed to avoid emitting any of this gas into the atmosphere. However, SF_6 gas can inadvertently escape as leaks develop during various stages of the equipment's lifecycle, including manufacturing, installation, maintenance and servicing, and de-commissioning. In some cases, significant leaks can occur from aging equipment.

Several factors affect SF_6 emissions from electric power systems, such as the type and age of the SF_6-containing equipment (e.g., old circuit breakers can contain up to 2,000 pounds of SF_6, while modern breakers usually contain less than 100 pounds) and the handling and maintenance procedures practiced by electric utilities.

The electric power industry can reduce the nation's SF_6 emissions through cost-effective operational improvements and equipment upgrades. Through improvements in the leak rate of new equipment, refurbishing older equipment, and the use of more efficient operation and maintenance techniques, utilities often find economical solutions to reduce SF_6 emissions.

Under the SF_6 Emission Reduction Partnership for Electric Power Systems <https://epa.gov/eps-partnership/about-electric-power-systems-partnership>, EPA shares information on best management practices and technical solutions to help reduce emissions. Some cost-effective options to reduce SF_6 emissions are:

- Leak Detection and Repair
- Use of Recycling Equipment
- Employee Education/Training

Reducing SF_6 emissions helps electric power systems:

- Save money - Purchasing SF_6 can be expensive, so reducing emissions can save money.
- Increase grid reliability - Use of improved SF_6 equipment and management practices helps protect system reliability and efficiency.
- Protect the environment - SF_6 is the most potent greenhouse gas known. It is 23,500 times more effective at trapping infrared radiation than an equivalent amount of CO_2 and stays in the atmosphere for more than a thousand years.

Other Common SF_6 Emission Sources

SF_6 is also used in industries including:

- manufacture of electrical transmission and distribution equipment
- manufacture of electronics such as semiconductors
- production of magnesium

Last updated on February 27, 2025

EXHIBIT D

OFFICE OF THE MAYOR
SAN FRANCISCO

LONDON N. BREED
MAYOR

OFFICE OF THE CITY ATTORNEY
SAN FRANCISCO

DENNIS J. HERRERA
CITY ATTORNEY

September 6, 2019

William Johnson
Chief Executive Officer and President
PG&E Corporation
77 Beale Street, P.O. Box 770000
San Francisco, CA 94177

Andrew Vesey
Chief Executive Officer and President
Pacific Gas and Electric Company
77 Beale Street, P.O. Box 770000
San Francisco, CA 94177

Re: San Francisco's Indication of Interest in the Acquisition of Electric Distribution and Transmission Assets

Dear Messrs. Johnson and Vesey,

As you know, the City and County of San Francisco (the "City") initiated intensive work beginning in January 2019 to determine the feasibility of a potential acquisition of electric utility assets serving San Francisco held by Pacific Gas and Electric Company ("PG&E" and collectively with PG&E Corporation, the "Debtors") in connection with the Debtors' Chapter 11 bankruptcy cases. We write to inform you that, after investing additional substantial resources since delivering our letter dated March 14, 2019 to PG&E Corporation (attached as Attachment A), the City and its advisors have concluded their initial analysis of a potential transaction. Based on that analysis, the City has prepared this acquisition proposal.

Accordingly, we are pleased to submit this non-binding indication of interest ("IOI") to purchase substantially all of PG&E's electric distribution and transmission assets needed to provide retail electric service to all electricity customers in San Francisco (such assets collectively, as further described below, the "Targeted Assets" and such transaction, the "Proposed Transaction"). We submit this IOI with the support of the San Francisco Board of Supervisors (the "Board of Supervisors") and the San Francisco Public Utilities Commission (the "SFPUC").

Subject to the terms and conditions described herein, the City is prepared to engage immediately with the Debtors and its stakeholders to facilitate the negotiation, documentation, execution and bankruptcy court approval of an acquisition transaction that we believe will be mutually beneficial for the City's constituents, the Debtors and their creditors, customers and other stakeholders.

1. Rationale for the Proposed Transaction

The City is uniquely positioned to acquire the Targeted Assets and provide enhanced value to the Debtors and their stakeholders. For over a century, the City has owned and operated its Hetch Hetchy Power municipal retail electric utility, including its own electric generation,

transmission and distribution facilities. Hetch Hetchy Power and CleanPowerSF (San Francisco's Community Choice Aggregation program) supply nearly 80% of San Francisco's electricity needs. The SFPUC, through Hetch Hetchy Power and CleanPowerSF, has a long track record of providing safe, reliable, affordable and sustainable electric service.

More recently, investment in distribution facilities has become an important initiative for the SFPUC to ensure reasonable access to electric distribution services for its customers, and to secure service for new Hetch Hetchy Power customers. Given the City's overlapping footprint with the Targeted Assets, the ability to integrate the Targeted Assets with the Hetch Hetchy Power infrastructure, the City's ability to access low-cost sources of financing and with no obligation to provide a return on equity capital or recover income taxes in its rate structure, the City believes that it will be able to achieve its long-held goal of providing cost-effective electric distribution service to all customers in San Francisco, while providing substantial value to the Debtors and their stakeholders.

The City has closely followed the Debtors' bankruptcy cases and believes that, through the Proposed Transaction, the City can assist PG&E in maximizing value for its stakeholders by providing a significant cash infusion to the Debtors. The City can, with the Debtors' cooperation, consummate the Proposed Transaction expeditiously to facilitate the Debtors' timely emergence from bankruptcy, consistent with the Debtors' articulated goals and timetable. Importantly, the Proposed Transaction reflects a premium valuation for the Targeted Assets due to the unique circumstances of the Debtors' chapter 11 bankruptcy cases, and would result in significant cash consideration that would be available to the Debtors and their stakeholders. The City has also analyzed the potential impacts of the Proposed Transaction on PG&E's remaining customers; we believe such impacts, if any, would be modest and can be mitigated in a way that is fair to all customers. The City will continue paying its fair share of systemwide costs.

The City also believes that the Proposed Transaction would provide meaningful benefits to the City and its residents, including: (i) stable and competitive rates for customers throughout San Francisco, (ii) enhanced focus on local needs, (iii) increased ability to achieve the City's aggressive climate action goals as well as other important local policy objectives and (iv) additional attractive long-term career and business opportunities for local residents and businesses.

2. Targeted Assets

The Targeted Assets would include substantially all of PG&E's distribution assets, 230/115 kV transformers and 115 kV transmission lines located within the City limits and certain other assets that are needed to properly service customers in San Francisco as described more particularly in Attachment B.

Given the unique geography of San Francisco within PG&E's overall service territory, the City contemplates that a physical separation of the Targeted Assets can be accomplished in a straightforward manner. The City and its engineering and technical advisors have evaluated various separation scenarios and the City welcomes a discussion with PG&E regarding the disposition of specific assets and the development of a mutually acceptable separation plan that maximizes reliability and efficiency for both San Francisco customers and PG&E's remaining customers.

3. Purchase Price

The City is pleased to submit an indicative purchase price for the Targeted Assets of $2.5 billion to be paid in cash upon the closing of the Proposed Transaction. Based on the City's key assumptions described below, this indicative purchase price represents a 2.5x multiple of

estimated year end 2019 rate base and more than a 35x multiple of estimated 2019 earnings for the Targeted Assets. The City believes that this indicative purchase price represents a very attractive premium valuation compared to recent electric utility transactions that reflects the unique circumstances of, and expedited timing resulting from, the Debtors' Chapter 11 bankruptcy cases.

In addition, in connection with the Proposed Transaction and taking into account the indicative purchase price for the Targeted Assets, the City is interested in discussing an arrangement to implement a "buy down" of any non-bypassable charge obligations[1] that may be applicable to the City's customers in exchange for a full release of those obligations, subject to the approval of the California Public Utilities Commission ("CPUC"). The City believes that such an arrangement would significantly increase the sources of cash available to PG&E in connection with the Proposed Transaction.

4. Key Assumptions

Based on an in-depth asset-by-asset analysis of the Targeted Assets conducted by the City's expert valuation, engineering and technical advisors, the City used several valuation methodologies to assess the value of the Targeted Assets. The City's proposal and the indicative purchase price are based upon, and are subject to, a number of assumptions, including the following key assumptions:

- Debt-Free Purchase: The Targeted Assets would be acquired free of any debt associated with the Debtors.

- Rate Structure:
  - Rate base for the Targeted Assets totaling $1.00 billion as of December 31, 2019
  - Authorized capitalization structure that includes 47% long-term debt, or $470 million, as of December 31, 2019
  - Net income contribution totaling $53 million for 2019.

- Bankruptcy Matters and Timing:
  - The Proposed Transaction would be undertaken as an asset sale in connection with a confirmed plan of reorganization of the Debtors in their Chapter 11 bankruptcy cases. As an alternative, the City would also consider a Bankruptcy Code Section 363 sale if the Debtors prefer.
  - The City will not assume or otherwise be responsible for liabilities of the Debtors arising prior to the closing of the Proposed Transaction, other than the Debtors' executory obligations under executory contracts that the City elects for the Debtors to assume and assign to the City in connection with the bankruptcy cases and for which the Debtors would be responsible for any cure costs.
  - The Debtors' Plan of Reorganization will be confirmed by the bankruptcy court no later than June 30, 2020, and the Proposed Transaction will close as soon as all required regulatory approvals are obtained.

[1] For example, charges such as the Power Charge Indifference Adjustment (PCIA), DWR Bond Charge, New System Generation Charge (NSGC), Competition Transition Charge (CTC) and new non-bypassable charges that may arise from state legislation, but only to the extent applicable to the City's customers under CPUC rules and regulations implementing those charges.

The City's key assumptions, including its expert advisors' estimations of the physical condition and age of the Targeted Assets included in rate base, are based on publicly available information. As a result, these key assumptions and the resulting indicative valuation are subject to refinement based on further comprehensive due diligence, including an analysis of non-public information that the Debtors would provide.

5. Financing

Financing for the Proposed Transaction is expected to include the issuance of municipal power revenue bonds by the SFPUC. The SFPUC's credit is well established by its issuance of power revenue bonds in 2015. The SFPUC's Power Enterprise, which includes Hetch Hetchy Power, currently maintains "AA" and "AA-" credit ratings from S&P Global Ratings and Fitch Ratings, respectively. In June 2018, San Francisco voters approved an amendment to the City's charter authorizing the Board of Supervisors to approve selling power revenue bonds for purposes that include financing the acquisition of electric transmission and distribution facilities such as contemplated in the Proposed Transaction. The City anticipates that the SFPUC's Power Enterprise would be expanded to include the Targeted Assets in connection with the Proposed Acquisition.

The City has worked closely with its buy-side financial advisor, Jefferies LLC ("Jefferies"), to evaluate financing structures. The City is confident in its ability to execute the financing based on the revenues from the Targeted Assets, as the municipal capital markets regularly absorb transactions of this size and the City and its various departments are frequent issuers.

6. Transaction Documentation

The Proposed Transaction will be conditioned on the negotiation of mutually agreeable definitive documentation between PG&E and the City, including an asset purchase agreement that contains reasonable and customary terms for acquisitions of electric utility systems and a transition services agreement to ensure the continuous provision of safe and reliable electrical service to San Francisco. The City and PG&E would work together to identify an appropriate transition period and scope of transition services prior to the closing of the Proposed Transaction and the City would endeavor to reduce the scope and length of transition services.

We also anticipate that separation of the Targeted Assets may require certain ancillary agreements between the City and PG&E, including, for example, coordination, shared facilities and customary utility border agreements that the parties would need to negotiate and execute in connection with the closing of the Proposed Transaction.

7. Employees

The City intends to recruit willing PG&E employees who currently operate and maintain the Targeted Assets. The City believes it can offer stable careers with appealing wages and benefits that will be attractive to PG&E employees. We would seek your cooperation in the recruitment process to ensure appropriate personnel to operate the system, while avoiding any disruption across the balance of the PG&E system. The City has a long history of working productively with its unionized workforce and intends to honor the successor provisions of PG&E's collective bargaining agreements.

8. Transaction Conditions

Entering into definitive documentation for the Proposed Transaction is conditioned upon the following matters, to the City's satisfaction: (i) the City's completion of comprehensive business and legal due diligence, which will require the assistance of the Debtors, (ii) the parties' negotiation of definitive documentation and ancillary agreements, and (iii) the receipt of the

City's requisite internal approvals described below. In addition, the Proposed Transaction would be subject to customary closing conditions, including, without limitation, receipt of a bankruptcy court order approving the Proposed Transaction that is acceptable to the City and required regulatory approvals.

a. Internal Approvals

As referenced above, the proposal contained in this IOI has the support of the Board of Supervisors and the SFPUC. Entering into definitive documentation for the Proposed Transaction would require the approval of the Board of Supervisors and the SFPUC, which can be sought expeditiously once the definitive agreements are finalized.

b. Regulatory Approvals

We anticipate that the Proposed Transaction will require the following regulatory approvals or clearances: (i) CPUC approval under Section 851 of the California Public Utilities Code, (ii) Federal Energy Regulatory Commission approval under Section 203 of the Federal Power Act, along with certain ancillary approvals, and (iii) compliance with the California Environmental Quality Act ("CEQA"). We anticipate that the regulatory filings would be coordinated with the bankruptcy court's schedule to allow for filing as soon as practicable in connection with the Debtors' plan of reorganization and that all required regulatory approvals and clearances would be received upon or prior to the receipt of all regulatory approvals required for the Debtors' plan of reorganization.

9. Due Diligence

The City and its team of advisors have created this proposal using information sourced from public filings, including FERC, Securities Exchange Commission and other regulatory filings and investor presentations. Access to non-public information and cooperation from the Debtors would be required for the City to expeditiously complete its comprehensive business and legal due diligence and finalize its valuation assumptions. If it would be helpful to PG&E to expedite the diligence confirmation process, the City is willing to provide a comprehensive list of the due diligence information that would be required for the City to complete its due diligence process to move forward with the Proposed Transaction.

The City has retained multiple expert advisors that have assisted the City in conducting its initial due diligence and submitting this IOI, including:

- Jefferies: buy-side financial advisor
- MRW & Associates, LLC: financial feasibility advisor
- NewGen Strategies and Solutions, LLC: asset appraisal advisor
- Advisian / Siemens Industry, Inc.: engineering advisor
- Flynn Resource Consultants Inc.: technical and regulatory advisor
- Morgan, Lewis & Bockius LLP: transaction legal counsel
- Orrick Herrington & Sutcliffe LLP: bond legal counsel

10. Non-Binding

This IOI represents a general statement of the City's interest in purchasing the Targeted Assets and does not create any legally binding obligations on the City or any of its officials, representatives, agencies, political subdivisions, affiliates or their respective advisors. Unless and until the parties have, among other things, completed comprehensive due diligence, negotiated definitive transaction documentation for the Proposed Transaction, obtained

necessary internal approvals, executed definitive transaction documentation for the Proposed Transaction and obtained a bankruptcy court order authorizing the Proposed Transaction, neither the City nor the Debtors shall be under any legal obligation of any kind whatsoever as to the Proposed Transaction by virtue of this IOI. The City does not commit to any definite course of action as to the Proposed Transaction prior to completing any required CEQA compliance.

11. Next Steps

The City appreciates your earnest consideration of this non-binding proposal. We welcome the opportunity to discuss this proposal, together with the significant benefits that it would provide, with appropriate representatives of the Debtors. As you know, we have a meeting scheduled with Mr. Johnson on September 26 to discuss various matters, including the City's interest in the Proposed Transaction. We understand that the Debtors will be filing a proposed plan of reorganization in short order. After reviewing the proposed plan, we may follow up with the Debtors to provide additional analysis demonstrating how the Proposed Transaction would enhance and could be coordinated with the proposed plan.

We have a full team, including outside legal, financial and engineering advisors and senior City representatives, engaged and standing ready to complete the City's comprehensive due diligence and work expeditiously towards definitive documentation, with the assistance of PG&E, subject to the terms and conditions described above. As noted above, with the Debtors' prompt engagement, the City believes that it can complete its outstanding work in a timeframe consistent with the Proposed Transaction being approved in parallel with PG&E's anticipated plan confirmation process, and ahead of the June 30, 2020 legislative deadline.

Any inquiries with respect to this IOI can be directed to Sean Elsbernd (415-554-6603), Chief of Staff to Mayor Breed, or to the following contacts at Jefferies: Scott Beicke (212-336-7479), Americas Co-Head of Power, Utilities and Infrastructure, or Simon Wirecki (310-575-5251), Western Regional Head for Municipal Finance.

Very truly yours,

London N. Breed
Mayor

Dennis J. Herrera
City Attorney

cc. All members Board of Supervisors
All SFPUC Commissioners
Harlan L. Kelly Jr., SFPUC General Manager
Ben Rosenfield, City Controller
Scott Beicke, Jefferies Americas Co-Head of Power, Utilities and Infrastructure
Simon Wirecki, Jefferies Western Regional Head for Municipal Finance

Jason Wells, PG&E Corporation Chief Financial Officer
Janet Loduca, PG&E Corporation Senior Vice President and General Counsel

Attachments: A. Letter to PG&E Corporation dated March 14, 2019
B. Targeted Assets

Attachment A

Letter to PG&E Corporation dated March 14, 2019

OFFICE OF THE MAYOR
SAN FRANCISCO

LONDON N. BREED
MAYOR

OFFICE OF THE CITY ATTORNEY
SAN FRANCISCO

DENNIS J. HERRERA
CITY ATTORNEY

March 14, 2019

VIA ELECTRONIC MAIL AND USPS

John R. Simon
Interim Chief Executive Officer
PG&E Corporation
77 Beale Street, P.O. Box 770000
San Francisco, CA 94177

Jason P. Wells
Senior Vice-President and Chief Financial Officer
PG&E Corporation
77 Beale Street, P.O. Box 770000
San Francisco, CA 94177

Dear Mr. Simon and Mr. Wells,

The City and County of San Francisco (the "City") has initiated work to evaluate the cost and feasibility of acquiring PG&E's electric distribution facilities that serve San Francisco. While you have probably heard public reports about this effort, we write you directly to underscore the seriousness of our purpose and facilitate lines of communication going forward.

The analysis the City is undertaking will enable us to make an initial determination whether such an acquisition is feasible, including whether it would benefit City taxpayers and electric customers, produce a fair price to PG&E for these assets, and advantage PG&E's employees and its ratepayers outside of San Francisco. We will work with the City's Board of Supervisors and Public Utilities Commission to evaluate these factors. If we determine the acquisition is feasible, we intend for the City to make a formal offer to PG&E within the coming months as part of the bankruptcy process.

Please contact us if you would like to discuss this matter.

Very truly yours,

London N. Breed, Mayor

Dennis J. Herrera, City Attorney

cc: Janet C. Loduca, Senior Vice-President and Interim General Counsel, PG&E Corporation
Members, Board of Supervisors
Members, Public Utilities Commission
Harlan Kelly, General Manager, Public Utilities Commission

1 DR. CARLTON B. GOODLETT PLACE, ROOM 200
SAN FRANCISCO, CALFORNIA 94102-4681
TELEPHONE: (415)554-6141

Attachment B

Targeted Assets

Attachment B
Targeted Assets

This Attachment B provides an overview description of the assets the City proposes to purchase from PG&E. The description provided here is not intended to be the comprehensive list of assets to be purchased that would be included in a final purchase and sale agreement. Subject to due diligence and discussions with PG&E, some assets described here may not be included, and other assets may be added to a binding pricing and a final purchase and sale agreement.

Broadly, the City is proposing to purchase substantially all of PG&E's transmission and distribution assets that are necessary for the City to provide safe and reliable retail electric service to all electricity customers in San Francisco.

These assets are currently anticipated to include:

i. All of PG&E's distribution assets within San Francisco, including distribution-level substations, metering, customer-level interconnections, and related facilities, as needed for operational control.
ii. PG&E's 115 kV transmission assets within San Francisco, and PG&E's 230 kV to 115 kV transformers, as needed for operational control. (This excludes PG&E's 230 kV transmission lines, and 230 kV busses at a) the Embarcadero Substation, b) Martin Substation and c) Potrero Substation.).
iii. A portion of the Martin substation or interconnections to the Martin substation to enable the City to control all 115 kV and 12 kV power flows from Martin into San Francisco, and a lease agreement for a portion of the Martin substation in which City equipment is located, as needed for operational control.
iv. An option to purchase the open bay position planned at PG&E's proposed Egbert Switching Station, as needed for operational control.

The City's proposal also includes related assets, materials, records and other items, as required for safe and reliable service to customers and safe and reliable operation of the assets above, including:

a. Other systems and equipment such as meters, relays, SCADA, transformers, rolling stock, telecommunication and control center equipment, and spares; support systems, standards, AMR facilities,

distribution system model data, system maps and diagrams, records, and all similar items required to operate the assets.

b. All of PG&E's reliability, safety, operating, maintenance and capital improvement records for the assets that are purchased.
c. PG&E's operating and maintenance facilities (for communications, SCADA, security, control and emergency response), service yards, warehouses; ; customer service and call center; and other facilities; all as located in San Francisco, and as necessary for safe and reliable operation and maintenance of the assets described above.
d. PG&E's customer service, metering and billing records, including program and service agreements, dispute notices, outstanding complaints, and similar customer-related information.
e. PG&E-owned land, easements, rights-of-way, lease agreements, and other land-related agreements (or appropriate new lease or other agreements between San Francisco and PG&E) necessary for safe and reliable operation and maintenance of the assets described above.
f. PG&E-owned streetlights and similar unmetered facilities in San Francisco.

The City's proposal excludes all PG&E land and facilities related to its "General Office" operations in San Francisco, i.e., those facilities related to PG&E's San Francisco headquarters, and excludes all land and facilities related to PG&E's natural gas operations and services.[1]

Asset Purchase Alternatives

While not incorporated into the City's indicative price proposal, the City is open to discussing alternative permutations of the asset grouping described above, such as (but not limited to):

- Purchase of all of the high-voltage transmission assets in San Francisco, including the high-voltage lines excluded above;
- Modifications of the interconnections at the Martin substation allowing for PG&E to maintain ownership of many of the assets at the Martin substation, to ensure reliability and/or accelerate transfer of customers from PG&E to the City;

[1] PG&E has gas and electric facilities (materials, service vehicles, construction equipment, etc.) co-located at 18th and Harrison Street and related blocks. This proposal assumes mutually-acceptable arrangements to allow the City to utilize this facility.

- Other alternatives that would add value, accelerate transfer, and/or ensure continued safe and reliable service for both PG&E's and the City's customers.

OFFICE OF THE MAYOR
SAN FRANCISCO

LONDON N. BREED
MAYOR

OFFICE OF THE CITY ATTORNEY
SAN FRANCISCO

DENNIS J. HERRERA
CITY ATTORNEY

September 19, 2019

William Johnson
Chief Executive Officer and President
PG&E Corporation
77 Beale Street, P.O. Box 770000
San Francisco, CA 94177

Andrew Vesey
Chief Executive Officer and President
Pacific Gas and Electric Company
77 Beale Street, P.O. Box 770000
San Francisco, CA 94177

Re: Supplement to San Francisco's Indication of Interest in the Acquisition of Electric Distribution and Transmission Assets

Dear Messrs. Johnson and Vesey:

We write you again on behalf of the City and County of San Francisco (the "City"). The purpose of this letter is to share with you some additional context for evaluating the City's indicative proposal made on September 6, 2019, to acquire substantially all of Pacific Gas and Electric Company's ("PG&E" and collectively with PG&E Corporation, the "Debtors") electric distribution and transmission assets needed to provide electric distribution service to all electricity customers in San Francisco (the "Proposed Transaction").

The City and its advisors have reviewed the Debtors' Joint Chapter 11 Plan of Reorganization dated September 9, 2019 (the "Plan") and the related summary and materials filed by the Debtors in connection with the Plan. We appreciate that the final Plan details are still contingent on the outcome of the wildfire claims estimation process and will be modified by the recent agreement in principle that the Debtors have reached to resolve wildfire claims with entities' representing approximately eighty-five percent (85%) of the insurance subrogation claims. Given the increase in the amount of the potential subrogation claims under the settlement in principle and the potential for the liability estimates and further settlement amounts to increase above what is contemplated in the Plan, we believe that every additional dollar will be important for satisfying the Debtors' creditors and formulating a confirmable reorganization plan. **Our Proposed Transaction timing aligns with the Debtors' proposed June 30, 2020 Plan confirmation date and provides approximately $1 billion of incremental value in comparison to a new equity raise at a 13.5x P/E without the benefit of the Proposed Transaction.**

The City proposes to work with the Debtors to incorporate the Proposed Transaction into the Plan. The City is fully aligned with the Debtors' efforts to avoid disrupting the state's decarbonization goals and PG&E's assumption of all power purchase and community choice aggregation agreements. We believe that the Proposed Transaction would be complementary

to the Debtors' objectives reflected in the Plan while providing substantially enhanced value to the Debtors and their creditors, customers and other stakeholders and preserving the Plan's accelerated timeline. The Proposed Transaction would provide substantial additional liquidity to fund the Debtors' numerous financial obligations reflected in the Plan and would reduce the Debtors' need to incur additional debt that ultimately could compromise PG&E's ability to provide cost-effective service to its customers.

Enhanced Value

The Proposed Transaction would allow the Debtors to maximize the value of PG&E's San Francisco distribution and transmission assets while raising needed cash to implement the Plan, thereby limiting equity financing requirements. The City and its advisors believe the indicative purchase price provided for in the Proposed Transaction would provide the greatest value to the Debtors' stakeholders that can be achieved due to the unique circumstances surrounding the Debtors' bankruptcy.

The City and its financial advisors have reviewed the financial terms of the Debtors' proposed exit equity financing structure, as reflected in the various backstop equity commitment letters with Knighthead and Abrams. The City is confident that the Proposed Transaction will provide greater value and lower cost capital to finance the Plan. Importantly, the Proposed Transaction could also limit financing risk to the Debtors or limit the need for more expensive incremental capital.

Using $48.0 billion as the estimated 2021 average rate base and $2.22 billion as PG&E's estimated 2021 net income, the backstop parties' investment reflects a 10x P/E multiple and an implied 1.2x rate base multiple. Alternatively, if the Debtors were to instead raise equity capital in the market at a 13.5x P/E multiple, the implied rate base multiple would be 1.3x. By contrast, using 2021 estimated numbers for comparison, the City and its advisors believe the Proposed Transaction, with an indicative $2.5 billion purchase price and an assumed $1.15 billion 2021 average rate base, provides a significantly higher 2.2x rate base multiple.

In dollar terms, the valuation of the Proposed Transaction offers approximately an **incremental $1 billion of value** in comparison to the valuation implied by a new equity raise at a 13.5x P/E multiple. As such, the Proposed Transaction provides exit funds on significantly more favorable terms to the Debtors than either the committed backstop financing or other equity financing at the 13.5x threshold valuation alone. This additional liquidity provided by the Proposed Transaction would not be subject to market fluctuations between now and the effective date of the Plan, thereby providing for an attractive source of funding for the Debtors without pricing risk.

Furthermore, the Proposed Transaction could assist the Debtors in structuring a more tax efficient transaction. The Plan is structured to preserve the value of the Debtors' net operating losses ("NOLs"). The Proposed Transaction could reduce the risk of any change of control under Internal Revenue Code section 382 by reducing the equity required to be raised from new stockholders. At the same time, a substantial portion of any taxable gain realized by PG&E upon the sale to the City of the distribution and transmission assets may be offset with such losses, thereby resulting in no material income tax liability to the Debtors, while accelerating the Debtors' monetization of its NOLs.

In addition, the City remains interested in discussing a mutually agreeable "buy down" arrangement with respect to applicable non-bypassable charge obligations. A buy down of these obligations would represent significant additional upfront value to the Debtors that would be available to support the necessary funding for the Plan.

Timing

The City recognizes the expedited timing embedded in the Plan necessary to achieve a confirmed plan by June 30, 2020 and is highly confident that the Proposed Transaction would align with the Debtors' proposed timetable. The City and its advisors stand ready to immediately engage in a process to complete due diligence, negotiations and documentation of the Proposed Transaction and file for California Public Utilities Commission approvals in connection with the approvals required for the Plan. We believe that incorporating the Proposed Transaction into the Plan and obtaining approvals in consolidated regulatory filings represents both a workable approach and the best opportunity for a value-enhancing transaction that meets the aggressive timetable required for Plan confirmation by June 30, 2020.

The Path Forward

After reviewing the Plan, the City is more convinced than ever that the Proposed Transaction would result in a mutually beneficial transaction for the Debtors and their stakeholders in the bankruptcy proceedings, as well as the City and its residents. We hope that the Debtors will make a good faith earnest effort to engage with the City as soon as possible. The San Francisco distribution system represents only a small portion of PG&E's service territory, but includes some of PG&E's oldest assets that will require substantial time and attention to remain in service reliably. The City believes the Proposed Transaction represents an opportunity for PG&E to refocus on the balance of its system, leaves its historical disagreements with the City in the past and allows the City to make the improvements and enhancements that are necessary to provide for safe and reliable electric service to its residents.

Based on the timeline outlined in the Plan, there is a limited time window for the Debtors and the City to begin engagement to meet that aggressive timeframe. The City has exhausted the public information sources available to it and requires the Debtors' engagement to complete its due diligence and to move forward with the Proposed Transaction. We hope the Debtors will be able to act while the Proposed Transaction remains feasible so that we can engage in a good faith negotiation and implementation of a mutually beneficial transaction.

Please reach out to Sean Elsbernd (415-554-6603), Chief of Staff to Mayor Breed, or to the following contacts at Jefferies LLC, the City's buy-side financial advisor: Scott Beicke (212-336-7479), Americas Co-Head of Power, Utilities and Infrastructure, or Simon Wirecki (310-575-5251), Western Regional Head for Municipal Finance, with any questions.

Very truly yours,

London N. Breed
Mayor

Dennis J. Herrera
City Attorney

cc. All members Board of Supervisors
All SFPUC Commissioners
Harlan L. Kelly Jr., SFPUC General Manager
Ben Rosenfield, City Controller
Scott Beicke, Jefferies Americas Co-Head of Power, Utilities and Infrastructure
Simon Wirecki, Jefferies Western Regional Head for Municipal Finance

Jason Wells, PG&E Corporation Chief Financial Officer
Janet Loduca, PG&E Corporation Senior Vice President and General Counsel

This letter represents a general statement of the City's interest in the Proposed Transaction and does not create any legally binding obligations on the City or any of its officials, representatives, agencies, political subdivisions, affiliates or their respective advisors. Unless and until the parties have, among other things, completed comprehensive due diligence, negotiated definitive transaction documentation for the Proposed Transaction, obtained necessary internal approvals, executed definitive transaction documentation for the Proposed Transaction and obtained a bankruptcy court order authorizing the Proposed Transaction, neither the City nor the Debtors shall be under any legal obligation of any kind whatsoever as to the Proposed Transaction by virtue of this letter. The City does not commit to any definite course of action as to the Proposed Transaction prior to completing any required California Environmental Quality Act compliance.

PG&E Corporation

William D. Johnson
Chief Executive Officer and President

77 Beale Street
32nd Floor
San Francisco, CA 94105

October 7, 2019

Via E-mail and U.S. Mail

Mayor London Breed and Mr. Dennis Herrera
1 Dr. Carlton B. Good Place
San Francisco, CA 94102-4681

Re: City and County of San Francisco Offer to Acquire Certain PG&E Retail Electric Facilities

Dear Mayor Breed and Mr. Herrera:

Thank you for your time and the constructive discussion on September 26 in the Mayor's offices.

As we noted at that time, we had received your letters of September 6 and September 19, 2019, expressing the City of San Francisco's interest in purchasing certain PG&E electric facilities. We reviewed your letters and considered your offer carefully and in detail. Although we appreciate the effort San Francisco undertook to prepare its offer, we must decline to accept it. As I indicated when we met, our San Francisco-based facilities are not for sale and to do so would not be consistent with our charter to operate or our mission to serve Northern and Central California communities.

As we understand it, San Francisco proposes an acquisition of PG&E facilities that would include these key terms:

1) PG&E would sell the identified facilities for $2.5 billion which would not include any debt or liabilities associated with those facilities;

2) San Francisco would acquire substantially all of PG&E's distribution assets, 230/115 kV transformers and 115 kV transmission lines within the City limits and certain other assets that San Francisco determines are needed (as described in Attachment B to your letter);

3) San Francisco would negotiate payment of a lump sum "buy-down" payment associated with non-bypassable charge obligations that would be owed by the City's customers, subject to the approval of the California Public Utilities

PG&E Corporation

Our evaluation of your proposal determined that a sale of our facilities in San Francisco could negatively impact PG&E's customers, both inside and outside of the city.

Our reasoning is as follows:

- San Francisco's offer reflects an amount significantly below the fair-market value of the underlying PG&E assets.
- It would unnecessarily and unfairly pass a large amount of costs to remaining PG&E customers throughout the State.
- It is not in the best interest of our customers. We disagree with the suggestion that PG&E's San Francisco customers would be better served by another entity. Our San Francisco customers—and our customers in the rest of our service territory—rely upon us every day to deliver safe, reliable, affordable and clean power.
- Finally, the offer appears to significantly underestimate the substantial separation and impairment costs that the City would have to bear as part of the proposed transaction.

In addition, our financing strategy to emerge from bankruptcy does not envision selling off Company assets. We believe we can fairly resolve and fund all claims and other items through conventional financial markets. If we ever do consider such sales, we have a duty to obtain the highest and best value for these assets.

Although we cannot accept your offer, we want to clearly communicate that PG&E intends to continue working with the City to best serve the citizens and businesses of San Francisco. Our company has been headquartered here in San Francisco for nearly 115 years, and we remain deeply invested in the community and in the future of this great city. We share many of the Administration's goals for San Francisco and look forward to continuing to find ways we can work together.

Sincerely,

William D. Johnson
Chief Executive Officer and President



cc: (*via electronic mail only*)
All members Board of Supervisors
All SFPUC Commissioners
Harlan L. Kelly Jr., SFPUC General Manager
Ben Rosenfield, City Controller
Scott Beicke, Jefferies Americas Co-Head of Power, Utilities and Infrastructure
Simon Wirecki, Jefferies Western Regional Head for Municipal Finance
Jason Wells, PG&E Corporation, Chief Financial Officer
Janet Loduca, PG&E Corporation, Senior Vice President and General Counsel

From: jay allen
To: CPC.PGEPowerAssetsEIR
Subject: Public Power for SF!!
Date: Thursday, May 15, 2025 10:37:57 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am writing to let you know that I am supporting public power for SF. Public utilities should not be a for-profit business. If SF has the ability to power all of SF with its Hetch Hetchy power generation, then it should be able to provide it. All San Franciscans deserve to have their power provided at the least expensive method without shareholder dividends and PGE mismanagement adding to the bill.

1 - GC-3

Thank you,
Jay Allen

From: Yeashore Community
To: CPC.PGEPowerAssetsEIR
Subject: ..Acquire PG&E's local electric grid NOW!
Date: Thursday, May 15, 2025 1:56:18 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

..Hello..
..San Francisco should move forward with Our City, Our Power...San Francisco must acquire PG&E's local electric grid and bring it under public ownership!!
....This would mean, for all San Franciscans, more affordable electricity rates, cleaner energy, safer and more reliable power and , importantly, greater accountability and investment in our local communities!!
..Please help make it happen..
...Be Seeing You...Raja Anderson...

1

From: Yeashore Community
To: CPC.PGEPowerAssetsEIR
Subject: ..Acquire PG&E's local electric grid NOW!
Date: Thursday, May 15, 2025 1:56:18 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

..Hello..
..San Francisco should move forward with Our City, Our Power...San Francisco must acquire PG&E's local electric grid and bring it under public ownership!!
....This would mean, for all San Franciscans, more affordable electricity rates, cleaner energy, safer and more reliable power and , importantly, greater accountability and investment in our local communities!!
..Please help make it happen..
...Be Seeing You...Raja Anderson...

1 - GC-3

I-Anonymous

From:
To: CPC.PGEPowerAssetsEIR
Subject: Voicing Support for Public Power
Date: Monday, April 14, 2025 2:45:30 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

I wanted to add my comment that San Francisco should pursue purchasing PG&E's assets in San Francisco. PG&E has repeatedly proven to not be a reliable partner for energy stewardship. They've been fiscally irresponsible as well. I think San Francisco could do a far better job.

From: Michael Beardsworth
To: CPC.PGEPowerAssetsEIR
Subject: Support for SF Public Power
Date: Monday, April 14, 2025 11:05:50 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

SF Planning Commissioners,

I'm writing in support of the EIR for the PG&E Power Asset Acquisition Project. San Francisco's ability to meet our climate goals is hamstrung by PG&E's absurdly high rates and intransigent attitude towards the city's projects. We need to take charge of our own energy infrastructure, even if that'll require some temporarily disruptive work.

Sincerely,
Michael Beardsworth
1912 9th Ave, San Francisco, CA 94116

1 - GC-3

From: L B
To: CPC.PGEPowerAssetsEIR
Subject: Let"s do this SOON !
Date: Monday, April 14, 2025 10:15:26 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello Julie,

I've been receiving your email newsletters but remain frustrated that our neighborhood isn't included in your early program.

I'm tired of receiving PGE emails telling me how I can reduce my monthly bills when my usage hasn't changed all these years but my bills keep going up as PGE raises their rates so their shareholders can increase their profits. Then they have the audacity to keep sending me those hypocritical emails about saving energy.

PGE also cost us over $2,000 of unnecessary work during the construction of our home when an inexperienced engineer insisted on costly additional work that was repudiated by one of their senior inspectors post fact. But there was nothing I could do as the engineer could cause us significant delays and PGE took absolutely no responsibility after the fact.

Let's get rid of this greed driven and incompetent company. We need to control our own energy needs.

Sincerely,
Lev Bereznycky
2538 3rd Street
San Francisco, CA
94107

1 - GC-3

From: Marty Bigos
To: CPC.PGEPowerAssetsEIR
Subject: Public Electrical grid
Date: Thursday, May 15, 2025 2:39:08 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

I am a long-time home owner in SF and support the City acquiring and operating the local grid from PG&E. Their rates keep going up, and in the final analysis, this money goes to shareholders and top level executives.
Marty Bigos (Gmail, iPad)
141 Fairmount St.

From: Logan Chadde
To: CPC.PGEPowerAssetsEIR
Subject: Support for PG&E power asset acquisition project
Date: Monday, April 14, 2025 11:50:47 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hi there,

I strongly support the city acquiring PG&E's local electric grid.

One of the biggest barriers to home electrification and EV adoption is PG&E's astronomical prices. This would help solve that, improving our city's air quality in the process.

I hope this happens ASAP!

Logan Chadde
1010 Ashbury St Apt 6
San Francisco, CA 94117

1 - GC-3

I-Chang

From: Michael Chang
To: CPC.PGEPowerAssetsEIR
Subject: Support public utility for SF electricity
Date: Thursday, May 15, 2025 2:30:45 PM
Attachments: bls_emblem_2016.png

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

San Francisco electricity rates are approximately 2.1 times higher than the national average as of December 2024. Specifically, San Francisco households paid an average of 37.0 cents per kilowatt-hour (kWh), while the nationwide average was 17.6 cents per kWh. This means San Francisco rates are 110% higher than the national average, or just over double.

Average Energy Prices, San Francisco-Oakland-Hayward – December 2024
bls.gov

PG&E Corporation reported a record profit of $2.47 billion for the full year 2024, as measured by net income available to common shareholders. This profit figure is based on generally accepted accounting principles (GAAP) and represents an increase from $2.24 billion in 2023. The company's earnings per share for 2024 were $1.15 (diluted), up from $1.05 the previous year.



PG&E Posts Record $2.4B Profit Amid Constant Rate Hikes: Reports
patch.com

PGE is making it difficult to live in San Francisco!

Sent from my iPhone

1 - GC-3

Kevin Chen

382 Missouri Street
San Francisco, CA 94107

April 19, 2025

Julie Moore
49 South Van Ness Avenue
Suite 1400
San Francisco, CA 94103

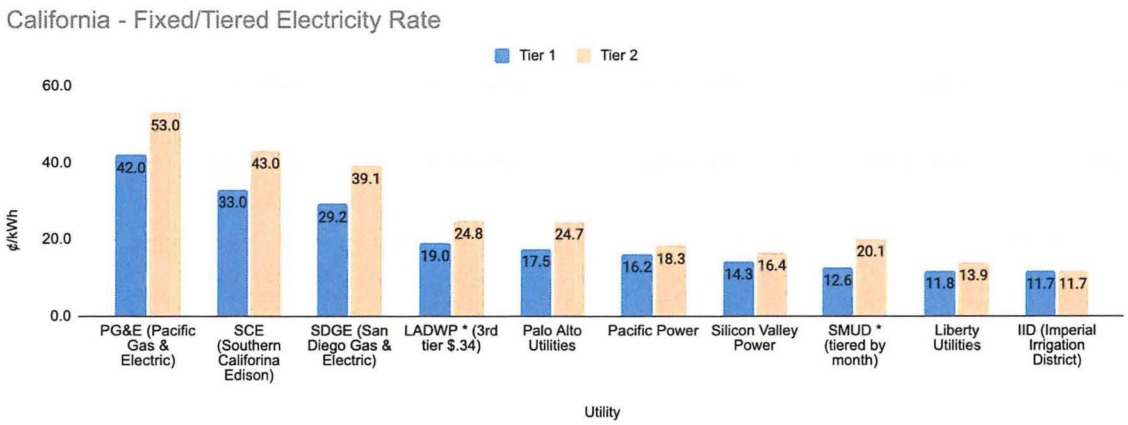
Dear San Francisco Planning Commission,

I'm writing to **express my support for SFPUC's efforts to establish a municipal utility,** including the purchase of PG&E's infrastructure. This effort supports the City's net-zero goals by accelerating electrification and improving affordability in a time of rising living costs.

Before last year, I did not know much about utilities. But after three PG&E rate hikes in January, March, and April 2024, I started researching electric tariffs. I was surprised by what I found.

1 - GC-3 cont.

PG&E customers now pay significantly more for electricity than any other utility customer in California:



Using the Bay Area municipal utilities as comparative benchmarks:

- **Santa Clara** (Silicon Valley Power) pays $0.143/kWh, which is **2.9 times cheaper.** Like San Francisco, the Santa Clara utility also owns generation resources.
- **Palo Alto** pays $0.175/kWh, which is **2.5 times cheaper.**

Not only do electricity rate increases make life less affordable, they also hinder San Francisco's carbon neutrality goals.

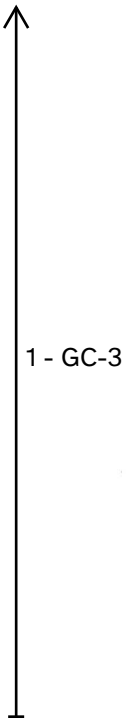
- For example, the current rate structure makes natural gas appliances significantly cheaper to run than their electric counterparts. Ratepayers can expect their energy bill to *increase* if they switch to electric appliances, and that's not even considering the replacement cost.
- It also makes charging an electric vehicle nearly as expensive as fueling an equivalent gas/diesel car. This neutralizes an important incentive to switch to an electric car.

A publicly owned utility would be directly accountable to San Francisco ratepayers. They could set rates and invest in long-term system health without considering the impact on short-term profits.

Thank you for your consideration. I do not need a response to this comment.

Best,

Kevin Chen



From: Sydney Clemens
To: CPC.PGEPowerAssetsEIR
Subject: Public should own the power system
Date: Monday, April 14, 2025 11:47:56 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I just got a bill for some 700 dollars. I live alone in a 900 sq ft house in Glen Park, and refused the so-called "Smart Meter" since I am a cancer survivor and don't want more triggers to illness in my life.

If The City were to become the supplier of power, the health of the citizens would figure largely (or at least I hope it would). That matters to me.

I am 85 years old and have lived in SF in one place since the 1970s. And I plan to live longer, but fear the rising costs of PG&E, and worry.

Sincerely,

Sydney Gurewitz Clemens

Sydney Gurewitz Clemens
73 Arbor St.
San Francisco, CA 94131

sydney@Eceteacher.Org
www.eceteacher.org

New book:
The Sun's Not Broken, A Cloud's Just in the Way: On Child-Centered Teaching 2nd.ed 2022

1 - GC-3

From: Bridget Clinton
To: CPC.PGEPowerAssetsEIR
Subject: Clean power
Date: Thursday, May 15, 2025 11:25:33 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

I would love to see an alternative to PGE
I support all avenues that could change this situation
Being captive to a monopoly is never a good idea
We hopefully await changes.
Bridget Clinton

Sent from my iPhone

From: Donovan Corliss
To: CPC.PGEPowerAssetsEIR
Subject: Support acceptance of EIR
Date: Thursday, May 15, 2025 3:17:44 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

To the CPC,
I am writing to express my support for the adoption of the EIR for public purchase of the PG and E power assets in San Francisco. The proposal will result in cleaner power and the speed the adoption of electrification of vehicles, homes and businesses that will improve the health and sustainability of San Francisco residents and of our natural resources. I am a current resident of San Francisco and have lived here full time since 1997. Please accept this EIR.
Donovan Corliss

From: Fay Darmawi
To: CPC.PGEPowerAssetsEIR
Subject: In support of Our City, Our Power
Date: Monday, April 14, 2025 10:16:37 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello Julie Moore,

Thank you for your managing of this process. I am writing in support of the Our City Our Power project.

As a resident and customer of PG&E, I am deeply disappointed at PG&E's mismanagement of fire hazards and relentless rate increases. This I put my faith in the new initiative of public-owned utilities infrastructure via the Our City Our Power project.

Fay Darmawi
San Francisco, CA

1 - GC-3

From: Patrick Dunagan
To: CPC.PGEPowerAssetsEIR
Subject: supporting PG&E Power Asset Acquisition Project
Date: Monday, April 14, 2025 10:05:59 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

Just voicing my support for Public Power in SF.

PG&E does not have public interest in mind and should not control our city's electric grid.

Please acquire the grid from PG&E. Simply seizing it in the name of overcharged residents and businesses of San Francisco would be far preferable to giving any more of city funds to PG$E.

Thanks much,

Patrick James Dunagan

1 - GC-3

--
Patrick Dunagan
E-resources Assistant
Gleeson Library / USF
https://guides.usfca.edu/patrick-dunagan

From: Don Eichelberger
To: CPC.PGEPowerAssetsEIR
Subject: San Francisco take over of PG&E"s electric infrastructure
Date: Saturday, May 17, 2025 3:36:49 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I fully support the city take over of PG&E electric infrastructure and formation of a municipal utility. Localizing energy decisions and doing away with the need to provide investors profits will put focus on clean alternative sources of energy and lower energy costs.

1 - GC-3

Sincerely,

Don Eichelberger
628 Lyon St. #1
San Francisco, CA 94117

Get Outlook for Android

From: Paul
To: CPC.PGEPowerAssetsEIR
Subject: Would love to see public power instead of PG&E in San Francisco
Date: Monday, April 14, 2025 11:12:57 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Greetings from the sunset!
I heard that on Thursday, April 17th, the San Francisco Planning Commission will hear from the Planning Department on the Environmental Impact Report (EIR) for the PG&E Power Asset Acquisition Project, also known as Our City, Our Power.

I FULLY SUPPORT THE IDEA behind Our City, Our Power. YES, PLEASE.

With the recent rate hikes and the lack of transparency behind these decisions, residents of San Francisco can and deserve better. PG&E seems to have a long track record of blocking affordable housing, delaying transit projects, and charging excessive fees for basic hookups. Public power seems to offer a better way forward.

Thanks for reading my comment and thanks for looking out for the residents of the city.
Paul Foppe
2301 Lincoln Way, San Francisco, CA 94122

1 - GC-3

From: Tera Freedman
To: CPC.PGEPowerAssetsEIR
Subject: Draft EIR Comments
Date: Wednesday, April 16, 2025 9:34:31 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore, CPC, and PGE,

Here are comments about the Draft EIR:

1.3 Not complete "whole of the action"
When a program EIR is completed, additional environmental review may be warranted in the future as project details are developed. The additional
environmental review would analyze any impacts particular to a specific activity or project site that were not known and, therefore, could not have been evaluated as part of the earlier EIR.

• The impact needs to be part of the Draft EIR before it can be approved.

1 - PD-2

———

1.5 Table 1-2
The project would involve work within the Coastal Zone and
could impact sensitive habitat for special status species.
Appendix A, Plans and (does not have effects on the environment that I would care about - its construction downtown)
Policies, and Section
E.15, Biological
Resources

* What impact of sensitive habitat and special status species? Appendix A did not prove information about the costal zone and sensitive habitat and special status species. Please present this information.

———

Endangered species at Martin station

San Bruno Elfin Butterfly *(callophrys mossii bayensis)*
Callipe Silverspot Butterfly (*speyeria callippe callippe)*
Mission Blue Butterfly *(Icaricia icarioides missionensis)*

* The endangered species are protected. What are you going to do to protect these sensitive butterflies and their host plants?

2 - BI-2

Thank you, Tera Freedman

From: Laurel Gaddie
To: CPC.PGEPowerAssetsEIR
Subject: Our City, Our Power - Let"s do this!
Date: Thursday, May 15, 2025 10:37:59 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I'm writing to voice my support for the effort to acquire PG&E's local energy infrastructure and turn it into a public utility for the City/County of San Francisco. My understanding is that this was the plan a hundred years ago, and it's a good one that would benefit the residents of SF by liberating us from the for-profit shenanigans perpetrated by PG&E and making us energy-independent as a city.

Thank you for your efforts.

Laurel Gaddie
178 Henry St, San Francisco, CA 94114

1 - GC-3

From: Cecily Gardner
To: CPC.PGEPowerAssetsEIR
Subject: Letter of support for PG&E Power Asset Acquisition (Our City, Our Power)
Date: Wednesday, April 16, 2025 4:53:06 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I'm writing to voice my support for the PG&E Power Asset Acquisition Project, also known as *Our City, Our Power*. This is an opportunity for San Francisco to transition to a clean, affordable, and community-owned energy future.

Public power means putting people over profit—lower rates, cleaner energy, and reinvestment in our neighborhoods. For too long, PG&E has held a monopoly that has slowed down vital projects and driven up costs for San Franciscans. We deserve better. And we cannot keep stomaching costs that are increasing steadily beyond power in other counties and states.

I urge you to move this process forward and help make public power a reality. Let's take control of our energy future—together.

Sincerely,
Cecily Gardner
Dolores Heights, San Francisco

1 - GC-3

From: Rick Girling
To: CPC.PGEPowerAssetsEIR
Subject: Public Power Now!
Date: Thursday, May 15, 2025 2:23:58 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear SFPUC
The time to get rid of PGE is well past. I moved here from Sacramento where we have SMUD. Worked fine. Cost was reasonable. Power should be apublic utility owned and operated my the municipality. The Time is NOW!
Sincerely,
Richard and Valerie Girling
182 Banks St
SF 94110

1 - GC-3

From: Ryan Grasell
To: CPC.PGEPowerAssetsEIR
Subject: Support for Power Asset Aquisition Project
Date: Friday, May 16, 2025 9:35:50 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am writing to express my strong support for the proposed PG&E Power Asset Acquisition Project.

I believe it is in the best interest of the City to gain greater control over its power infrastructure. I am confident that the minor short-term impacts associated with the project will be significantly outweighed by the substantial long-term benefits it will bring to the City.
--
Sincerely,
Ryan Grasell

1 - GC-3

From: Travis Gregg
To: CPC.PGEPowerAssetsEIR
Subject: Support for Our City, Our Power
Date: Thursday, May 15, 2025 11:24:57 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I'm writing in support of the "Our City, Our Power" initiative.

As a resident of Mission, this project represents a unique opportunity for San Francisco to protect lower income household from continued rate increases from PG&E. More generally, this effort would ensure more affordable electricity rates for everyone in SF.

From an environmental aspect, owning the power infrastructure would enable San Francisco as a whole to prioritize cleaner energy. This is more important than ever as we see the Federal government passing the regulatory responsibility to State and local governments.

Lastly, this initiative would put greater accountability and investment in our local communities, which we all agree is always a good thing.

Thanks!
Travis Gregg
+1 301-254-8945

1 - GC-3

From: Claudia Bonilla Haas
To: CPC.PGEPowerAssetsEIR
Subject: SUPPORT PUBLIC POWER
Date: Monday, April 14, 2025 10:31:58 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To Whom It May Concern,

For too long PG&E has been gouging customers to satisfy its investors. It's about time the City of San Francisco reins in the greed of this monopoly. Please support San Francisco's bid to buy its grid from PG&E to provide gas and electricity at affordable prices.

Thank you!

Claudia B. Haas
Retired Bilingual Teacher SFUSD

I'm a constituent of Supervisor Jackie Fielder in the Portola District

1 - GC-3

From: Nancy Haber
To: CPC.PGEPowerAssetsEIR
Subject: Support Public Power for San Francisco!
Date: Sunday, May 18, 2025 7:41:04 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am writing in strong support of the Project for Public Power and for San Francisco to acquire our local grid from PG&E and take public ownership as soon as possible. I urge you to move forward with this as quickly as possible including approving the draft EIR and subsequent steps.

Public ownership of our grid will mean more affordable electricity rates, which will help us transition to an all-electric city. Lower rates will help incentivize and make it more possible for all SF residents to switch to electric appliances, for better health and to meet the upcoming Bay Area Air District regulations. We must address our climate emergency with urgency and Public Power will get us to 100% clean energy more easily and quickly; certainly this is the path to less pollution and cleaner air. Further benefits include safer and more reliable power, greater accountability and a faster response to problems, and significantly greater investment in our own communities.

PG&E has set up many roadblocks to clean energy development and has experienced many delays in connection and upgrading equipment. In addition, they have charged our city and residents too much, often unreasonably as their main concern is their profits. We must take public ownership of our grid for our health, our economy, and a future in which San Francisco can thrive.

Please support the Public Power Project and do all in your power to make this happen as quickly and smoothly as possible.

Thank you,

Nancy Haber
SF Resident District 7

1 - GC-3

From: Amy Hansen
To: CPC.PGEPowerAssetsEIR
Subject: Public Comment in Support of Public Power Acquisition
Date: Monday, May 19, 2025 7:42:33 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,
I'm writing to express my strong support for the City's effort to acquire PG&E's local electric grid and bring it under public ownership through the Our City, Our Power initiative.

Public power would mean more affordable rates, cleaner energy, safer and more reliable service, and greater accountability to our local communities. This is a rare opportunity for San Francisco to take control of its energy future, and I urge you to move this process forward.

Thank you for your leadership and consideration.

Sincerely,

Amy Hansen

District 10

1 - GC-3

From: robert heisler
To: CPC.PGEPowerAssetsEIR
Subject: SFPUC acquisition of pge infrastructure
Date: Thursday, May 15, 2025 9:14:04 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

As a victim of the practices of the monopoly, pge, I absolutely support the SFPUC takeover of pge. Ever since I have been forced to buy pge's dirty energy services, as they are for all purposes, a monolithic monopoly, manipulating rates and extreme lobbying, for their own profit, I have dreamed of municipal ownership of the electrical grid which is actually supplied by city owned resources. .
They publicly declare themselves guardians of the environment through clean energy, their practices show otherwise. They penalize individual solar installations and strive to attack them legislatively while burdening them with fees and other costs to deter their adoption. Their literature and advertising try to show a caring corporation that is dedicated to lowering energy costs for consumers but in actuality they are a mega corporate monopoly that only considers the ratepayers as cash machines, congratulating each other in boardrooms with every undeserved rate increase.
It's time, actually long overdue, to get pge off the ratepayer's back and re designate control to the people where it belongs.

Robert Heisler
1908 14th Avenue
San Francisco CA 94116

1 - GC-3

From: Augusta Hopkins
To: CPC.PGEPowerAssetsEIR
Subject: Public Utilities Please!
Date: Thursday, April 17, 2025 10:06:33 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Certain things should operate specially as a service to benefit people and society, not for financial gain such as health care, public transportation and education. Utilities also fall in this category.

In a capitalist environment, continued growth is the goal of publicly traded companies like PG&E. Since their customer base is location bound, when faced with this goal, they are forced to grow by the charging more and more for their services. They also have an effective monopoly, as we can't choose another utility company for power, so there is no competition to lower prices.

Public utilities make sense in that they can operate as a service, not trying to make extra profit for CEOs or shareholders. Lower energy costs help our most vulnerable residents & small businesses, by which we all benefit!

Augusta Hopkins
94131

True Ocean of Strength
Peaceful Fulfillment of the Heart

Augusta Hopkin s, she/her | 415.355.4330 | Mindfulness for Stress Reduction and Beyond | m4srb.org

she/her (pronouns, why this is important https://pronouns.org/what-and-why/

1 - GC-3

From: Frank Hrovat
To: CPC.PGEPowerAssetsEIR
Subject: Public power
Date: Thursday, April 17, 2025 9:46:45 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I believe that certain things should operate as services to benefit the people, such as health care or education. Utilities also fall in this category.

In a capitalistic environment, continued growth is what a publicly traded company strives for, like pg&e and its shareholders. But since their customer base is location bound, they are forced to grow by the charging more for their services. They also have an effective monopoly, as we can't choose another utility company for power, so there is no competition to lower prices.

Public utilities make sense in that they can operate as service, not trying to make extra profit for CEOs or shareholders.

Lower energy costs help our most vulnerable residents & small businesses and we all benefit from that!

Kindly,

Frank H.
San Francisco resident

1 - GC-3

From: Judy Irving
To: CPC.PGEPowerAssetsEIR
Subject: Re: Draft Environmental Impact Report Comment Period Extended - PG&E Power Asset Acquisition Project
Date: Friday, May 16, 2025 5:43:16 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Julie,

Re: PG&E Power Asset Acquisition Project

I could not find the project when I clicked on the link. I recommend the "preferred alternative."

Thank you,

Judy Irving
237-E Greenwich

> On Apr 3, 2025, at 4:34 PM, CPC.PGEPowerAssetsEIR <CPC.PGEPowerAssetsEIR@sfgov.org> wrote:
>
> The San Francisco Planning Department published a Draft Environmental Impact Report (EIR) for the PG&E Power Asset Acquisition Project on March 19, 2025, available at Environmental Review Documents | SF Planning. This email is an update to inform you that **the public review period has been extended to May 19, 2025.**
>
> If you wish to comment on the adequacy of the Draft EIR, you may submit comments in either or both of the following ways: (1) in person at the San Francisco Planning Commission public hearing on April 17th; or (2) written comments to San Francisco Planning department due by 5 p.m. on May 19, 2025.
>
> **Julie Moore**
> **Principal Environmental Planner**
> **Environmental Planning Division**
> San Francisco Planning Department
> 49 South Van Ness Avenue, Suite 1400, San Francisco, CA 94103
> Direct: 628.652.7566 | www.sfplanning.org

1 - GC-3

From: Amin Issa
To: CPC.PGEPowerAssetsEIR
Subject: In Support of Public Power
Date: Wednesday, April 30, 2025 12:57:26 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello!

My name is Amin Issa, I'm a resident of District 10, and I would simply like to write in to voice my support for San Francisco's efforts to acquire power assets from PG&E, with the goal of providing municipal power.

My hometown is Chattanooga, TN, which has its power provided by the municipality through the Electric Power Board. By having control of this infrastructure, they have been able to establish a high degree of vertical integration, which has led to them being able to provide the fastest commercially available consumer internet connection in the country over the same infrastructure as their electric smart grid. The city has been able to build a number of novel citizen-serving technologies due to this integration, and this is only possible due to their sole ownership. I would love if San Francisco, tech capital of the country and my new home, could match or surpass this.

Thank you!

1 - GC-3

Karen Lancelle

From: Jason Jungreis <jasonzjungreis@gmail.com>
Sent: Wednesday, March 19, 2025 5:26 PM
To: CPC.PGEPowerAssetsEIR; Moore, Julie (CPC)
Subject: Re: Availability of Draft Environmental Impact Report and Notice of Public Hearing - PG&E Power Asset Acquisition Project

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Ms. Moore,

I have received the email sent earlier today re acquisition of PG&E assets in SF. I do not want to comment re the EIR in that regard. However, I very much want to comment on the fundamental scheme of SF purchasing PG&E assets: please let me know all venues in which this issue will be heard so that I can provide my public comment. 1 - GC-2

Thanks.

Jason Jungreis
San Francisco

On Wed, Mar 19, 2025 at 3:26 PM CPC.PGEPowerAssetsEIR <CPC.PGEPowerAssetsEIR@sfgov.org> wrote:

> The San Francisco Planning Department has published a Draft Environmental Impact Report (EIR) for the PG&E Power Asset Acquisition Project, available at Environmental Review Documents | SF Planning. If you wish to comment on the adequacy of the Draft EIR, you may submit comments in either or both of the following ways: (1) in person at the San Francisco Planning Commission public hearing on April 17th; or (2) written comments to San Francisco Planning department due by 5 p.m. on May 5, 2025.
>
> Please refer to the attached Notice of Availability of Draft EIR and Notice of Public Hearing for more information.
>
> **Julie Moore, MS**
> **Principal Environmental Planner**
> **Environmental Planning Division**

San Francisco Planning
49 South Van Ness Avenue, Suite 1400 San Francisco, CA 94103
Direct: 628.652.7566 | www.sfplanning.org
San Francisco Property Information Map

provide their contact information will receive a notice of availability of the Responses to Comments document when it's published. If you are providing verbal comments today and you wish to receive this notice, or if you just wish to receive a notice, please provide your contact information to the e-mail address above or call me at (628) 652-7566 and leave a message with this -- that information.

This concludes my presentation. Thank you.

COMMISSION SECRETARY IONIN: With that, we should open up public comment. Members of the public, this is your opportunity to address the commission on this matter. You'll each receive two minutes.

MEMBER OF PUBLIC: Good day, commissioners. This is one of the most important matters that you'll have in front of you because this is the opportunity for San Francisco to take its leadership and open the door to energy abundant future.

My name is Byron Kaufman, founder of Grid Science AI, a San Francisco company that's like the AI of power systems. We're the most advanced on the planet. I formed this after a career of advising the boards of the major companies across this planet, and I've spent six years without a vacation, seven days a week, in order to make an impact. And I can tell you, because I've been

1 - GC-5

involved in every single thing in California, across the U.S., all the way to Asia, this will only happen if you take full control, period.

I'm also the host of the Smart City Council Summit in three weeks, and I'll be speaking on energy resilience, and I'd like to make an invitation to anyone that would like to join me on stage, along with your other great cities across this planet. Thank you.

COMMISSION SECRETARY IONIN: If you intend to speak on this matter, please line up on the screen side of the room.

MEMBER OF PUBLIC: My name is James Lansing, resident San Francisco, and I have a few questions.

First of all, how much would all this cost? How would it be paid? Over what period of time would it be paid? And what is the likelihood that -- or how would it affect the current rates that San Francisco residents pay now for electricity and gas? Thank you.

COMMISSION SECRETARY IONIN: Okay. Last call for public comment.

MEMBER OF PUBLIC: Hello, my name's Jim Moreshell (phonetic), and unlike the first speaker who knows a lot about this field, I'm just a resident who has experienced PG&E in all its wonder for many, many years now.

1 - GC-5 cont.

From: Byron Kaufman
To: CPC.PGEPowerAssetsEIR; CPC-Commissions Secretary
Subject: CPC EIR - Public Comment - Grid Science Strongly Supports
Date: Friday, April 18, 2025 7:57:11 PM
Attachments: CPC_EIR_Grid Science_Support.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Planning Commission:

Grid Science supports the CPC EIR and has provided this letter to advance the public good.

We have extensive experience in California and are very well informed across both the U.S. and globe regarding the electricity industry and grid modernization.

I believe this is the only course which will serve the needs of San Francisco.
In succession, the City will have provided history defining leadership to the State and numerous other cities held hostage in the current situation.

Proud to be a San Franciscan!

Byron Kaufman

Byron Kaufman
CEO, Founder

San Francisco, USA
+1 415 800 9672 (B)
+1 706 593 6022 (C)
https://gridscience.ai/

1 - GC-3

From: Kathy Keller
To: CPC.PGEPowerAssetsEIR
Subject: Cheaper, Cleaner, more Reliable Power
Date: Thursday, May 15, 2025 11:27:50 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

"T*he Raker Act* (HR-7207) would allow San Francisco to build its dam - but only on one condition: The dam must be used not only to store water but also to generate electric power, which must be sold directly to the citizens through a municipal power agency at the cheapest possible rates."

Since passage of The Raker Act in 1913, San Francisco has been under a federal mandate to provide public power to its residents and businesses. However, PG&E has blocked every effort to make that mandate a reality. It's time to fulfill the intent of the Raker Act.

As a low income elder, I am not in a financial position to continue to support PG&E, especially the outrageous annual compensation of the CEO: "PG&E CEO Patricia Poppe took home $17 million in the 2023 fiscal year, including her $1.4 million salary and $11.8 million in stock awards."

Regards,
Kathryn L Keller
SF Resident since 1991

1 - GC-3

From: Sarah Korda
Sent: Thursday, May 15, 2025 10:37 AM
To: CPC.PGEPowerAssetsEIR
Subject: Support for public energy

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

Hello,

I'm writing in support of PGE being sold to SF so that it can be a public utility hat is maintained by the county.

Thank you!
Sarah
Sarah Korda, MFT/RDT
https://url.avanan.click/v2/r01/___www.sarahkorda.com___.YXAzOnNmZHQyOmE6bzo3MDU5YzQ4NTBiYzBmYWJjZjYxYWM4MzlkYzFhM2FjNzo3Ojg5N2Y6MGQ1MDJmMGE3YWI2MDZhYjU4MzNhOGY4ZTE4OTJjM2Q5NWRjMWJjZGQxNTJkNDgxYzQyNjBkODk3YTVlOWM1ZjpwOlQ6Tg

From: Vitaly Korolev
To: CPC.PGEPowerAssetsEIR
Subject: Re: Environmental Impact Report for the PG&E Power Asset Acquisition (Our City, Our Power)
Date: Thursday, May 08, 2025 8:27:10 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To whom it may concern,

I live in San Francisco and I believe the city should own and manage our electrical grid. I would like to go on record in support of the "Our City, Our Power" project and would be grateful if you would consider this when reviewing the Environmental Impact Report.

Thank you,
Vitaly Korolev

1 - GC-3

From: Jules Landry-Simard
To: CPC.PGEPowerAssetsEIR
Cc: Lurie, Daniel (MYR); Mahmood, Bilal (BOS)
Subject: Support for the Our City, Our Power initiative
Date: Thursday, May 15, 2025 12:58:00 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To whoever it may concern,

I am a resident of San Francisco and a PG&E ratepayer, and I wanted to express my wholehearted support for the initiative to convert our municipal grid to a public utility.

The current for-profit management of the grid by PG&E has resulted in outrageous rates for SF ratepayers, which burdens middle income residents (leading us to having the 2nd highest energy costs in the country, despite our moderate climate), and is severely limiting the electrification of our households due to the rates making non-economical the transition to electric cars, heat pumps/HP water heaters or induction stoves.

In addition, the glacial pace at which they connect new infrastructure is currently delaying badly needed projects throughout the city, whether it is housing, transit upgrades or basic infrastructure maintenance. This is completely unacceptable.

Other cities and counties in California have shown that a public utility is feasible, economical and desirable. Let's make it happen

Best
Jules Landry-Simard

1 - GC-3

involved in every single thing in California, across the U.S., all the way to Asia, this will only happen if you take full control, period.

I'm also the host of the Smart City Council Summit in three weeks, and I'll be speaking on energy resilience, and I'd like to make an invitation to anyone that would like to join me on stage, along with your other great cities across this planet. Thank you.

COMMISSION SECRETARY IONIN: If you intend to speak on this matter, please line up on the screen side of the room.

MEMBER OF PUBLIC: My name is James Lansing, resident San Francisco, and I have a few questions.

First of all, how much would all this cost? How would it be paid? Over what period of time would it be paid? And what is the likelihood that -- or how would it affect the current rates that San Francisco residents pay now for electricity and gas? Thank you. 1-GC-4

COMMISSION SECRETARY IONIN: Okay. Last call for public comment.

MEMBER OF PUBLIC: Hello, my name's Jim Moreshell (phonetic), and unlike the first speaker who knows a lot about this field, I'm just a resident who has experienced PG&E in all its wonder for many, many years now.

From: joshglewis@me.com
To: CPC.PGEPowerAssetsEIR
Subject: Voicing Our City, Our Power support
Date: Monday, April 14, 2025 10:15:42 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I would like to voice my support for San Francisco's acquisition of PG&E's local assets to create a city run power program.

This is a generational opportunity to reclaim control of our energy which would reap significant benefits for all SF residents and businesses. The procurement of a locally owned power grid would enable SF's ability to supply for itself cleaner, safer, and more affordable energy.

Additionally, PG&E has proven countless times to be, to put it kindly, a poor steward of their own resources as well the public's. They are not worthy of our trust, nor our money.

I look forward to SF owning and operating a power supply that is financially, environmentally, and socially responsible and accessible.

grace & peace
Josh Lewis

1 - GC-3

I-Lin

From: Victor Lin
To: CPC.PGEPowerAssetsEIR
Subject: Public Comment - changing from PG&E to Public Power
Date: Monday, May 19, 2025 2:25:51 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I've been an SF resident for literally my entire life. PG&E has been at best negligent this entire time. Their actions have lead to crap service, massive price increases, and the deaths of entire towns.

Having our energy generation dependent on this company that is only beholden to shareholders, the vast majority of whom only care about how much they can extract from the citizens of our city, is frankly terrible policy. Switch to public power.

Thanks,
Victor Lin

1 - GC-3

From: Francine Lofrano
To: CPC.PGEPowerAssetsEIR
Subject: 4/17/2025 Planning Commission Meeting - Public Comment
Date: Monday, April 14, 2025 7:14:43 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To the SF Planning Commission:

I am writing to OPPOSE "Our City, Our Power", San Francisco's effort to purchase PG&E's local electric grid and put it in public hands. Everything the City touches is a mess whether it be homelessness, crime, "war on drugs", Muni, "Non-Profit" bottomless pits - literally everything!! So, as a native San Franciscan who has watched the continued and heartbreaking decline of SF over my entire life, I have ZERO faith that anything the City runs will be a success or a good thing for the citizens of San Francisco - it's just too corrupt and bloated. How on earth, with the City's already huge budget AND deficit, can this even be considered??

"Our City, Our Power" will no doubt result in:

Higher energy price for San Franciscans
Power outages taking longer to restore
More bureaucratic red tape
No real oversight or accountability
Special Interest groups, NOT citizens benefitting

This is just another scam designed to sound good but will be just another disaster for San Franciscans. NO!

Francine Lofrano

1 - GC-3

From: Clay Maffett
To: CPC.PGEPowerAssetsEIR
Subject: Please Proceed with bringing the grid under SF Ownership!
Date: Friday, May 16, 2025 1:33:38 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

That's my comment. I have no real concerns about environmental impact and think the benefits of having SF-owned power generation for city residents and homeowners like myself overwhelmingly point to proceeding with the plan.

Let's make it happen!

-Clay Maffett

From: Karan Mamaniya
To: CPC.PGEPowerAssetsEIR
Subject: Our City Our Power
Date: Monday, April 14, 2025 11:26:23 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

I have lived in Santa Clara for a year before settling in San Francisco. Santa Clara is serviced by Silicon Valley Power is not for profit entity and I have first hand experience having better, faster and cheaper service than PGE. I fully support San Francisco's needs over corporate greed of PGE.

Sincerely,
Karan Mamaniya

From:	Sam
To:	CPC.PGEPowerAssetsEIR
Subject:	Re: Draft Environmental Impact Report Comment Period Extended - PG&E Power Asset Acquisition Project
Date:	Sunday, April 06, 2025 11:13:18 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Please consider this my public comment on the project:

This 600-page EIR is not just adequate, but is too thorough for the magnitude of the issues considered. Stop letting your administrative process be used as a weapon by PG&E (eg, why extend the comment period?) and let's get to the heart of the negotiation. Why does some temporary construction noise get to block a greener and more responsive public power utility for all San Franciscans?

1 - GC-3

Sam Mankiewicz,
San Francisco, CA

On Thu, Apr 3, 2025 at 4:35 PM CPC.PGEPowerAssetsEIR <CPC.PGEPowerAssetsEIR@sfgov.org> wrote:

> The San Francisco Planning Department published a Draft Environmental Impact Report (EIR) for the PG&E Power Asset Acquisition Project on March 19, 2025, available at Environmental Review Documents | SF Planning. This email is an update to inform you that **the public review period has been extended to May 19, 2025.**
>
> If you wish to comment on the adequacy of the Draft EIR, you may submit comments in either or both of the following ways: (1) in person at the San Francisco Planning Commission public hearing on April 17th; or (2) written comments to San Francisco Planning department due by 5 p.m. on May 19, 2025.
>
> **Julie Moore**
> **Principal Environmental Planner**
> **Environmental Planning Division**
> San Francisco Planning Department
> 49 South Van Ness Avenue, Suite 1400, San Francisco, CA 94103
> Direct: 628.652.7566 | www.sfplanning.org

From: Patricia Martell
To: CPC.PGEPowerAssetsEIR
Cc: Patricia Rose Martell
Subject: Frustrated with PG&E!
Date: Thursday, April 17, 2025 3:41:45 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

As a long time resident of San Francisco, paying high property taxes, I would like to see our local government have the power to control our electric and gas supply and delivery. PG&E does not care one iota for us here in San Francisco. For over a year, we have been working here in District 7 with Supervisor Melgar to get PG&E to do something about repeated and prolonged power outages which have plagued our Sherwood Forest neighborhood for more than a decade! It has been incredibly frustrating to say the least.

I would love to see this change happen!

Thank you!
Patricia
she series
256 Casitas Ave
SF, CA 94127
415.215.9222 (c)

1 - GC-3

involved in every single thing in California, across the U.S., all the way to Asia, this will only happen if you take full control, period.

I'm also the host of the Smart City Council Summit in three weeks, and I'll be speaking on energy resilience, and I'd like to make an invitation to anyone that would like to join me on stage, along with your other great cities across this planet. Thank you.

COMMISSION SECRETARY IONIN: If you intend to speak on this matter, please line up on the screen side of the room.

MEMBER OF PUBLIC: My name is James Lansing, resident San Francisco, and I have a few questions.

First of all, how much would all this cost? How would it be paid? Over what period of time would it be paid? And what is the likelihood that -- or how would it affect the current rates that San Francisco residents pay now for electricity and gas? Thank you.

COMMISSION SECRETARY IONIN: Okay. Last call for public comment.

MEMBER OF PUBLIC: Hello, my name's Jim Moreshell (phonetic), and unlike the first speaker who knows a lot about this field, I'm just a resident who has experienced PG&E in all its wonder for many, many years now.

1 - GC-3

All I can really say is, anything that you can do to advance the separation and public takeover of the PG&E, separation for San Francisco is absolutely what I would recommend. We have seen buildings delayed, arrogance, incompetence, everything from PG&E. Anything you can do to advance takeover is strongly recommended by, not only myself, but everybody that I've ever talked to.

(Collective laughter.)

MEMBER OF PUBLIC: I've -- I've never really heard too many people defend PG&E, other than saying that their service people are individually very nice when they're called upon to come into our homes or deal with us. But this company is troublesome, to put it mildly, and anything within your power to make this happen is great.

Given the history with PG&E of their intransigence on even negotiating this, I'm skeptical. You know, even when they were in bankruptcy and they should have been looking for options, they refused to set their price. It's frustrating.

But again, all I'm asking you to do is advance any option which can speed this up. I looked at the four options proposed. The Brisbane makes the most sense to me. But what do I know?

1 - GC-3 cont.

Again, I rely on your goodwill, your judgment and your passion for the City to help facilitate this. Thank you very much.

COMMISSION SECRETARY IONIN: Okay. Final last call for public comment.

Seeing none, public comment is closed and this matter is now before you, commissioners.

COMMISSIONER MOORE: Let me just briefly start with staying that the thoroughness and confidence of the department's EIRs has always been outstanding.

I am in support just examining the possibilities of finding an alternative without advertising or making a marketing pitch for either; that's not my role. However, personally speaking, the subject matter itself is extremely complicated, it is highly technical and it's way above my pay grade. I can only say that what I see, reading, for those parts of the DEIR that I read, they felt well informed and assume that the technical depths with which things are being examined are also looked at by experts in the field, who will, in written comment, comment on this DEIR. They are not here today, and the -- ultimately, the draft EIR will shape itself into a final EIR based on the pushback, or the challenges, or the support that the public and experts in the field will lend to this discussion.

1 - GC-3 cont.

From: R Michael Olexo
To: CPC.PGEPowerAssetsEIR
Subject: SF acquiring local electrical grid
Date: Thursday, May 15, 2025 11:12:25 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I fully support the effort by SF to acquire the local grid from PG&E.

This is something that should have happened when PG&E went bankrupt due to the fires, and instead of supporting this type of initiative for control of our local power grid, Governor Newsom bailed out a failing PG&E.

In any State in the US, where the grid is Public rather than a privately owned monopoly like PG&E, this has worked out well for ratepayers that pay into that system.

Public municipalities also have more laws requiring open meetings as well as a responsibility to feedback, that provides more daylight on big decisions on how our local grid works.

I also support more alternative power being generated locally.

Currently I own a multi-unit building with solar on it, and am also opposed to PG&E's breaking current 20 year utility rate contracts with Owners of solar.

I think governments should be doing everything possible to expand local alternative energy, not get in the way, as PG&E so often does.

Regards.

Michael Olexo

1 - GC-3

From: Trvlr
To: CPC.PGEPowerAssetsEIR
Subject: PG&E Power Asset Acquisition Project
Date: Thursday, May 15, 2025 8:55:48 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

As San Francisco residents we desire to have more direct-local control of our own power in the City and County of San Francisco.

We support the acquisition of these power assets so as to have an opportunity to create even more clean power at cheaper rates in our very unique geography in San Francisco City/County.

We wish as San Francisco residents for the City to move forward with acquiring these power assets from PG&E.

Thank you for your consideration.

Bernal Heights Residents
Mark Reynolds (Spouse)

1 - GC-3

I-Russo

From:
To: CPC.PGEPowerAssetsEIR
Subject: Support for Municipal Power in SF
Date: Thursday, May 15, 2025 1:48:31 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

I wanted to voice my support for the Our City, Our Power initiative.

Rob Russo
835 Cole Street, San Francisco, CA

I-Sage

From: Sage
To: CPC.PGEPowerAssetsEIR
Subject: SF Public Power
Date: Thursday, May 15, 2025 10:59:38 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hi there, I'm writing today to voice my support for SF Public Power. I believe that cheap, accessible, and high quality utilities are a public good and fundamental right.

This stands in stark contrast to the profit drive incentives driving PG&E, which so clearly conflict against the public nature of utilities.

San Franciscans deserves the right to cheap, clean energy without profit margins baked into rates. The city would benefit from local investment, employment, and safer and reliable power.

Thank you,
Sage C.

1 - GC-3

From: Barklee Sanders
To: CPC.PGEPowerAssetsEIR
Subject: OFFICIAL PUBLIC COMMENT SUBMISSION PG&E Power Asset Acquisition Project – Draft Environmental Impact Report
Date: Wednesday, April 16, 2025 1:09:51 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

https://www.treasureislandsfpoweroutages.com/

RE: PG&E Power Asset Acquisition Project – Draft Environmental Impact Report

Date: April 16, 2025

Submitted via email to: CPC.PGEPowerAssetsEIR@sfgov.org

To: San Francisco Planning Commission

Subject: Include Treasure Island Grid Failure in EIR Findings – Demand Emergency Declaration, Structural Audit, and Public Power Acceleration

https://docs.google.com/document/d/1BRhn2IQWmIbOrQyHG0za2JZW7LpthTzk

Dear Planning Commissioners,

I write to strongly support the City's pursuit of full public power, and to urge that the Draft Environmental Impact Report (EIR) for the PG&E & TIDA Power Asset Acquisition Project be amended to explicitly address the ongoing power crisis on Treasure Island—one of the most chronically underserved communities in San Francisco's electrical grid system.

Over the past 25+ years, Treasure Island has experienced more than 508 power outages—an average of one every 2–3 weeks. This is not a mere inconvenience. It is a systemic infrastructure failure that:

Endangers the safety and well-being of residents,

Disrupts essential services, and

Undermines equitable access to modern utilities.

LEGAL & STRUCTURAL CONTEXT

Under California Public Utilities Code § 451, PG&E and TIDA is obligated to provide "just and reasonable" utility service. The documented history of outages on Treasure Island fails this standard. San Francisco's Charter and Proposition H (2001) further mandate that the City pursue public power solutions when private utilities fail to serve the public interest.

Additionally, the chronic neglect of Treasure Island's infrastructure may invoke federal

1 - GC-4

concerns under 42 U.S.C. § 1983 should residents be subjected to disproportionate harm due to long-standing, unresolved failures in basic services.

RECOMMENDED ACTIONS

I request that the Planning Commission:

Declare Treasure Island a Critical Grid Failure Zone in the Final EIR and recommend that the Board of Supervisors pursue an emergency declaration under SF Admin Code Chapter 7.

Direct SFPUC and relevant agencies to produce a full grid reliability and cost analysis for Treasure Island, with timelines and contingency planning.

Reclassify Treasure Island's infrastructure risk under FEMA Lifeline standards and incorporate it into the PG&E asset transition plan as a Tier 1 priority.

Include Treasure Island as a case study of urgency in the Final EIR, reinforcing the rationale for public power and the moral imperative of intervention.

1 - GC-4 cont.

RELEVANT LINKS AND DATA SOURCES

Treasure Island Outage Tracking: www.treasureislandsfpoweroutages.com

SFPUC Power Division Overview: sfpuc.org/programs/power

EIR Public Info Page: sfplanning.org/environmental-review-documents#pge-power-assets

Planning Commission Meeting – April 17, 2025: sfplanning.org/event/planning-commission-april-17-2025

FINAL NOTE

This moment must serve as a turning point. The PG&E asset acquisition is not just about taking over wires from TIDA also —it's about finally delivering justice, resilience, and reliability to every San Franciscan, especially those who have been left behind.

Barklee Sanders
Technology Consultant
More about me: barkleesanders.com
Schedule a meeting: https://cal.com/barkleesanders

RESOLUTION REGARDING EMERGENCY AUTHORIZATIONS AND POWER OUTAGES ON TREASURE ISLAND
https://www.treasureislandsfpoweroutages.com/

Sponsors: Barklee Sanders, Jodi Soboll

WHEREAS, Treasure Island and Yerba Buena Island have experienced an average of 18 power outages per year since 1997 averaging approximately four to five hours each incident, totaling at least 508 power outages (as of 9/24/2024), at a rate that is four times higher than PG&E provided power in San Francisco, highlighting a significant disparity in the frequency of power disruptions experienced by Treasure Island and Yerba Buena Island inhabitants; and

WHEREAS, Census tract 6075017902, encompassing a portion of Treasure Island, is characterized by a demographic in which 60% of its residents are classified as low-income households struggling with high housing expenses, and ranks within the top 25% of the CalEnviroScreen 4.0 for SB 535 Disadvantaged Communities data, meaning these residents bear a disproportionate burden when it comes to power outages in San Francisco; and

WHEREAS, Residents of Treasure Island and Yerba Buena Island are entitled to safe and reliable electric service and under CHAPTER 99: PUBLIC POWER as detailed in SEC. 99.1. FINDINGS, the City's provision of electricity not only ensures the delivery of clean, reliable, and safe electric service but also bestows economic benefits to both the City and the customer; and

WHEREAS, The Treasure Island Development Authority (TIDA), a nonprofit, public-benefit corporation, is tasked with the supervision of development within the Development Plan Area. TIDA manages the property under the purview of the Tidelands Trust, adhering to the land use constraints outlined in the Treasure Island Conversion Act of 1997, which amended Section 33492.5 of the California Health and Safety Code and introduced Section 2.1 to Chapter 1333 of the Statutes of 1968. TIDA has the authority and responsibility to take reasonable actions to address issues related to the power grid on Treasure Island and Yerba Buena Island, and has failed to take sufficient action to address the ongoing power outages; and

WHEREAS, On July 25, 2017, under File Number: 170649, the San Francisco Board of Supervisors passed Resolution Number R0307-17, approving an emergency replacement of two generators on Treasure Island; and https://sfbos.org/sites/default/files/r0307-17.pdf

WHEREAS, While the SFPUC and Treasure Island Community Development LLC are constructing new electrical infrastructure on Treasure Island and Yerba Buena Island, new development customers; while there are no improvements planned for the existing system which will remain operational for current residents for another 10 to 15 years, creating an even greater disparity between these communities; and

WHEREAS, The City Charter (under Article III, section 3.100(14)) and Administrative Code(under Chapter 7, section 7.1(b), Chapter 21, section 21.15, Chapter 6, section 6.60, Chapter 10,sections 10.03 and 10.62) authorize the Mayor, Board of Supervisors, TIDA and SFPUC to take immediate emergency action to protect the public that might be applicable to the situation at Treasure Island and Yerba Buena Island; and

WHEREAS, on May 3rd 2023 Mayor London Breed declared that the “the safety and wellbeing of our residents and businesses is our first priority, and as of a fundamental principle of good government, it's our duty to deliver services San Franciscans deserve” in response to a power outage in north-eastern San Francisco.

https://www.sf.gov/news/city-leaders-call-pge-address-recent-power-outages-impacting-thousands-residents

NOW, THEREFORE, BE IT RESOLVED, That the Citizens' Advisory Committee of the San Francisco Public Utilities Commissioner hereby requests SFPUC, the Board of Supervisors, and The Mayor to endorse the emergency declaration for the immediate inspections and deployment of the new grid.

BE IT FURTHER RESOLVED, That the SFPUC Citizens' Advisory Committee requests the Board of Supervisors recommend that, by July 2024, TIDA conduct a comprehensive inspection of the electrical distribution system in accordance with the relevant utility industry standards and practices for inspections, as set forth in California Public Utilities Commission General Order 165,General Order 128, and General Order 95; and

BE IT FURTHER RESOLVED, That the SFPUC Citizens' Advisory Committee requests the Mayor, and the Board of Supervisors identify a public agency that has authority and responsibility for oversight of The Treasure Island Development Authority (TIDA) to assure it is meeting all its obligations and responsibilities related to the existing performance, health and safety, current and future maintenance of the power grid on Treasure Island and Yerba Buena Island.

BE IT FURTHER RESOLVED, That the SFPUC Citizens' Advisory Committee requests the mayor, and the board of supervisors to obtain a detailed accounting from The Treasure Island Development Authority (TIDA) of all spending activities from the $15M Funds allocated to TIDA for providing reliable, healthy, and safe power to the existing residents of Treasure Island and Yerba Buena Island. This report should be provided by TIDA within two weeks of the Mayor and B.O.S. request.

BE IT FURTHER RESOLVED, That the SFPUC Citizens' Advisory Committee requests the SFPUC, using past maintenance reports and data, provides a complete analysis and report (referred to as the TREASURE ISLAND AND YERBA BUENA ISLAND FAILURE MODE ANALYSIS REPORT) characterizing and quantifying all past outages on Treasure Island and Yerba Buena Island, including but not limited to; 1) Quantity and Types of Failure Modes, 2) Quantity and Type of Corrective Actions, 3) Failure rates over time, for no less than the past 15 years, for total failures and each failure mode, 4) Total cost of corrective action for total failures and for each Failure Mode, 5) Number of repeat failures for any location, 6) Map showing locations of all failures and by each failure mode, and 7) Total outage time (customer impact including time of outage, time to respond, and time for corrective action) for total failures and for each failure mode. Believing this data should be readily available in SFPUC records, the SFPUC Citizens' Advisory Committee requests the SFPUC provide this analysis and report within 12 weeks of this Resolution.

BE IT FURTHER RESOLVED, That the SFPUC Citizens' Advisory Committee requests the SFPUC, upon review of the complete the TREASURE ISLAND AND YERBA BUENA ISLAND FAILURE MODE ANALYSIS REPORT, provides a recommended Corrective Action Plan and Preventative Maintenance Action Plan (referred to as RECOMMENDATIONS FOR TREASURE ISLAND AND YERBA BUENA ISLAND POWER GRID CONFORMANCE TO CALIFORNIA CODES AND REGULATIONS) to prevent further outages impacting Treasure Island and Yerba Buena residents. Implementation of these recommended measures should bring the TREASURE ISLAND AND YERBA BUENA ISLAND power grid performance (based primarily on, but not limited to, outages) to the same levels as the City of San Francisco. Each recommendation should have a comprehensive description, note which failure modes are

addressed, and provide an estimated cost of the measure and emergency maintenance savings. The SFPUC Citizens' Advisory Committee requests the SFPUC provide this analysis and report within 6 weeks of the TREASURE ISLAND AND YERBA BUENA ISLAND FAILURE MODE ANALYSIS REPORT.

BE IT FURTHER RESOLVED, That the SFPUC Citizens' Advisory Committee requests the Mayor, the Board of Supervisors, and SFPUC to work with the public agency that has been identified as having authority and responsibility for oversight of The Treasure Island Development Authority (TIDA), TIDA, and the SFPUC CAC and Power Subcommittee to review the TREASURE ISLAND AND YERBA BUENA ISLAND FAILURE MODE ANALYSIS REPORT and RECOMMENDATIONS FOR TREASURE ISLAND AND YERBA BUENA ISLAND POWER GRID CONFORMANCE TO CALIFORNIA CODES AND REGULATIONS findings with the goal of assuring TIDA is meeting all its obligations and responsibilities related to the existing performance, health and safety, current and future maintenance of the existing power grid on Treasure Island and Yerba Buena Island.

BE IT FURTHER RESOLVED, That the SFPUC Citizens' Advisory Committee urges the Board of Supervisors to request that TIDA immediately inspect the overhead and underground electric distribution system and to develop, by July 2024, a capital improvement plan for replacing the aging electrical infrastructure, ensuring that the plan addresses the need for resilience and sustainability in the face of extreme weather events and climate change; and

BE IT FURTHER RESOLVED, That the SFPUC Citizens' Advisory Committee requests that the
Board of Supervisors work with TIDA and the SFPUC to identify and secure funding to ensure the long-term sustainability and reliability of the power infrastructure on Treasure Island and Yerba Buena Island, and mitigation of the continuing health and safety crisis affecting existing residents pending implementation of long-term corrective action.

PROPOUNDED BY: Barklee Sanders

From: Nathan Sarang-Walters
To: CPC.PGEPowerAssetsEIR
Subject: SF Public Power comment
Date: Monday, April 14, 2025 3:13:04 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I'm writing to express my strong support for San Francisco's initiative to expand public power through the "Our City, Our Power" campaign. As a resident of San Francisco's Outer Mission neighborhood, I believe that transitioning to a publicly owned and operated electric grid is a crucial step toward achieving a cleaner, more reliable, and more equitable energy future for our city.

San Francisco has a long history of providing public power to essential city services, including our airport, public hospital, schools, and parks. Programs like CleanPowerSF have already demonstrated success by delivering 100% renewable electricity to over 375,000 customers two years ahead of schedule, significantly reducing greenhouse gas emissions and improving air quality.

However, the current arrangement with PG&E has hindered further progress. PG&E's control over the electric grid has led to delays and increased costs for critical public projects, including affordable housing and infrastructure improvements. Since 2018, PG&E has obstructed over 135 local public projects in San Francisco, costing taxpayers $35 million.

By pursuing full public ownership of the electric grid, San Francisco can ensure that decisions about our energy future are made transparently and in the best interests of our communities. Public power allows for reinvestment into local infrastructure, job creation, and the acceleration of our climate goals without the profit-driven motives of investor-owned utilities.

Importantly, public power also has the potential to reduce costs for residents. By eliminating the need to generate profits for shareholders, a municipal utility can keep rates more stable and affordable. Cities with public utilities often enjoy lower electricity rates than those served by private monopolies like PG&E. As a San Franciscan facing high utility bills, I believe this shift could bring much-needed financial relief for many households across the city.

I urge you to support the city's efforts to acquire PG&E's local electric assets and expand public power to serve all San Franciscans. This transition is not only feasible but necessary to build a resilient and sustainable energy system that benefits everyone.

Thank you for your attention to this important matter.

Sincerely,
Nathan Sarang-Walters

1 - GC-3

I-Shane

From: SPacct
To: CPC.PGEPowerAssetsEIR
Subject: Support
Date: Thursday, May 15, 2025 10:44:17 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

I live in San Francisco and am tired of giving money to PGEs for profit nonsense. I don't care if it's cheaper, the same price, or more expensive I would rather keep the money in the city and invest in infrastructure. Rather than pay for executives and shareholder compensation. How many rate increases did we have in the past year. Privatized utilities are a sham. Please make this happen and quickly.

Shane

From: Donna Sharee
To: CPC.PGEPowerAssetsEIR
Subject: Support for Public Power
Date: Wednesday, April 30, 2025 11:54:21 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To Whom it May Concern,

Our family wholeheartedly supports public power. Other cities have successfully migrated to public power and have lowered their electricity rates, created cleaner more sustainable energy sources, and made a greater investment in their communities. San Francisco can do it, too!

PG&E has only kept raising our rates with no oversight, no guardrails, and no conscience - only pursuing more money for their shareholders and to pay their debts! The ratepayers are at their mercy!

As home owners we try to do our best to be environmentally conscious stewards of our small carbon-footprint but this would be a win-win for all!

Sincerely,
Donna Sharee

Donna Sharee Design
cell 1.415.314.6235
dsharee@earthlink.net

1 - GC-3

From: Donna Sharee
To: CPC.PGEPowerAssetsEIR
Cc: ChenStaff
Subject: Please submit my public comment in support of Public Power
Date: Thursday, May 15, 2025 4:55:13 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To Whom it May Concern:

I am a big supporter of public power. It would allow for more affordable electricity rates, create cleaner energy, provide safer and more reliable power, and invest in local communities.

We are long overdue for this exciting advance for the City!

Sincerely,
Donna Sharee
District 11 resident

1 - GC-3

I-Smith Fong

From: Elizabeth Smith
To: CPC.PGEPowerAssetsEIR
Subject: Public comment: PG&E Power Asset Acquisition(Our City, Our Power)
Date: Tuesday, April 15, 2025 10:45:07 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To the San Francisco Planning Commission:

I'm writing in support of Our City, Our Power and the PG&E power asset acquisition. I'm a San Francisco resident (zip code 94116) and I'm unable to make the EIR hearing on Thursday 4/17, but I strongly support the project. Acquiring PG&E's power assets for public ownership of the electric grid would give San Franciscans cleaner, more reliable, and more affordable public power.

San Francisco deserves to have control and ownership of its own energy grid so that we can achieve bold climate goals and provide clean, affordable power to residents. PG&E is deeply unpopular because of its for-profit structure, high rates, and safety violations, and I don't know a single person who wants to keep allowing PG&E to control our grid. Local ownership and public power is the right choice for San Francisco!

Thank you, Elizabeth Smith Fong
Parkside, 94116

1 - GC-3

From: Kevin
To: CPC.PGEPowerAssetsEIR
Subject: Public comment for PG&E Power Asset Acquisition (Our City, Our Power)
Date: Monday, April 14, 2025 10:42:26 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I would like to submit a public comment for the upcoming planning commission hearing on 4/17/2025 regarding the PG&E Power Asset Acquisition (Our City, Our Power).

PG&E has been increasing rates significantly, while doing a poor job maintaining our infrastructure. I would like to see the public utility be purchased by Our City, Our Power, who I believe will do a better job. Additionally I believe it will be easier to hold them accountable if they are not doing a good job.

Kevin Smithly
Inner Sunset Resident

1 - GC-3

From: Lisa Stanziano
To: CPC.PGEPowerAssetsEIR
Subject: I support public power
Date: Tuesday, April 15, 2025 9:23:27 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am writing in support of San Francisco acquiring PG&E's electric grid so that the City can establish its own public power service for our community.

Sincerely,
L. Stanziano
227 Eureka St., SF
35-year resident of San Francisco

1 - GC-3

From: Gregory Stevens
To: CPC.PGEPowerAssetsEIR
Subject: Buy the grid from PG&E
Date: Monday, April 14, 2025 12:00:38 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

Good morning -
I'm writing as a Richmond District resident in full support of being the electrical grid and put it in public hands. This will lower our rates, provide more sustainable energy, and is a great investment in our city. We need and we demand public power! Criminal monopoly IOU's should be ousted.

Thank you,

—
Rev. Gregory Stevens (they/he)
(650) 313-3998

I-Taylor

From: michael Taylor
To: CPC.PGEPowerAssetsEIR
Subject: Approve PG&E takeover
Date: Friday, May 16, 2025 6:57:35 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am in favor of moving forward with Our City, Our Power – a bold effort to acquire PG&E's local electric grid and bring it under public ownership. This would mean:

- More affordable electricity rates
- Cleaner energy
- Safer and more reliable power
- Greater accountability and investment in our local communities

Thank you.

Michael Taylor
1201 California St
202
San Francisco, CA 94109

1 - GC-3

From: Kenny Teeter
To: CPC.PGEPowerAssetsEIR
Subject: PG&E power Asset acquisition Project Draft EIR Public Hearing
Date: Friday, May 02, 2025 6:07:09 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

Hello,

I would like to voice my support for the PG&E power Asset acquisition Project. The Draft EIR has no concerning unmitigated environmental impacts from my perspective.

Thank you,
Kenneth Teeter

From: Cole Turner
To: CPC.PGEPowerAssetsEIR
Subject: "Our City, Our Power"
Date: Thursday, May 15, 2025 5:50:12 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

We need a public power system!

Sacramento and other cities with public power have more-reliable, greener, and cheaper power!

We need to catch up with them.

--
In gratitude,

Cole

From: Jim Warshell
To: CPC.PGEPowerAssetsEIR
Subject: Comment to planning commission
Date: Thursday, May 15, 2025 6:27:29 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

I absolutely believe in the merit of ridding SF of PG&E and would encourage all efforts to bring that about at the earliest possible date.
Jim Warshell
Sent from my iPad

I-Watkins

From: sarah watkins
To: CPC.PGEPowerAssetsEIR
Subject: My support
Date: Thursday, May 15, 2025 4:18:16 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

Yes to City Power grid. No to PGE.
Sarah Watkins
Sent from my iPad

From: Thomas Weed
To: CPC.PGEPowerAssetsEIR
Subject: Public Power
Date: Monday, April 14, 2025 2:17:20 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

My vote is for the purchase of PG&E's local electric grid & to put it in public hands.
Thank you,

Thomas Weed
360 32nd Avenue Apt 12
San Francisco, CA 94121
(415) 387-3448
ThomasWeed@aol.com

1 - GC-3

From: Will Whitney
To: CPC.PGEPowerAssetsEIR
Subject: Supporting the PG&E asset acquisition project
Date: Thursday, May 15, 2025 12:20:25 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

As a resident of Noe Valley in SF, I'd like to voice my support for the city acquisition of PG&E's power distribution assets in the city. PG&E has poorly served the city and wildly overcharged us for power distribution.

I-Ye

From: tommy ye
To: CPC.PGEPowerAssetsEIR
Subject: We need public power now
Date: Wednesday, April 16, 2025 10:50:16 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

1 - GC-3

These PG&E bills are criminal, how are they allowed to raise the bill with the justification of needing more profit!

Yahoo Mail: Search, Organize, Conquer

ATTACHMENT B
NOISE ANALYSIS SUPPORTING DOCUMENTATION

PAGE INTENTIONALLY BLANK

ESA

575 Market Street
Suite 3700
San Francisco, CA 94105
415.896.5900 phone
415.896.0332 fax

esassoc.com

Technical Memorandum

date April 16, 2026

to Julie Moore and Chelsea Fordham, San Francisco Environmental Planning

from Chris Dugan, ESA

subject Noise Technical Memorandum Updates– PG&E Power Asset Acquisition Project

This memorandum provides updated information to address refinements made to the PG&E Power Asset Acquisition project since publication of the draft environmental impact report (Draft EIR) on March 19, 2025. This memorandum supports the updated evaluation of the project's potential noise and vibration analysis shown in Chapter 11 of the Final EIR and, where necessary, supplements and replaces the technical information included in Draft EIR Appendix E, Noise Technical Memo. **Table 1** summarizes project refinements and the updated information provided to address these refinements. Sections 1 through 4 of this memorandum show the updated results of the project's noise and vibration analysis, based on the information summarized in Table 1. These results supplement or replace the findings of Draft EIR Appendix E as indicated in Table 1. The same methods described in the Draft EIR were used to conduct the updated noise and vibration analyses presented in this memorandum.

TABLE 1
PROJECT REFINEMENTS THAT AFFECT THE DRAFT EIR'S NOISE TECHNICAL MEMORANDUM

Project Refinement	Description	Updated Information Provided
Addition of Baylands Staging Area	The new Baylands Staging Area would result in staging activities at a new location on Bayshore Boulevard in Brisbane.	A new analysis of potential Baylands construction staging area noise levels at the nearest receptors on Geneva Avenue (see Section 1 and Attachment A). This new information supplements the analysis of construction staging noise levels provided in Draft EIR Impacts NO-1 and NO-2, Draft EIR Appendix E, and Draft EIR Appendix E, Attachment C.1.
Expansion of Martin Substation Separation Area into Daly City	With the expanded area, potential construction and operational activities at the Martin Substation would now occur in Daly City in addition to Brisbane. In addition, with the expanded area, construction and operational activities at the Martin Substation would occur closer to noise sensitive receptors to the south and west of the Daly City Yard. Finally, since construction and operation activities could occur in either Daly City or Brisbane, each jurisdiction's relevant noise ordinance standards were considered.	An updated analysis of potential Martin Substation Separation construction noise levels (see Section 1 and Attachment A) at sensitive receptors at Geneva Avenue, Midway Village, Main Street, and Schwerin Street. This updated information partially replaces information used in the analysis of Martin Substation Separation construction noise levels in Draft EIR Impact NO-2, Draft EIR Appendix E, and Draft EIR Appendix E, Attachment C.1. An updated analysis of potential Martin Subsation operational transformer noise levels, including an updated transformer noise level of 72 dBA at 6 feet, at the nearest property planes and sensitive receptors at Geneva Avenue and Midway Village (see Section 2 and Attachment B). This updated information replaces information used in the analysis of Martin Substation Separation transformer noise levels in Draft EIR

TABLE 1
PROJECT REFINEMENTS THAT AFFECT THE DRAFT EIR'S NOISE TECHNICAL MEMORANDUM

Project Refinement	Description	Updated Information Provided
		Impact NO-3, Draft EIR Appendix E, and Draft EIR Appendix E, Attachment C.3. An updated analysis of potential Martin Subsation Separation construction vibration levels (see Section 3 and Attachment C). This updated information replaces information used in the analysis of Martin Substation Separation construction vibration levels in Draft EIR Impact NO-4, Draft EIR Appendix E, and Draft EIR Appendix E, Attachment C.3.
Corrected Footprint of the New City Substation (Project Variant)	The new City Substation footprint has not changed; however, the Draft EIR's analysis of potential new City Substation construction and operational activities was inadvertently based on smaller project footprint that was approximately 100 feet farther away from sensitive receptors to the south of the Daly City Yard.	An updated analysis of potential new City Substation construction noise levels at sensitive receptors at the Midway Village (see Section 1 and Attachment A). This updated information partially replaces information used in the analysis of new City Substation construction noise levels in Draft EIR Impact NO-2, Draft EIR Appendix E, and Draft EIR Appendix E, Attachment C.1. An updated analysis of potential new City Substation operational transformer noise levels, including an updated transformer noise level of 72 dBA at 6 feet, at the nearest property plane and sensitive receptors at Midway Village (see Section 2 and Attachment B). This updated information replaces information used in the analysis of new City Substation transformer noise levels in Draft EIR Impact NO-3, Draft EIR Appendix E, and Draft EIR Appendix E, Attachment C.3. An updated analysis of potential new City Substation construction vibration levels (see Section 3 and Attachment C). This updated information replaces information used in the analysis of New City Substation construction vibration levels in Draft EIR Impact NO-4, Draft EIR Appendix E, and Draft EIR Appendix E, Attachment C.3.
Updated Transformer Noise Level for both Martin Substation and New City Substation (Project Variant) Operations	The noise level produced by new transformers at the Martin Substation was revised upwards based on a manufacturer's guaranteed noise level for similar sized 115 kilovolt (KV)-12 kV and 230 kV-115 kV transformer equipment. The revised transformer noise level is assumed to be 72 dBA at 6 feet for one transformer, as compared to the Draft EIR's assumed noise level of 55 dBA at 6 feet.	An updated analysis of Martin Substation and new City Substation transformer noise levels (see Section 3 and Attachment C) at the nearest property planes and sensitive receptor locations . The updated analysis also considers the expanded Martin Substation Separation Area and the correct new City Substation footprint (see above). This updated information replaces information used in the analysis of Martin Substation and New City Substation transformer noise levels in Draft EIR Impact NO-3, Draft EIR Appendix E, and Draft EIR Appendix E, Attachment C.3.
Use of Leq instead of L90 metric to define ambient noise level and evaluate stationary noise sources like transformers.	The analysis of stationary source noise levels has been revised to consistently use the Leq metric to define ambient noise levels, instead of the L90 metric, for all stationary source analysis.[a] This change aligns with legislative changes to San Francisco Police Code Section 2901 in July 2025 that remove the L90 definition of ambient noise and replace it with an LAeq definition.[b]	An updated analysis of Martin Substation and new City Substation transformer noise levels (see Section 3 and Attachment C) at the nearest property planes and sensitive receptors that is based on the use of the Leq metric to define ambient noise conditions. This updated information replaces information used in the analysis of Martin Substation and New City Substation transformer noise levels in Draft EIR Impact NO-3, Draft EIR Appendix E, and Draft EIR Appendix E, Attachment C.3.

Notes:

a. The Draft EIR had used the L90 to define ambient noise levels in the evaluation of transformer noise only.

b. Prior to July 2025, the City and County of San Francisco defined ambient noise using the L90 metric. In July 2025, the Board of Supervisors of the City and County of San Francisco adopted Ordinance 118-25, which revised the definition of "ambient" in Police Code Section 2901 to mean "the LAeq and LCeq values produced during a minimum ten-minute period."

1 New and Updated Construction Noise Analysis

1.1 Baylands Staging Area

The Baylands staging area could be used for temporary construction staging or temporary PG&E parking and materials/equipment storage relocated from the Daly City Yard. As described in the Draft EIR (p. 3.2-30 and 3.2-36), loaders and dump trucks would be the loudest equipment used at the construction staging area. The Baylands staging area would be on the nearby Brisbane Baylands site. Compared to the Martin Substation Separation area, the potential Baylands staging area would be located closer to some commercial receptors (on Geneva Avenue) but the same distance or farther away from hotel and residential receptors (also on Geneva Avenue). The updated construction staging noise levels at the commercial and hotel receptors on Geneva Avenue are summarized in **Table 2**. This change does not affect the Draft EIR's estimate of staging noise levels at any other sensitive receptor in the vicinity of the project.

TABLE 2
CONSTRUCTION STAGING AREA NOISE LEVELS AT NEAREST SENSITIVE RECEPTOR

Component	Construction Phase or Activity	Location	Loudest Two Pieces of Equipment	Combined Equipment Noise Level at 50 Feet (dBA Leq)[a]	Distance to Receptor (Feet)	Attenuated Noise Level at Nearest Sensitive Receptor (dBA Leq)
Martin Substation Separation	Staging at Baylands	Brisbane	Loader/ Dump truck	77	265 (Commercial Receptor)	63
Martin Substation Separation	Staging at Baylands	Brisbane	Loader/ Dump truck	77	350 (Hotel Receptor)	60

Notes:

a. The approximate distances are measured from the nearest edge of the construction activity to the nearest sensitive receptor property line.

Source: Attachment A.1

1.2 Updated Martin Substation Separation Site

The expanded Martin Substation Separation site would result in construction equipment operating closer to sensitive receptors located to the south and west of the substation site. In some cases, construction equipment could operate hundreds of feet closer to receptors than assumed for the Draft EIR's analysis, resulting in higher potential construction noise levels than identified in Draft EIR Impacts NO-1 and NO-2. The updated Martin Substation Separation construction noise levels at the nearest sensitive receptors to the north (Geneva Avenue), south (residences at Midway Village and on Main Street) and west (Bayshore School and residences on Schwerin Avenue) are summarized in **Table 3**.

TABLE 3
UPDATED MARTIN SUBSTATION SEPARATION CONSTRUCTION NOISE LEVELS

Nearest Offsite Sensitive Receptor	Distance to Receptor Property Plane (Feet)[a]	Existing Monitored Daytime Noise Level (dBA Leq)	Construction Phase	Loudest Two Noise Sources	Estimated Construction Noise Level (dBA Leq)	Resultant Noise Level (Existing + Construction) (dBA Leq)	Increase over Existing
Residences at Midway Village (LT-5)	280	51	Site Excavation	Jack Hammer/ Concrete Saw	70	70	+19
			Concrete Foundations	Tractor/ Generator	67	67	+16
			Backfill and Grading	Tractor/ Generator	67	67	+16
			Placement of Facilities	Jack Hammer/ Generator	68	68	+17
			Equipment and Gate Installation	Jack Hammer/ Tractor	69	69	+18
Residences at 3100 Block of Geneva Avenue (LT-1)	150/200	66	Site Excavation	Jack Hammer/ Concrete Saw	76/73	76.4/74	+10.4/+8
			Concrete Foundations	Tractor/ Generator	73/70	73/72	+7/+6
			Backfill and Grading	Tractor/ Generator	73/70	73/72	+7/+6
			Placement of Facilities	Jack Hammer/ Generator	74/72	74/73	+8/+7
			Equipment and Gate Installation	Jack Hammer/ Tractor	75/72	76/73	+9.5/+7
Bayshore School and Residences at 800 Block of Schwerin Street (LT-3)	660	72	Site Excavation	Jack Hammer/ Concrete Saw	64	73	+1
			Concrete Foundations	Tractor/ Generator	60	72	<1
			Backfill and Grading	Tractor/ Generator	60	72	<1
			Placement of Facilities	Jack Hammer/ Generator	61	72	<1
			Equipment and Gate Installation	Jack Hammer/ Tractor	62	72	<1
Residences at 100 Block of Main Street (LT-4)	400	63	Site Excavation	Jack Hammer/ Concrete Saw	67	69	+6
			Concrete Foundations	Tractor/ Generator	64	67	+4
			Backfill and Grading	Tractor/ Generator	64	67	+4
			Placement of Facilities	Jack Hammer/ Generator	65	67	+4
			Equipment and Gate Installation	Jack Hammer/ Generator	66	68	+5

Notes:

a. The approximate distances are measured from the nearest edge of the construction activity to the nearest sensitive receptor property line.

Source: Attachment A.2

1.3 Updated New City Substation (Project Variant)

As corrected, construction of the new City Substation would result in construction equipment operating approximately 100 feet closer to sensitive receptors (located to the south) compared to the Draft EIR analysis, resulting in higher potential construction noise levels than identified in Draft EIR Impacts NO-1 and NO-2. The updated new City Substation construction noise levels at the nearest sensitive receptors to the south (residences at Midway Village) are summarized in **Table 4**. This change does not affect the Draft EIR's estimate of new City Substation construction noise levels at sensitive receptors on Geneva Avenue, Main Street, or Schwerin Street.

TABLE 4
UPDATED NEW CITY SUBSTATION CONSTRUCTION NOISE LEVELS

Nearest Offsite Sensitive Receptor	Distance to Receptor Property Plane (Feet)a	Existing Monitored Daytime Noise Level (dBA Leq)	Construction Phase	Loudest Two Noise Sources	Estimated Construction Noise Level (dBA Leq)	Resultant Noise Level (Existing + Construction) (dBA Leq)	Increase over Existing
Residences at Midway Village (LT-5)	95	51	Site Excavation and Preparation	Tractor/ Pile Driver	88	88	+37
			Concrete Foundations	Tractor/ Generator	76	76	+25
			Backfill and Grading	Tractor/ Generator	76	76	+25
			Placement of Facilities	Jack Hammer/ Generator	77	77	+26
			Equipment and Gate Installation	Tractor/ Generator	76	76	+25

Note:

a. The approximate distances are measured from the nearest edge of the construction activity to the nearest sensitive receptor property line.

Source: Attachment A.3

2 Updated Operational Transformer Noise Analysis

2.1 Martin Substation

The expanded Martin Substation Separation site would result in transformers operating closer to sensitive receptors located to the south and west of the substation site; however, receptors to the west would continue to be farther away than receptors to the north and south. Each individual transformer would generate a noise level of 72 dBA at 6 feet. This updated information results in higher transformer noise levels than were estimated in Draft EIR Impact NO-3. The updated Martin Substation transformer noise levels at the nearest property planes with adjacent sensitive receptors (Geneva Avenue to the north and Midway Village to the south) and at the nearest sensitive receptors are summarized in **Table 5** and **Table 6**, respectively.

TABLE 5
UPDATED MARTIN SUBSTATION TRANSFORMER NOISE LEVELS AT NEAREST PROPERTY PLANES

Property Plane	Distance to Property Plane (Feet)[a]	Existing Noise Level (dBA Leq)	Single Transformer Noise Level at 6 Feet (dBA Leq)	Number of Transformers	Estimated Total Transformer Noise Level at Property Plane (dBA Leq)	Resultant Noise Level (Existing + Transformer) (dBA Leq)	Increase over Existing
North - 3100 Block of Geneva Avenue (LT-1)	40[b]	66.0 (daytime)/ 64.0 (nighttime)	71.8	2	58.3	66.7 (daytime)/ 65.0 (nighttime)	+0.7 (daytime)/ +1.0 (nighttime)
North - 2900 Block of Geneva Avenue (LT-2)	40[b]	72.0 (daytime)/ 65.0 (nighttime)	71.8	2	58.3	72.2 (daytime)/ 65.8 (nighttime)	+0.2 (daytime)/ +0.8 (nighttime)
South - Residences at Midway Village (LT-5)	280[b]	51.0 (daytime)/ 45.0 (nighttime)	71.8	2	41.4	51.5 (daytime)/ 46.6 (nighttime)	+0.5 (daytime)/ +1.6 (nighttime)
East – Bayshore Boulevard (LT-1)	6[b]	66.0 (daytime)/ 64.0 (nighttime)	71.8	2	74.8	75.4 (daytime)/ 75.2 (nighttime)	+9.4 (daytime)/ +11.2 (nighttime)
West – 700/800 Block of Schwerin Street (LT-3)	585[b]	72.0 (daytime)/ 65.0 (nighttime)	71.8	2	35.0	72.0 (daytime)/ 65.0 (nighttime)	0.0

Notes:

a. The approximate distances are measured from the assumed face of the transformer to the nearest property plane
b. An existing natural gas easement would result in transformers being located no closer than 40 feet from the substation northern property line. All other transformers were assumed to have a six-foot setback from the substation boundary.

Source: Attachment B

TABLE 6
UPDATED MARTIN SUBSTATION TRANSFORMER NOISE LEVELS AT NEAREST SENSITIVE RECEPTORS

Receptor	Distance to Receptor (Feet)[a]	Existing Noise Level (dBA Leq)	Single Transformer Noise Level at 6 Feet	Number of Transformers	Estimated Total Transformer Noise Level at Sensitive Receptor (dBA L_{eq})	Resultant Noise Level (Existing + Transformer) (dBA L_{90})	Increase over Existing
Residences at 3100 Block of Geneva Avenue (LT-1)	155	66.0 (daytime)/ 64.0 (nighttime)	71.8	2	46.6	66.0 (daytime)/ 64.1 (nighttime)	0.0 (daytime)/ +0.1 (nighttime)
Residences at 2900 Block of Geneva Avenue (LT-2)	155	72.0 (daytime)/ 65.0 (nighttime)	71.8	2	46.6	72.0 (daytime)/ 65.1 (nighttime)	0.0 (daytime)/ +0.1 (nighttime)
Residences at Midway Village (LT-5)	285	51.0 (daytime)/ 45.0 (nighttime)	71.8	2	41.3	51.4 (daytime)/ 46.5 (nighttime)	+0.4 (daytime)/ +1.5 (nighttime)

Note:

a. The approximate distances are measured from the assumed face of the transformer to the nearest sensitive receptor building facade.

Source: Attachment B

2.2 New City Substation (Project Variant)

The corrected new City Substation footprint would result in transformers operating closer to sensitive receptors located to the south of the substation site. Each individual transformer would generate a noise level of 72 dBA at 6 feet. This updated information results in higher transformer noise levels than estimated in Draft EIR Impact NO-3. The updated new City Substation transformer noise levels at the at the nearest property plane with adjacent sensitive receptors (Geneva Avenue to the north and Midway Village to the south) and at the nearest sensitive receptors are summarized in **Table 7** and **Table 8**, respectively.

TABLE 7
UPDATED NEW CITY SUBSTATION TRANSFORMER NOISE LEVELS AT NEAREST PROPERTY PLANES

Property Plane	Distance to Property Plane (Feet)[a]	Existing Noise Level (dBA Leq)	Single Transformer Noise Level at 6 Feet	Number of Transformers	Estimated Total Transformer Noise Level at Property Plane (dBA Leq)	Resultant Noise Level (Existing + Transformer) (dBA Leq)	Increase over Existing
North - 3100 Block of Geneva Avenue (LT-1)	365	66.0 (daytime)/ 64.0 (nighttime)	71.8	6	43.9	66.0 (daytime)/ 64.0 (nighttime)	0.0
North - 2900 Block of Geneva Avenue (LT-2)	365	72.0 (daytime)/ 65.0 (nighttime)	71.8	6	43.9	72.0 (daytime)/ 65.0 (nighttime)	0.0
South - Residences at Midway Village (LT-5)	101	51.0 (daytime)/ 45.0 (nighttime)	71.8	6	55.1	56.5 (daytime)/ 55.5 (nighttime)	+5.5 (daytime)/ +10.5 (nighttime)
East – Bayshore Boulevard (LT-1)	1,200	66.0 (daytime)/ 64.0 (nighttime)	71.8	6	33.6	66.0 (daytime)/ 64.0 (nighttime)	0.0
West – Residences on 700/800 block of Schwerin Street	245	72.0 (daytime)/ 65.0 (nighttime)	71.8	6	47.4	72.0 (daytime)/ 65.1 (nighttime)	0.0 (daytime) +0.1 (nighttime)

Notes:

a. The approximate distances are measured from the assumed face of the transformer to the nearest property plane. All transformers were assumed to have a six-foot setback from the substation boundary.

Source: Attachment B

TABLE 8
UPDATED NEW CITY SUBSTATION TRANSFORMER NOISE LEVELS AT NEAREST SENSITIVE RECEPTORS

Receptor	Distance to Receptor (Feet)[a]	Existing Noise Level (dBA Leq)	Single Transformer Noise Level at 6 Feet	Number of Transformers	Estimated Total Transformer Noise Level at Sensitive Receptor (dBA Leq)	Resultant Noise Level (Existing + Transformer) (dBA Leq)	Increase over Existing
Residences at 3100 Block of Geneva Avenue (LT-1)	480	66.0 (daytime)/ 64.0 (nighttime)	71.8	6	41.5	66.0(daytime)/ 64.0 (nighttime)	0.0

TABLE 8
UPDATED NEW CITY SUBSTATION TRANSFORMER NOISE LEVELS AT NEAREST SENSITIVE RECEPTORS

Receptor	Distance to Receptor (Feet)[a]	Existing Noise Level (dBA Leq)	Single Transformer Noise Level at 6 Feet	Number of Transformers	Estimated Total Transformer Noise Level at Sensitive Receptor (dBA Leq)	Resultant Noise Level (Existing + Transformer) (dBA Leq)	Increase over Existing
Residences at 2900 Block of Geneva Avenue (LT-2)	480	72.0 (daytime)/ 65.0 (nighttime)	71.8	6	41.5	72.0 (daytime)/ 65.0 (nighttime)	0.0
Residences at Midway Village (LT-5)	106	51.0 (daytime)/ 45.0 (nighttime)	71.8	6	54.6	56.2 (daytime)/ 55.1 (nighttime)	+5.2 (daytime) +10.1 (nighttime
West – Residences on 700/800 block of Schwerin Street	270	72.0 (daytime)/ 65.0 (nighttime)	71.8	6	46.5	72.0 (daytime)/ 65.1 (nighttime)	0.0 (daytime) +0.1 (nighttime

Notes:

a. The approximate distances are measured from the assumed face of the transformer to the nearest sensitive receptor building facade. All transformers were assumed to have a six-foot setback from the substation boundary.

Source: Attachment B

2.3 Fire Walls

Transformers at the Martin Substation and new City Substation could be located behind 25-foot-tall, 16-inch-thick fire walls that would shield the transformers and serve to block the direct transmission of noise from the transformers to the property plane and sensitive receptors located beyond the property plane. These walls are preliminarily estimated to provide a minimum 15 dBA reduction in transformer noise levels immediately outside the fire wall, a minimum of 10 dBA of attenuation at distances up to 100 feet outside the fire wall, and between 7 to 9 dBA dBA of attenuation at distances between 100 and 300 feet outside the fire wall (see Attachment B). The specific reduction realized at property planes and sensitive receptor locations would depend on the actual distance between the fire wall and the property plane, the actual distance between the fire wall and the receptor location, and the elevation of the receptor with respect to the transformer and fire wall.

3 New and Updated Construction Vibration Analysis

The expanded Martin Substation Separation site and corrected new City Substation footprint would result in construction equipment operating closer to sensitive residential and historic structures, resulting in higher potential construction vibration levels than identified in Draft EIR Impact NO-4. **Table 9** summarizes updated construction vibration levels.

TABLE 9
UPDATED CONSTRUCTION VIBRATION LEVELS

Equipment	Estimated Peak Particle Velocity (PPV; inches per second)[a]						
	8 Feet (Martin Substation Building)	25 Feet (Reference)	60 Feet	100 Feet (Midway Village Residences – new City Substation)	150/200 Feet (Geneva Avenue Residences)	290 Feet (Midway Village Residences – Martin Substation Separation)	360 Feet (Martin Substation Warehouse)
Vibratory Roller (12 ton)	0.249	0.067	0.026	0.015	0.009/0.007	0.005	0.004
Jack Hammer	0.123	0.035	0.013	0.008	0.005/0.004	0.002	0.002

Notes:

a. The listed distances represent the shortest distance between equipment operations and specific structures that could be impacted by Martin Substation activities (Martin Substation Building, Geneva Avenue Residences, Midway Village Residences – 290 feet, and Martin Substation Warehouse) and New City Substation activities (Midway Village – 100 feet), plus 25-foot reference and 60-foot estimates for additional context.

Source: Attachment C

Attachment A

Updated Construction Noise Analysis

A.1 Daly City Yard and Baylands Staging Areas

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/24/2026
Case Description: Daly City Yard Staging

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Geneva Residences	Residential	69	66	64

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	450	0
Dump Truck	No	40		76.5	450	0

Results

Equipment	Calculated (dBA) *Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Front End Loader	60	56	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	57.4	53.4	N/A	N/A	N/A	N/A	N/A	N/A
Total	60	57.9	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Midway Village	Residential	61	61	61

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	150	0
Dump Truck	No	40		76.5	150	0

Results

Equipment	Calculated (dBA) *Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Front End Loader	69.6	65.6	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	66.9	62.9	N/A	N/A	N/A	N/A	N/A	N/A
Total	69.6	67.5	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/3/2026
Case Description: Baylands Site Staging

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Geneva Commercial	Commercial	69	66	64

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	265	0
Dump Truck	No	40		76.5	265	0

Equipment		Calculated (dBA) *Lmax	Leq	Results Day Lmax	Leq	Noise Limits (dBA) Evening Lmax	Leq	Night Lmax	Leq
Front End Loader		64.6	60.6	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck		62	58	N/A	N/A	N/A	N/A	N/A	N/A
	Total	64.6	62.5	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Geneval - Bridgepoint Inn	Residential	69	66	61

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	350	0
Dump Truck	No	40		76.5	350	0

Equipment		Calculated (dBA) *Lmax	Leq	Results Day Lmax	Leq	Noise Limits (dBA) Evening Lmax	Leq	Night Lmax	Leq
Front End Loader		62.2	58.2	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck		59.5	55.6	N/A	N/A	N/A	N/A	N/A	N/A
	Total	62.2	60.1	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

A.2 Martin Substation Separation

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 12/15/2025
Case Description: Martin Substation - Site Excavation (Include Trenching)

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Midway Village	Residential	51	51	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	280	0
Jackhammer	Yes	20		88.9	280	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Concrete Saw		74.6	67.6	N/A	N/A	N/A	N/A	N/A
Jackhammer		73.9	66.9	N/A	N/A	N/A	N/A	N/A
	Total	74.6	70.3	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Geneva Residences	Residential	66	64	64

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	200	0
Jackhammer	Yes	20		88.9	200	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Concrete Saw		77.5	70.5	N/A	N/A	N/A	N/A	N/A
Jackhammer		76.8	69.9	N/A	N/A	N/A	N/A	N/A
	Total	77.5	73.2	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Schwerin Street Resic	Residential	72	65	65

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Concrete Saw	No	20		89.6	660	0
Jackhammer	Yes	20		88.9	660	0

			Results				
		Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening		Night
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Concrete Saw		67.2	60.2	N/A	N/A	N/A	N/A	N/A
Jackhammer		66.5	59.5	N/A	N/A	N/A	N/A	N/A
	Total	67.2	62.9	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Main Street	Residential	63	57	57

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Concrete Saw	No	20		89.6	400	0
Jackhammer	Yes	20		88.9	400	0

			Results				
		Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening		Night
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Concrete Saw		71.5	64.5	N/A	N/A	N/A	N/A	N/A
Jackhammer		70.8	63.8	N/A	N/A	N/A	N/A	N/A
	Total	71.5	67.2	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Property Line (Genev	Industrial	66	64	64

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	115	0
Jackhammer	Yes	20		88.9	0	0

Results

		Calculated (dBA)		Noise Limits (dBA)				
				Day		Evening		Night
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Concrete Saw		82.3	75.4	N/A	N/A	N/A	N/A	N/A
Jackhammer			-7	N/A	N/A	N/A	N/A	N/A
	Total	82.3	75.4	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Report date: 12/15/2025
Case Description: Martin Substation - Concrete Foundations

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Midway Village	Residential	51	51	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		280	0
Generator	No	50		80.6	280	0

		Results						
		Calculated (dBA)		Noise Limits (dBA)				
				Day		Evening		Night
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Tractor		69	65.1	N/A	N/A	N/A	N/A	N/A
Generator		65.7	62.7	N/A	N/A	N/A	N/A	N/A
	Total	69	67	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Geneva Residences	Residential	66	64	64

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		200	0
Generator	No	50		80.6	200	0

		Results						
		Calculated (dBA)		Noise Limits (dBA)				
				Day		Evening		Night
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Tractor		72	68	N/A	N/A	N/A	N/A	N/A
Generator		68.6	65.6	N/A	N/A	N/A	N/A	N/A
	Total	72	70	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Schwerin Street Resid	Residential	72	65	65

			Equipment			
			Spec	Actual	Receptor	Estimated
		Impact	Lmax	Lmax	Distance	Shielding
Description		Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor		No	40	84		660	0
Generator		No	50		80.6	660	0

		Results						
		Calculated (dBA)		Noise Limits (dBA)				
				Day		Evening		Night
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Tractor		61.6	57.6	N/A	N/A	N/A	N/A	N/A
Generator		58.2	55.2	N/A	N/A	N/A	N/A	N/A
	Total	61.6	59.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Main Street	Residential	63	57	57

			Equipment			
			Spec	Actual	Receptor	Estimated
		Impact	Lmax	Lmax	Distance	Shielding
Description		Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor		No	40	84		400	0
Generator		No	50		80.6	400	0

		Results						
		Calculated (dBA)		Noise Limits (dBA)				
				Day		Evening		Night
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Tractor		65.9	62	N/A	N/A	N/A	N/A	N/A
Generator		62.6	59.6	N/A	N/A	N/A	N/A	N/A
	Total	65.9	63.9	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 12/15/2025
Case Description: Martin Substation - Backfill and Grading

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Midway Village	Residential	51	51	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		280	0
Generator	No	50		80.6	280	0

		Results							
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		69	65.1	N/A	N/A	N/A	N/A	N/A	N/A
Generator		65.7	62.7	N/A	N/A	N/A	N/A	N/A	N/A
	Total	69	67	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Geneva Residences	Residential	66	64	64

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		200	0
Generator	No	50		80.6	200	0

		Results							
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		72	68	N/A	N/A	N/A	N/A	N/A	N/A
Generator		68.6	65.6	N/A	N/A	N/A	N/A	N/A	N/A
	Total	72	70	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Schwerin Street Resi	Residential	72	65	65

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84		660	0
Generator	No	50		80.6	660	0

		Results							
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		61.6	57.6	N/A	N/A	N/A	N/A	N/A	N/A
Generator		58.2	55.2	N/A	N/A	N/A	N/A	N/A	N/A
	Total	61.6	59.6	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Main Street	Residential	63	57	57

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84		400	0
Generator	No	50		80.6	400	0

		Results							
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		65.9	62	N/A	N/A	N/A	N/A	N/A	N/A
Generator		62.6	59.6	N/A	N/A	N/A	N/A	N/A	N/A
	Total	65.9	63.9	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 12/15/2025
Case Description: Martin Substation - Placement of Facilities

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Midway Village	Residential	51	51	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Generator	No	50		80.6	280	0
Jackhammer	Yes	20		88.9	280	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Generator		65.7	62.7	N/A	N/A	N/A	N/A	N/A	N/A
Jackhammer		73.9	66.9	N/A	N/A	N/A	N/A	N/A	N/A
	Total	73.9	68.3	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Geneva Residences	Residential	66	64	64

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Generator	No	50		80.6	200	0
Jackhammer	Yes	20		88.9	200	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Generator		68.6	65.6	N/A	N/A	N/A	N/A	N/A	N/A
Jackhammer		76.8	69.9	N/A	N/A	N/A	N/A	N/A	N/A
	Total	76.8	71.2	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Schwerin Street Resi	Residential	72	65	65

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Generator	No	50		80.6	660	0
Jackhammer	Yes	20		88.9	660	0

		Results							
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Generator		58.2	55.2	N/A	N/A	N/A	N/A	N/A	N/A
Jackhammer		66.5	59.5	N/A	N/A	N/A	N/A	N/A	N/A
	Total	66.5	60.9	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Main Street	Residential	63	57	57

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Generator	No	50		80.6	400	0
Jackhammer	Yes	20		88.9	400	0

		Results							
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Generator		62.6	59.6	N/A	N/A	N/A	N/A	N/A	N/A
Jackhammer		70.8	63.8	N/A	N/A	N/A	N/A	N/A	N/A
	Total	70.8	65.2	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 12/15/2025
Case Description: Martin Substation - Equipment and Gate Installation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Midway Village	Residential	51	51	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		280	0
Jackhammer	Yes	20		88.9	280	0

Equipment		Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Tractor		69	65.1	N/A	N/A	N/A	N/A	N/A	N/A
Jackhammer		73.9	66.9	N/A	N/A	N/A	N/A	N/A	N/A
	Total	73.9	69.1	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Geneva Residences	Residential	66	64	64

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		200	0
Jackhammer	Yes	20		88.9	200	0

Equipment	Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Tractor	72	68	N/A	N/A	N/A	N/A	N/A	N/A
Jackhammer	76.8	69.9	N/A	N/A	N/A	N/A	N/A	N/A

	Total	76.8	72	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Schwerin Street Resi	Residential	72	65	65

			Equipment				
			Spec	Actual	Recept	Estimated	
		Impact	Lmax	Lmax	Distanc	Shielding	
Description		Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor		No	40	84		660	0
Jackhammer		Yes	20		88.9	660	0

		Results							
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		61.6	57.6	N/A	N/A	N/A	N/A	N/A	N/A
Jackhammer		66.5	59.5	N/A	N/A	N/A	N/A	N/A	N/A
	Total	66.5	61.7	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Main Street	Residential	63	57	57

			Equipment				
			Spec	Actual	Recept	Estimated	
		Impact	Lmax	Lmax	Distanc	Shielding	
Description		Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor		No	40	84		400	0
Jackhammer		Yes	20		88.9	400	0

		Results							
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		65.9	62	N/A	N/A	N/A	N/A	N/A	N/A
Jackhammer		70.8	63.8	N/A	N/A	N/A	N/A	N/A	N/A
	Total	70.8	66	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

A.3 New City Substation (Project Variant)

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 2/3/2026
Case Desc New Substation (Variant) - Site Excavation & Preparation

---- Receptor #1 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Midway Vil	Residentia	51	51	51

			Equipment				
			Spec	Actual	Receptor	Estimated	
	Impact		Lmax	Lmax	Distance	Shielding	
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)	
Tractor	No	40	84		95	0	
Impact Pile Driver	Yes	20		101.3	95	0	

			Results					
	Calculated (dBA)		Noise Limits (dBA)					
			Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor	78.4	74.4	N/A	N/A	N/A	N/A	N/A	N/A
Impact Pile Driver	95.7	88.7	N/A	N/A	N/A	N/A	N/A	N/A
Total	95.7	88.9	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Bayshore E	Residentia	72	70	65

			Equipment				
			Spec	Actual	Receptor	Estimated	
	Impact		Lmax	Lmax	Distance	Shielding	
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)	
Tractor	No	40	84		300	0	
Impact Pile Driver	Yes	20		101.3	300	0	

			Results					
	Calculated (dBA)		Noise Limits (dBA)					
			Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor	68.4	64.5	N/A	N/A	N/A	N/A	N/A	N/A
Impact Pile Driver	85.7	78.7	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.7	78.9	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Report date: 2/3/2026
Case Description: New City Substation - Concrete Foundations

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Midway Village	Residential	51	50	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		95	0
Generator	No	50		80.6	95	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	Night
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Tractor		78.4	74.4	N/A	N/A	N/A	N/A	N/A
Generator		75.1	72	N/A	N/A	N/A	N/A	N/A
	Total	78.4	76.4	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Bayshore Elementary	Residential	72	70	65

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		300	0
Generator	No	50		80.6	300	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	Night
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Tractor		68.4	64.5	N/A	N/A	N/A	N/A	N/A
Generator		65.1	62.1	N/A	N/A	N/A	N/A	N/A
	Total	68.4	66.4	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Leq
N/A
N/A
N/A

Leq
N/A
N/A
N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/3/2026
Case Description: New City Substation - Backfill and Grading

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Midway Village	Residential	51	50	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84		95	0
Generator	No	50		80.6	95	0

		Results							
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		78.4	74.4	N/A	N/A	N/A	N/A	N/A	N/A
Generator		75.1	72	N/A	N/A	N/A	N/A	N/A	N/A
	Total	78.4	76.4	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Bayshore Elementary	Residential	72	70	65

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84		300	0
Generator	No	50		80.6	300	0

		Results							
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		68.4	64.5	N/A	N/A	N/A	N/A	N/A	N/A
Generator		65.1	62.1	N/A	N/A	N/A	N/A	N/A	N/A
	Total	68.4	66.4	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/3/2026
Case Description: New City Substation - Placement of Facilities

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Midway Village	Residential	51	50	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Jackhammer	Yes	20		88.9	95	0
Generator	No	50		80.6	95	0

				Results					
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Jackhammer		83.3	76.3	N/A	N/A	N/A	N/A	N/A	N/A
Generator		75.1	72	N/A	N/A	N/A	N/A	N/A	N/A
	Total	83.3	77.7	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Bayshore Elementary	Residential	72	70	65

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Jackhammer	Yes	20		88.9	300	0
Generator	No	50		80.6	300	0

				Results					
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Jackhammer		73.3	66.3	N/A	N/A	N/A	N/A	N/A	N/A
Generator		65.1	62.1	N/A	N/A	N/A	N/A	N/A	N/A
	Total	73.3	67.7	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/3/2026
Case Description: New City Substation - Equipment and Gate

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Midway Village	Residential	51	50	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		95	0
Generator	No	50		80.6	95	0

		Results							
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		78.4	74.4	N/A	N/A	N/A	N/A	N/A	N/A
Generator		75.1	72	N/A	N/A	N/A	N/A	N/A	N/A
	Total	78.4	76.4	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Bayshore Elementary	Residential	72	70	65

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		300	0
Generator	No	50		80.6	300	0

		Results							
		Calculated (dBA)		Noise Limits (dBA)					
				Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		68.4	64.5	N/A	N/A	N/A	N/A	N/A	N/A
Generator		65.1	62.1	N/A	N/A	N/A	N/A	N/A	N/A
	Total	68.4	66.4	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Attachment B

Updated Transformer Noise Analysis

The Variant proposes the following transformers:

1. Four (4) 115kV-12kV, 45MVA step-down transformers
2. Two (2) 230kV-115kV, 420MVA power auto transformers

Transformer sound levels will vary based on capacity size; design elements - such as core type winding configuration and tank construction; orientation; power levels. Furthermore, the sound levels can be attenuated utilizing various techniques, such as optimized transformer design with low-noise core materials, custom-designed transformer enclosures, sound barrier walls, and strategic placement

From the American National Standards Institute (ANSI) IEEE C57.136, IEEE Guide for Audible Sound of Liquid-Immersed Power Transformers. Transformer #1 would be a conservative noise level for the four (4) 115kV-12kV step down transformers. Transformer #8 would be a good representative for the two (2) 230kV-115kV power auto transformers.

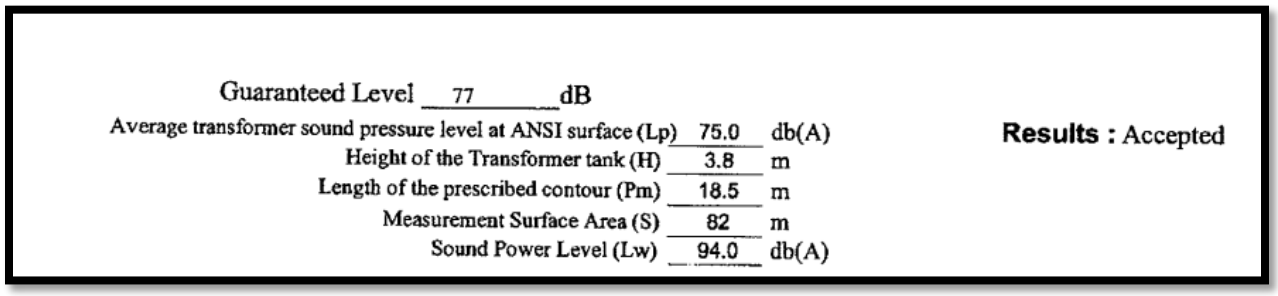
The core refers to an energized transformer but not connected (with power flowing through it). The load refers to the noise level under load. The distance of these measurements is 1 meter from surface of transformer tank.

Table 1—Examples of measured sound pressure levels of core and load noise of pow transformers

Transformer	Voltage, kV		MVA	Transformer type	Noise component, dBA	
	HV	LV			Core	Load
3-phase transformers						
1	161	14	39	Step-down	67.3	69.0
2	110	12	75	Step-down	53.3	59.1
3	138	72	112	Auto	59.5	54.4
4	230	33	133	Step-down	78.4	59.5
5	242	69	199	Auto	70.4	63.8
6	345	140	199	Auto	72.0	57.6
7	345	21.2	263	SVC	58.8	70.4
8	230	69	336	Auto	75.5	68.4
1-phase transformers						
1	162	69	37	Step-down	58.6	61.8
2	735	23	109	GSU	60.0	49.1
3	513	16	187	GSU	64.6	70.9
4	352	143	200	Auto	73.5	61.8
5	513	16	210	GSU	66.7	66.6
6	525	18	320	GSU	63.2	67.5
7	500	230	333	Auto	62.0	53.5

The numbers in Table 1 support recent projects that we have completed with transformers.

For example, a similar 45MVA step down transformer from a recent project had similar results with a guarantee of 77dB at 1 meter (with load) [project.and.manufacturer.have. been.redacted]



Guaranteed Level 77 dB

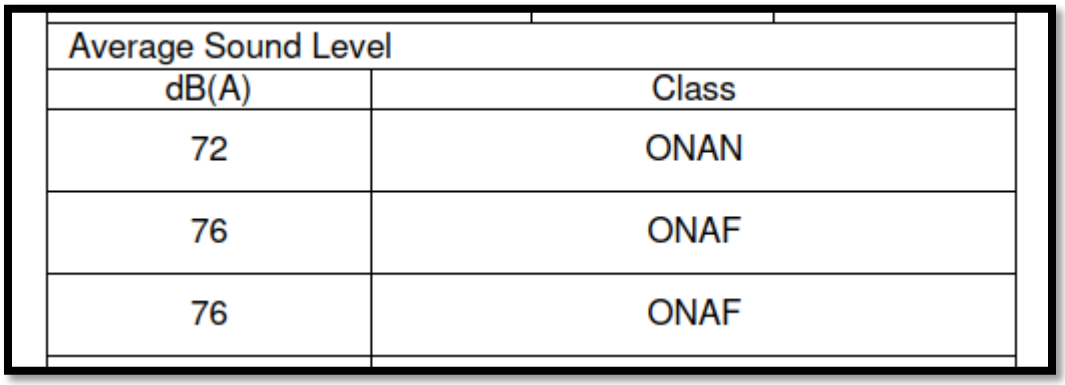
Average transformer sound pressure level at ANSI surface (Lp)	75.0	db(A)
Height of the Transformer tank (H)	3.8	m
Length of the prescribed contour (Pm)	18.5	m
Measurement Surface Area (S)	82	m
Sound Power Level (Lw)	94.0	db(A)

Results : Accepted

Exhibit.A¿001MVA.Step.Down.Transformer.Sound.Levels

For a similar 333 MVA autotransformer on a recent project, the sound levels are similar at 76 dB (with load) at 1 meter, shown below [project.and.manufacturer.have.been.redacted]

In below table, ONAN shows the fans are off (air natural), ONAF is with fan on (air forced).



Average Sound Level	
dB(A)	Class
72	ONAN
76	ONAF
76	ONAF

Exhibit.B¿999MVA.Auto.Transformer.Sound.Levels

PG&E Power Asset Acquisition Project
San Francisco Planning
Transformer Reference and Project Noise Level Data
Prepared by ESA, March 2026

Table 1: Unmitigated Martin Substation Transformer Noise Levels at Property Planes (Daytime)									
Property Plane	Transformer Reference Noise Data		Transformer Noise at Distance (Single Source)		Transformer Noise at Distance (Multiple Sources)		Existing Leq Noise Level at Property Plane	Existing + Project Noise Level	Increase in Ambient Leq Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA (Leq)	dBA (Leq)	dBA (Leq)
Reference	3.3	77.0	6	71.8	2	74.8	--	--	--
North (Geneva Avenue, LT-1)	3.3	77.0	40	55.3	2	58.3	66.0	66.7	0.7
North (Geneva Avenue, LT-2)	3.3	77.0	40	55.3	2	58.3	72.0	72.2	0.2
South (Midway Village, LT-5)	3.3	77.0	280	38.4	2	41.4	51.0	51.5	0.5
East (7 Mile House/Bayshore, LT-1)	3.3	77.0	6	71.8	2	74.8	66.0	75.4	9.4
West (Schwerin Street, LT-3)	3.3	77.0	585	32.0	2	35.0	72.0	72.0	0.0

PG&E Power Asset Acquisition Project
San Francisco Planning
Transformer Reference and Project Noise Level Data
Prepared by ESA, March 2026

Table 2: Unmitigated Martin Substation Transformer Noise Levels at Property Planes (Nighttime)

Property Plane	Transformer Reference Noise Data		Transformer Noise at Distance (Single Source)		Transformer Noise at Distance (Multiple Sources)		Existing Leq Noise Level at Property Plane	Existing + Project Noise Level	Increase in Ambient Leq Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA (Leq)	dBA (Leq)	dBA (Leq)
Reference	3.3	77.0	6	71.8	2	74.8	--	--	--
North (Geneva Avenue, LT-1)	3.3	77.0	40	55.3	2	58.3	64.0	65.0	1.0
North (Geneva Avenue, LT-2)	3.3	77.0	40	55.3	2	58.3	65.0	65.8	0.8
South (Midway Village, LT-5)	3.3	77.0	280	38.4	2	41.4	45.0	46.6	1.6
East (7 Mile House/Bayshore, LT-1)	3.3	77.0	6	71.8	2	74.8	64.0	75.2	11.2
West (Schwerin Street, LT-3)	3.3	77.0	585	32.0	2	35.0	65.0	65.0	0.0

Table 3: Unmitigated New City Substation Transformer Noise Levels at Property Planes (Daytime)

Property Plane	Transformer Reference Noise Data		Transformer Noise at Distance (Single Source)		Transformer Noise at Distance (Multiple Sources)		Existing Leq Noise Level at Property Plane	Existing + Project Noise Level	Increase in Ambient Leq Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA (Leq)	dBA (Leq)	dBA (Leq)
Reference	3.3	77.0	6	71.8	6	79.6	--	--	--
North (Geneva Avenue, LT-1)	3.3	77.0	365	36.1	6	43.9	66.0	66.0	0.0
North (Geneva Avenue, LT-2)	3.3	77.0	365	36.1	6	43.9	72.0	72.0	0.0
South (Midway Village, LT-5))	3.3	77.0	101	47.3	6	55.1	51.0	56.5	5.5
East (7 Mile House/Bayshore, LT-1)	3.3	77.0	1200	25.8	6	33.6	66.0	66.0	0.0
West (Schwerin Street, LT-3)	3.3	77.0	245	39.6	6	47.4	72.0	72.0	0.0

PG&E Power Asset Acquisition Project
San Francisco Planning
Transformer Reference and Project Noise Level Data
Prepared by ESA, March 2026

Table 4: Unmitigated New City Substation Transformer Noise Levels at Property Planes (Nighttime)									
Property Plane	Transformer Reference Noise Data		Transformer Noise at Distance (Single Source)		Transformer Noise at Distance (Multiple Sources)		Existing Leq Noise Level at Property Plane	Existing + Project Noise Level	Increase in Ambient Leq Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA (Leq)	dBA (Leq)	dBA (Leq)
Reference	3.3	77.0	6	71.8	6	79.6	--	--	--
North (Geneva Avenue, LT-1)	3.3	77.0	365	36.1	6	43.9	64.0	64.0	0.0
North (Geneva Avenue, LT-2)	3.3	77.0	365	36.1	6	43.9	65.0	65.0	0.0
South (Midway Village, LT-5)	3.3	77.0	101	47.3	6	55.1	45.0	55.5	10.5
East (7 Mile House/Bayshore, LT-1)	3.3	77.0	1200	25.8	6	33.6	64.0	64.0	0.0
West (Schwerin Street, LT-3))	3.3	77.0	245	39.6	6	47.4	65.0	65.1	0.1

Notes:

Reference transformer noise level information provided by San Francisco Planning for similar sized 115 kilovolt (KV)-12 kV and 230 kV-115 kV transformer equipment.

Transformer noise at distance for a single source calculated using standard point source spherical propagation assumptions. See Caltrans, 2013, equation 2-13.

Transformer noise at distance for multiple sources calculated using standard point source spherical propagation and equal sound pressure assumptions. See Caltrans, 2013, equation 2-9.

Existing Leq noise levels obtained from EIR Table 3.2-3

PG&E Power Asset Acquisition Project
San Francisco Planning
Transformer Reference and Project Noise Level Data
Prepared by ESA, March 2026

Table 5: Unmitigated Martin Substation Transformer Noise Levels at Noise Sensitive Receptors (Daytime)

Receptor	Transformer Reference Noise Data		Transformer Noise at Distance (Single Source)		Transformer Noise at Distance (Multiple Sources)		Existing Leq Noise Level at Receptor	Existing + Project Noise Level	Increase in Ambient Leq Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA (Leq)	dBA (Leq)	dBA (Leq)
Reference	3.3	77.0	6	71.8	2	74.8	--	--	--
North (Geneva Avenue, LT-1)	3.3	77.0	155	43.6	2	46.6	66.0	66.0	0.0
North (Geneva Avenue, LT-2)	3.3	77.0	155	43.6	2	46.6	72.0	72.0	0.0
South (Midway Village, LT-5)	3.3	77.0	285	38.3	2	41.3	51.0	51.4	0.4
West (Schwerin Street, LT-3)	3.3	77.0	615	31.6	2	34.6	72.0	72.0	0.0

Table 6: Unmitigated Martin Substation Transformer Noise Levels at Noise Sensitive Receptors (Nighttime)

Receptor	Transformer Reference Noise Data		Transformer Noise at Distance (Single Source)		Transformer Noise at Distance (Multiple Sources)		Existing Leq Noise Level at Receptor	Existing + Project Noise Level	Increase in Ambient Leq Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA (Leq)	dBA (Leq)	dBA (Leq)
Reference	3.3	77.0	6	71.8	2	74.8	--	--	--
North (Geneva Avenue, LT-1)	3.3	77.0	155	43.6	2	46.6	64.0	64.1	0.1
North (Geneva Avenue, LT-2)	3.3	77.0	155	43.6	2	46.6	65.0	65.1	0.1
South (Midway Village, LT-5)	3.3	77.0	285	38.3	2	41.3	45.0	46.5	1.5
West (Schwerin Street, LT-3)	3.3	77.0	615	31.6	2	34.6	65.0	65.0	0.0

PG&E Power Asset Acquisition Project

San Francisco Planning

Transformer Reference and Project Noise Level Data

Prepared by ESA, March 2026

Table 7: Unmitigated New City Substation Transformer Noise Levels at Noise Sensitive Receptors (Daytime)

Receptor	Transformer Reference Noise Data		Transformer Noise at Distance (Single Source)		Transformer Noise at Distance (Multiple Sources)		Existing Leq Noise Level at Receptor	Existing + Project Noise Level	Increase in Ambient Leq Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA (Leq)	dBA (Leq)	dBA (Leq)
Reference	3.3	77.0	6	71.8	6	79.6	--	--	--
North (Geneva Avenue, LT-1)	3.3	77.0	480	33.7	6	41.5	66.0	66.0	0.0
North (Geneva Avenue, LT-2)	3.3	77.0	480	33.7	6	41.5	72.0	72.0	0.0
South (Midway Village, LT-5))	3.3	77.0	106	46.9	6	54.6	51.0	56.2	5.2
West (Schwerin Street, LT-3))	3.3	77.0	270	38.7	6	46.5	72.0	72.0	0.0

Table 8: Unmitigated New City Substation Transformer Noise Levels at Noise Sensitive Receptors (Nighttime)

Receptor	Transformer Reference Noise Data		Transformer Noise at Distance (Single Source)		Transformer Noise at Distance (Multiple Sources)		Existing Leq Noise Level at Receptor	Existing + Project Noise Level	Increase in Ambient Leq Noise Level
	Distance	dBA Leq	Distance	dBA Leq	No. Sources	dBA Leq	dBA (Leq)	dBA (Leq)	dBA (Leq)
Reference	3.3	77.0	6	71.8	6	79.6	--	--	--
North (Geneva Avenue, LT-1)	3.3	77.0	480	33.7	6	41.5	64.0	64.0	0.0
North (Geneva Avenue, LT-2)	3.3	77.0	480	33.7	6	41.5	65.0	65.0	0.0
South (Midway Village, LT-5)	3.3	77.0	106	46.9	6	54.6	45.0	55.1	10.1
West (Schwerin Street, LT-3))	3.3	77.0	270	38.7	6	46.5	65.0	65.1	0.1

Notes:

Reference transformer noise level information provided by San Francisco Planning for similar sized 115 kilovolt (KV)-12 kV and 230 kV-115 kV transformer equipment.

Transformer noise at distance for a single source calculated using standard point source spherical propagation assumptions. See Caltrans, 2013, equation 2-13.

Transformer noise at distance for multiple sources calculated using standard point source spherical propagation and equal sound pressure assumptions. See Caltrans, 2013, equation 2-9.

Existing Leq noise levels obtained from EIR Table 3.2-3

PG&E Power Asset Acquisition Project
San Francisco Planning
Transformer Reference and Project Noise Level Data
Prepared by ESA, March 2026

Table 9: Transformer Source Noise Level Information							
Noise Source:	Transformer w/ Cooling Fan						
Source Frequency (Hz):	125						

Table 10: Source, Receptor, and Barrier Elevation Data						
Source / Receptor	Approximate Elevation Above Mean Sea Level					
	Grade	Receiver	Source	Effective Source	Barrier	Top of Barrier
Martin Sub Transformers / Northern Property Plane	0.0	5.0	20.0	19.0	0.0	25.0
Martin Sub Transformers / Southern Property Plane	0.0	5.0	20.0	19.0	0.0	25.0
Martin Sub Transformers / Geneva Avenue Residence (Ground Level)	0.0	5.0	20.0	19.0	0.0	25.0
Martin Sub Transformers / Geneva Avenue Residence (2nd Story)	0.0	15.0	20.0	19.0	0.0	25.0
Martin Sub Transformers / Midway Village (Ground Level)	0.0	5.0	20.0	19.0	0.0	25.0
Martin Sub Transformers / Midway Village (2nd Story)	0.0	15.0	20.0	19.0	0.0	25.0
Martin Sub Transformers / Midway Village (3rd Story)	0.0	25.0	20.0	19.0	0.0	25.0

Table 11: Path Length Difference with 25-Foot-High Wall								
Source/Receptor	**A**	**B**	**C**	**D**	**D1**	**D2**	**H1**	**H2**
Martin Sub Transformers / Northern Property Plane	17.09	44.72	57.72	56	16	40	14.0	20.0
Martin Sub Transformers / Southern Property Plane	17.09	280.71	296.33	296	16	280	14.0	20.0
Martin Sub Transformers / Geneva Avenue Residence (Ground Level)	17.09	156.28	171.57	171	16	155	14.0	20.0
Martin Sub Transformers / Geneva Avenue Residence (2nd Story)	17.09	155.32	171.05	171	16	155	4.0	10.0
Martin Sub Transformers / Midway Village (Ground Level)	17.09	285.70	301.33	301	16	285	14.0	20.0
Martin Sub Transformers / Midway Village (2nd Story)	17.09	285.18	301.03	301	16	285	4.0	10.0
Martin Sub Transformers / Midway Village (3rd Story)	17.09	285.00	301.06	301	16	285	-6.0	0.0

Table 12: Fresnel Number (N_0) and Barrier Attenuation Estimate				
Source/Receptor	**δ (Feet)**	**λ (Feet)**	**N_0**	**Attenuation Estimate (dB)**
Martin Sub Transformers / Northern Property Plane	4.09	9.000	0.907975	12.7
Martin Sub Transformers / Southern Property Plane	1.47	9.000	0.326775	9.1
Martin Sub Transformers / Geneva Avenue Residence (Ground Level)	1.80	9.000	0.400191	9.7
Martin Sub Transformers / Geneva Avenue Residence (2nd Story)	1.36	9.000	0.302995	8.9
Martin Sub Transformers / Midway Village (Ground Level)	1.46	9.000	0.325221	9.1
Martin Sub Transformers / Midway Village (2nd Story)	1.24	9.000	0.274848	8.6
Martin Sub Transformers / Midway Village (3rd Story)	1.03	9.000	0.228492	8.2

Notes:

Approximate elevations and distances obtained from Google Earth.

Barrier attenuation estimates assume point source characteristics, single barrier,and simple terrain. See Caltrans, 2013, Figure 2-13 and equation 2-16. Estimate does not account for any reflections or other noise sources.

Reference transformer dominant frequency information provided by San Francisco Planning for similar sized 115 kilovolt (KV)-12 kV and 230 kV-115 kV transformer equipment.

PG&E Power Asset Acquisition Project
San Francisco Planning
Transformer Reference and Project Noise Level Data
Prepared by ESA, March 2026

Table 13: Source, Receptor, and Barrier Elevation Data						
Source / Receptor	Approximate Elevation Above Mean Sea Level					
	Grade	Receiver	Source	Effective Source	Barrier	Top of Barrier
New City Sub Transformers - Northern Property Line	0.0	5.0	20.0	19.0	0.0	25.0
New City Sub Transformers - Southern Property Line	0.0	5.0	20.0	19.0	0.0	25.0
New City Sub Transformers - Geneva Avenue Residence (Ground Level)	0.0	5.0	20.0	19.0	0.0	25.0
New City Sub Transformers - Geneva Avenue Residence (2nd Story)	0.0	15.0	20.0	19.0	0.0	25.0
New City Sub Transformers - Midway Village (Ground Level)	0.0	5.0	20.0	19.0	0.0	25.0
New City Sub Transformers - Midway Village (2nd Story)	0.0	15.0	20.0	19.0	0.0	25.0
New City Sub Transformers - Midway Village (3rd Story)	0.0	25.0	20.0	19.0	0.0	25.0

Table 14: Path Length Difference with 25-Foot-High Wall								
Receptor	**A**	**B**	**C**	**D**	**D1**	**D2**	**H1**	**H2**
New City Sub Transformers - Northern Property Line	17.09	365.55	381.26	381	16	365	14.0	20.0
New City Sub Transformers - Southern Property Line	17.09	101.98	116.84	116	16	100	14.0	20.0
New City Sub Transformers - Geneva Avenue Residence (Ground Level)	17.09	480.42	496.20	496	16	480	14.0	20.0
New City Sub Transformers - Geneva Avenue Residence (2nd Story)	17.09	480.10	496.02	496	16	480	4.0	10.0
New City Sub Transformers - Midway Village (Ground Level)	17.09	106.89	121.81	121	16	105	14.0	20.0
New City Sub Transformers - Midway Village (2nd Story)	17.09	105.48	121.07	121	16	105	4.0	10.0
New City Sub Transformers - Midway Village (3rd Story)	17.09	105.00	121.15	121	16	105	-6.0	0.0

Table 15: Fresnel Number (N_0) and Barrier Attenuation Estimate				
Receptor	**δ (Feet)**	**λ (Feet)**	**N_0**	**Attenuation Estimate (dB)**
New City Sub Transformers - Northern Property Line	1.38	9.000	0.306314	8.9
New City Sub Transformers - Southern Property Line	2.23	9.000	0.494805	10.4
New City Sub Transformers - Geneva Avenue Residence (Ground Level)	1.31	9.000	0.290434	8.8
New City Sub Transformers - Geneva Avenue Residence (2nd Story)	1.18	9.000	0.261341	8.5
New City Sub Transformers - Midway Village (Ground Level)	2.17	9.000	0.481905	10.3
New City Sub Transformers - Midway Village (2nd Story)	1.50	9.000	0.332672	9.2
New City Sub Transformers - Midway Village (3rd Story)	0.94	9.000	0.208742	7.9

Notes:

Approximate elevations and distances obtained from Google Earth.

Barrier attenuation estimates assume point source characteristics, single barrier,and simple terrain. See Caltrans, 2013, Figure 2-13 and equation 2-16. Estimate does not account for any reflections or other noise sources.

Reference transformer dominant frequency information provided by San Francisco Planning for similar sized 115 kilovolt (KV)-12 kV and 230 kV-115 kV transformer equipment.

Attachment C

Updated Construction Vibration Analysis

PG&E Power Asset Acquisition Project

San Francisco Planning

Updated Martin Substation and New City Substation (Project Variant) Vibration Analysis

Prepared by ESA, March 2026

Table 1: Reference Vibration Equipment Levels		
Equipment	**Reference Peak Particle Velocity (PPV, inches/second)**	**Reference Distance in Feet**
Vibratory Roller (12 Ton)	0.43	4.6
Jackhammer	0.04	25

Table 2: Estimated PPV Vibration Levels							
Equipment	**Peak Particle Velocity (PPV, inches/second) at Distance**						
	8 Feet	**25 Feet**	**60 Feet**	**100 Feet**	**200 Feet**	**290 Feet**	**360 Feet**
Vibratory Roller (12 Ton)	0.236	0.067	0.026	0.015	0.007	0.005	0.004
Jackhammer	0.123	0.035	0.013	0.008	0.004	0.002	0.002

Notes:

Reference PPV for jackhammer from Caltrans, 2020.

Reference PPV for vibratory roller from Nedoma et al., 2019.

Formula for estimating PPV at distance from Caltrans, 2020: $PPV_{equip} = PPV_{ref} \times (D_{ref}/D)^{1.1}$

Where:

- PPV_{equip} = Vibration level from equipment
- PPV_{ref} = Reference PPV level
- D_{ref} = Reference PPV distance
- D = Actual distance between equipment and receptor
- n = ground attenuation rate (assumed to be 1.1 for hard dense soil)

ATTACHMENT C
BIOLOGICAL RESOURCES SUPPORTING DOCUMENTATION

PAGE INTENTIONALLY BLANK

ESA

575 Market Street
Suite 3700
San Francisco, CA 94105
415.896.5900 phone
415.896.0332 fax

esassoc.com

memorandum

date	January 26, 2026
to	Julie Moore and Tania Sheyner, San Francisco Planning Department
cc	Sue Chau, San Francisco Public Utilities Commission
from	Rachel Haines, ESA
subject	PG&E Power Asset Acquisition Project – Bumble Bee Memorandum

The City and County of San Francisco ("City") proposes the Pacific Gas and Electric Company (PG&E) Power Asset Acquisition Project ("the project"). In response to comments received on the project's draft Environmental Impact Report (EIR), Environmental Science Associates (ESA) conducted additional research into the historic and current presence of special-status bumble species in San Francisco and San Mateo counties, specifically Crotch's bumble bee (*Bombus crotchii*), western bumble bee (*Bombus occidentalis*), and obscure bumble bee (*Bombus caliginosus*), to supplement information presented in the draft EIR Appendix A, Initial Study, Section E.15 Biological Resources, and Appendix H (Biological Resources Technical Memorandum).

This memorandum presents the results of additional research on Crotch's bumble bee and obscure bumble bee to support the analysis and conclusions in the draft EIR Response to Comments document.

Crotch's Bumble Bee

Crotch's bumble bee is a candidate for listing as endangered under the California Endangered Species Act (CESA). This species has been assigned an International Union for Conservation of Nature (IUCN) Red List of Threatened Species rank of critically endangered (CR), according to criteria A2bc.[1] This species is understood to occupy grassland and scrub habitats and is characterized as a generalist forager but may prefer the following plant families because of its shorter tongue: *Fabaceae, Apocynaceae, Asteraceae, Hydrophyllacae, Asclepiadaceae* and *Borginaceae*.[2] Crotch's bumble bee will overwinter and nest below ground in animal burrows or beneath leaf litter or other debris.[3] This species tolerates a limited climatic

[1] A2 = "Population reduction observed, estimated, inferred, or suspected in the past where the causes of reduction may not have ceased OR may not be understood OR may not be reversible; b = an index of abundance appropriate to the taxon; c = a decline in area of occupancy, extent of occurrence and/or habitat quality.

[2] California Department of Fish and Wildlife, Report to the Fish and Game Commission, Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered under the California Endangered Species Act. April 4, 2019.

[3] California Department of Fish and Wildlife, Report to the Fish and Game Commission, Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered under the California Endangered Species Act. April 4, 2019.

range, inhabiting hotter and drier climates than preferred by most other bumble bees.[4] Historic range for this species is understood to extend from central California south to Baja California, including coastal areas, the Central Velley and to the edge of deserts.[5] Contemporary observations of this species indicate a retraction from the northern extent of its historical range, with most records for this species concentrated in coastal southern California.[6]

Occurrence Data

ESA evaluated information on natural communities, plant and animal species, and sensitive biological resources obtained from regional databases, plans, and reports relevant to the project, including the California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CNDDB), the California Native Plant Society Electronic Inventory, the U.S. Fish and Wildlife Service, standard biological literature, eBird.org, and the Biological Resources Technical Memorandum prepared for the project (Appendix H). Results of the CNDDB query of special-status species' records within the San Francisco North and San Francisco South U.S. Geological Survey 7.5-minute quadrangles (which include all of San Francisco and a portion of north San Mateo County) supporting the draft EIR did not identify Crotch's bumble bee which is why this species was not evaluated.[7] In response to comments on the draft EIR, ESA expanded the CNDDB query to search records from all of San Francisco and San Mateo counties, which returned one occurrence record for Crotch's bumble bee from 1909, near Palo Alto, approximately 20 miles southeast of the system reinforcement areas.[8]

The 2019 CDFW Report to the Fish and Game Commission evaluating the petition to list four species of bumble bees as endangered under CESA includes figures depicting Crotch's bumble bee occurrence records throughout the state characterized as either historic (dating 1894 – 2003) or current (2002-2017). The only Crotch's bumble bee record cited on the San Francisco Peninsula from the 2019 CDFW report and presently in the CNDDB is a 1909 record from the vicinity of the City of Palo Alto.[9]

Separately, the Xerces Society *Bumble Bee Watch* tool returned one additional record of Crotch's bumble bee, documented on April 8, 2025, within the Jasper Ridge Biological Preserve in San Mateo County where the bumble bee was found on *Castilleja exserta.*[10] The Xerces Society *Bumble Bee Atlas* noted

4 NatureServe 2025. Bombus crotchii, Crotch's Bumble Bee, Nature Serve Explorer. Accessed September 11, 2025. Available: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.834085/Bombus_crotchii.

5 NatureServe 2025. Bombus crotchii, Crotch's Bumble Bee, Nature Serve Explorer. Accessed September 11, 2025. Available: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.834085/Bombus_crotchii.

6 NatureServe 2025. Bombus crotchii, Crotch's Bumble Bee, Nature Serve Explorer. Accessed September 11, 2025. Available: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.834085/Bombus_crotchii.

7 California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) Rarefind version 5 query of the San Francisco North and San Francisco South U.S. Geological Survey 7.5-minute quadrangles, Commercial Version. April 8, 2024.

8 California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) Rarefind version 5 query of the San Francisco County and San Mateo County, *Bombus crotchii.* Commercial Version, September 11, 2025.

9 California Department of Fish and Wildlife, Report to the Fish and Game Commission, Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered under the California Endangered Species Act. April 4, 2019.

10 The Xerces Society, Wildlife Preservation Canada, York University, University of Ottawa, The Montreal Insectarium, The London Natural History Museum, BeeSpotter. Data accessed from Bumble Bee Watch, a collaborative website to track and conserve North America's bumble bees. Available here. Accessed: August 6, 2025.

additional species records from 2023 and 2024 in the Palo Alto Baylands Nature Preserve, east of Highway 101, approximately 16 miles southeast of the system reinforcement areas.[11]

Range

Historical reduction of the species' range is evaluated in the 2015 IUCN Assessments for Northern American *Bombus* spp., which applied a dataset of 202,198 specimen records of North American *Bombus* species from academic, research, citizen science and private collections to depict changes in the species' spatial distribution over time.[12] Historical records from this dataset include those from 1805 to 2001; current (contemporary) records in the dataset are those from 2002 to 2012. As presented in the Xerces Society petition to CDFW to list Crotch's bumble bee, **Figure 1** depicts extent of occurrence (EOO) polygons informed by these records, representing the Crotch's bumble bee historical EOO in black and current EOO in white.[13] This map excludes the San Francisco Peninsula from Crotch's bumble bee's current spatial distribution and appears to exclude it from the historical distribution as well. A similar range map informed by this dataset and excluding the San Francisco Peninsula from the extant (resident) range appears on the IUNC Red List webpage for Crotch's bumble bee.[14] Crotch's bumble bee are known to occupy a limited climatic range that is hotter and drier than areas affected by persistent maritime fog such as the San Francisco Peninsula, southwest Marin County, and coastal Mendocino and Humboldt counties, which could explain species absence in these areas.

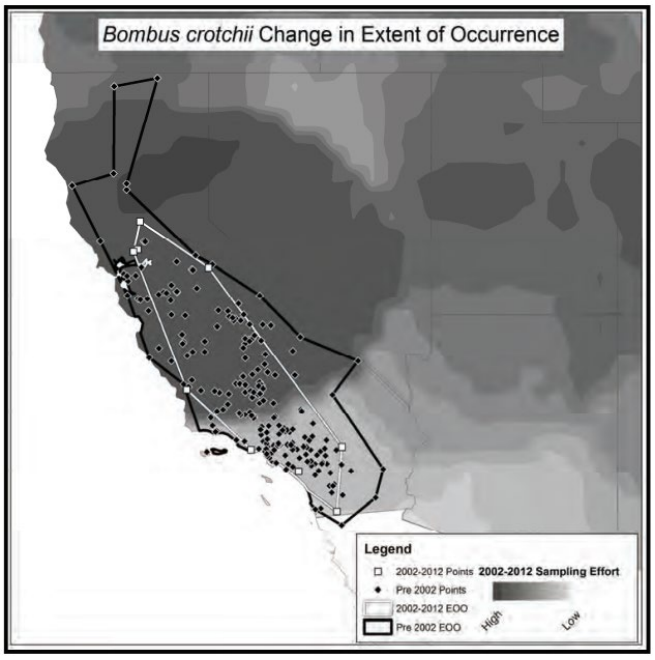


Figure 1. Recent and historical range of the Crotch bumble bee from the CESA listing petition submitted to CDFW.

CDFW published a range map for Crotch's bumble bee on their open data portal based on occurrence records through 2024 from the Bumble Bees of North America Occurrence Record Database,[15] the CNDDB, and other datasets submitted directly to

[11] The Xerces Society for Invertebrate Conservation, 2024. Bumble Bee Atlas. Records in San Francisco County and San Mateo County, *Bombus crotchii.* Accessed September 11, 2025. Available: https://www.bumblebeeatlas.org/.

[12] Hatfield, R., S. Colla, S. Jepsen, L. Richardson, R. Thorp, and S. Foltz Jordan, 2015. IUCN Assessments for North American *Bombus* spp. for the North American IUCN Bumble Bee Specialist Group. The Xerces Society for Invertebrate Conservation, www.xerces.org, Portland, OR. Assessments completed December 2014. Document updated March 2, 2015.

[13] The Xerces Society for Invertebrate Conservation, Defenders of Wildlife, Center for Food Safety, A Petition to the State of California Fish and Game Commission to List the Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*) and western bumble bee (*Bombus occidentalis occidentalis*) as Endangered under the California Endangered Species Act, October 2018. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=161902&inline.

[14] Richardson, Leif. 2014. *Bombus crotchii* (spatial data). The IUNC Red List of Threatened Species. Version 2025-1 http://www.leifrichardson.org/bbna.html. Accessed September 11, 20225. Available: https://www.iucnredlist.org/species/44937582/46440211#geographic-range.

[15] Richardson, Leif; Guzman, Laura Melissa; Jackson, Hanna et al. (2022). Bumble bee occurrences of North America from 1805–2020 [Dataset]. Dryad. https://doi.org/10.5061/dryad.c59zw3r8f

CDFW.[16] The range boundary delineations were based primarily on U.S. Department of Agriculture Forest Service Ecological Subregions of the United States,[17] watersheds, and 10 kilometer occurrence [record] buffers which they acknowledge may result in the range polygons including areas not currently occupied by Crotch's bumble bee. In particular, CDFW's published range map for this species includes portions of San Francisco County and San Mateo County east of Interstate 280 where they have not been identified and where the strongly maritime fog-influenced climate creates unsuitable habitat conditions. Contrary to the conclusions of primary data sources, the inclusion of the City and County of San Francisco in CDFW's range map for Crotch's bumble bee is likely the result of buffering occurrence data from outside San Francisco and aligning the species' range boundaries with the extent of ecoregions rather than on the availability of suitable habitat or verified records for Crotch's bumble bee.

Conclusion

Crotch's bumble bee is not expected within the project area because of the species' limited climatic range and apparent intolerance for maritime fog, evidenced by the lack of occurrence records in this coastal climate zone on the San Francisco Peninsula in the several datasets examined including southern and western Marin County, coastal Monterey, Mendocino and Humboldt counties. Although the CDFW range map for Crotch's bumble bee includes the project area, within San Francisco and (north or coastal) San Mateo counties such mapping appears to be the result of generous mapping assumptions based on ecoregions, rather than documented presence of the species or the availability of suitable habitat.

Western Bumble Bee

Western bumble bee is a candidate for listing as endangered under CESA. This species has been assigned an IUCN Red List of Threatened Species rank of vulnerable, according to criteria A2be.[18] This species is understood to inhabit mixed woodlands, farmlands, urban areas, montane meadows and into the western edge of the prairie grasslands within central California north to southern British Columbia, Canada.[19] Western bumble bee usually nests underground and is a short-tongued species which forages on the following plant genera: *Ceanothus*, *Centaurea*, *Chrysothamnus*, *Cirsium*, *Geranium*, *Grindelia*, *Lupinus*, *Melilotus*, *Monardella*, *Rubus*, *Solidago*, and *Trifolium.*[20]

Occurrence Data and Range

The 2015 IUCN assessment documented a severe retraction in the western bumble bee range, which formerly included coastal California. The species is now concentrated in mountainous areas north and

[16] California Department of Fish and Wildlife 2025. Crotch's Bumble Bee Range – CDFW [ds3095]. CDFW Open Data Portal. Published May 25, 2023. Updated August 27, 2025. Available: https://data-cdfw.opendata.arcgis.com/datasets/CDFW::crotchs-bumble-bee-range-cdfw-ds3095/explore?location=37.071918%2C-119.728319%2C7.04

[17] USDA - Forest Service 2007. United States Forest Service Ecological Subregions of the U.S.A. USDA - Forest Service ECOMAP Team. Available: https://databasin.org/datasets/662c543156c14313b87d9b99b7a78221/.

[18] A2 = "Population reduction observed, estimated, inferred, or suspected in the past where the causes of reduction may not have ceased OR may not be understood OR may not be reversible; b = an index of abundance appropriate to the taxon; e = effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

[19] NatureServe 2025. Bombus occidentalis, Western Bumble Bee, Nature Serve Explorer. Accessed September 15, 2025. Available: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.916920/Bombus_occidentalis.

[20] NatureServe 2025. Bombus occidentalis, Western Bumble Bee, Nature Serve Explorer. Accessed September 15, 2025. Available: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.916920/Bombus_occidentalis.

east of Sacramento and west of the Nevada border, and north of Chico; a conclusion supported by data from the *Bumble Bee Atlas* and *Bumble Bee Watch* tools.[21,22,23]

Based on the current range of this species, Draft EIR Appendix H, Biological Resources Technical Memorandum, identified the potential for western bumble bee to occur in the project area as low. Results of the CNDDB query supporting the draft EIR returned several occurrences within the San Francisco North and San Francisco South quadrangles between 1954 and 1998 which were reexamined alongside a query for both San Francisco and San Mateo counties.[24,25]

Conclusion

Although the CNDDB includes historical records for this species within counties containing the project area, recent analysis by subject matter experts of western bumble bee occurrence records and species' historic and current range cited above supports the Draft EIR conclusion that this species is not expected in the project area.

Obscure Bumble Bee

The obscure bumble bee is not a listed or a candidate for listing under CESA and is assigned an IUCN rank of vulnerable, according to criteria A2bc.[26] It is a medium to long-tongued species which forages on the following plant genera: *Ceanothus, Cirsium, Clarkia, Keckiella, Lathyrus, Lotus, Lupinus, Rhododendron, Rubus, Trifolium, and Vaccinium*.[27] Obscure bumble bee nests underground in abandoned rodent burrows, and above ground in tufts of grass, rock piles, cavities in dead trees, and in abandoned bird nests.[28] This species may not thrive in urban parks, gardens, or agricultural areas.[29]

---

21 Hatfield, R., S. Colla, S. Jepsen, L. Richardson, R. Thorp, and S. Foltz Jordan, 2015. IUCN Assessments for North American *Bombus* spp. for the North American IUCN Bumble Bee Specialist Group. The Xerces Society for Invertebrate Conservation, www.xerces.org, Portland, OR. Assessments completed December 2014. Document updated March 2, 2015.

22 The Xerces Society, Wildlife Preservation Canada, York University, University of Ottawa, The Montreal Insectarium, The London Natural History Museum, BeeSpotter. Data accessed from Bumble Bee Watch, a collaborative website to track and conserve North America's bumble bees. Available: https://www.bumblebeewatch.org/sightings/bee/. Accessed September 15, 2025.

23 The Xerces Society for Invertebrate Conservation, 2024. Bumble Bee Atlas. Records for *Bombus occidentalis.* Accessed September 15, 2025. Available: https://www.bumblebeeatlas.org/.

24 California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) Rarefind version 5 query of the San Francisco North and San Francisco South U.S. Geological Survey 7.5-minute quadrangles, Commercial Version. April 8, 2024.

25 CDFW, CNDDB Rarefind version 5 query of the San Francisco County and San Mateo County, *Bombus occidentalis.* Commercial Version, September 15, 2025.

26 A2 = "Population reduction observed, estimated, inferred, or suspected in the past where the causes of reduction may not have ceased OR may not be understood OR may not be reversible; b = an index of abundance appropriate to the taxon; c = a decline in area of occupancy, extent of occurrence and/or habitat quality.

27 NatureServe 2025. Bombus caliginosus, Obscure Bumble Bee, Nature Serve Explorer. Accessed September 12, 2025. Available: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.819678/Bombus_caliginosus.

28 Hatfield, R., Jepsen, S., Thorp, R., Richardson, L. & Colla, S. 2014. Bombus caliginosus. The IUCN Red List of Threatened Species 2014: e.T44937726A69000748. http://dx.doi.org/10.2305/IUCN.UK.2014- 3.RLTS.T44937726A69000748.en.

29 NatureServe 2025. Bombus caliginosus, Obscure Bumble Bee, Nature Serve Explorer. Accessed September 12, 2025. Available: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.819678/Bombus_caliginosus.

Occurrence Data and Range

This species is understood to occupy coastal shrubland and grassland areas from Santa Barbara County north to Washington state and is considered extant in San Francisco and San Mateo Counties.[30] Draft EIR Appendix H, Biological Resources Technical Memorandum, identified the potential presence for obscure bumble bee in the project area as low. Results of the CNDDB query supporting the draft EIR returned several occurrences for obscure bumble bee within the San Francisco North and San Francisco South quadrangles since 2004, located in the Presidio and at San Bruno Mountain; however, only the San Bruno Mountain occurrence overlapped the study area.[31] These results were reexamined alongside a query for obscure bumble bee records within San Francisco and San Mateo counties. [32] One record for obscure bumble bee is located at Lake Merced from 1960.[33] The Bumble Bee Watch tool records a verified sighting of obscure bumble bee on bee plant (*Scrophularia* sp.) in a native shrub restoration area located on the east shore of East Lake (Merced) from 2021.[34]

Conclusion

Because the obscure bumble bee is considered extant within counties overlapping the project area, and there are multiple recent records within San Francisco near project locations or in habitat areas similar to those within the project area, this species is considered to have a moderate[35] potential to occur.

---

30 Hatfield, R., Jepsen, S., Thorp, R., Richardson, L. & Colla, S. 2014. Bombus caliginosus. The IUCN Red List of Threatened Species 2014: e.T44937726A69000748. http://dx.doi.org/10.2305/IUCN.UK.2014- 3.RLTS.T44937726A69000748.en.

31 California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) Rarefind version 5 query of the San Francisco North and San Francisco South U.S. Geological Survey 7.5-minute quadrangles, Commercial Version. April 8, 2024.

32 CDFW, CNDDB Rarefind version 5 query of the San Francisco County and San Mateo County, *Bombus caliginosus.* Commercial Version, September 12, 2025.

33 CDFW, CNDDB Rarefind version 5 query of the San Francisco County and San Mateo County, *Bombus caliginosus*. Commercial Version, September 12, 2025.

34 The Xerces Society, Wildlife Preservation Canada, York University, University of Ottawa, The Montreal Insectarium, The London Natural History Museum, BeeSpotter. 2021. Data accessed from Bumble Bee Watch, a collaborative website to track and conserve North America's bumble bees, https://www.bumblebeewatch.org/sightings/bee/, *Bombus caliginosus;* 2021-04-30, San Francisco, CA, accessed August 7, 2025.

35 Moderate Potential indicates species not observed during field investigations but have some (medium) probability for occurrence based on habitats present on site. Some documented occurrences of species occur in the general region.

ATTACHMENT D
HAZARDOUS MATERIALS SUPPORTING DOCUMENTATION

PAGE INTENTIONALLY BLANK

Environmental Science & Engineering
Construction • Development • Industrial • Municipal

601 Montgomery St, Suite 780, San Francisco, California 94111 • 415.498.0535 • cdimengineering.com

TO: Karen Lancelle, Environmental Science Associates;
Julie Moore, San Francisco Environmental Planning;
Sue Chau, San Francisco Public Utilities Commission

FROM: Scott Bourne, PE and Mary Cunningham, PE, CDIM Engineering

RE: Revised Technical Memorandum, Site Management Requirements, PG&E Martin Service Center, PG&E Power Asset Acquisition Project, Brisbane and Daly City, California

DATE: January 16, 2026

CDIM Engineering (CDIM) has prepared this revised memorandum as an update to their August 2024 technical memorandum documenting site management requirements for the Pacific Gas and Electric Company (PG&E) Martin Service Center (MSC) as it relates to the PG&E Power Asset Acquisition Project. The original memorandum was incorporated into the Draft Environmental Impact Report (EIR) prepared under the California Environmental Quality Act (CEQA) guidelines (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3) and San Francisco Administrative Code Chapter 31. Public review of the Draft EIR yielded comments related to the document's adequacy at addressing hazard management at the MSC, with specific focus on land use covenant and variance requirements, and mitigation and management measures related to dust control, soil and groundwater management and vapor intrusion. Upon review of the comments, Environmental Science Associates (ESA), the San Francisco Planning Department, San Francisco Public Utilities Commission (SFPUC), and CDIM met with the California Environmental Protection Agency Department of Toxic Substances Control (DTSC) to confirm the path forward for MSC site management. This revised memorandum provides additional detail on existing requirements, identifies potential new measures to support construction implementation at the MSC, and aligns the Project's construction planning with DTSC's oversight framework.

INTRODUCTION

The City and County of San Francisco (City) is proposing (1) purchase ("acquisition") of PG&E owned electrical transmission and distribution assets ("Assets") located in San Francisco and San Mateo counties that are needed to provide electricity service to customers within San Francisco, and (2) other transactions and physical changes necessary for the City to own, operate, and maintain the electricity grid in San Francisco ("separation"). The terms "PG&E Power Asset Acquisition Project" and "project" refer to the acquisition and separation, including construction and related work required for independent operation of the system.

The Assets include equipment, facilities, property, and records that the City would acquire, including the following:

- PG&E's distribution assets within San Francisco (distribution-level substations, metering, customer serving distribution lines, and related facilities);

- PG&E's 115 kilovolt[1] (kV) and 230 kV transmission assets (substations, transmission lines, transformers, and related facilities needed for operations);
- Certain PG&E distribution lines in Brisbane emanating from the Martin Substation that serve customers in San Francisco[2];
- A portion of SFPUC to control all power flows from Martin Substation into San Francisco; and
- Other systems and equipment, materials, records, operating and maintenance facilities, property, and other land-related agreements as necessary for safe and reliable operation, maintenance, repair, control, and protection of the acquired transmission and distribution system.

After the City completes its acquisition of the Assets, the City would own, operate, and maintain the electricity grid in San Francisco, most of which is currently owned, operated, and maintained by PG&E. In addition, the City would acquire property rights as needed to operate and maintain the Assets and new City equipment, as needed, on public and private lands. This transaction would not include the purchase of PG&E's natural gas facilities; thus, PG&E would continue providing natural gas services to customers in San Francisco.[3]

In addition to acquiring the necessary transmission and distribution system and electrical facilities, the City would physically separate PG&E's existing electric system into two separate systems (generally divided along the San Francisco-San Mateo County border), to allow both systems to be safely, reliably, and independently operated by the SFPUC and PG&E. After the proposed separation of the system, the SFPUC would provide electricity service to customers in San Francisco currently served by PG&E; PG&E would continue to provide electricity service to its customers outside San Francisco.

The construction portion of the project is anticipated to take approximately 3 to 5 years after the acquisition of the Assets. It is anticipated that the City and PG&E would coordinate on the implementation of the project.

Project Components at Martin Substation and Daly City Yard

The project includes the Martin Substation separation component, where the City would need to reconfigure the existing Martin Substation transmission and distribution infrastructure to create a separate City-owned system (Martin Substation separation). As a project variant, the City would construct a new substation at the Daly City Yard (New City Substation) instead of the Martin Substation separation.

For the Martin Substation separation, the City would rearrange and install new and existing equipment within Martin Substation. Above- and below-ground components required at Martin Substation for City and PG&E systems to function independently include transformers, circuit breakers, metering devices, one control house

[1] Kilovolt is a unit of electric potential and electromotive force. One kilovolt is equal to 1,000 volts.

[2] Existing distribution lines serving only San Francisco customers would be acquired by the City. Distribution lines serving only PG&E customers outside of San Francisco would remain with PG&E. Finally, some of the distribution lines serve both customers in San Francisco and customers outside of San Francisco. These feeders would be separated at the border and the City would construct new infrastructure to ensure that each utility would have its own system and that all customers would continue to be served.

[3] In addition, the interconnection between the transmission system in San Francisco and the Trans Bay Cable (TBC), and TBC operation, would not be physically changed as a result of the acquisition.

with associated equipment, and underground duct banks and vaults. Changes could include adding or relocating cable terminations, circuit breakers, cable trenches, revenue meters, and transformer locations within the existing substation fence. Installation of new equipment or reconfiguration would necessitate excavation of soil for placement of foundations, concrete containment pits, or trenching. The City would also install approximately 3,500 feet of underground lines within Martin Substation to connect the new equipment to the City's grid. Underground lines would be housed in duct banks and vaults. It is estimated that the Martin Substation separation would involve around 8,000 cubic yards of soil excavation to a maximum depth of 15 feet below ground surface (bgs).

A project variant is to construct a New City Substation at the Daly City Yard, adjacent to the existing Martin Substation, instead of implementing the Martin Substation separation. This work would involve the installation of new incoming transmission lines from Martin Substation to the New City Substation and outgoing transmission and distribution lines from the new substation to the existing distribution system serving customers in San Francisco, as well as construction of new switchgear building, transformers, transmission and distribution lines, and various other improvements (e.g., light and fencing, grading). It is estimated that the New City Substation would involve excavation of around 35,000 cubic yards of soil to a maximum depth of 15 feet bgs and would include pile driving up to 100 feet bgs.

Martin Service Center

Both the Martin Substation and the Daly City Yard are at a location where a former manufactured gas plant (MGP) site operated, in a PG&E complex referred to as the Martin Service Center (MSC; Figure 1). Due to site contamination related to the MGP, the entirety of MSC is managed by PG&E with engineering controls and land use restrictions under regulatory oversight of the DTSC. Any work at MSC must abide by DTSC requirements for site remediation or management. CDIM prepared this technical memorandum to provide planning guidance regarding activities and approvals related to construction on this contaminated site for the SFPUC to either reconfigure the existing Martin Substation or construct a New City Substation in the Daly City Yard.

The MSC is a 52-acre property at the intersection of Geneva Avenue and Bayshore Boulevard in Daly City and Brisbane, California.[4] The MSC includes six distinct areas: Daly City Yard, Brisbane Yard, Brisbane Yard Annex, Martin Substation, Levinson North, and the building located at 2850 Bayshore Boulevard (see Figure 2). From 1905 to 1916, an MGP operated on the MSC property where both the Daly City Yard and Martin Substation are located. The MGP was established in 1905 as a large oil to gas generating plant. While originally built to generate gas to power gas engines which produced electricity, the gas plant was heavily used in 1906 and perhaps 1907 to supply gas to areas whose supply was cut off by the 1906 earthquake and fire. This plant continued in operation only until 1916 when it was shut down and dismantled (PG&E, 1986). During World War II, the Federal Public Housing Authority (FPHA, which later became the United States Department of Housing and Urban Development [HUD]) acquired the site where the plant was located. In 1944, FPHA graded the area and constructed Navy housing over it. During site grading and construction activities, soil from the former gas plant property was moved, spread around and used as fill material (SFPUC and DTSC, 2000).

The MSC is located at an approximate elevation between 25 to 50 feet above mean sea level. A drainage ditch traverses the site between the Brisbane Yard and Brisbane Yard Annex. Storm water at the site appears to

[4] The property spans two city jurisdictions: Daly City Yard is located at 731 Schwerin Street in Daly City, California; and Martin Substation is located at 3004 Geneva Avenue in Brisbane, California.

flow into the municipal storm sewer collection system before its discharge to the San Francisco Bay. A freshwater marsh exists in a topographically low area of the Levinson North Parcel (Figure 2).

A historical marsh with dense vegetation once extended westward across what is now known as Levinson North Parcel, the Martin Substation, and Brisbane Yard Annex (Figure 2). Between 1940 and 1970 the marsh was filled. The marsh deposits now consist of soft organic clay and follow the outline of the former marsh. At Martin Substation, up to 15 feet of artificial fill overlies the marsh deposits. In the Daly City Yard (west of the former marsh), up to 3 feet of engineered fill overlies a 10- to 15-foot-thick layer of low permeability alluvial deposits consisting of green and brown mottled sandy silt. A more permeable 5- to 10-foot-thick layer of silty sand called the shallow zone lies beneath the low permeability alluvium. Both the shallow zone and the overlying low-permeability alluvium pinch out east of the boundary between the Daly City Yard and the Brisbane Yard. The deep zone is composed of clean, blue-green sand that underlies the marsh deposits and alluvium at approximately 30 to 40 feet below ground surface (bgs) (Haley & Aldrich, 2015).

Unconfined groundwater within the artificial fill is encountered at approximately 7 feet bgs, from a range of ground surface elevations. The saturated thickness of this zone is as much as 7 feet. Groundwater in the artificial fill, shallow, and deep zones generally flows from the northwest toward the southeast (Haley & Aldrich, 2015).

SITE REMEDIATION ACTIVITIES

Remediation History

Site contamination was discovered in 1980 during PG&E's grading of the southern portion of the Daly City Yard for expansion of the MSC. Deposits of odorous tar were observed, and analytical testing identified presence of polycyclic aromatic hydrocarbons (PAHs)[5] in the tar. PG&E then initiated site investigation activities (CH2M Hill, 1987 and CH2M Hill, 1988) that resulted in PG&E entering into a consent agreement with California Department of Health Services, the predecessor of DTSC (DTSC, SFRWQCB and PG&E, 1991), to address the historical hazardous material release at the site.

After performing a risk assessment (PG&E, 1991), PG&E prepared a Remedial Action Plan (1993 RAP; CH2M Hill, 1993). The 1993 RAP divided the site into two operable units[6] (OUs). OU-1 is on the western edge of the former MGP site that contains the Daly City Yard and shallow soil contamination, and OU-2 is on the eastern side where groundwater is impacted. The 1993 RAP established the Remedial Action Objectives (RAOs) for the MSC. The RAOs apply to the entire MSC and are to minimize direct or indirect exposure of humans and the environment to PAHs, to minimize the potential for migration of PAHs off the PG&E property, and preserve the existing beneficial uses of the site, including potential wildlife habitat and wetlands.

[5] Early PG&E reports refer to PAHs as polynuclear aromatics (PNAs), which is a synonym for PAHs. The term PAH is used in this memorandum.

[6] During cleanup, a site can be divided into a number of distinct areas depending on the complexity of the problems associated with the site. These areas called operable units may address geographic areas of a site, specific site problems, or areas where a specific action is required.

Since most of OU-1 was already capped, implementation of the 1993 RAP involved capping of the strip of land between Schwerin Street and the MSC and of the berm along the southern boundary of the Daly City Yard (CH2M Hill, 1994), and recordation of a land use covenant (LUC) for the Daly City Yard (Attachment A; PG&E and DTSC, 1995b). After RAP implementation, most soil at the MSC had been covered by concrete, asphalt or clean fill material, and site access was controlled by a fence around the property. PG&E and DTSC entered into an agreement for operation and maintenance of the cap at the Daly City Yard (PG&E and DTSC, 1995a).

PG&E then prepared a second RAP (CH2M Hill, 1998) that further addressed potential routes of PAH transport offsite and required installation of a groundwater interceptor drain, grading of the Brisbane Yard and Annex, management of soil generated from the Bayshore Storm Drain Improvement Project[7], fencing of the Levinson North Parcel, and recordation of a second LUC to control future land use for the entirety of the MSC (Attachment B; PG&E and DTSC, 2002). Implementation of the 1998 RAP was completed in 2002 (CH2M Hill, 2002) after which PG&E and DTSC entered into a revised agreement for operation and maintenance of the cap at the Daly City Yard (Operations and Maintenance [O&M] Agreement, Attachment C; PG&E and DTSC, 2003).

Requirements for ongoing site management are outlined in the O&M Agreement and associated attachments (PG&E and DTSC, 2003). Among other administrative requirements, the O&M Agreement requires that PG&E inspect the caps, notify DTSC of any modification, discontinuation or disruption of the caps, and report to DTSC on the adequacy of the implemented remedy in protecting public health, safety, and the environment.

Per the 2003 O&M Agreement (Attachment C), PG&E prepares an Annual Progress Report describing activities undertaken at the site including the results of cap inspection and a Five-Year Review Report that discusses the effectiveness of the remedy. To date, PG&E and DTSC have completed four Five Year Review Reports. After the second five-year review report (CH2M Hill, 2005), PG&E prepared a revised O&M Plan (PG&E, 2005) to describe irrigation requirements for the berm in OU-1. The most recent Five-Year Review Report concluded that the remedies at the MSC are operating as designed and meeting DTSC protectiveness criteria (Haley & Aldrich, 2015). The fifth five-year review, dated December 29, 2020, was submitted to DTSC but has not been reviewed by DTSC or posted online.[8]

Numerous projects undertaken by PG&E within the MSC for maintenance, operation, or construction of site infrastructure after implementation of the second RAP involved excavation of soils affected by MGP waste and repair of site cap surfaces. Per the O&M agreement, PG&E prepares a notice and documentation report for DTSC to describe project implementation and necessary management measures. PG&E prepared a Soil Management Plan (SMP; Attachment D; Haley & Aldrich, 2017) for the MSC that provides program level guidance on mitigation measures necessary for projects involving disturbance of soils within the known and possible MGP-impacted areas. Subsequent to the publication of the SMP, numerous additional projects for maintenance, operation, or construction of site infrastructure were performed and documented through submitting project-specific addenda to the SMP and a post-construction completion report.

[7] The 1998 RAP addresses onsite re-use and stabilization of 8,500 cubic yards of soils excavated as part of the construction of the Bayshore Storm Drain Improvement Project. Soils with PNA concentrations above 10 mg/kg would be treated by stabilization with cold asphalt batching prior to use.

[8] Personal communication between Scott Bourne of CDIM Engineering and Kimberly Walsh of DTSC on July 8, 2024.

Residual Contamination

Areas of known MGP impacts have been documented across a large portion of the MSC (Figure 2). Residual waste associated with the MGP operations, including lampblack and tar, is known to exist locally in the site fill and on adjacent areas to the south and west. Results of soil sampling indicate the presence of the following constituents of potential concern (COPCs): total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), PAHs, cyanide, and metals including arsenic, cadmium, chromium, lead, nickel, and mercury.

Most characterization at the MSC occurred in 1987 and 1988, and the analytical results from the soil investigation showed PAH concentrations ranging from 40 milligrams per kilogram (mg/kg) to 12,657 mg/kg. PAHs were detected and/or black discolorations in the soil were observed in most soil borings.[9] Total phenol concentrations in the soil samples ranged from 0.6 to 300 mg/kg. Benzene, toluene, ethylbenzene and xylenes (BTEX) concentrations ranged from 0.1 to 13.4 mg/kg. The depth of the soil layer containing residues from the gas plant varies from 3 to 12 feet bgs and depends on the thickness of the overlying fill. Subsurface soil at the MSC contained higher concentrations of PAHs than surface soil. In the Daly City Yard, tar-like residue was mixed with relatively shallow fill, and residues appeared to be distributed randomly (Haley & Aldrich, 2015).

Groundwater contamination was observed in the artificial fill zone, the shallow zone and the deep zone. PAHs were detected in groundwater at the MSC above screening levels. Annual groundwater monitoring was performed between 1987 and 2011 and is now performed every five years. A groundwater interceptor trench designed to prevent offsite migration of PAHs was installed in 2002. PAHs were not detected on the MSC in concentrations above screening levels between 2008 and 2015 (Haley & Aldrich, 2015).

Figure 2 shows both the location of the former MGP as well as the location of known or suspected MGP waste. As stated above, FPHA graded the MGP area and constructed Navy housing over it. During site grading and construction activities, soil from the former gas plant property was moved, spread around and used as fill material. As a result, it is assumed that elevated COPC concentrations extend across the entire MSC (including beneath any hardscape areas) (Attachment D; Haley & Aldrich, 2017).

SITE MANAGEMENT REQUIREMENTS

Figure 3 shows the project location relative to MSC OU-1 and OU-2 and the extent of known MGP impacts. The project or its variant must comply with all existing controls.

The MSC is managed under the oversight of the DTSC pursuant to the Hazardous Substances Account Act (California Health and Safety Code [HSC] Division 20, Chapter 6.8, including Sections 25355.5 and 25356.1), which authorizes DTSC to direct, oversee, and approve remedial actions to ensure that site contaminants are managed in a manner protective of human health and the environment.

Reconfiguration of PG&E's Martin Substation or construction of a new substation at the nearby Daly City Yard would occur in areas impacted or potentially impacted by MGP waste. As the proposed project advances, DTSC oversight would first apply through the existing Land Use Covenants recorded for the property and

[9] For comparison, the 1998 RAP established a most conservative remediation action goal of 4.7 mg/kg total PAHs based on a risk to trespassers at Levinson North Parcel.

associated management documents (e.g., O&M Agreement and Plan, SMP). Activities that conflict with LUC restrictions, such as disturbance of capped soils, would require DTSC approval through a variance process described in HSC Section 25223.

The following describes the existing and potential additional management for the project.

Existing Management Requirements

Existing management requirements for the MSC include those in the following:

- 1995 LUC (PG&E and DTSC, 1995b) and 2002 LUC (PG&E and DTSC, 2002);
- O&M Agreement and associated attachments (PG&E and DTSC, 2003 and PG&E, 2005);
- Program-level Soil Management Plan (Haley & Aldrich, 2017); and
- Capping and/or excavation requirements.

The following subsections describe these requirements.

Land Use Covenants

Two LUCs are recorded for the proposed project site: the 1995 LUC, which applies to the Daly City Yard (Appendix A), and the 2002 LUC, which applies to the entire MSC (Appendix B). Table 1 provides a summary of these LUCs. These covenants follow the land and are binding on current and future owners. The LUCs:

- Notify landowners of site contaminants,
- Restrict sensitive property uses,
- Prohibit certain activities,
- Require DTSC notice and approval for site construction, and
- Protect remedial measures such as caps and the interceptor trench.

All work performed at the MSC must comply with the LUC terms and restrictions. In the event a project requires activities in conflict with the LUC restrictions (e.g., the reconfiguration of PG&E's Martin Substation or construction of a new substation at the nearby Daly City Yard), a variance to the LUC must be obtained (see *Additional Management Requirements* below).

Operation and Maintenance

The existing O&M Agreement and associated attachments (PG&E and DTSC, 2003 and PG&E, 2005) require that PG&E:

- Perform routine inspection and maintenance of caps at the Daly City Yard Berm, the Schwerin Street Strip, and the Brisbane Yard Annex;
- Notify DTSC 60 days prior to any proposed modification, discontinuation, or other disruption of the caps;

- Perform environmental monitoring and reporting to DTSC per the approved O&M Plans;
- Prepare Annual Progress Reports and Five-Year Review Reports; and,
- Immediately take appropriate action to prevent, abate or minimize the threat of release from emergency actions or occurrences (e.g., fire, earthquake, explosion).

Future construction within the MSC that alters or installs new caps would require updates to the applicable O&M Plan and Agreement.

Soil Management Plan and Health and Safety Plan

PG&E's Soil Management Plan (SMP)(Attachment D; Haley & Aldrich, 2017) specifies program-level risk management measures to be implemented before, during, and after any work is conducted that will penetrate below the surface cap and into native soil and/or fill. Measures are summarized below.

- Training—All individuals working in an excavation or with excavation soil must in accordance with Hazardous Waste Operations and Emergency Response training requirements in Code of Federation Regulations, Title 29, Section 1920 and California Code of Regulations, Title 8, Section 5192 (40-HR HAZWOPER).
- Soil Handling, Excavation and Disposal—The SMP specifies that soil in the known or suspected MGP impacted area must be assumed hazardous and handled appropriately and soil handling anywhere else within the MSC should be observed by a qualified environmental professional to identify MGP impacts, (e.g., staining, odors, or the identification of MGP residues) and handled as hazardous as needed. Pending offsite disposal, affected soil must be secured within the site in a manner to prevent dispersion (e.g., stockpiled on sheet plastic sheeting, in a roll-off bin, or drums).
- Soil Sampling—The SMP recommends composite sampling of affected soil using methods to detect COPCs identified for MGP waste.[10]
- Soil Disposal—All excavated soil from inside the area of known MGP impacts shall be removed and disposed of at an authorized facility.
- Soil Reuse—Soil excavated from outside the area of known MGP impacts may be reused on the site if analytical results from its corresponding composite soil sample analysis are below lowest of the commercial/industrial limits[11] for each COPC among the DTSC-Modified Screening Levels established by DTSC in the Human Health Risk Assessment Note 3 (DTSC, 2022) and Environmental Screening Levels established by the San Francisco Bay Regional Water Quality Control Board (San Francisco Regional Water Board, 2019).

[10] VOCs by United States Environmental Protection Agency (EPA) Method 8260B; Title 22 metals and cyanide by EPA method 600/7400 series; TPH by EPA Method 8015B; Semi volatile Organic Compounds by EPA Method 8270 Selective Ion Monitoring (SIM); Benzene Toxicity Characteristic Leaching Procedure (TCLP); Lead Soluble Threshold Limit Concentration (STLC); and Lead (TCLP).

[11] Note that the SMP reference the DTSC-SLs and ESLs effective at that time the SMP was prepared. These values are updated regularly. Communication with DTSC is necessary to determine if current screening levels can be used as reuse criteria.

- Health and Safety Plan—A project health and safety plan must be developed that addresses site safety associated with COPCs and construction activities including contingencies for unexpected conditions and accidental hazardous material releases.
- Completion Reporting—A completion report with all permits, chains of custody, field forms, waste manifests, laboratory analytical data, and other relevant documentation related to soil management must be submitted to DTSC following completion of each project.
- Other Items—The SMP identifies other mitigations that may be appropriate based on project specific requirements, which may include: air monitoring, best management practices for stockpiles, storm water runoff, and odor suppression; dust and noise mitigation; traffic control; dewatering and handling of groundwater; and, quality assurance/quality control for sampling. For example, PG&E routinely conducts dust and VOC perimeter air monitoring for projects within impacted areas.[12]

These measures serve as a guide to the type of risk management that could be required for the reconfiguration of PG&E's Martin Substation or construction of a new substation at the nearby Daly City Yard. A project-specific SMP or SMP addendum may be required to address the specific scope (see *Project-Specific Soil Management Plan* section below).

Capping and/or Excavation

Management of MGP-impacted soils at the MSC relies in part on containment through surface capping. Existing remedial documents including RAPs, completion reports, LUCs, and the O&M Agreement identify specific capping requirements at the Daly City Yard Berm, the Schwerin Street Strip, and the Brisbane Yard Annex. Outside of these defined areas, the extent of engineered capping is less clearly documented. Much of the Daly City Yard is covered by asphalt, concrete, or buildings, which are presumed to function as protective caps, while surface conditions at the Martin Substation consist of a mix of gravel, concrete, and pavement.

Future construction at the MSC must ensure continued protection of human health and the environment by either:

- Installing or maintaining a cap system (e.g., concrete, asphalt, or other hardscape, with gravel potentially acceptable in the Martin Substation area depending on observed soil impacts), or
- Demonstrating to DTSC's satisfaction that soils in the area of disturbance do not require capping.

These requirements highlight that any excavation or redevelopment activities must not compromise existing caps and must incorporate appropriate reconstruction or alternative protective measures where caps are disturbed.

Additional Management Requirements

Implementation of the MSC project may trigger additional management requirements depending on the final scope of work and DTSC's determination of the appropriate regulatory pathway. If DTSC determines project

[12] One example of perimeter air monitoring at MSC is the PG&E Storage Locker Building Installation project, for which an SMP addendum was prepared on January 16, 2023. The SMP addendum can be accessed on Envirostor here: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=41360100&doc_id=60530483

activities fall within the scope of the existing RAP and LUC, additional requirements may be limited to preparation of project-specific management plans (e.g., an SMP addendum) implemented under existing approvals. If, however, DTSC determines that the project scope extends beyond the assumptions or remedy established in the approved RAP, the agency may require either a Removal Action Workplan (RAW), for remedial actions with an estimated total cost of under $2 million, or a new or amended RAP followed by a Remedial Design and Implementation Plan (RDIP) for larger or more comprehensive remedial actions. The following subsections describe potential triggers and requirements for each project implementation pathway.

Voluntary Cleanup Agreement

DTSC typically requires a voluntary agreement[13] to provide regulatory oversight and cost reimbursement for site construction and remediation activities. PG&E already has such an agreement for MSC; SFPUC would likely need to enter into a similar agreement with DTSC for the substation projects.[14]

The voluntary agreement process includes:

- Applying for DTSC oversight;
- Confirming lead agency;
- Negotiating an agreement;
- Conducting a scoping meeting; and
- Performing technical work under DTSC oversight.

This agreement would serve as the administrative vehicle for DTSC to review and approve any LUC variance requests, new or amended RAP, Community Air Monitoring Plan (CAMP) requirements or other relevant documents associated with the project.

Land Use Covenant Variance

Under HSC 25220, the sole explicit trigger for a LUC variance is when a project proposes "*a land use that differs from filed land use restrictions on the property*." The proposed reconfiguration of the existing Martin Substation or construction of a New City Substation at the Daly City Yard would not result in a change in land use, as the site would continue to be used for utility purposes, and would involve construction activities which may temporarily affect existing remedy components. The 1995 and 2002 LUCs applicable to the Site do not categorically prohibit construction or utility activities, but instead restrict specific actions such as alterations to the existing cap or interceptor trench "*without written approval by the Department [DTSC]*."

[13] See template here: https://dtsc.ca.gov/brownfields/voluntary-agreements-quick-reference-guide/

[14] A new voluntary agreement would likely be similar to the 2000 site voluntary agreement SFPUC and DTSC entered into for the Crystal Springs Pipeline No. 2. Replacement (Attachment E). That project involved installation a new 36-inch diameter, 1,000-ft length, steel pipe within an existing 44-inch diameter pipe within a pipeline easement traversing the MSC. The site voluntary agreement required SFPUC to prepare a Health and Safety Plan for DTSC approval. The site voluntary agreement is available on DTSC's Envirostor website.

However, DTSC indicated during an August 19, 2025 meeting with CDIM, SFPUC, and SF Planning that a variance may be required, citing the adjacent Midway Housing Development as precedent.[15] The Midway Housing Development proponents submitted a LUC variance application for implementation of a RAP amendment, including penetration and reconstruction of the cap, as well as for a proposed change in site uses to residential and childcare, which directly conflicted with recorded restrictions.[16] The variance was therefore driven by both a change in land use and remedy modifications associated with that change.

Accordingly, two regulatory pathways are available for implementation of the proposed project or variant. One pathway would involve proceeding under the existing LUCs without obtaining a LUC variance. Under this pathway, DTSC could review and provide written approval of construction activities which may affect remedy components within the existing LUC framework. Alternatively, a second pathway would involve DTSC determining that a LUC variance is appropriate as an administrative mechanism to document concurrence with the proposed project activities. Under this pathway, DTSC would review a LUC variance application containing relevant project information and provide written approval before construction could begin. In either case, DTSC oversight and written authorization of activities affecting the remedy would be required.

If required, a variance application must describe restrictions imposed under the LUC, a description of the proposed variance, and rationale for DTSC to grant the variance. Specifically, under HSC Section 25223(c), the application must document that the variance would not result in:

- The creation or increase of significant present or future hazards to public health.
- A significant diminution of the ability to mitigate any significant potential or actual hazard to public health.
- A long-term increase in the number of humans or animals exposed to significant hazards that affect the health, well-being, or safety of the public.

DTSC will review the variance application and take into account the following information as required by the California Code of Regulations, Title 22, Section 67390.2, *Information Required for a Variance*:

- The hazardous characteristics of the wastes that caused the land to be restricted;
- The factors affecting the potential for movement of any waste constituents away from the site through air, water, or soil; and,
- The factors affecting the potential for exposure of any population within 2,000 feet of the wastes.

[15] A Land Use Variance was required for the adjacent Midway Housing Development, where the site was impacted by grading of MGP-impacted soil from the MSC during construction of Navy housing in 1944. See https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=41650007&doc_id=60469529.

[16] The Midway Housing Development redevelopment was subject to three recorded LUCs (1998, 2002 and 2010). The 1998 and 2010 LUCs allowed only multifamily residential uses consistent with local R3 Multiple Family Residential zoning, while the 2002 LUC explicitly prohibited residences, hospitals, public or private schools and daycare centers. Because the redevelopment included high-density residential housing and a new childcare facility, both prohibited under the existing LUCs, the Housing Authority of County of San Mateo (HACSM) applied for and obtained a variance from DTSC in 2021.

If after public hearing, DTSC determines that the variance should be granted, the DTSC make findings of fact and will record its final decision.

Project-Specific Soil Management Plan

If DTSC determines that the Martin Substation separation project or New City Substation variant falls within the assumptions and remedy of the existing approved RAP, the project may be implemented through existing approval pathways. The agency would require preparation of a project-specific SMP or SMP addendum to address the specific construction scope and requirements under the framework of the existing program-level SMP. Such project-specific plans may also incorporate air monitoring, groundwater management and other protective measures, as determined appropriate by DTSC.

Removal Action Workplan

If DTSC determines that the Martin Substation separation project or New City Substation (project variant) constitutes a removal action outside the assumptions of the existing approved RAP, and the total removal cost associated with the removal action is less than $2 million, the agency may require preparation and implementation of a Removal Action Workplan (RAW) under HSC Section 79225. Based on the scope and scale of the project or project variant, DTSC is likely to determine that one or both options include elements outside the scope of the approved RAP remedy, however the RAW pathway is unlikely due to a preliminary estimated removal cost l exceeding $2 million.

New or Amended RAP

DTSC may require a new or amended RAP to evaluate project elements that extend beyond the scope of the existing approved RAP and exceed the $2 million threshold for a removal action. Based on the scope and scale of the Martin Substation separation project or New City Substation (project variant), DTSC is likely to determine that each includes elements outside the scope of the current RAP, necessitating a new or amended RAP.[17]

It is currently estimated that the Martin Substation separation would involve around 8,000 cubic yards of soil excavation up to a maximum depth of 15 feet bgs and that the New City Substation would involve excavation of around 35,000 cubic yards of soil up to a maximum depth of 15 feet bgs and would include pile driving up to 100 feet bgs. While the 2002 O&M Agreement and 2005 O&M Plan do contemplate routine excavation of small volumes of soil as a part of site maintenance activities, the approved RAP does not appear to include excavation of MGP-impacted soil for offsite disposal at the quantities and locations proposed. In addition, excavation or modification of caps beyond routine maintenance activities may affect remedy protectiveness.

In addition, site COPCs include vapor forming chemicals (e.g., TPH and VOCs). Limited soil vapor sampling was performed in 2009 at the MSC related to earlier removal and replacement of underground storage tanks in 2004 (Entrix, 2009), however no comprehensive vapor evaluation has been performed for the MSC. Neither the 1993 nor the 1998 RAP addresses vapor intrusion mitigation. For either the Martin Substation separation or the new City substation (project variant), if new occupied structures are planned, a vapor intrusion

[17] At the adjacent Midway Housing Development, DTSC required a RAP amendment for implementation of a vapor mitigation system and community air monitoring performing during a housing densification project. See https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=41650007&doc_id=60469529.

evaluation consistent with DTSC and San Francisco Regional Water Board guidance[18] will be required. This evaluation could include collection of soil vapor data, risk screening, and/or modeling of vapor migration. If screening identifies potential risks, DTSC may require a Vapor Intrusion Mitigation Plan, which could include vapor barriers, passive or active sub-slab depressurization systems, and long-term monitoring.

Accordingly, DTSC may require a new or amended RAP to evaluate project elements that do not fit within the scope of the existing approved RAP. RAPs under HSC Section 79205-79125 require:

- Site condition analysis,
- Human health and environmental risk evaluation,
- Development and comparison of remedial alternatives,
- Selection of a preferred alternative, and
- Public participation, including notice and at least a 30-day public comment period.

It should be assumed that a new or amended RAP will be required.

Remedial Design and Implementation Plan (RDIP)

Following DTSC approval of a new or amended RAP, a Remedial Design and Implementation Plan (RDIP)[19] would be prepared. The RDIP serves as the detailed engineering and construction plan for implementing the approved remedy. It translates the high-level remedial approach described in the RAP into specific design drawings, technical specifications, and field procedures. The RDIP would typically include:

- Detailed excavation, soil handling, and disposal plans;
- Groundwater management and dewatering protocols, including containerization, sampling, and discharge/treatment requirements (see *Groundwater Management* section below);
- Air monitoring and dust control measures, including implementation of a Community Air Monitoring Program (CAMP; see *Air Monitoring* section below);
- Vapor intrusion mitigation measures, if required, for construction of new occupied structures (see *Vapor Mitigation* section below);
- Health and Safety Plan requirements for workers; and
- Contingency procedures for unexpected conditions or materials.

[18] Guidance documents for vapor intrusion evaluation may include, but may not be limited to, DTSC's 2011 *Vapor Intrusion Guidance* (DTSC, 2011), 2015 *Advisory – Active Soil Gas Investigations* (DTSC, 2015), and 2023 *Final Draft Supplemental Guidance for Screening and Evaluation Vapor Intrusion* (DTSC, 2023).

[19] Although not explicitly identified in law or regulation, RDIP preparation is required by DTSC under site voluntary agreements (VCA) where a RAP is prepared. See Task 8 of the template VCA https://dtsc.ca.gov/wp-content/uploads/sites/31/2024/09/Voluntary_Agreement_Model-January-23-2024-website-SVA-1.pdf

The RDIP must be submitted to DTSC for review and approval prior to construction. Implementation of the RDIP under DTSC oversight ensures that remedial activities are protective of human health and the environment, consistent with the approved RAP.

Vapor Mitigation

If the project includes construction of new occupied structures at grade, and the vapor intrusion evaluation identifies potential risks to future occupants, a vapor mitigation system (VMS) could be required. Occupied structures without a complete vapor intrusion pathway (i.e., structures that are elevated above grade and not in direct contact with underlying soil or soil gas) would not be expected to require a VMS.

A typical VMS includes some or all of the following measures:

- Installation of passive or active sub-slab depressurization systems;
- Placement of vapor barriers or engineered membranes beneath building slabs;
- Ventilation enhancements or pressure control systems in enclosed spaces; and/or
- Long-term monitoring of sub-slab vapor and/or indoor air to verify protectiveness.

Required VMS would be designed and installed in accordance with current regulatory guidance (San Francisco Regional Water Board, 2019; DTSC, 2011; DTSC, 2015 and DTSC, 2023), and would likely be incorporated into a new or amended RAP/RDIP. Long-term operations and maintenance requirements would be incorporated into updated O&M Plans and, if necessary, into revised LUC restrictions.

Air Monitoring

Air monitoring will likely be required for both worker and community protection for reconfiguration of PG&E's Martin Substation or construction of a new substation at the nearby Daly City Yard.

Based on California Division of Occupational Safety and Health (Cal/OSHA) requirements and previous project-specific Health and Safety Plans developed for MSC, site worker air monitoring will be required to protect site workers from exposure to VOCs, PAHs, TPH and particulates.

For community protection, DTSC is likely to require a Community Air Monitoring Program (CAMP) due to:

- Large soil excavation volumes,
- Presence of volatile and particle-bound COPCs (PAHs, VOCs, TPH), and
- Proximity of residential neighborhoods and schools to the MSC.

The CAMP would be prepared using the current DTSC *Interim Guidance for Implementing a Community Air Monitoring Program at Contaminated Sites* guidance document (DTSC, 2020) under DTSC's broad remedial authority (HSC Sections 79055 and 79195-79240). A CAMP typically requires installation of perimeter and offsite air sensors to continuously monitor particulates and site-specific COPCs in surrounding residential area or along

haul routes.[20] Monitoring results are compared against action levels that trigger immediate response measures, including dust suppression (e.g., increased watering frequency, application of soil binders, covering of stockpiles or haul trucks) and odor control measures (e.g., foam or misting agents). Work stoppage or modification may be required if exceedances persist. The approved RAP does not include community air monitoring; a CAMP would need to be incorporated into either a project-specific SMP or a new or amended RAP/RDIP.

In addition to DTSC's CAMP requirements, air emissions and vapor controls associated with construction and treatment equipment may also require Bay Area Air Quality Management District (BAAQMD) permits under Regulation 2. CAMP applies to construction-phase activities and provides real-time monitoring and field response to protect the community. Separately, BAAQMD permitting may be required for operation of VMS, generators, or other emission sources to establish emission limits and health risk thresholds for toxic air contaminants. Together, these programs ensure that both real-time emissions and overall project risks are monitored and controlled.

Groundwater Management

Groundwater dewatering during excavation at the Martin Substation or Daly City Yard may generate contaminated water requiring management. The existing program-level SMP (Appendix D) does not provide management measures for groundwater. Therefore, a project-specific Groundwater Management Plan (GMP) will be required to address extracted groundwater characterization and sampling requirements, disposal options, and containment and staging requirements. It may be incorporated into a new or amended RAP/RDIP, or as a standalone document. The GMP must be submitted to DTSC for approval prior to project initiation and implemented alongside the SMP during construction.

Discharge of extracted groundwater to the sanitary sewer would require authorization from the Bayshore Sanitary District under its Sewer Use Ordinance (Ordinance Code, Chapter 5), including compliance with pretreatment standards, permit conditions, and any analytical monitoring specified by the District. Alternatively, discharge of extracted groundwater could be authorized under a NPDES permit issued by the San Francisco Regional Water Board, however onsite treatment prior to discharge would likely be required to meet NPDES permit requirements.

STEPS NEEDED

Site remediation data indicate that significant quantities of MGP waste are present in shallow soil at the Daly City Yard. Limited investigation has been performed in the Martin Substation area, but available data suggests some MGP waste is also present throughout this area. The LUCs (Attachments A and B), O&M Agreement (Attachment C), and SMP (Attachment D) apply to the entirety of the MSC and would thus be the initial regulatory framework for obtaining DTSC approval for either Martin Substation separation or the New City Substation variant. The following regulatory steps are anticipated to achieve DTSC approval for the project:

- **Early DTSC Coordination:** Early communication with DTSC is recommended to establish the regulatory framework for DTSC's approval and site mitigation requirements. This would likely

[20] Personal communication Scott Bourne of CDIM Engineering and Kimberly Walsh of DTSC on July 8, 2024.

include DTSC and SFPUC entering a voluntary oversight agreement for DTSC regulatory oversight and cost reimbursement.

- **DTSC Review and Pathway Selection:** DTSC determines whether the proposed activities can be authorized under existing remedy assumptions or require modification of the remedy. If activities are consistent with existing RAP assumptions and do not compromise remedy protectiveness, the project could be approved using the existing approval process for MSC (i.e., implementing SMP/Health and Safety Plan per the O&M Agreement process). If activities exceed the scope of the existing RAPs, DTSC will require a new or amended RAW or RAP/RDIP prior to approving the project
- **Anticipated New or Amended RAP:** Given anticipated excavation quantities and DTSC precedent at nearby sites, it should be assumed that a new or amended RAP would be required.[21] A new or amended RAP would address excavation and soil management (including off-site disposal or on-site reuse with or without stabilization), reconstruction of caps, vapor intrusion evaluation and mitigation, and development of a CAMP. The new or amended RAP process would require public participation, including public notice and a minimum 30-day comment period, prior to DTSC approval.
- **Determine Applicability of LUC Restrictions:** In concert with DTSC, review proposed project activities against the LUCs to identify potential conflicts and determine required scope of variance request. Apply for LUC variance under HSC Section 25223 as required.
- **Remedial Design and Implementation Plan (RDIP):** Following DTSC approval of the new or amended RAP, an RDIP would be prepared. The RDIP would provide detailed engineering, construction, and monitoring specifications for implementing the selected remedy in the new or amended RAP. It would address excavation and soil handling procedures, cap reconstruction, vapor intrusion mitigation systems (if required), air and groundwater monitoring protocols, health and safety requirements, and quality assurance/quality control measures. The RDIP would be reviewed and approved by DTSC before field implementation.
- **Permitting and Coordination:** SFPUC and its contractors will need to obtain required permits and approvals from DTSC and other agencies. This may include hazardous waste transport and disposal approvals, construction stormwater permits, wastewater discharge permits for dewatering, and local building or grading permits. Coordination with regulatory agencies and the local community will also occur during this stage to ensure consistency with RAP requirements and permit conditions.
- **Implementation of Approved Remedy:** Once permits are in place and DTSC approves the RDIP, project construction can proceed under DTSC oversight. DTSC will provide oversight throughout fieldwork to verify compliance with the approved plans and permit conditions including, but not necessarily limited to, the RAP, RDIP, SMP, GMP, health and safety plan, CAMP, stormwater permit, wastewater discharge permit, building permit, etc.
- **Completion Reporting:** After field activities are completed, a Remedial Action Completion Report (or equivalent) must be prepared for DTSC review and approval. The report will document

[21] Based on the anticipated scope and cost of the soil removal (remedial action or remedy), DTSC is expected to require the RAP/RDIP, rather than a RAW, to support project implementation.

compliance with the RAP and RDIP, summarize remedial activities, present confirmation sampling results, and evaluate protectiveness of the remedy. DTSC approval of the completion report is required before the project can be considered complete.

- **Updating Land Use Covenant and O&M Documents:** Following completion, DTSC will require recordation of an updated LUC to reflect any changes to remedial measures or land use restrictions, and revision of associated O&M Plans and Agreements. This ensures that long-term obligations (e.g., inspection, monitoring, reporting, and maintenance of engineered controls) remain enforceable and protective. The updated covenant and O&M documents will govern future management of the site.

Given these factors, it is prudent for SFPUC and PG&E to plan for a new or amended RAP and associated public participation process as the most likely pathway for DTSC approval. Early coordination with DTSC will be essential to confirm the scope of requirements and maintain project schedule

REFERENCES

CDIM and DTSC, 2024. Personal communication between Scott Bourne of CDIM Engineering and Kimberly Walsh of DTSC. July 8.

California Department of Health Services (DTSC), SFRWQCB and PG&E, 1991. Consent Order, Docket # HAS 90/91-011 Pacific Gas and Electric Company, Martin Service Center. June 28.

_____, 2011. Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). October.

_____, 2015. Advisory—Active Soil Gas Investigations, Joint DSTC/LARWQCB/SFRWQCB, July.

_____, 2020. Community Air Monitoring Plan Guidance, January.

_____, 2022. Human Health Risk Assessment (HHRA) Note Number 3, DTSC Modified Screening Levels. May.

_____, 2023. Final Draft Supplemental Guidance: Screening and Evaluating Vapor Intrusion. February.

CH2M Hill, 1987. Final Report PG&E Martin Service Center Investigation. November.

_____, 1988. Final Site Characterization Report, Daly City Manufactured Gas Plant Site, Pacific Gas & Electric. November.

_____, 1991. Human Health and Environmental Risk Assessment Report. PG&E Daly City Manufactured Gas Plan Site. August 30.

_____, 1993. Remedial Action Plan, PG&E Daly City Manufactured Gas Plant Site, Operable Units 1 and 2. June.

_____, 1994, Final Construction Report, PG&E Martin Service Center Site OU-1, Daly City Yard Berm and Schwerin Street Strip. December 8.

_____, 1998. Remedial Action Plan, PG&E Daly City Manufactured Gas Plant Site, Operable Unit 2. July.

_____, 2002. Construction Completion Report, PG&E Martin Service Center Former Manufactured Gas Plant – Operable Unit 2. April.

_____, 2005. Second Five-Year Review Report, PG&E Martin Service Center. September.

Entrix, 2009. Soil Vapor Investigation Report, Martin Services Center. August 27

Haley & Aldrich, Inc. (Haley & Aldrich), 2015. Fourth Five Year Review for Pacific Gas and Electric Company's Martine Service Center,731 Schwerin Street, Daly City, California. June 15.

_____, 2017. Soil Management Plan, Pacific Gas and Electric Company, Martin Service Center/Daly City MGP, 3004 Geneva Avenue, Daly City, California. June 15.

PG&E, 1986. Historical Overview of Gas Manufacturing in Daly City, California, 1905-1916. Site NO. GG-SM-DAC.

_____, 2005. Revised Operation and Maintenance Plan for Martin Services Center Operable Unit 1 (the Daly City Yard Berm Cap and Schwerin Street Strip Capped Areas) and Operable Unit 2 (Brisbane Yard Annex cap and Interceptor Trench). October 12.

_____, 2008. Letter from PG&E to DTSC, Completion Report for 2007 Excavations at Martin Service Center and Substation. May 9.

PG&E and DTSC, 1995a. Agreement for Operation and Maintenance, PG&E Martin Service Center Daly City Yard. January 3.

_____, 1995b. Covenant to Restrict Use of Property, Daly City Yard. March 23.

_____, 2002. Covenant and Agreement to Restrict Use of Property, PG&E Martin Service Center February.

_____, 2003. Revised Operation and Maintenance Agreement, Docket# HSA-94/95-010, PG&E Martin Service Center, Daly City Yard, Daly City, California. March 7.

San Francisco Bay Regional Water Quality Water Board (San Francisco Regional Water Board), 2019. Environmental Screening Levels, Rev. 2. January 24.

_____, 2022. Vapor Intrusion Mitigation Guidance, Technical Guidance Document. June 30.

SFPUC and DTSC, 2000. Voluntary Cleanup Agreement.

ENCLOSURES

Table 1. Summary of Land Use Covenants, PG&E Martin Services Center
Figure 1. Proposed Martin Substation Separation and New Substation at Daly City Yard (Project Variant)
Figure 2. Martin Service Center Location and Layout and Environmental Features
Figure 3. Proposed Martin Substation Separation and New Substation at Daly City Yard (Project Variant) with Operable Units
Attachment A. 1995 Covenant to Restrict Use of Property, Daly City Yard
Attachment B. 2002 Covenant and Agreement to Restrict Use of Property, PG&E Martin Service Center
Attachment C. 2003 Revised Operation and Maintenance Agreement
Attachment D. 2017 Soil Management Plan
Attachment E. Voluntary Cleanup Agreement for Crystal Springs Pipeline No. 1. Replacement (2000)

TABLE

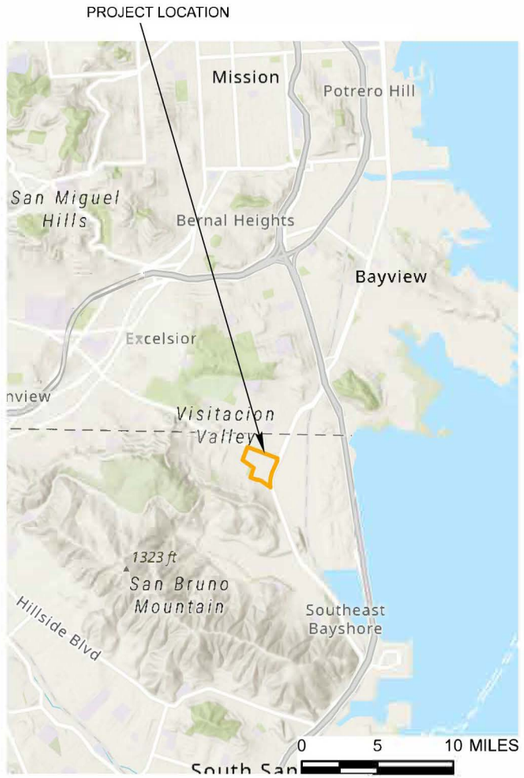
Table 1. Summary of Land Use Covenants, PG&E Martin Services Center

Document	1995 Covenant to Restrict Use of Property for OU-1 (PG&E and DTSC, 1995b):	2002 Covenant and Agreement to Restrict Use of Property for MSC (PG&E and DTSC, 2002a):
Summary	Original land use covenant (LUC) applicable to the Daly City Yard.	Second LUC applicable to the entirety of the MSC.
Contents	Covenantor promises to restrict the use of the Property as follows: (a) Development of the Property shall be restricted to industrial, utility, commercial or office space use. (b) No hospitals or health clinics shall be permitted on the Property. (c) No schools for persons under 18 years of age shall be permitted on the Property. (d) No daycare centers for either children or senior citizens shall be permitted on the Property. (e) No drilling for water for drinking or irrigation purposes shall be permitted on the Property. (f) No raising of food (food crops or animals) shall be permitted on the Property. (g) No subdivision of the Property shall be permitted, except as allowed under Health and Safety Code Sections 25232 (a) (2) and (b) (2). (h) No grading, excavation or construction shall be permitted on the Property that would adversely affect the operation and maintenance of the Cap, excluding routine maintenance or installation of utility facilities at the PG&E Martin Service Center, if said maintenance is performed in compliance with PG&E's "Guidelines for Excavations at Former Manufactured Gas Plant Sites" dated September 1991, or equivalent revisions of those guidelines. (i) No activities that will disturb the soil in the area (e. g., excavation, grading, removal, trenching, filling, or earth movement) shall be permitted on the Property without approval of a Health and Safety Plan and a Soils Management Plan by DTSC, with the exceptions noted in Paragraph h. (j) A sign shall be posted in the PG&E Martin Service Center office in English stating that no grading, excavation or construction activities can occur on the Property without written permission of DTSC, with the exceptions noted in Paragraph h. (k) Any contaminated soils brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law. (l) All uses and development of the Property shall preserve the integrity of the Cap installed on the Property pursuant to the requirements of the Remedial Action Plan. (m) Any proposed alteration of the Cap shall require written approval by the Department. (n) The Owner shall monitor the Cap regularly to insure the integrity of the Cap as required in the Operation and Maintenance Agreement. (o) The Owner shall notify DTSC of each of the following: 1) The type, cause, location and date of any disturbance to the Cap by fire, explosion, or earthquake, that could affect the ability of the system to contain the encapsulated hazardous substances and 2) the type and date of repair of such disturbance. Notification to DTSC shall be made by registered mail within ten (10) working days of both the discovery of system disturbance and the completion of repairs. The Owner shall provide thirty (30) days advance written notice to the Department of any sale or other conveyance of the Property to a third person. DTSC shall not, by reason of the Covenant, have authority to approve, disapprove, or otherwise affect any sale or other conveyance of the Property.	Prohibited Uses: The Property shall not be used for any of the following purposes: (a) A residence, including any mobile home or factory built housing, constructed or installed for use as residential human habitation. (b) A hospital for humans. (c) A public or private school for persons under 21 years of age. (d) A day care center for children. Soil Management (a) No activities that will disturb the soil below the Caps (e.g., excavation, grading, removal, trenching, filling, earth movement, or mining) shall be allowed on the Property without a Soil Management Plan and a Health and Safety Plan approved by DTSC. (b) Any contaminated soil brought to the surface by grading, excavation, trenching, or backfilling shall be managed in accordance with all applicable provisions of state and federal law. (c) The Owner shall provide the Department written notice at least fourteen (14) days prior to any building, filling, grading, mining, or excavating in the Property below the Caps or interceptor trench except for routine maintenance or installation of utility facilities if said maintenance or installation is performed in compliance with Guidelines for Excavations at Former Manufactured Gas Plant Sites (Pacific Gas and Electric, September 1991) or a comparable excavation guideline approved by DTSC in advance of said maintenance or installation. Prohibited Activities: The following activities shall not be conducted at the Property: (a) Raising of food (cattle, food crops); (b) Drilling for water, oil, or gas without prior written approval by DTSC. (c) Extraction of groundwater for purposes other than site remediation or construction dewatering. Non-interference with Caps and Interceptor Trench (a) Activities that may disturb the Caps or the Interceptor Trench (e.g. excavation, grading, removal, trenching, filling, earth movement/or minings) shall not be permitted on the Property without prior review and approval by the Department except as specified in Section 4.02(c). (b) All uses and development of the Property shall preserve the integrity of the Caps and the Interceptor Trench. (c) The Caps and the Interceptor Trench shall not be altered without written approval by the DTSC. (d) Covenantor shall notify DTSC of each of the following: (i) the type, cause, location, and date of any damage to the Caps or the Interceptor Trench including any work for which prior notice under 4.02 (c) was not required; and (ii) the type and date of repair of such damage. Notification to the Department shall be made as provided below within ten (10) working days of both the discovery of any such disturbance and the completion of any repairs. Timely and accurate notification by any Owner or Occupant shall satisfy this requirement on behalf of all other Owners and Occupants. DTSC shall have reasonable right of entry and access to the Property for inspection, monitoring, and other activities consistent with the purposes of this Covenant as deemed necessary by DTSC to protect the public health or safety, or the environment. The entity or person responsible for implementing the Operation and Maintenance Agreement shall have reasonable right of entry and access to the Property for the purpose of implementing the Operation and Maintenance Plan until the DTSC determines that no further Operation and Maintenance are required.

FIGURES

LEGEND

- PG&E PROPERTY BOUNDARY / MARTIN SERVICE CENTER
- PARCELS
- PROPOSED MARTIN SUBSTATION PROJECT SITE
- PROPOSED NEW SUBSTATION AT DALY CITY YARD (PROJECT VARIANT)
- DISTRIBUTION EXPRESS FEEDER





NOTES

1. FEATURES SHOWN ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: ESRI, 2022.
3. SAN MATEO COUNTY ASSESOR'S PARCEL NUMBERS (APNS) FROM SHAPEFILE PROVIDED BY ENVIRONMENTAL SCIENCE ASSOCIATES ON MARCH 11, 2024.

0 200 400 FEET

N

CDIM ENGINEERING

CDIM ENGINEERING, INC.
45 POLK STREET, THIRD FLOOR
SAN FRANCISCO, CA 94102
WWW.CDIMENGINEERING.COM
PH:(415)498-0535

PROPOSED MARTIN SUBSTATION SEPARATION AND NEW SUBSTATION AT DALY CITY YARD (PROJECT VARIANT)
PG&E POWER ASSET ACQUISITION PROJECT
GENEVA AVENUE AND BAYSHORE BOULEVARD
BRISBANE, CALIFORNIA

FIGURE
1

LEGEND

- PG&E PROPERTY BOUNDARY / MARTIN SERVICE CENTER
- APPROXIMATE EXTENT OF FORMER MGP (1911)
- PARCELS
- DALY CITY YARD
- MARTIN SUBSTATION
- DRAINAGE DITCH
- GROUNDWATER INTERCEPTOR TRENCH
- KNOWN EXTENT OF MGP IMPACTS
- OU-1
- OU-2

NOTES

1. FEATURES SHOWN ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: ESRI, 2022.
3. FORMER MANUFACTURED GAS PLANT (MGP) FOOTPRINT IS APPROXIMATE BOUNDARY OF MGP FEATURES SHOWN IN AN 1911 PLAN OF MARTIN STATION PRESENTED IN PG&E'S PRELIMINARY ASSESSMENT OF THE FORMER MGP SITE IN THE CITY OF DALY CITY, DATED DECEMBER 1986.
4. OPERABLE UNIT (OU) BOUNDARIES AND EXTENT OF MGP IMPACTS SHOWN ARE BASED ON FIGURE 4 PRESENTED IN THE HAYLEY AND ALDRICH SOIL MITIGATION PLAN DATED JUNE 2017.



N

0 200 400 FEET

CDIM ENGINEERING

CDIM ENGINEERING, INC.
45 POLK STREET, THIRD FLOOR
SAN FRANCISCO, CA 94102
WWW.CDIMENGINEERING.COM
PH:(415)498-0535

MARTIN SERVICE CENTER LAYOUT AND ENVIRONMENTAL FEATURES
PG&E POWER ASSET ACQUISITION PROJECT
GENEVA AVENUE AND BAYSHORE BOULEVARD
BRISBANE, CALIFORNIA

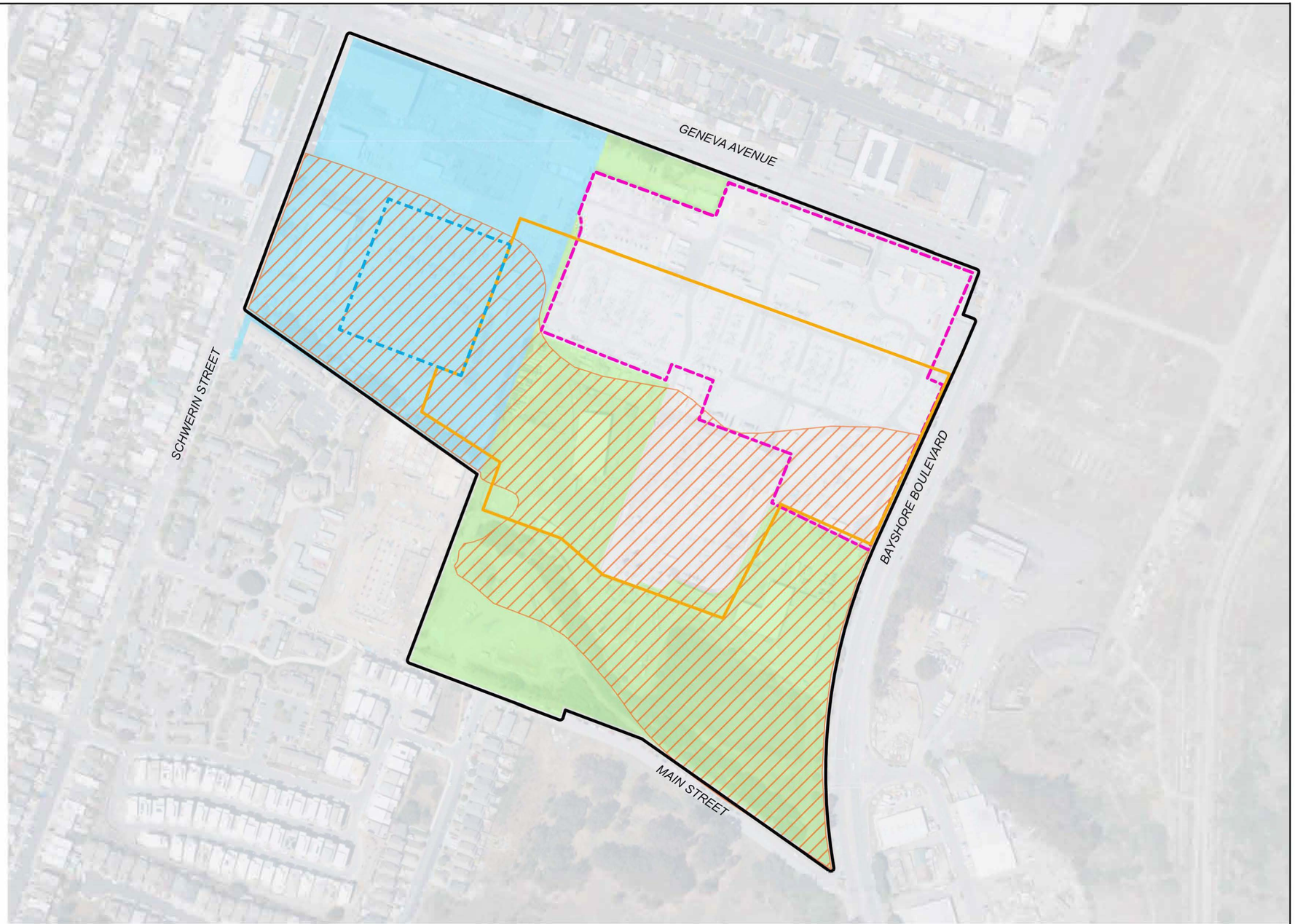
FIGURE
2

LEGEND

- PG&E PROPERTY BOUNDARY / MARTIN SERVICE
- PROPOSED NEW SUBSTATION AT DALY CITY YARD (PROJECT VARIANT)
- PROPOSED INCOMING TRANSMISSION LINE AREA (PROJECT VARIANT)
- PROPOSED MARTIN SUBSTATION PROJECT SITE
- KNOWN EXTENT OF MGP IMPACTS
- OU-1
- OU-2

NOTES

1. FEATURES SHOWN ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: ESRI, 2022.
3. OPERABLE UNIT (OU) BOUNDARIES AND EXTENT OF MANUFACTURED GAS PLANT (MGP) IMPACTS SHOWN ARE BASED ON FIGURE 4 PRESENTED IN THE HAYLEY AND ALDRICH SOIL MITIGATION PLAN DATED JUNE 2017.



0 200 400 FEET

N

CDIM ENGINEERING

CDIM ENGINEERING, INC.
45 POLK STREET, THIRD FLOOR
SAN FRANCISCO, CA 94102
WWW.CDIMENGINEERING.COM
PH:(415)498-0535

PROPOSED MARTIN SUBSTATION SEPARATION AND NEW SUBSTATION
AT DALY CITY YARD (PROJECT VARIANT) WITH OPERABLE UNITS
PG&E POWER ASSET ACQUISITION PROJECT
GENEVA AVENUE AND BAYSHORE BOULEVARD
BRISBANE, CALIFORNIA

FIGURE
3

ATTACHMENT A

Covenant to Restrict Use of Property, Daly City Yard (1995)

2303-05-2160

AFTER RECORDING, RETURN TO:
PACIFIC GAS AND ELECTRIC COMPANY
Building & Land Services, H21A
123 Mission Street, Room 2134
P.O. Box 770000
San Francisco, CA 94177
Location: ~~City~~/Uninc.

Recording Fee $ 47.00

Documentary Transfer Tax $

X Computed on Full Value of Property Conveyed, or
___ Computed on Full Value Less Liens & Encumberances Remaining at Time of Sale.

Signature of declarant or agent determining tax

OFFICIAL RECORDS OF
SAN MATEO COUNTY
ASSESSOR-COUNTY CLERK-RECORDER
WARREN SLOCUM

Recorded at Request of
PACIFIC GAS AND ELECTRIC CO

95-028573 03/23/95 09:18

Recording Fee: 47.00 ASALAS

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

15 pp

TITLE(S)

COVENANT AND AGREEMENT TO RESTRICT USE OF PROPERTY
PG&E MARTIN SERVICE CENTER DALY CITY YARD
DALY CITY, CALIFORNIA

95028573

Recording Requested By:

The Pacific Gas and Electric Company

When Recorded, Mail To:

Department of Toxic Substances Control
Region 2
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2737
Attention: Barbara Cook, Chief
Site Mitigation Branch

COVENANT AND AGREEMENT
TO RESTRICT USE OF PROPERTY

PG&E Martin Service Center
Daly City Yard
Daly City, California

1.0 This Covenant and Agreement ("Covenant") is made on the 7 day of March, 1995 by the Department of Toxic Substances Control ("Department") and by the Pacific Gas and Electric Company (PG&E) ("Covenantor"), which is the owner of the PG&E Martin Service Center situated in the City of Daly City, County of San Mateo, State of California.

This Covenant and Agreement affects the Daly City Yard of the PG&E Martin Service Center which is located at 731 Schwerin Street, Daly City, California; and approximately 33 feet of the Property bordering Schwerin Street which was dedicated to the City of Daly City by PG&E in 1908 for the purpose of a street right-of-way (Schwerin Street Strip). Daly City retains interest over approximately 176 square yards of this portion of the Property as a limited easement for public passage and utilities.

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

550285 73

~~a limited easement for public passage and utilities.~~

The Property is depicted on the map attached hereto as Exhibit A, and made a part hereof, (hereinafter referred to as the "Property"); and is further described in Exhibit B attached hereto and made a part hereof.

Covenantor and the Department desire and intend that in order to protect the present and future public health and safety, the Property shall be used in such a manner as to avoid potential harm to persons or property, which might otherwise result from hazardous substances which have been encapsulated on the Property. Contaminated soil has been covered by a concrete parking lot, building foundations, and a constructed cap over the berm and the Schwerin Street Strip, hereinafter described as the "Cap". The Cap eliminates any significant risks to human health or the environment by eliminating the exposure pathways.

ARTICLE I

GENERAL PROVISIONS

1.01. Provisions to Run with the Land. This Covenant sets forth protective provisions, covenants, restrictions, and conditions (collectively referred to as "Restrictions"), upon and subject to which the Property shall be improved, held, used, occupied, leased, sold, hypothecated, encumbered, and/or conveyed. Each and all of the Restrictions shall run with the land, and pass with the Property, and shall apply to, inure to the benefit of, and bind the respective successors in interest thereof. Each and all

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

85028373

of the Restrictions are imposed upon the Property as described in Paragraph 1.0. Each and all of the Restrictions are imposed pursuant to Health and Safety Code Sections 25355.5 and 25356.1, and run with the land pursuant to Health and Safety Code Section 25355.5. Each and all of the Restrictions are for the benefit of and enforceable by the Department.

1.02. Concurrence of Owners Presumed. All purchasers, lessees, or possessors of any portion of the Property shall be deemed by their purchase, leasing, or possession of such Property, to be in accord with the foregoing and to agree for and among themselves, their heirs, successors, and assignees, and the agents, employees, and lessees of such owners, heirs, successors, and assignees, that the Restrictions as herein established must be adhered to for the benefit of future Owners and Occupants and that their interest in the Property shall be subject to the Restrictions contained herein.

1.03. Incorporation into Deeds and Leases. Covenantor desires and covenants that the Restrictions set out herein shall be incorporated by reference in each and all deeds and leases of any portion of the Property.

ARTICLE II

DEFINITIONS

2.01. Department. "Department" shall mean the California State Department of Toxic Substances Control and shall include its successor agencies, if any.

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

85029573

2.02. Improvements. "Improvements" shall mean all buildings, roads, driveways, regrading, and paved parking areas, constructed or placed upon any portion of the Property.

2.03. Occupant(s). "Occupant(s)" shall mean those persons entitled by ownership, leasehold, or other legal relationship to the exclusive right to occupy any portion of the Property.

2.04. Owner(s). "Owner(s)" shall mean the Covenantor or its successors in interest, including heirs, and assigns, who hold title to all or any portion of the Property.

2.05. Director. "Director" shall mean the Director of the California Department of Toxic Substances Control or his or her designee.

ARTICLE III

DEVELOPMENT, USE, AND CONVEYANCE OF THE PROPERTY

3.01. Restrictions on Development and Use. Covenantor promises to restrict the use of the Property described in Exhibits A and B as follows:

a. Development of the Property shall be restricted to industrial, utility, commercial or office space use.

b. No hospitals or health clinics shall be permitted on the Property.

c. No schools for persons under 18 years of age shall be permitted on the Property.

d. No daycare centers for either children or senior citizens shall be permitted on the Property.

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

85028573

e. No drilling for water for drinking or irrigation purposes shall be permitted on the Property.

f. No raising of food (food crops or animals) shall be permitted on the Property.

g. No subdivision of the Property shall be permitted, except as allowed under Health and Safety Code Sections 25232 (a)(2) and (b)(2).

h. No grading, excavation or construction shall be permitted on the Property that would adversely affect the operation and maintenance of the Cap described in Paragraph 1.0, excluding routine maintenance or installation of utility facilities at the PG&E Martin Service Center, if said maintenance is performed in compliance with PG&E's "Guidelines for Excavations at Former Manufactured Gas Plant Sites" dated September 1991, or equivalent revisions of those guidelines.

i. No activities that will disturb the soil in the area (e.g., excavation, grading, removal, trenching, filling, or earth movement) shall be permitted on the Property without approval of a Health and Safety Plan and a Soils Management Plan by the Department, with the exceptions noted in Paragraph h.

j. A sign shall be posted in the PG&E Martin Service Center office in English stating that no grading, excavation or construction activities can occur on the Property without written permission of the Department, with the exceptions

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

95028573

noted in Paragraph h.

k. Any contaminated soils brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law.

l. All uses and development of the Property shall preserve the integrity of the Cap installed on the Property pursuant to the requirements of the Department's Remedial Action Plan.

m. Any proposed alteration of the Cap shall require written approval by the Department.

n. The Owner shall monitor the Cap regularly to insure the integrity of the Cap as required in the Operation and Maintenance Agreement.

o. The Owner shall notify the Department of each of the following: 1) The type, cause, location and date of any disturbance to the Cap by fire, explosion, or earthquake, that could affect the ability of the system to contain the encapsulated hazardous substances and 2) the type and date of repair of such disturbance. Notification to the Department shall be made by registered mail within ten (10) working days of both the discovery of system disturbance and the completion of repairs.

3.02. Conveyance of Property. The Owner shall provide thirty (30) days advance written notice to the Department of any sale or other conveyance of the Property to a third person. The

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

95028573

Department shall not, by reason of the Covenant, have authority to approve, disapprove, or otherwise affect any sale or other conveyance of the Property.

3.03. Enforcement. Failure of the Owner to comply with any of the requirements set forth in paragraph 3.01 shall be grounds for the Department, by reason of the Covenant, to require that the Owner modify or remove any Improvements constructed in violation of that paragraph. Violation of the Covenant may be grounds for the Department to file civil and criminal actions against the Owner as provided by law.

3.04 Notice in Agreements. Owner and Occupant shall give all purchasers, lessees, and tenants a written notice containing the following statement:

> "The land described herein contains hazardous substances. Such condition renders the land and the owner, lessee, or other possessor of the land subject to requirements, restrictions, provisions, and liabilities contained in Chapter 6.5 and Chapter 6.8 of Division 20 of the Health and Safety Code. This statement is not a declaration that a hazard exists."

Owner and Occupant shall forward a copy of the signed notification to the Department within ten (10) days of purchase, lease or rental agreement.

ARTICLE IV

VARIANCE AND TERMINATION

4.01. Variance. Any Owner or, with the Owner's consent, any Occupant of the Property or any portion thereof may apply to the Department for a written variance from the provisions of this

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

85028573

Covenant. Such application shall be made in accordance with Section 25233, Health & Safety Code.

4.02 Termination. Any Owner or, with the Owner's consent, any Occupant of the Property or a portion thereof may apply to the Department for a termination of the Restrictions as they apply to all or any portion of the Property. Such application shall be made in accordance with Section 25234, Health & Safety Code.

4.03. Term. Unless terminated in accordance with paragraph 4.02 above, by law or otherwise, this Covenant shall continue in effect in perpetuity.

ARTICLE V

MISCELLANEOUS

5.01. No Dedication Intended. Nothing set forth herein shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Property or any portion thereof to the general public or for any purposes whatsoever.

5.02. Notices. Whenever any person gives or serves any notice, demand, or other communication with respect to this Covenant, each such notice, demand, or other communication shall be in writing and shall be deemed effective 1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served or official of a government agency being served, or 2) three (3) business days after deposit in the mail if mailed by United States mail, postage paid certified, return receipt requested:

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

95028573

To: "Covenantor"
Pacific Gas and Electric Company
77 Beale Street
San Francisco, California 94120
Attn: Corporate Secretary

Copy to: Pacific Gas and Electric Company
77 Beale Street
San Francisco, California 94120
Attn: Manager, Environmental Services Department
Site Remediation Group

Copy to: Pacific Gas and Electric Company
123 Mission Street, H21A
San Francisco, California 94177
Attn: Manager, Building and Land Services

Copy to: Department of Toxic Substances Control
Region 2
700 Heinz Avenue, Suite 200
Berkeley, California 94710
Attn: Chief, Site Mitigation Branch

5.03. Partial Invalidity. If any portion of the Restrictions or terms set forth herein is determined to be invalid for any reason, the remaining portion shall remain in full force and effect as if such portion had not been included herein.

5.04. Article Headings. Headings at the beginning of each numbered article of this Covenant are solely for the convenience of the parties and are not a part of the Covenant.

5.05. Recordation. This instrument shall be executed by the Covenantor and by the Site Mitigation Branch Chief, California Department of Toxic Substances Control. This instrument shall be recorded by the Covenantor in the County of San Francisco within ten (10) days of the date of execution.

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

85028573

5.06. Reference. All references to Code sections include successors provisions.

IN WITNESS WHEREOF, the parties execute this Covenant as of the date set forth above.

OWNER: Pacific Gas and Electric Company

By: P Bruce Bangle

Title: Manager, Building and Land Services

Date: February 27, 1995

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

By: Barbara J Cook

Barbara Cook

Chief, Site Mitigation Branch, Region 2

Date: March 7, 1995

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

95028573

STATE OF CALIFORNIA)

)

COUNTY OF SAN FRANCISCO)

On this 27TH day of FEBRUARY, in the year 1995, before me MELISSA BROSNAN, personally appeared P. BRUCE BENZLER, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the persons, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Melissa Brosnan

PWR1 MELISSA BROSNAN Comm. # 1032560 NOTARY PUBLIC CALIFORNIA City and County of San Francisco My Comm. Expires July 17, 1998 PWR1

-11-

95028573

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

STATE OF CALIFORNIA)

COUNTY OF ALAMEDA)

On MARCH 7, 1995 (DATE) before me, WILLIE H. McBRIDE, NOTARY PUBLIC (NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC")

personally appeared, BARBARA J. COOK

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Willie H. McBride (SEAL)
NOTARY PUBLIC SIGNATURE

MGC 1 — Willie H. McBride
Comm. #984857
NOTARY PUBLIC - CALIFORNIA
ALAMEDA COUNTY
Comm. Expires Feb. 16, 1997 — MGC 1

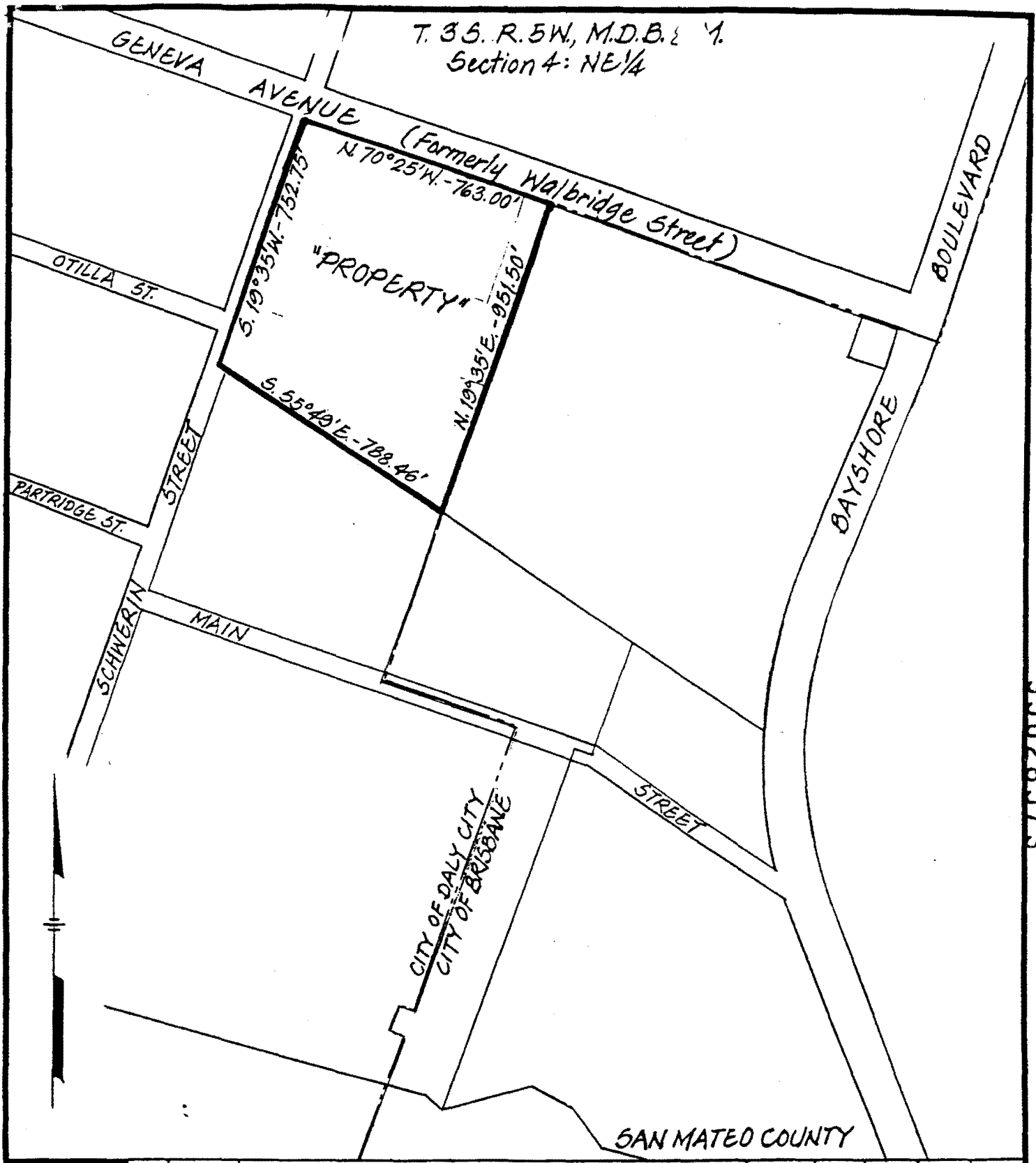
95028573

OPTIONAL INFORMATION

TITLE OR TYPE OF DOCUMENT COVENANT AND AGREEMENT

DATE OF DOCUMENT MARCH 7, 1995 NUMBER OF PAGES 14

SIGNER(S) OTHER THAN NAMED ABOVE



95028573

APPROVED BY									
		REV.	DATE	DESCRIPTION	GM	DWN.	CHKD.	SUPV.	APVD.

GM 4150397			B/M
SUPV.			DWG. LIST
DSGN. EKC			SUPSDS
DWN.			SUPSD BY
CHKD.			SHEET NO. SHEETS
O.K.			DRAWING NUMBER REV.
DATE 10-17-94	SCALE 1"= 400'		

MARTIN SERVICE CENTER

EXHIBIT "A"

PACIFIC GAS AND ELECTRIC COMPANY

SAN FRANCISCO, CALIFORNIA

MICROFILM

DIETERICH POST REORDER NO. 100682

7000-4047 (EKC-16) 11 94 2
Martin Service Center

EXHIBIT "B"

(SBE 135-41-28 Parcel 1; 135-41-28A Parcels 1 and 2)

The parcel of land, situate in the City of Daly City, County of San Mateo, State of California, described as follows:

Beginning at the point of intersection of the centerline of Schwerin Street and the Southerly line of Geneva Avenue (formerly Walbridge Street) and running thence along said centerline

(1) south 19° 35' west 752.75 feet

to the Northerly line of the "Partridge Tract", as shown upon "Map of the Partition of the Partridge Tract, Visitacion Valley, San Mateo County", filed in Book 12 of Maps, page 76, in the office of the Recorder of said County of San Mateo; thence running along said Northerly line

(2) south 55° 49' east 788.46 feet, more or less,

to a point perpendicularly distant 763.00 feet easterly from the centerline of Schwerin Street; thence running parallel with said centerline

(3) north 19° 35' east 951.50 feet, more or less,

to the Southerly line of Geneva Avenue; thence running along said Southerly line

(4) north 70° 25' west 763.00 feet

to the point of beginning; containing 14.926 acres.

95028573

ATTACHMENT B

Covenant to Restrict Use of Property, Martin Service Center (2002)

Exempt from Recording Fees per code 6103

RECORDING REQUESTED BY:
The Pacific Gas and Electric Company
77 Beale Street
San Francisco, California 94105-1814

WHEN RECORDED, MAIL TO:

Department of Toxic Substances Control
Berkeley Office
700 Heinz Avenue
Berkeley, California 94710
Attention: Barbara J. Cook, Chief
Northern California - Coastal Cleanup
Operations Branch

DOC # 2002-208875
10/17/2002 11:48A DR Fee:NC
Page 1 of 26
Recorded in Official Records
County of San Mateo
Warren Slocum
Assessor-County Clerk-Recorder
Recorded By CALIFORNIA ENVIRONMENTAL

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

26p

COVENANT TO RESTRICT USE OF PROPERTY

ENVIRONMENTAL RESTRICTION

(Re: PG&E Martin Service Center Brisbane and Daly City State Board of Equalization Parcel Numbers 135-41-28 Parcel 1, 135-41-28 Parcel 2, 135-41-28B Parcel 3, 135-41-28B Parcel 4, and 135-41-3A Parcel 3)

This Covenant and Agreement ("Covenant") is made by and between the Pacific Gas and Electric Company (the "Covenantor"), the current owner of property situated in Brisbane and Daly City, County of San Mateo, State of California, described in Exhibit "A", attached hereto and incorporated herein by this reference (the "Property"), and the Department of Toxic Substances Control (the "Department"). Pursuant to Civil Code section 1471(c), the Department has determined that this Covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the land of hazardous materials as defined in Health and Safety Code ("H&SC") section 25260. The Covenantor and the Department, collectively referred to as the "Parties", hereby agree that the use of the Property be restricted as set forth in this Covenant.

ARTICLE I

STATEMENT OF FACTS

1.01. The Property, totaling approximately 49 acres is more particularly described and depicted in Exhibit "A", attached hereto and incorporated herein by this reference. The Property is located in the area now generally bound by Schwerin Street to the west, Geneva Avenue to the north, Bayshore Boulevard to the east, and Main Street, Bayshore Park, and the Midway Village Housing Complex to the south, in the County of San Mateo, State of California. This property is more specifically described as State Board of Equalization Parcel Numbers: 135-41-28 Parcel 1, 135-41-28 Parcel 2, 135-41-28B Parcel 3, 135-41-28B Parcel 4, and 135-41-3A Parcel 3.

1.02. The Property was remediated pursuant to two separate Remedial Action Plans and a subsequent Explanation of Significant Differences developed pursuant to Chapter 6.8 of Division 20 of the H&SC. Because hazardous substances, as defined in H&SC section 25316, which are also hazardous materials as defined in H&SC section 25260, including polycyclic aromatic hydrocarbons (PAHs), remain in the soil and groundwater in and under portions of the Property, the Remedial Action Plans provide that a deed restriction be required as part of the site remediation. The Department circulated the Remedial Action Plans, which include health risk assessments, together with negative declarations pursuant to the California Environmental Quality Act, Public Resources Code section 21000 et seq. for public review and comment. The first Remedial Action Plan prescribed remedial actions to be performed at Operable Unit 1 (OU-1) on the Property and the second Remedial Action Plan prescribed remedial actions to be performed at Operable Unit 2 (OU-2) on the Property. The OU-1 Remedial Action Plan and negative declaration were approved by the Department on June 7, 1993. The OU-2 Remedial Action Plan and negative declaration, were approved by the Department on July 20, 1998. Subsequently, the Department amended the OU-2 Remedial Action Plan by finalizing an Explanation of Significant Differences on September 26, 2000. Remediation at OU-1 included: 1) Covering the strip of land between Schwerin Street and the Martin Service Center property

with a concrete cap with accommodations for trees; and 2) covering the berm along the southern boundary of the Martin Service Center Daly City Yard with a shotcrete cap and providing landscaping and drainage. Remediation at OU-2 included: 1) Management of soil generated by the Bayshore Storm Drain Improvement Project including chemical characterization and drying as required for on-site grading and off-site disposal; 2) Off-site transportation and disposal of soil containing concentrations of carcinogenic polycyclic aromatic hydrocarbons (cPNAs) greater than 10 milligrams per kilogram (mg/kg ; 3) On-site screening and grading of soil containing concentrations of cPNAs less than or equal to 10 mg/kg , and placement of a final chip seal ("the Cap") over the graded area ("the Capped Property"); and 4) Construction and operation of a groundwater interceptor trench ("Interceptor Trench") along the Bayshore Boulevard boundary of the Martin Service Center property, more particularly described in the Engineering drawings in Exhibit B. The locations of the Caps and the Interceptor Trench are shown on Exhibit C. The operation and maintenance of the Caps and the Interceptor Trench are pursuant to an Operation and Maintenance Plan incorporated into the Operation and Maintenance Agreement between Covenantor and the Department dated August 30, 2002.

1.03. As detailed in the Remedial Action Plans and the subsequent Explanation of Significant Differences, as approved by the Department on June 7, 1993, July 20, 1998, and September 26, 2000, respectively, all or a portion of the subsurface soil below the Caps contain hazardous substances, as defined in H&SC section 25316, which include polycyclic aromatic hydrocarbons (PAHs) in the ranges set forth below: total PAHs up to 12,657 mg/kg (in lampblack). Groundwater levels in monitoring wells at the Property historically have ranged from 3.94 feet above the ground surface to 7.35 feet below the ground surface. Contaminants in the groundwater include PAHs at up to 3,566 micrograms per liter (ug/l) (unfiltered sample). The Department concludes that the groundwater could present an unacceptable threat to human health and safety should a complete pathway to the human receptor exist.

Based on the Remedial Action Plans and the subsequent Explanation of Significant Differences the Department concluded that use of the Property for a residence, hospital, school for persons under the age of 21, or day care center would entail an unacceptable

health risk. The Department further concluded that the Property, as remediated, and subject to the restrictions of this Covenant, does not present an unacceptable threat to human safety or the environment if limited to commercial, industrial, or open space use.

ARTICLE II
DEFINITIONS

2.01. Department. "Department" means the California Department of Toxic Substances Control and includes its successor agencies, if any.

2.02. Owner. "Owner" means the Covenantor, its successors in interest, and their successors in interest, including heirs and assigns, who at any time hold title to all or any portion of the Property.

2.03. Occupant. "Occupant" means Owners and any person or entity entitled by ownership, leasehold, or other legal relationship to the right to occupy any portion of the Property.

ARTICLE III
GENERAL PROVISIONS

3.01. Restrictions to Run with the Land. This Covenant sets forth protective provisions, covenants, restrictions, and conditions (collectively referred to as "Restrictions"), subject to which the Property and every portion thereof shall be improved, held, used, occupied, leased, sold, hypothecated, encumbered, and/or conveyed. Each and every Restriction: (a) runs with the land pursuant to H&SC section 25355.5(a)(1)(C) and Civil Code section 1471; (b) inures to the benefit of and passes with each and every portion of the Property, (c) is for the benefit of, and is enforceable by the Department and/or Covenantor, and (d) is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.

3.02. Binding upon Owners/Occupants. Pursuant to H&SC section

25355.5(a)(1)(C), this Covenant binds all owners of the Property, their heirs, successors, and assignees, and the agents, employees, and lessees of the owners, heirs, successors, and assignees. Pursuant to Civil Code section 1471(b), all successive owners of the Property are expressly bound hereby for the benefit of the Department.

3.03. Written Notice of the Presence of Hazardous Substances. Prior to the sale, lease or sublease of the Property, or any portion thereof, the owner, lessor, or sublessor shall give the buyer, lessee, or sublessee notice that hazardous substances are located on or beneath the Property, as required by H&SC section 25359.7.

3.04. Incorporation into Deeds and Leases. The Restrictions set forth herein shall be incorporated by reference in each and all deeds and leases for any portion of the Property.

3.05. Conveyance of Property. The Owner shall provide notice to the Department not later than thirty (30) days after any conveyance of any ownership interest in the Property (excluding mortgages, liens, and other non-possessory encumbrances). The Department shall not, by reason of this Covenant, have authority to approve, disapprove, or otherwise affect proposed conveyance, except as otherwise provided by law, by administrative order, or by a specific provision of this Covenant.

ARTICLE IV
RESTRICTIONS

4.01. Prohibited Uses. The Property shall not be used for any of the following purposes:

(a) A residence, including any mobile home or factory built housing, constructed or installed for use as residential human habitation.

(b) A hospital for humans.

(c) A public or private school for persons under 21 years of age.

(d) A day care center for children.

4.02. Soil Management

(a) No activities that will disturb the soil below the Caps (e.g., excavation, grading, removal, trenching, filling, earth movement, or mining) shall be allowed on the Property without a Soil Management Plan and a Health and Safety Plan approved by the Department.

(b) Any contaminated soil brought to the surface by grading, excavation, trenching, or backfilling shall be managed in accordance with all applicable provisions of state and federal law.

(c) The Owner shall provide the Department written notice at least fourteen (14) days prior to any building, filling, grading, mining, or excavating in the Property below the Caps or interceptor trench except for routine maintenance or installation of utility facilities if said maintenance or installation is performed in compliance with *Guidelines for Excavations at Former Manufactured Gas Plant Sites* (Pacific Gas and Electric, September 1991) or a comparable excavation guideline approved by the Department in advance of said maintenance or installation.

4.03. Prohibited Activities. The following activities shall not be conducted at the Property:

(a) Raising of food (cattle, food crops);

(b) Drilling for water, oil, or gas without prior written approval by the Department.

(c) Extraction of groundwater for purposes other than site remediation or construction dewatering.

4.04. Non-Interference with Caps and Interceptor Trench. Covenantor agrees:

(a) Activities that may disturb the Caps or the Interceptor Trench (e.g. excavation, grading, removal, trenching, filling, earth movement, or

2002-208875
10/17/2002 11:48A

mining) shall not be permitted on the Property without prior review and approval by the Department except as specified in Section 4.02(c).

(b) All uses and development of the Property shall preserve the integrity of the Caps and the Interceptor Trench.

(c) The Caps and the Interceptor Trench shall not be altered without written approval by the Department.

(d) Covenantor shall notify the Department of each of the following: (i) the type, cause, location, and date of any damage to the Caps or the Interceptor Trench including any work for which prior notice under 4.02 (c) was not required, and (ii) the type and date of repair of such damage. Notification to the Department shall be made as provided below within ten (10) working days of both the discovery of any such disturbance and the completion of any repairs. Timely and accurate notification by any Owner or Occupant shall satisfy this requirement on behalf of all other Owners and Occupants.

4.05. Access for Department. The Department shall have reasonable right of entry and access to the Property for inspection, monitoring, and other activities consistent with the purposes of this Covenant as deemed necessary by the Department to protect the public health or safety, or the environment.

4.06. Access for Implementing Operation and Maintenance. The entity or person responsible for implementing the Operation and Maintenance Agreement shall have reasonable right of entry and access to the Property for the purpose of implementing the Operation and Maintenance Plan until the Department determines that no further Operation and Maintenance are required.

ARTICLE V
ENFORCEMENT

5.01. Enforcement. Failure of the Covenantor, Owner, or Occupant to comply with any of the Restrictions specifically applicable to it shall be grounds for the Department to

require that the Covenantor or Owner modify or remove any improvements ("Improvements" herein shall mean all buildings, roads, driveways, and paved parking areas) constructed or placed on any portion of the Property in violation of the Restrictions. Violation of this Covenant shall be grounds for the Department to file civil or criminal actions as provided by law.

ARTICLE VI
VARIANCE, TERMINATION, AND TERM

6.01. Variance. Covenantor, or any other aggrieved person, may apply to the Department for a written variance from the provisions of this Covenant. Such application shall be made in accordance with H&SC section 25233.

6.02 Termination. Covenantor, or any other aggrieved person, may apply to the Department for a termination of the Restrictions or other terms of this Covenant as they apply to all or any portion of the Property. Such application shall be made in accordance with H&SC section 25234..

6.03 Term. Unless ended in accordance with the Termination paragraph above, by law, or by the Department in the exercise of its discretion, this Covenant shall continue in effect in perpetuity.

ARTICLE VII
MISCELLANEOUS

7.01. No Dedication Intended. Nothing set forth in this Covenant shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Property or any portion thereof to the general public or anyone else for any purpose whatsoever.

7.02. Department References. All references to the Department include successor agencies/departments or other successor entity.

2002-208875
10/17/2002 11:48A
DR Page: 8 of 26

7.03. Recordation. The Covenantor shall record this Covenant, with all referenced Exhibits, in the County of San Mateo within ten (10) days of the Covenantor's receipt of a fully executed original.

7.04. Notices. Whenever any person gives or serves any Notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served, or (2) three (3) business days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested:

To Owner:
Darrell S. Klingman
The Pacific Gas and Electric Company
77 Beale Street
San Francisco, California 94105

To Department:
Barbara J. Cook, P.E., Chief
Northern California
Coastal Cleanup Operations Branch
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710

Any party may change its address or the individual to whose attention a Notice is to be sent by giving written Notice in compliance with this paragraph.

2002-208875
10/17/2002 11:48A
DR Page: 9 of 26

7.05. Partial Invalidity. If any portion of the Restrictions or other term set forth herein is determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included herein.

7.06 Statutory References. All statutory references include successor provisions.

7.07 Replacement and Recision of Existing OU-1 Deed Restriction. This document replaces and rescinds the existing *Covenant and Agreement to Restrict the Use of Property*, dated March 7, 1995 between the Department and PG&E for the Martin Service Center Daly City Yard.

IN WITNESS WHEREOF, the Parties execute this Covenant.

Covenantor: The Pacific Gas and Electric Company

By: _____

Title: Robert L. Harris, Vice President- Environmental Affairs

Date: 10/10/02

Department of Toxic Substances Control

By: Barbara J Cook

Title: Barbara J. Cook, P.E., Chief
Northern California
Coastal Cleanup Operations Branch

Date: 10/17/2002

2002-208875
10/17/2002 11:48A
DR Page: 10 of 26

STATE OF CALIFORNIA

COUNTY OF SAN FRANCISCO

On this 10th day of October, in the year 2002,

before me Alline D. Adams, personally appeared

Robert L. Harris

personally known to me (~~or proved to me on the basis of satisfactory evidence~~) to be the person(~~s~~) whose name(~~s~~) is /~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(~~s~~) on the instrument the person(s), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

WITNESS my hand and official seal.

Signature Alline D. Adams

ALLINE D. ADAMS
Comm. # 1232766
NOTARY PUBLIC - CALIFORNIA
City & County of San Francisco
My Comm. Expires Aug. 21, 2003

2002-208875
10/17/2002 11:48A
DR Page: 11 of 26

STATE OF CALIFORNIA

COUNTY OF Alameda

On this 17th day of October, in the year 2002,

before me Nicole Dee Thuemmler, personally appeared

Barbara J. Cook,

~~personally known to me~~ (or proved to me on the basis of satisfactory evidence) to be the person~~(s)~~ whose name~~(s)~~ is ~~are~~ subscribed to the within instrument and acknowledged to me that ~~he/she/they~~ executed the same in ~~his/her/their~~ authorized capacity~~(ies),~~ and that by ~~his/her/their~~ signature~~(s)~~ on the instrument the person~~(s),~~ or the entity upon behalf of which the person~~(s)~~ acted, executed the instrument.

WITNESS my hand and official seal.

NICOLE DEE THUEMMLER
Comm. # 1350260
NOTARY PUBLIC-CALIFORNIA
Alameda County
My Comm. Expires April 8, 2006

Signature Nicole Dee Thuemmler

2002-208875
10/17/2002 11:48A
OR Page: 12 of 26

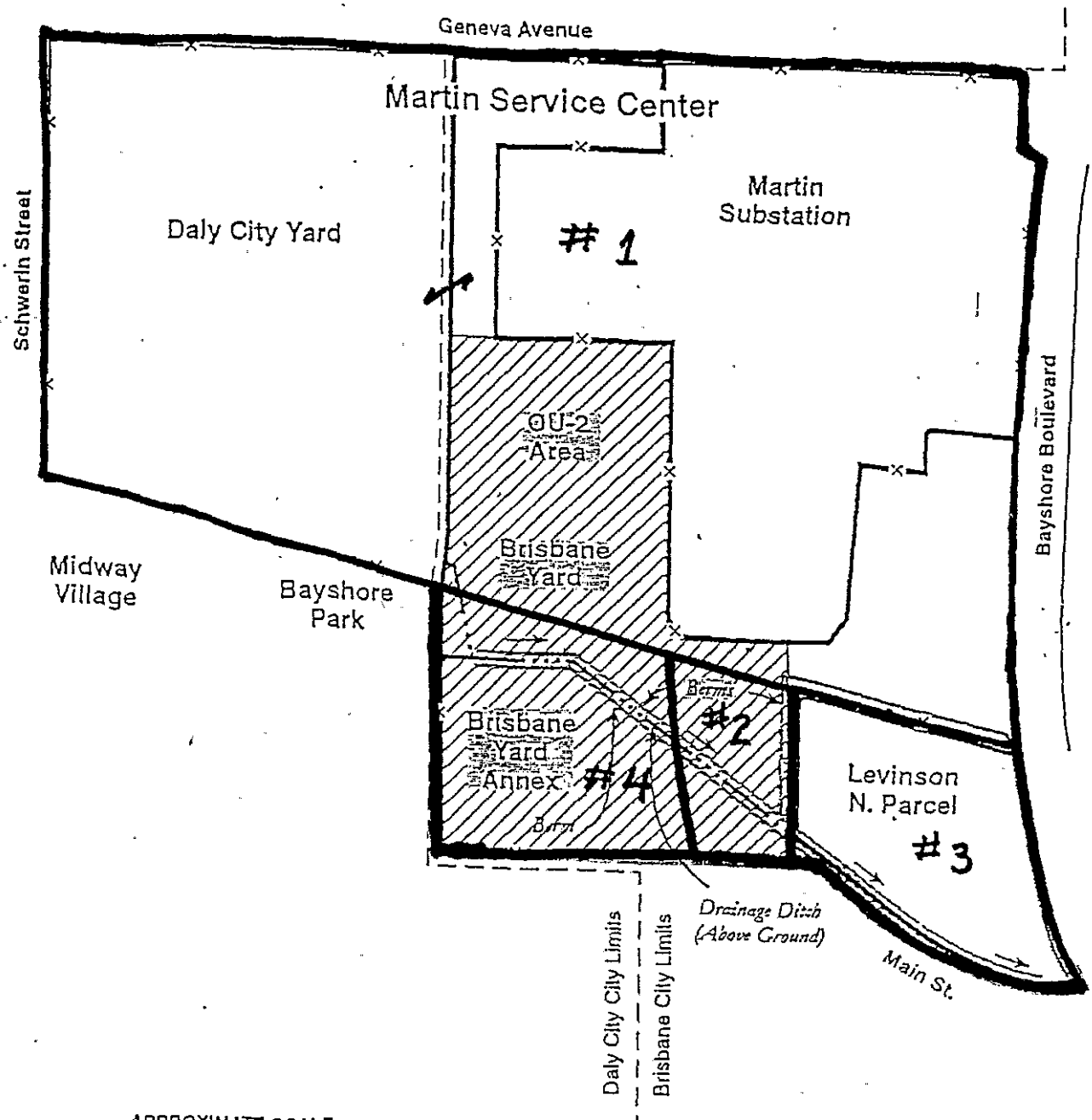


Figure A-1
KEY MAP
Property Descriptions

2002-208875
10/17/2002 11:48A
DR Page: 13 of 26

EXHIBIT A

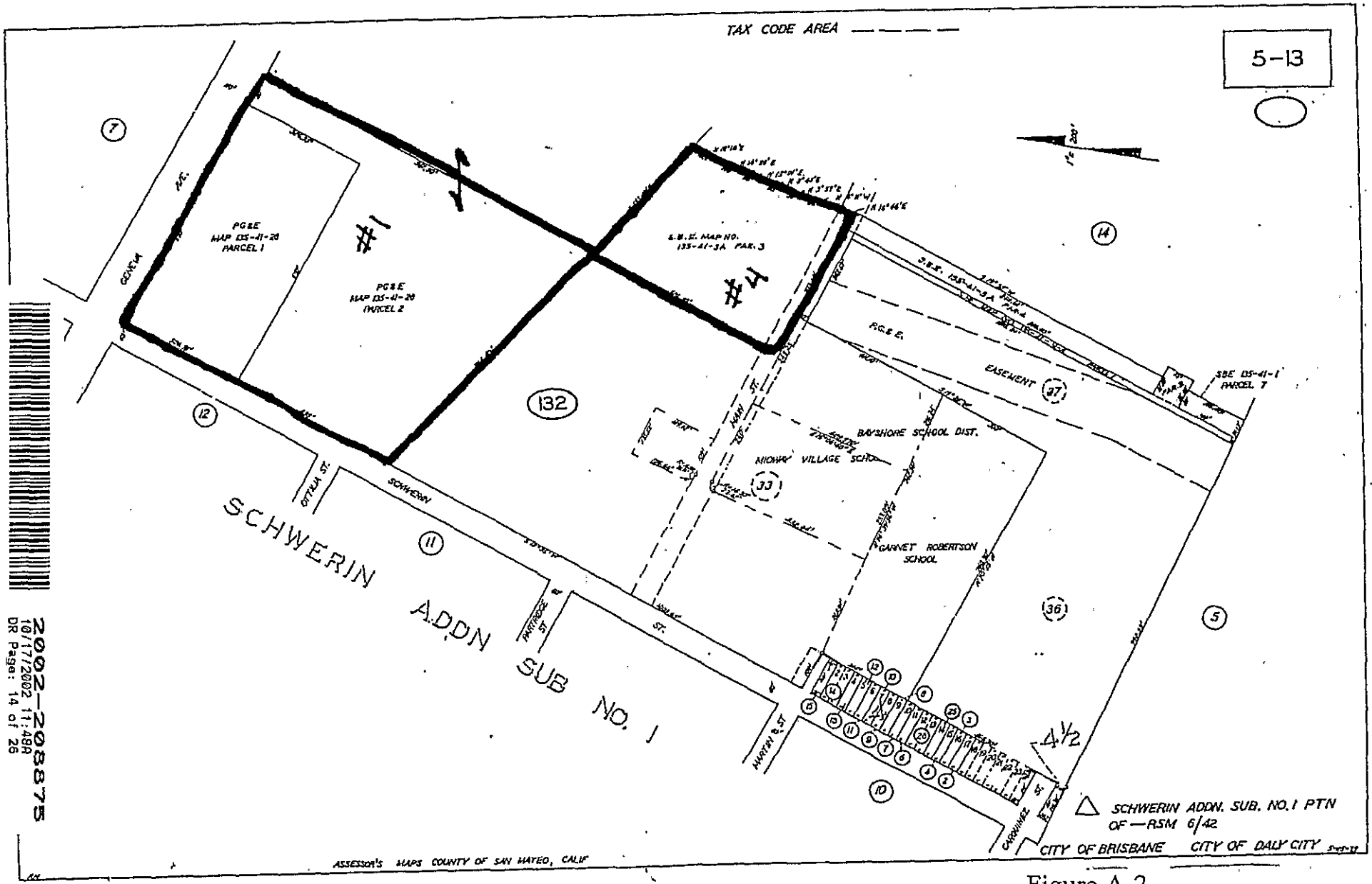
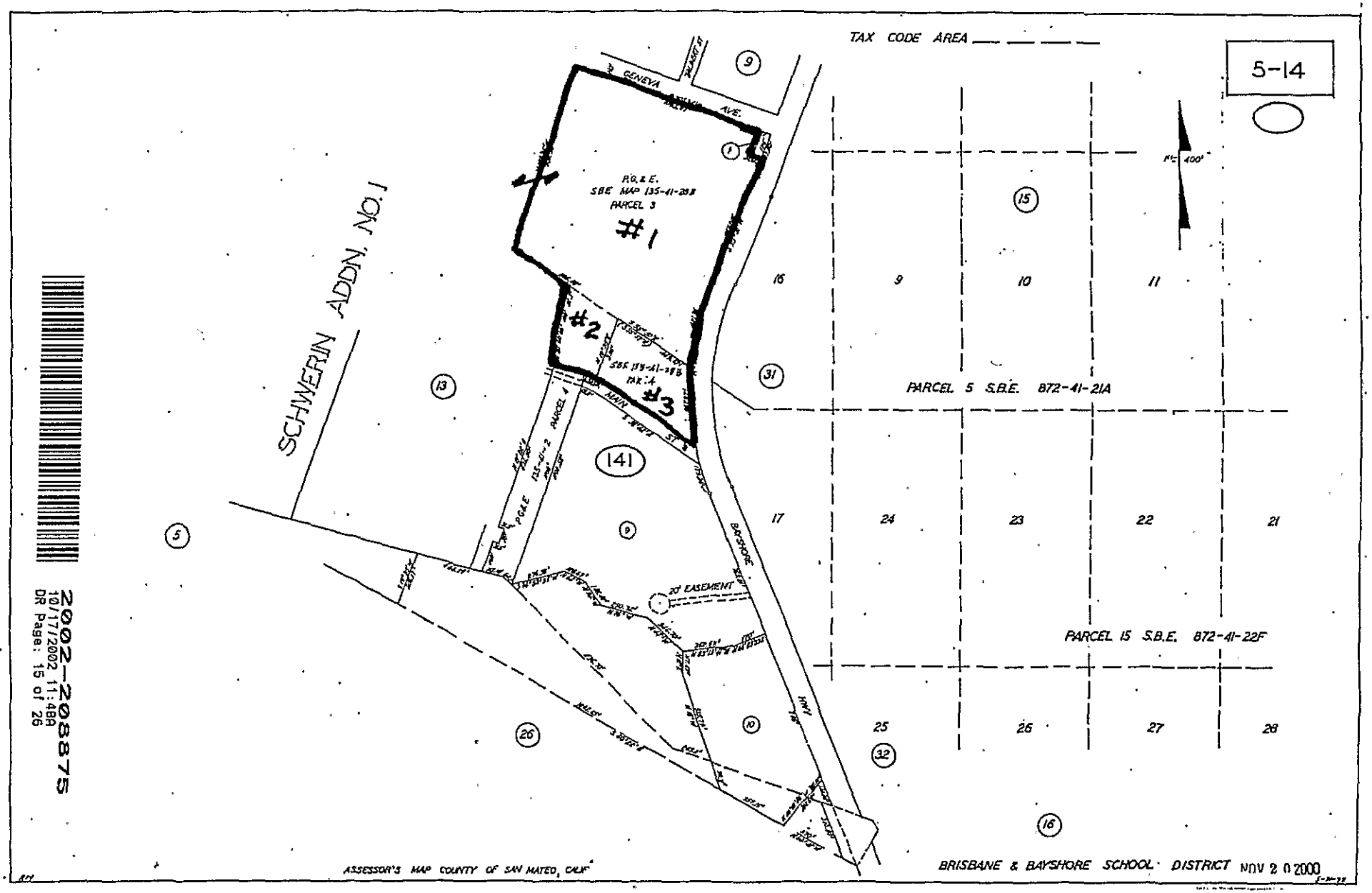


Figure A-2
PROPERTY OUTLINES
Properties 1 (partial) and 4

EXHIBIT A

2002-208875
10/17/2002 11:48A
DR Page: 14 of 26



2002-208875
10/17/2002 11:48A
DR Page: 15 of 26

Figure A-3
PROPERTY OUTLINES
Properties 1 (partial), 2 and 3

EXHIBIT A

MARTIN 503

#1

For Pipe Line Easement to City and Co. of S.F. see 197-SAC

ABS-238

LAND DEPT.
FILE No. 197-2.

103-500

2303-05-0041

THIS INDENTURE made by and between the MERCANTILE TRUST COMPANY OF SAN FRANCISCO, a corporation duly organized and existing under and by virtue of the laws of the State of California, and having its office and principal place of business in the City and County of San Francisco, State aforesaid, the party of the first part, and the SAN MATEO POWER COMPANY, a corporation also duly organized and existing under and by virtue of the laws of the State of California, and having its office andprincipal place of business in the said City and County of San Francisco, the party of the second part:

W I T N E S S E T H:

That the said party of the first part, for and in consideration of the sum of ten dollars ($10.00) gold coin of the United States of America to it paid by the said party of the second part, the receipt whereof is hereby acknowledged, does hereby remise, release and forever quitclaim unto the said party of the second part, its successors and assigns, that certain tract or parcel of land which is situate in the County of San Mateo, State of California, and is bounded on the north by a highway known as Walbridge Street, on the west by the lands of Schwerin, on the south by the lands of Partridge and on the east by the highway known as the San Bruno Road, and is more particularly described as follows, viz:-

#1

Commencing at the intersection of the center line of Walbridge Street with the center line of Schwerin Street, and running thence southerly along the center line of said Schwerin Street produced southerly, south eighteen and one-half (18½) degrees west eleven and 48/100 (11.48) chains more or less to the southwesterly corner of said tract of land; thence running southeasterly along the boundary line between the said tract of land and the said lands of Partridge,

#1

south fifty-six and three fourths (56¾) degrees east thirty-two (32) chains more or less to the San Bruno Road; thence along the San Bruno Road in a general northerly direction twenty-two chains more or less to the intersection of said San Bruno Road with said Walbridge Street; and thence westerly along said Walbridge Street thirty (30) chains more or less to the point of beginning, except a certain parcel of land situate in the northeasterly corner of said tract, having a frontage of approximately one hundred (100) feet on Walbridge Street and one hundred and twenty-five (125) feet on said San Bruno Road, which was heretofore granted by Isabella D. Walbridge, Thomas H. Walbridge, Narcissa Grace Secor and Mary D. Newton to Guiseppe Lercari by a deed which is recorded in the office of the County Recorder of San Mateo County in Volume 96 of Deeds at page 249; and also except whether certain parcel of land which adjoins the last mentioned parcel on the westerly side thereof and which is more particularly described as follows, viz:-

Beginning at the northwesterly corner of said parcel of land which was granted by said Isabella D. Walbridge, Thomas H. Walbridge Narcissa Grance Secor and Mary D. Newton to the said Lercari, and running, thence westerly along the southerly line of Walbridge Street, seventy-five (75) feet; thence at right angles southerly one hundred and twenty-five (125) feet; thence at right angles easterly seventy-five (75) feet to the southwesterly corner of the said parcel of land which was granted as aforesaid to said Lercari, and thence northerly one hundred and twenty-five (125) feet to the point of beginning.

TOGETHER with all and singular the tenements, hereditaments, and appurtenances thereunto belonging or in anywise appertaining, and the rents, issues and profits thereof.

TO HAVE AND TO HOLD unto the said party of the second part, its successors and assigns forever to its and their proper use and behoof.

DESCRIPTION OF THE TRACT OF LAND COVERED BY THIS POLICY OF INSURANCE:

#2

That certain parcel of land in the county of San Mateo, state of California, which is described as follows:

Beginning at a point which is distant South 19° 35' West one hundred sixty-nine (169) feet and South 70° 25' East eleven hundred sixty-three and three tenths (1163.3) feet from an iron monument set at the Northeasterly corner of the intersection of Schwerin Street with Partridge Avenue as the same are shown on the recorded map of the Schwerin Tract; thence South 70° 25' East two hundred thirty and fifty-five one hundredths (230.55) feet to a stone monument; thence North 19° 35' East three hundred thirty-six (336) feet, more or less, to a point in the Northerly boundary line of the lands of Partridge; thence on and along said line North 55° 37' West three hundred four and eight tenths (304.8) feet to the Easterly boundary line of the lands of Sierra and San Francisco Power Co.; thence Southwesterly on and along said Easterly boundary line four hundred twelve and seven tenths (412.7) feet, more or less, to the point of beginning.

Containing two and twenty-one one hundredths (2.21) acres of land.

- 0 -

2002-208875
10/17/2002 11:48A
DR Page: 18 of 26

EXHIBIT A

ORDER NO: SM6760104
Page 1

#3

LEGAL DESCRIPTION

CITY OF BRISBANE

ALL THAT CERTAIN REAL PROPERTY SITUATE IN THE CITY OF BRISBANE, COUNTY OF SAN MATEO, STATE OF CALIFORNIA, BEING A PORTION OF LOT "A"-2, AS SAID LOT IS SHOWN ON THE MAP OF THE PARTITION OF THE PARTRIDGE TRACT, VISITACION VALLEY, WHICH WAS RECORDED IN BOOK 12 OF MAPS, AT PAGE 76, SAN MATEO COUNTY RECORDS, SAID PORTIONS BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST NORTHERLY CORNER OF SAID LOT "A"-2, AS SHOWN ON SAID MAP; THENCE ALONG THE NORTHEASTERLY LINE OF SAID LOT, SOUTH 55° 54' 00" EAST (CALLED SOUTH 55° 49' EAST ON SAID MAP), 446.35 FEET TO A POINT THEREON WHICH IS THE MOST NORTHERLY CORNER OF LANDS DESCRIBED AS PARCEL 1 IN THE DEED FROM PACIFIC BONE COAL AND FERTILIZING COMPANY TO THE STATE OF CALIFORNIA, DATED APRIL 2, 1930 AND RECORDED JUNE 30, 1930, IN BOOK 482, OFFICIAL RECORDS OF SAN MATEO COUNTY, PAGE 259; THENCE ALONG THE WESTERLY LINE OF SAID STATE LANDS; FROM A TANGENT THAT BEARS SOUTH 4° 40' 01" WEST, SOUTHERLY ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 1462.50 FEET AND A CENTRAL ANGLE OF 15° 42' 12", AN ARC DISTANCE OF 400.83 FEET TO INTERSECT WITH THE SOUTHWESTERLY LINE OF SAID LOT "A"-2, AS SHOWN ON SAID MAP; THENCE ALONG SAID SOUTHWESTERLY LINE, NORTH 55° 49' 00" WEST, 605.63 FEET TO THE MOST WESTERLY CORNER OF SAID LOT "A"-2; THENCE ALONG THE NORTHWESTERLY LINE OF SAID LOT, NORTH 19° 28' 00" EAST, 327.67 FEET TO THE POINT OF BEGINNING.

ASSESSOR'S PARCEL NO. 005-141-020 JOINT PLANT NO. 005-014-141-02

EXHIBIT A

#4

SCHEDULE "A".

DESCRIPTION OF THE PROPERTY COVERED BY THIS POLICY OF INSURANCE:

All those certain lots, pieces or parcels of land situate, lying and being in the County of San Mateo, State of California and bounded and described as follows, to-wit:-

Beginning at a point which is distant the following courses and distances from the intersection of the westerly line of Schwerin street with the southerly line of Partridge Avenue as the same is shown upon the map of the Schwerin Addition on file in the Office of the Recorder of San Mateo County; south 19 degrees 35 minutes west 145 feet and south 70 degrees 25 minutes east 796 feet to said point of beginning; thence south 70 degrees 25 minutes east 423.3 feet; thence north 15 degrees 46 minutes east 30.07 feet, north 4 degrees 11 minutes west 50 feet, north 3 degrees 57 minutes east 50 feet, north 9 degrees 45 minutes east 60 feet, north 13 degrees 01 minutes east 60 feet, north 14 degrees 50 minutes east 100 feet, north 18 degrees 10 minutes east 92.7 feet to a point in the northerly boundary line of the lands of Partridge, thence on and along said boundary line north 55 degrees 49 minutes west 372.01 feet, thence leaving said boundary line south 19 degrees 35 minutes west 528.5 feet to the point of beginning.
Containing 4.18 acres of land.

Also- A strip of land 50 feet in width more particularly described as follows:-

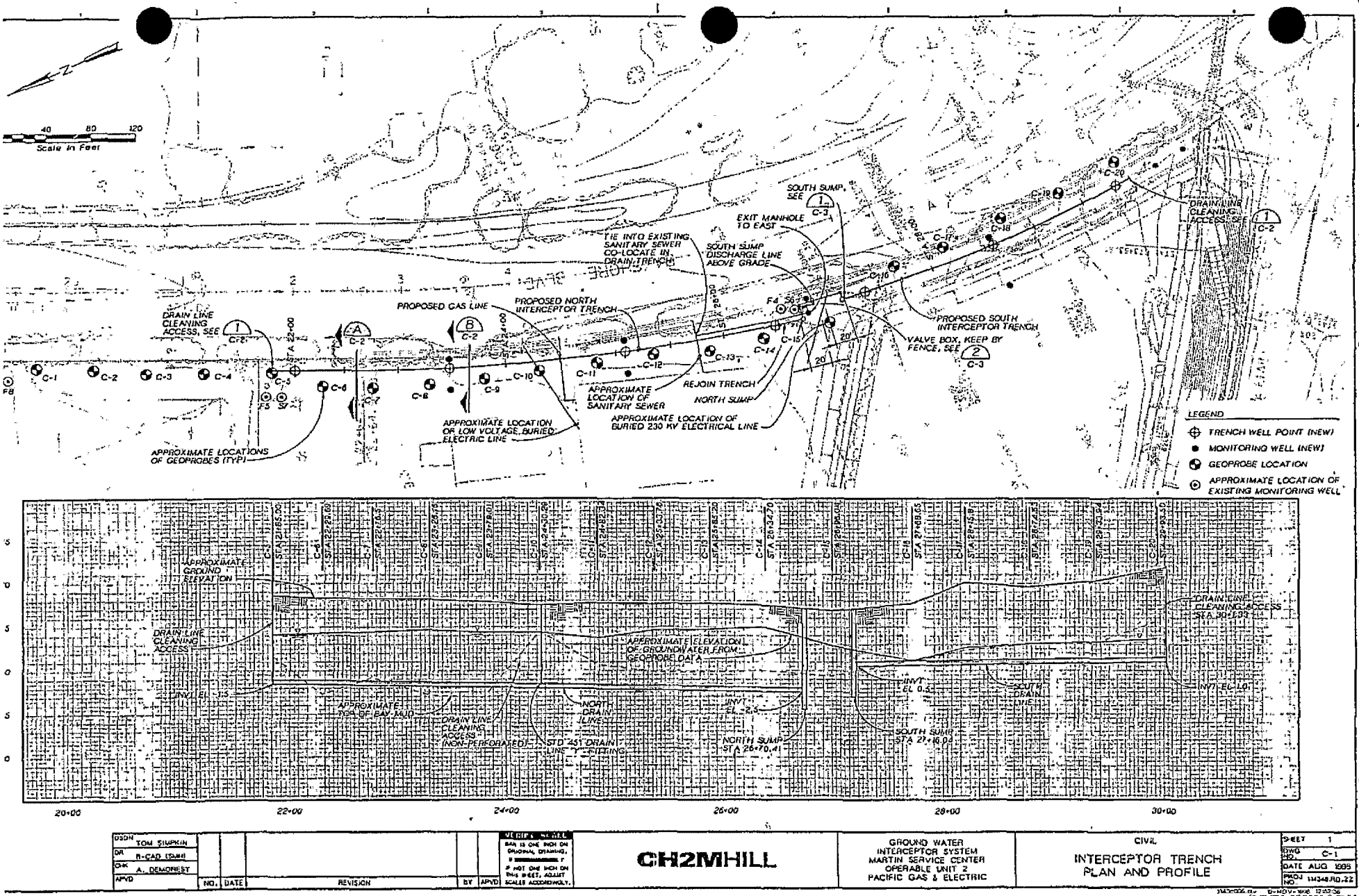
Beginning at a point which is distant the following courses and distances from the intersection of the westerly line of Schwerin street with the southerly line of Partridge Avenue as the same is shown upon the map of the Schwerin Addition on file in the Office of the Recorder of San Mateo County, south 19 degrees 35 minutes west 145 feet and south 70 degrees 25 minutes east 1169.3 feet to said point of beginning; thence south 15 degrees 46 minutes west 30.07 feet, south 19 degrees 35 minutes west 1095.6 feet to a point in the southerly boundary line of the lands of Partridge; thence on and along said boundary line south 74 degrees 35 minutes east 50.13 feet; thence leaving said boundary line north 19 degrees 35 minutes east 1092 feet, north 15 degrees 46 minutes east 30.07 feet, north 70 degrees 25 minutes west 50 feet to the point of beginning.

Excepting therefrom, however, a strip of land commencing at a point on the westerly line of the property hereinabove described and being distant thereon 150 feet northerly from the southerly boundary line of said property hereinabove described, and running thence northerly along said westerly line 75 feet; thence at a right angle easterly 50 feet; thence southerly and along the easterly line of the property hereinabove described 75 feet, and thence westerly 50 feet to the point of commencement.

2002-208875
10/17/2002 11:48A
DR Page: 20 of 26

California Title Insurance and Trust Co., S. F.
(9-28-04-2000)

EXHIBIT A



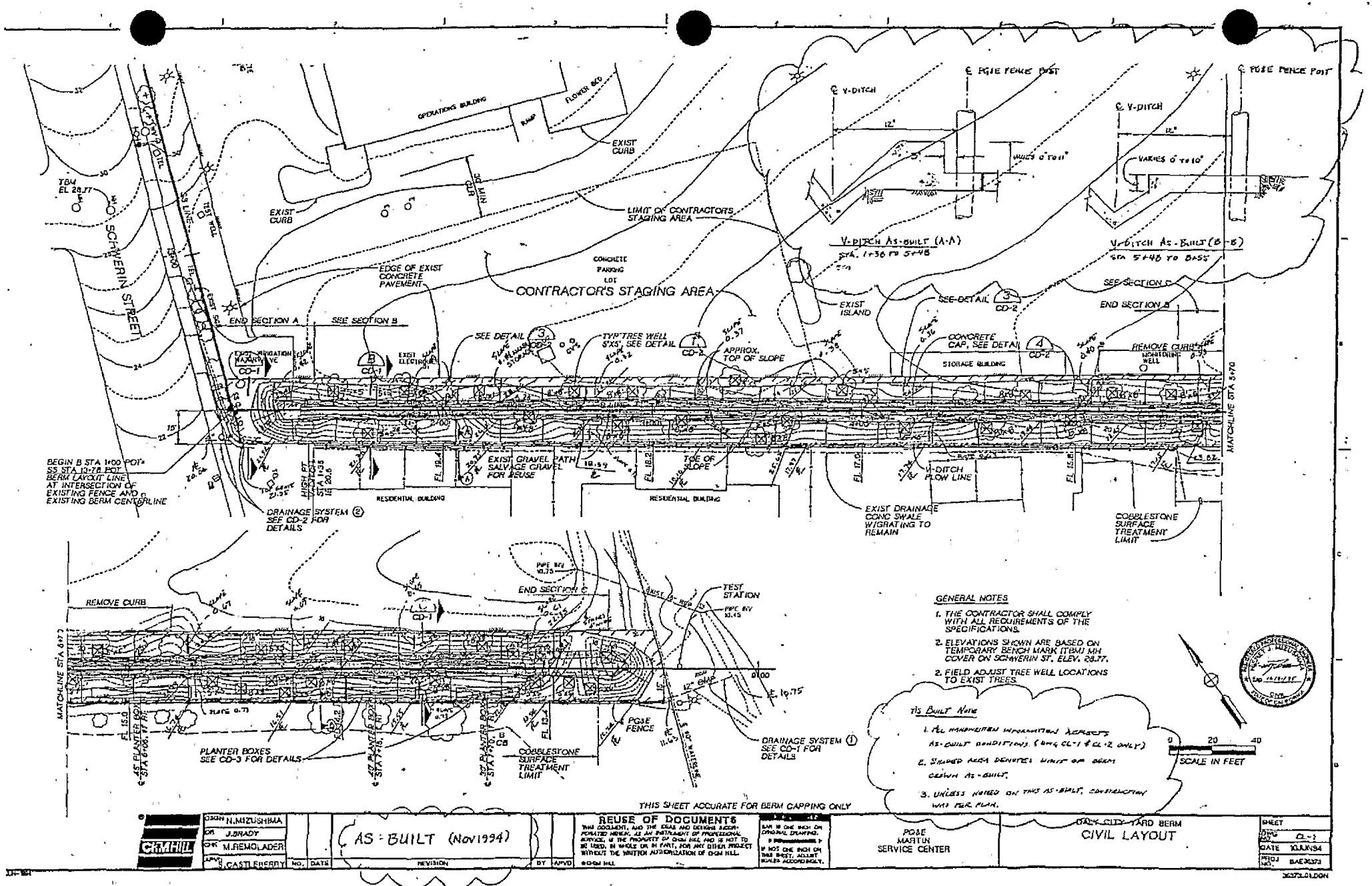
DSGN TOM SIMPKIN					WHEN SHEET WAS ONE INCH ON ORIGINAL DRAWING, IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	CH2MHILL	GROUND WATER INTERCEPTOR SYSTEM MARTIN SERVICE CENTER OPERABLE UNIT 2 PACIFIC GAS & ELECTRIC	CIVIL INTERCEPTOR TRENCH PLAN AND PROFILE	SHEET 1
DR R-CAD (SMH)									DWG NO. C-1
CHK A. DEMOREST									DATE AUG 1995
APVD	NO.	DATE	REVISION	BY	APVD				PROJ NO. 114348.R0.22

PRELIMINARY

REUSE OF DOCUMENTS: THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

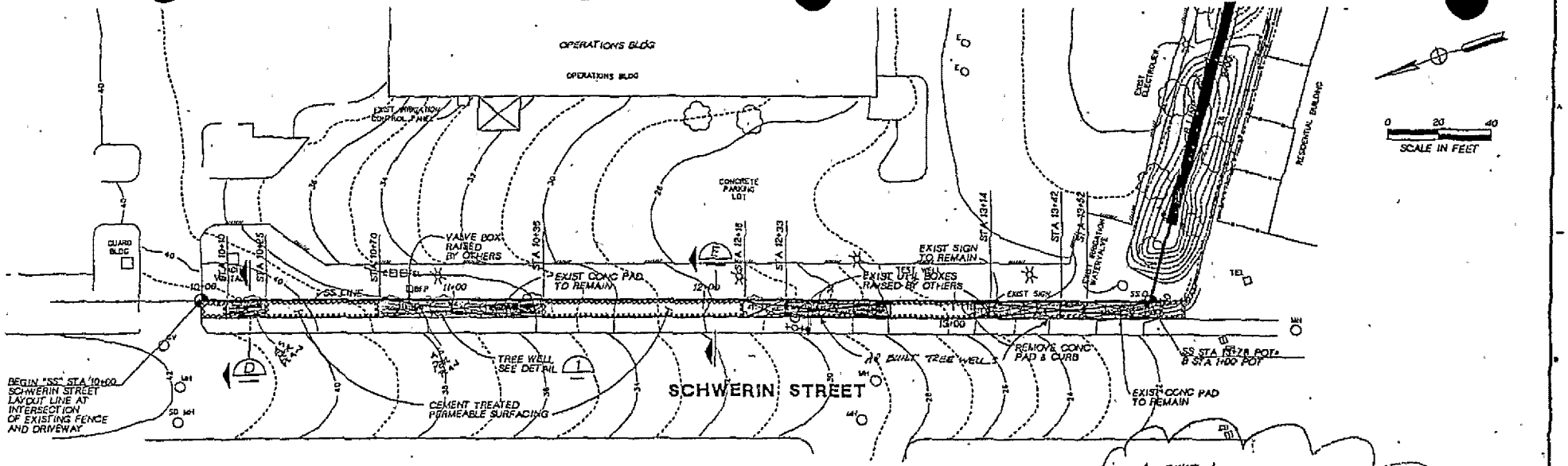
EXHIBIT B

2002-208875
10/17/2002 11:48A
DR Page: 21 of 26



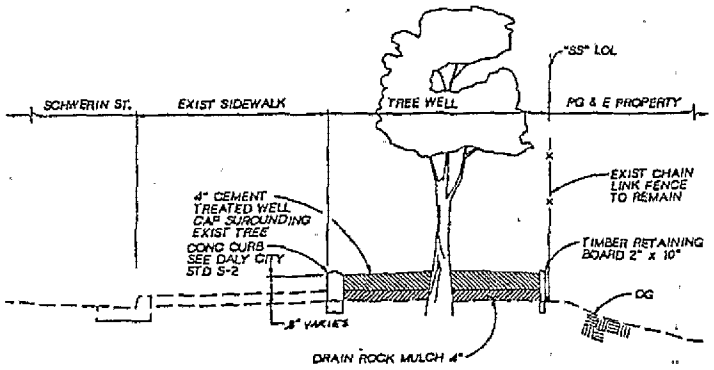
2002-208875
10/17/2002 11:48A
DR Page: 22 of 26

EXHIBIT B

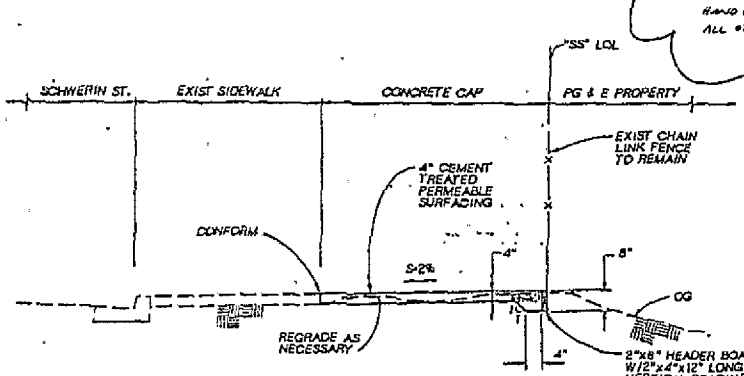


PLAN
SCALE 1"=20'

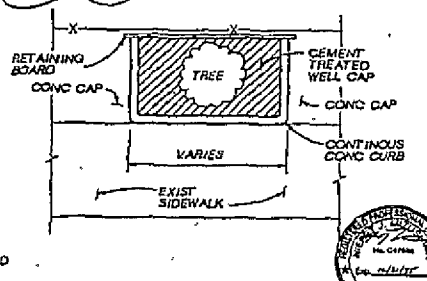
AS BUILT NOTES:
1. SHADED AREAS DENOTE LIMITS OF TREE WELL AREAS AS-BUILT.
2. AS BUILT CONDITIONS REFLECTED IN HAND WRITTEN NOTES ON DWG CL-1 AND CL-2. ALL OTHER INFORMATION PER PLAN.



SECTION D
NO SCALE



SECTION E
NO SCALE



DETAIL 1
NO SCALE

THIS PLAN ACCURATE FOR SIDEWALK MODIFICATION ONLY

CH2MHILL

DESIGN N. MIZUSHIMA
DR F. POON
CHK M.REMOLADER
APVD S.CASTLEBERRY

AS BUILT (NOV 1994)

NO.	DATE	REVISION	BY	APVD

REUSE OF DOCUMENTS
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL
©CH2M HILL

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

PG&E MARTIN SERVICE CENTER

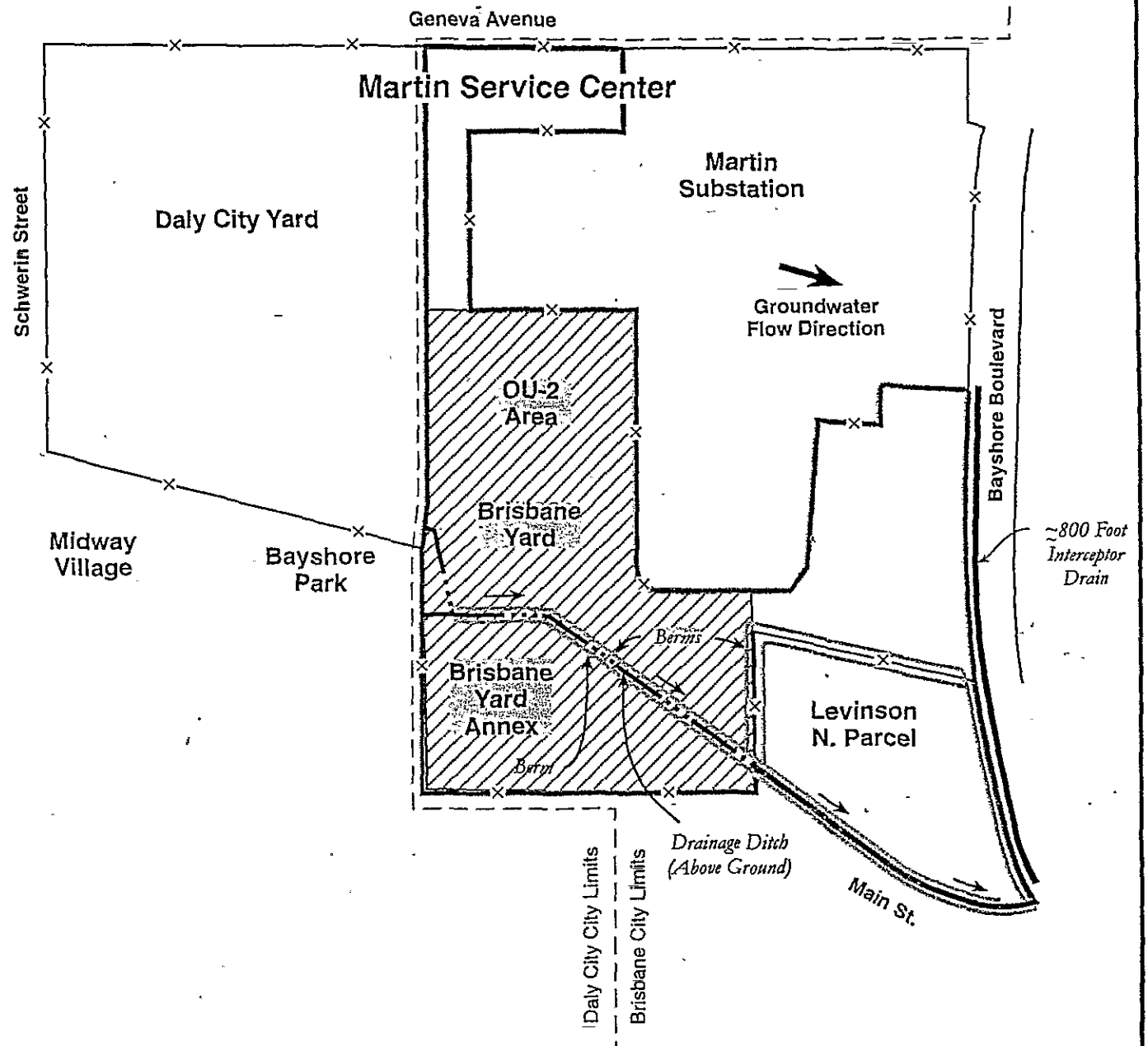
SCHWERIN STREET SIDEWALK MODIFICATION
CIVIL LAYOUT AND DETAILS

SHEET
DWG NO. CL-2
DATE 10JUN94
PROJ NO. 8AE36370

11-1994

2002-208875
10/17/2002 11:48A
DR Page: 23 of 26

EXHIBIT B



2002-208875

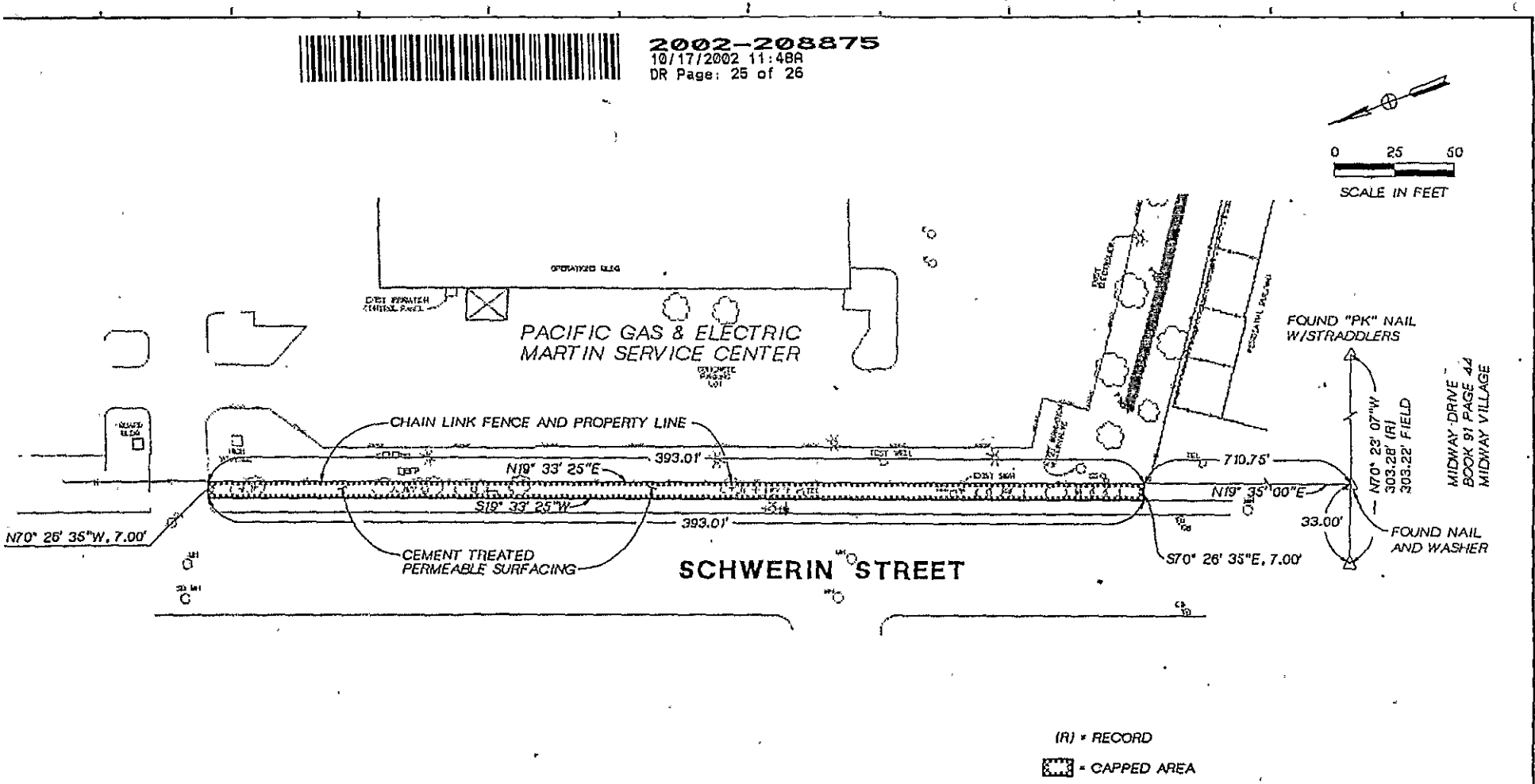
OU-2 Remediation Activities
Martin Service Center
Operable Unit 2

CH2MHILL

1S4410.01.10 • OU 2 Remed • 12/18/01 • pm • SFO

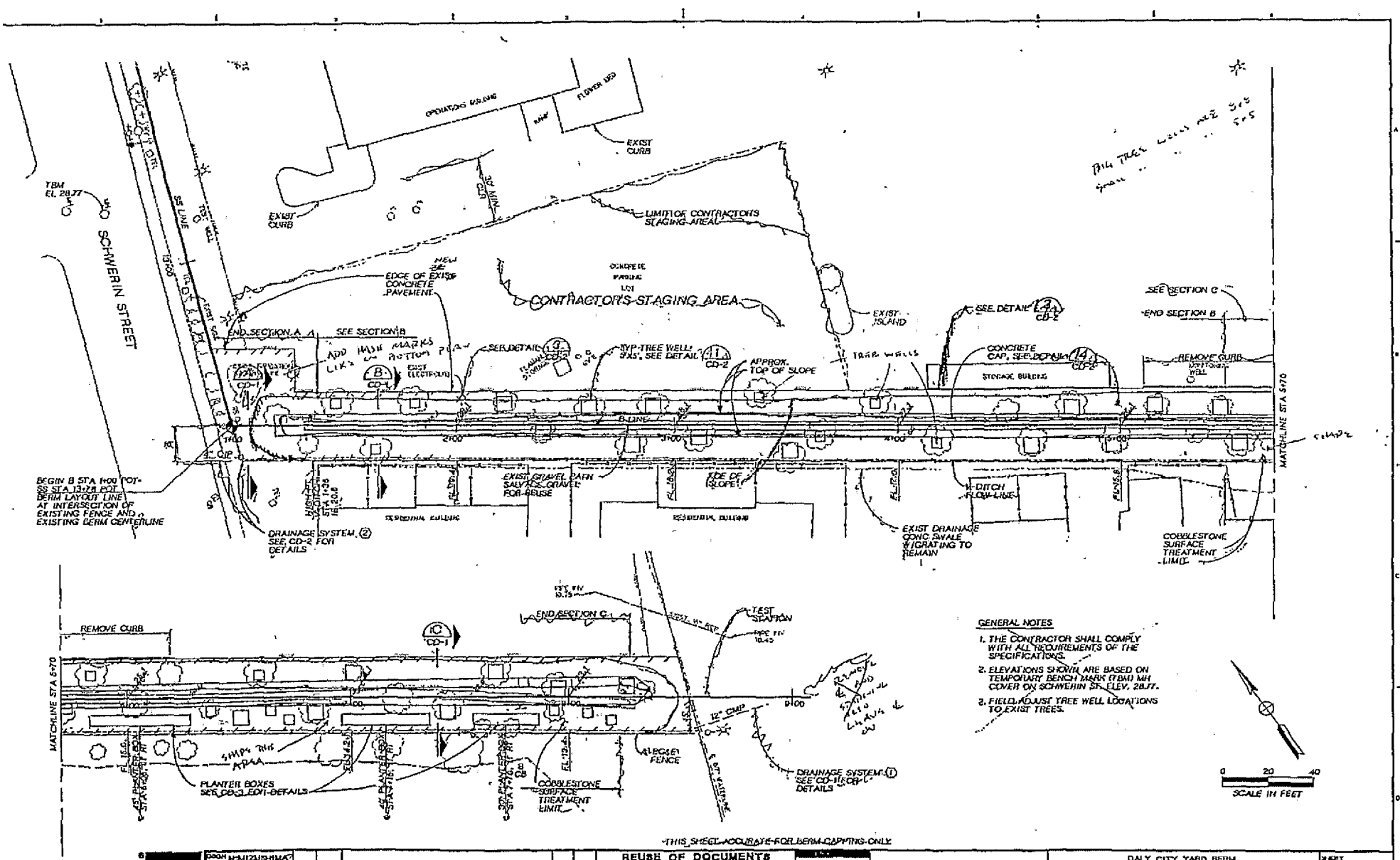
EXHIBIT C

2002-208875
10/17/2002 11:48A
DR Page: 25 of 26



CIVIL	DSGN R. ANDERSON DR F. POOH CHK R. VAUGHN APVD N. MIZUSHIMA	NO.	DATE	REVISION	BY	APVD	REUSE OF DOCUMENTS THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF OHM HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF OHM HILL. ©OHM HILL	IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	DALY CITY, CA SAN MATEO COUNTY	CEMENT - TREATED PERMEABLE CAP ALONG THE EASTERLY SCHWERIN STREET SIDE WALK	SHEET 1 DWG NO. 1 DATE DEC 1994 PROJ NO. BAE36373

EXHIBIT C



THIS SHEET ACCURATE FOR BERM CAPPING ONLY

CH2MHILL	DSGN J.HNIZUSHIMA DR J.BRADY CHK J.MBEVOLADER APVD J.CASTLEBERRY	NO.	DATE	REVISION	BY	APVD	REUSE OF DOCUMENTS THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL. ©CH2M HILL	IF THIS BAR IS NOT 3" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	PG&E MARTIN SERVICE CENTER	DALY CITY YARD BERM GRADING LAYOUT CONCRETE CAP	SHEET NO. CL-1 DATE 7/2011 PROJ NO. 346573

EXHIBIT C

ATTACHMENT C

Revised Operation and Maintenance Agreement (2003)

In the matter of:	)	
	)	
Pacific Gas and Electric Co.	)	
Martin Service Center	)	
731 Schwerin Street	)	AMENDMENT TO ENFORCEABLE
Daly City, California 94014	)	AGREEMENT DOCKET No.
	)	HSA-94/95-010
	)	
	)	
	)	Health and Safety Code
A Hazardous Waste Site	)	Section 25355.5(a)(1)(C)
	)	

The Enforceable Agreement Docket No. HSA-94/95-010 entered into by the Department of Toxic Substances Control (DTSC) and Pacific Gas and Electric Company (PG&E) on January 6, 1995 (hereinafter referred to as the Agreement) is hereby amended as follows:

1. Paragraph 1.0. is replaced by a new paragraph 1.0., as follows:

1.0. It will be necessary to maintain the Caps that were installed at the PG&E Martin Service Center to prevent public and environmental exposure to soil and groundwater contaminated with polynuclear aromatic hydrocarbons (PNAs). It will be necessary to maintain the Interceptor Trench that was installed to ensure that potentially contaminated groundwater does not flow offsite.

2. Paragraph 3.1. is replaced by a new paragraph 3.1., as follows:

3.1. Implementation of Operation and Maintenance Plans. Respondent shall implement the Operation and Maintenance Plan (OMP) dated August 30, 2002 and attached hereto as Exhibit A for continuing maintenance of the Caps and the Interceptor Trench installed at the PG&E Martin Service Center. The Caps and the Interceptor Trench shall be left in place and maintained by Respondent until and except to the extent the Department authorizes Respondent in writing to discontinue, move, or modify one or all of the of the Caps or the Interceptor Trench.

3. Paragraph 3.2. is replaced by a new paragraph 3.2., as follows:

3.2. Modifications. Respondent shall give the Department at least thirty [30] days advance written notice prior to any proposed modifications, discontinuation or other disruption of the Caps or Interceptor Trench, excluding routine maintenance or installation of utility facilities at the PG&E Martin Service Center, if said maintenance is performed in compliance with PG&E's "Guidelines for Excavations at Former Manufactured Gas Plant Sites" dated September 1991 and attached hereto as Exhibit B. The written notice to the Department shall include a detailed description of the work to be done or modifications to be made, a map showing the exact location of the proposed work, and the reasons for the modification, disruption or discontinuation.

4. Paragraph 3.4. is replaced by a new paragraph 3.4., as follows:

3.4 Annual Summary Reports. Respondent shall submit an Annual Summary Report of its activities under the provisions of this Agreement. The report shall be received by the Department by February 15 each year and shall describe:

a) Specific actions taken by or on behalf of Respondent during the previous year;
b) Actions expected to be undertaken during the current year;
c) All planned activities for the next year;
d) Any requirements under this Agreement that were not completed;
e) Any problems or anticipated problems in complying with this Agreement; and
f) All results of sample analyses, tests, and other data generated under this Agreement, and any significant findings from these data.

5. Paragraph 22.0 is replaced by a new paragraph 22.0, as follows:

22.0 Financial Assurance. Respondent must assure that sufficient monies are available to: implement the OMP; conduct the Five-Year Review as outlined in paragraph 3.5; and pay costs as outlined in paragraph 23.0. PG&E will use a Trust Fund to provide continuing maintenance at the PG&E Martin Service Center and the Department's incurred oversight costs. The cost estimate for the Operation and Maintenance is shown by a new Exhibit D attached hereto.

6. Exhibit C (Site Map) is replaced by a new Exhibit C attached hereto.

7. Exhibit A (Operation and Maintenance Plan) is replaced by a new Exhibit A attached hereto.

8. The effective date of this Amendment to the Agreement is the date when it is signed by DTSC.

9. Each undersigned representative of the parties to this Amendment to the Agreement certifies that she or he is fully authorized to enter into the terms and conditions of this Amendment to the Agreement and to excavate and legally bind the parties to this Amendment to the Agreement.

10. This Amendment to the Agreement may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one and the same document.

Barbara J. Cook, P.E. Chief
Site Mitigation Branch
Department of Toxic Substances Control

Date: 2/10/2003

Name: Robert L. Harris
Title: Vice President – Environmental Affairs
Pacific Gas and Electric Company

Date: 10/8/02

In the Matter of:	Docket No. HSA - 94/95-010
PACIFIC GAS AND ELECTRIC COMPANY) MARTIN SERVICE CENTER OPERABLE UNIT ONE 731 Schwerin Street Daly City, California 94014	ENFORCEABLE AGREEMENT
Pacific Gas and Electric Company) Respondent	Health and Safety Code Section 25355.5(a)(1)(C)

AGREEMENT
OPERATION AND MAINTENANCE

PG&E MARTIN SERVICE CENTER
DALY CITY YARD
Daly City, California

This Agreement is made and entered into, by and between the State Department of Toxic Substances Control ("Department") and the Pacific Gas and Electric Company, at 77 Beale Street, San Francisco, California 94120 ("Respondent").

W H E R E A S:

1.0. It will be necessary to maintain the Cap which has been installed at the Daly City Yard of the PG&E Martin Service Center to prevent public and environmental exposure to soil contaminated with polynuclear aromatic hydrocarbons (PNAs) (the Cap).

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

1.1 The PG&E Martin Service Center is located at 731 Schwerin Street, Daly City, California. The Property is currently owned by the Pacific Gas and Electric Company.

1.2. PG&E dedicated approximately 33 feet of the Property bordering Schwerin Street to the City of Daly City in 1908 for the purpose of a street right-of-way (Schwerin Street Strip). Daly City retains interest over approximately 176 square yards of this portion of the Property as a limited easement for public passage and utilities.

1.3 The Property is depicted on the map attached hereto as Exhibit A, and is further described on Exhibit B attached hereto.

2.0. The parties hereto, based upon the foregoing and in exchange for the mutual performances and forbearances described below, agree as follows:

AGREEMENT

3.0. Obligations of the Pacific Gas and Electric Company.

3.1. Implementation of Operation and Maintenance Plans. Respondent shall implement the Operation and Maintenance Plan (OMP) dated December 8, 1994 and attached hereto as Exhibit C for continuing maintenance of the Cap installed at the PG&E Martin Service Center. The Cap shall be left in place and maintained by Respondent until and except to the extent that the Department authorizes

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

Respondent in writing to discontinue, move or modify some or all of the Cap.

3.2. Modifications. Respondent shall give the Department at least sixty [60] days advance written notice prior to any proposed modifications, discontinuation or other disruption of the Cap, excluding routine maintenance or installation of utility facilities at the PG&E Martin Service Center, if said maintenance is performed in compliance with the PG&E's "Guidelines for Excavations at Former Manufactured Gas Plant Sites" dated September 1991 and attached hereto as Exhibit D. The written notice shall be sent by certified mail to the Department at the address set out in Paragraph 8.0 of this Agreement. The written notice to the Department shall include a detailed description of the work to be done or modifications to be made and a map showing the exact location of the proposed work and the reasons for modification, disruption or discontinuation.

3.3 Environmental Monitoring. Respondent shall implement the maintenance plans and reporting requirements approved by the Department. The inspection and maintenance plans are included in the OMP, attached hereto as Exhibit C. Respondent shall also comply with the inspection and maintenance requirements of other agencies.

3.4 Annual Summary Reports. Within thirty [30] days of the initial completion of Cap construction, and on an annual

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

basis thereafter, Respondent shall submit an Annual Summary Report of its activities under the provisions of this Agreement. The report shall be received by the Department by the fifteenth [15th] day of the first month after each year ends and shall describe:

a) Specific actions taken by or on behalf of Respondent during the previous year;

b) Actions expected to be undertaken during the current year;

c) All planned activities for the next year;

d) Any requirements under this Agreement that were not completed;

e) Any problems or anticipated problems in complying with this Agreement; and

f) All results of sample analyses, tests, and other data generated under this Agreement, and any significant findings from these data.

3.5 Five Year Review. Pursuant to Section 121(c) of CERCLA (42 U.S.C. 9601, et seq.), as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, Respondent shall submit a remedial action review workplan within thirty [30] days before the end of the five-year period following approval of the final RAP. Within sixty [60] days of the Department's approval of the workplan, Respondent shall implement the workplan and shall submit a comprehensive report of the results of the remedial action

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

review. The report shall provide the results of all sample analyses, tests and other data generated or received by the Respondent and evaluate the adequacy of the implemented remedy in protecting public health, safety and the environment.

3.6 Emergency Response Action/Notification. In the event of any action or occurrence (such as a fire, earthquake, explosion, or human exposure to hazardous substances caused by the release or threatened release of a hazardous substance, with the exception of routine maintenance as described in Paragraph 2.2) during the course of this Agreement, Respondent shall immediately take all appropriate action to prevent, abate, or minimize such emergency, release, or immediate threat of release and shall immediately notify the Project Manager. Respondent shall take such action in consultation with the Project Manager and in accordance with all applicable provisions of this Agreement. Within seven [7] days of the onset of such an event, Respondent shall furnish a report to the Department, signed by Respondent's Project Coordinator, setting forth the events which occurred and the measures taken in the response thereto. In the event that Respondent fails to take appropriate response and the Department takes the action instead, Respondent shall be liable to the Department for all costs of the response action. Nothing in this

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

section shall be deemed to limit any other notification requirement to which the Respondent may be subject.

4.0 Obligations of the Department. The Department agrees to review and oversee the measures to be performed by Respondent pursuant to this Agreement.

5.0 Project Coordinator. Within five [5] days of the effective date of this agreement Respondent shall submit to the Department in writing, the name and address of a Project Coordinator. The responsibilities of the Project Coordinator will be to receive and submit all notices, comments, approvals, and other communications from and to the Department. Respondent shall promptly notify the Department of any change in the identity of the Project Coordinator.

6.0 Project Engineer/Geologist. The work performed pursuant to this Agreement shall be under the direction and supervision of a qualified professional engineer or a registered geologist in the State of California with expertise in hazardous substance site cleanup. Within five [5] calendar days from the date the Agreement is signed by the Department, Respondent must submit: a) The name and address of the project engineer or geologist chosen by the Respondent; and b) in order to demonstrate expertise in hazardous substance cleanup, the resume of the engineer or geologist, and the statement of qualifications of the consulting firm responsible for the work. Respondent shall

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

promptly notify the Department of any change in the identify of the Project Engineer/Geologist.

7.0 Quality Control/Quality Assurance (QC/QA). All sampling and analysis conducted by Respondent under this Agreement shall be performed in accordance with QC/QA procedures submitted by Respondent and approved by the Department pursuant to this Agreement.

8.0 Submittals. All submittals and notifications from Respondent that are required by this Agreement, shall be sent simultaneously to:

Barbara J. Cook
Site Mitigation Branch Chief
Department of Toxic Substances Control
700 Heinz Avenue Suite 200
Berkeley, California 94710
Attn: Project Manager

Steven Ritchie, Director
San Francisco Bay Regional Water
Quality Control Board
2101 Webster Street
Oakland, California 94612
Attn: Project Manager

9.0. Communications. All approvals and decisions of the Department made regarding submittals and notifications will be communicated to Respondent in writing by the Site Mitigation Branch Chief, Department of Toxic Substances Control, or his/her designee. No informal advice, guidance, suggestions or comments by the Department regarding reports, plans, specifications, schedules or any other writings by Respondent shall be construed to relieve Respondent of the

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

obligations to obtain such formal approvals as may be required.

10.0. Department Review and Approval. (a) If the Department determines that any report, plan, schedule or other document submitted to the Department for approval pursuant to this Agreement fails to comply with this Agreement or fails to protect public health or safety or the environment, the Department may: (1) modify the document as deemed necessary and approve the document as modified; or (2) return comments to Respondent with recommended changes and a date by which Respondent must submit to the Department a revised document incorporating the recommended changes.

(b) Any modifications, comments or other directive issued pursuant to (a) above, are incorporated into this Agreement. Any noncompliance with these modifications or directives shall be deemed a failure or refusal to comply with this Agreement.

11.0 Stop Work Order. In the event that the Department determines that any activity (whether or not pursued in compliance with this Agreement) may pose an imminent or substantial endangerment to the health or safety of people on the Site or in the surrounding area or to the environment, the Department may order Respondent to stop further implementation of this Agreement for such period of time needed to abate the endangerment. In the event that the Department determines that any activities (whether or

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

not pursued in compliance with this Agreement) are proceeding without Department authorization, the Department may order Respondent to stop further implementation of this Agreement or activities for such period of time needed to obtain Department authorization, if such authorization is appropriate. Any deadline in this Agreement directly affected by a Stop Work Order, under this section, shall be extended for the term of the Stop Work Order.

12.0. Department Required Modifications. The Department may require modification, replacement, or additions to remediation facilities if those facilities are not achieving remediation objectives or protecting public health, safety or the environment, including those identified in the Remedial Action Plan or Remedial Design. The Department may require additional evaluations, designs and the construction and operation of facilities to achieve these objectives.

13.0. Compliance with Applicable Laws. Respondent shall carry out this Agreement in compliance with all applicable local, state, and federal requirements, including, but not limited to, requirements to obtain permits and to assure worker safety.

14.0 Respondent Liabilities. Nothing in this Agreement shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current or future operations of

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

Respondent. Nothing in this Agreement is intended or shall be construe to limit the rights of any of the parties with respect to claims arising out of or relating to the deposit or disposal at any other location of substances removed from the Site. Nothing in this Agreement is intended or shall be construed to limit or preclude the Department from taking any action authorized by law to protect public health or safety or the environment and recovering the cost thereof. Notwithstanding compliance with the terms of this Agreement, Respondent may be required to take further actions as are necessary to protect public health and the environment.

15.0 Site Access. Access to the Site and laboratories used for analyses of samples under this Agreement shall be provided at all reasonable times to employees, contractors and consultants of the Department. Nothing in this paragraph is intended or shall be construed to limit in any way the right of entry or inspection that the Department or any other agency may otherwise have by operation of any law. The Department and its authorized representatives shall have the authority to enter and move freely at the Site at all reasonable times for purposes including, but not limited to: inspecting records, operating logs, sampling and analytical data, and contracts relating to the Site; reviewing the progress of Respondent in carrying out the terms of this Agreement; conducting such tests as the Department may deem necessary; and verifying the data to the Department by

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

Respondent. The Department shall make a reasonable effort to give Respondent prior notification of each inspection date, and shall provide split samples to the Respondent or representative upon request. During the inspection, the Department and representative shall comply with all reasonable security and safety measures. Respondent shall ensure that no conveyance of title, easement or other interest in the property shall be executed or consummated without incorporating the continued right of entry by the Department.

16.0. Sampling, Data and Document Availability. Respondent shall permit the Department and its authorized representatives to inspect and copy all sampling, testing, monitoring or other data generated by Respondent or on Respondent behalf in any way pertaining to work undertaken pursuant to this Agreement. Respondent shall submit all such data upon request of the Department. Respondent shall inform the Department at least seven [7] days in advance of all field sampling under this Agreement, and shall allow the Department and its authorized representatives to take duplicates of any samples collected by Respondent pursuant to this Agreement. Respondent shall maintain a central repository of the data, reports, and other documents prepared pursuant to this Agreement.

17.0 Record Retention. All such data, reports and other documents shall be preserved by Respondent for a

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

minimum of ten [10] years after the conclusion of all activities under this Agreement. If the Department requests that some or all of these documents be preserved for a longer period of time, Respondent shall either comply with that request or deliver the documents to the Department, or permit the Department to copy the documents prior to destruction. Respondent shall notify the Department in writing at least six [6] months prior to destroying any documents prepared pursuant to this Agreement.

18.0. Government Liabilities. The State of California shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by Respondent, or related parties specified in paragraph 30.0, Parties Bound, in carrying out activities pursuant to this Agreement, nor shall the State of California be held as a party to any contract entered into by Respondent or its agents in carrying out activities pursuant to this Agreement.

19.0. Additional Actions. By entering into this Agreement, the Department does not waive the right to take any further actions authorized by law.

20.0. Extension Requests. If Respondent is unable to perform any activity or submit any document within the time required under this Agreement, Respondent may, prior to expiration of the time, request an extension of the time in writing. The extension request shall include a

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

justification for the delay. All such requests shall be in advance of the date on which the activity or document is due.

21.0. Extension Approvals. If the Department determines that good cause exists for an extension, it will grant the request and specify a new schedule in writing. Respondent shall comply with the new schedule, which is incorporated in this Agreement.

22.0 Financial Assurance. Respondent must assure that sufficient monies are available to: implement the OMP; conduct the Five-Year Review as outlined in paragraph 3.5; and pay costs as outlined in paragraph 23.0. Respondent will submit an annual report providing documentation in support of the use of the financial test to demonstrate financial responsibility to provide continuing maintenance of the Cap installed at the PG&E Martin Service Center and the Department's incurred oversight costs.

23.0. Cost Recovery. To the extent required by law, Respondent is liable for all of the Department's costs incurred in responding to the contamination at the Site (including costs of overseeing response work performed by Respondent) or costs to be incurred in the future. Cost recovery may also be pursued by the Department under CERCLA, Health and Safety Code Section 25360, or any other applicable state or federal statute or common law. The

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

Department will invoice Respondent for the Department's costs on a quarterly basis.

24.0. Severability. The requirements of this Agreement are severable, and Respondent shall comply with each and every provision hereof notwithstanding the effectiveness of any other provisions.

25.0. Incorporation of Plans, Schedules and Reports. All plans, schedules, reports, specifications and other documents that are submitted by Respondent pursuant to this Agreement are incorporated in this Agreement upon the Department's approval or as modified pursuant to Paragraph 12.0, Department Review and Approval, and shall be implemented by Respondent. Any noncompliance with the documents incorporated in this Agreement shall be deemed a failure or refusal to comply with this Agreement.

26.0. Modification and Termination. Respondent may, upon written request, seek modification or termination of this Agreement at any time. This Agreement may be modified or terminated by mutual written agreement

27.0. Dispute Resolution. Respondent may seek resolution to a dispute which arises from a decision made by the Department related to this Agreement, including decisions made under the Modification and Termination provisions. Respondent may seek dispute resolution in accordance with the following process:

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

a. Respondent may seek resolution from the Department's first-line supervisor (Senior) who supervises the Project Manager.

b. If the issue is not resolved after review by the first-line supervisor, Respondent may seek resolution from the second-line manager, the Branch Chief.

28.0. Time Periods. Unless otherwise specified, time periods begin from the effective date of this Agreement and "days" means calendar days.

29.0. Effective Date. The effective date of this Agreement is the date it is signed by the Department.

30.0. Parties Bound. This Agreement applies to and is binding upon Respondent and its successors and assignees, and upon the Department and any successor agency of the State of California that may have responsibility for and jurisdiction over the subject matter of this Agreement.

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

31.0. Representative Authority. Each undersigned representative of the parties to this Agreement certifies that she or he is fully authorized to enter into the terms and conditions of this Agreement and to execute and legally bind the parties to this Agreement.

DATE: 1-3-95

P Bruce Bangerter
NAME

Manager, Building and Land Services
TITLE
For Respondent

DATE: 1-6-95

Barbara J. Cook
Barbara J. Cook, Chief
Site Mitigation Branch, Region 2
Department of Toxic Substances Control

COURT PAPER
STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

85 34769

Department of Toxic Substances Control

Edwin F. Lowry, Director
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Gray Davis
Governor

August 30, 2002

Darrell Klingman
Pacific Gas and Electric Company
Environmental Services
P.O. Box 770000
Mail Code B24A
San Francisco, California 94120

Dear Mr. Klingman:

The Department of Toxic Substances Control (DTSC) has completed its review of the revisions to the Operation and Maintenance (O&M) Plan dated August 2002 for the PG&E Martin Site. DTSC, hereby, approves the revised O&M Plan.

If you have any questions, please contact Virginia Lasky at (510) 540-3829.

Sincerely,

Barbara J. Cook, P.E., Chief
Northern California - Coastal
Cleanup Operations Branch

cc: Mr. Al Atkinson
Pacific Gas & Electric Company
P.O. Box 770000
Mail Code B24A
San Francisco, California 94120

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.

Printed on Recycled Paper

EXHIBIT A

REVISED
OPERATIONS AND MAINTENANCE PLAN

for

MARTIN SERVICE CENTER OPERABLE UNIT 1 (The Daly City Yard Berm Cap and Schwerin Street Strip Cap) AND OPERABLE UNIT 2 (Brisbane Yard and Annex Cap and Interceptor Trench)

Background

The 49-acre Martin Service Center site is located at 731 Schwerin Street in Daly City, California, approximately 0.1 mile south of the City of San Francisco and approximately 0.6 mile west of the San Francisco Bay. From previous operations at the site, polynuclear aromatic hydrocarbons (PNAs) and volatile organic compounds (VOCs) were detected in the soil and groundwater beneath the PG&E property.

Remedial actions for Operable Unit 1 (OU-1) were presented in the Draft Remedial Action Plan (RAP) that, in conformance with Section 25356.1 of the California Health and Safety Code, was circulated for public review and comment from October 26, 1992 to May 3, 1993. The Final RAP was approved by DTSC in June 1993. Further details of the remediation were described in the Remedial Design and Implementation Plan (RDIP) dated December 1993 and approved by DTSC on December 23, 1993. The final construction documents were approved by DTSC on April 28, 1994.

Remedial actions for Operable Unit 2 (OU-2) were presented in the Draft RAP circulated for public review and comment from April 20 to June 4, 1998. The Revised RAP was approved by DTSC on July 20, 1998. Further information on the remediation was presented in the RDIP dated November 1998 and approved by DTSC on September 16, 1999. DTSC approved the off haul of soil with detected concentrations of greater than 10 mg/kg cPNAs in a letter dated September 26, 2000. The final construction documents were approved by DTSC on June 19, 2002.

The remedial actions for OU-1 were as follows:

- The strip of land between Schwerin Street and the Martin Service Center property was covered with a concrete cap with accommodations for the existing trees.

- The berm along the southern boundary of the Martin Service Center Daly City Yard was covered with a shotcrete cap, with landscaping and drainage provided.

The remedial actions for OU-2 were as follows:

EXHIBIT A

- Installation of a groundwater interceptor trench on PG&E property and the Levinson North Parcel, owned by PG&E, adjacent to the west side of Bayshore Boulevard.

- Classification and management of soil generated during the construction of the Bayshore Storm Drain Improvement Project (BSDIP) including off site disposal of soil that exceeded reuse criteria and filling, grading, and placement of a chip seal cap on the Brisbane Yard and the Brisbane Yard Annex.

- Abandonment of monitoring wells located within the construction area.

Cap Monitoring and Maintenance

PG&E will inspect all capped areas annually. Concrete and asphalt capped areas will be inspected for broken, cracked, or missing concrete. If the concrete is cracked it will be repaired with a suitable concrete patching product. If the area is badly cracked or broken, a contractor will be hired to make the appropriate repairs. If the concrete cannot be repaired, the old concrete and reinforcing will be removed as needed and new concrete and reinforcing placed and connected with dowels into the existing concrete.

Chip seal surfaces will be inspected semi-annually for deterioration and, if found to be deteriorated, worn, or damaged sufficiently to allow significant dust generation, the chip seal surface will be repaired as needed. If chip sealed surfaces are upgraded to asphalt, the asphalt surfaces will be inspected annually.

Drainage Monitoring

OU-1 and OU-2 drainage areas will be monitored as needed to inspect for debris blocking catch basin grates owned by PG&E. All debris will be removed and properly disposed. PG&E will notify DTSC and the City of Brisbane regarding any blockage and damage to the drainage channels.

Irrigation and Landscape Monitoring and Maintenance

The sprinkler system timer is located on the west side of the Operations Building. The irrigation system for the berm shall be inspected quarterly for malfunctions and leaks.

A PG&E representative will inspect the planted areas annually for brown or dying plants, overly damp areas (as a sign of leaks in the irrigation system), and weed growth. The planter wells will be checked to make sure that the rock has not washed out of the planters and that soil is not exposed. If any rock has washed out, it will be raked back into the planters or tree wells.

If plants show signs of deterioration, or if the irrigation system leaks, a landscape irrigation firm will be contracted to make repairs to the irrigation system.

If plants show signs of deterioration, or if the irrigation system leaks, a landscape irrigation firm will be contracted to make repairs to the irrigation system.

Groundwater Monitoring

Starting with Monitoring Program Event 29, groundwater will be sampled on an annual basis from monitoring wells S1, S2, S6, F4, and F9. In addition, one sample will be collected from each segment of the interceptor trench annually. The samples collected from the monitoring wells and trench segments will be analyzed for total PAHs. The samples from monitoring well S1 and the interceptor trench will also be analyzed for purgeable aromatics.

Water levels will be monitored on an annual basis using monitoring wells D1, F1, F2, F4, F5, F7, F8, F9, F10b, F12, and S1 through S9. The interceptor trench will also be monitored as required for compliance with the SFPOTW discharge permit as described below. The locations of the wells to be monitored in this program and the locations of the interceptor trench and sumps are shown on Figure1.

Interceptor Trench Monitoring

Routine monitoring of the interceptor trench will include:

- Checking the operability of the pumps quarterly.
- Recording the total flow from each pump on a quarterly basis.
- Semi-annual monitoring of the water levels in the trench well points and in the monitoring wells.
- Water quality monitoring of the interceptor trench effluent as required by the SFPOTW discharge permit. Monitoring will be performed quarterly for the analytes required in the permit.

Periodic and routine maintenance will be performed to keep the trench operating as designed. Routine maintenance of the pumps and flow meters will be performed at the frequency recommended by the manufacturer. Periodic maintenance, including replacement of pumps and other mechanical components, cleaning of the sumps, and cleaning of the trench drain pipe, will be performed as necessary.

Fencing

A PG&E representative will periodically, at least yearly, inspect the perimeter fence to check for holes or other damage to the fence. If damage is found, PG&E will make required repairs.

GUIDELINES FOR EXCAVATIONS AT FORMER MANUFACTURED GAS PLANT SITES

Prepared by:

Manufactured Gas Plant Project
Robert C. Doss, Project Manager

September 1991
Revision 3

EXHIBIT B

GUIDELINES FOR EXCAVATIONS
AT FORMER MANUFACTURED GAS PLANT SITES

TABLE OF CONTENTS

Section — Page

1.0 OVERVIEW 1
1.1 INTRODUCTION 1
1.2 BACKGROUND 1
1.3 GAS PLANT RESIDUES 1

2.0 GENERAL RESPONSIBILITIES AND APPROVALS 2
2.1 APPLICABILITY 2
2.2 RESPONSIBILITIES 2
2.3 WORK PLAN PREPARATION 2
2.4 PRE-EXCAVATION TESTING 3
2.5 UNDERGROUND TANK WORK AT FORMER MANUFACTURED GAS PLANT SITES 3
2.6 EMERGENCY WORK 3
2.7 EXCAVATION ADJACENT TO FORMER MANUFACTURED GAS PLANT SITES 3
2.8 AGENCY CONTACTS 3
2.9 SITE RUNOFF CONTROL 4

3.0 PRE-EXCAVATION TESTING 5

4.0 EXCAVATION AT FORMER MANUFACTURED GAS PLANT SITES WHERE NO RESIDUE IS KNOWN OR ANTICIPATED 6

5.0 EXCAVATION AT FORMER MANUFACTURED GAS PLANT SITES WHERE RESIDUE IS KNOWN OR ANTICIPATED 7

6.0 UNDERGROUND TANK WORK AT FORMER MANUFACTURED GAS PLANT SITES 9

7.0 EMERGENCY WORK AT FORMER MANUFACTURED GAS PLANT SITES 10

8.0 EXCAVATION WORK ADJACENT TO FORMER MANUFACTURED GAS PLANT SITES 11

9.0 RUNOFF CONTROL 12

10.0 ADDITIONAL CONSIDERATIONS 13
10.1 POTENTIAL COSTS 13
10.2 TRANSFER OF OWNERSHIP 13
10.3 SAFETY PRECAUTIONS 13
10.4 TRAINING 13

11.0 INFORMATION AND ASSISTANCE 15

LIST OF ATTACHMENTS

ATTACHMENT 1 - Historic Manufactured Gas Plant Sites

ATTACHMENT 2 - PG&E Excavation Work Plan and Site Safety Plan for Excavations at Former Manufactured Gas Plant Sites

GUIDELINES FOR EXCAVATIONS
at
FORMER MANUFACTURED GAS PLANT SITES

1.0 OVERVIEW

1.1 INTRODUCTION

The Company currently has facilities that are located on properties once used for the manufacturing of gas (see Attachment 1). Experience at certain of these facilities has shown that deposits of residues from these former operations may exist at some of these properties.

Some of the constituents in gas plant residues are classified as hazardous. For this reason, these guidelines have been established to provide procedures for managing any excavations or soil disturbance activities on or adjacent to these properties. Safety issues related to gas plant residues are addressed in Attachment 2. A generic site safety plan and instructions for preparing and approving a site safety plan for excavation at a former manufactured gas plant site are also included in Attachment 2.

"Excavation", in these guidelines, refers to any disturbance of surface or subsurface soil. "Adjacent to" means the properties and streets (or other public rights-of-way) that abut the property or properties containing a former manufactured gas plant site (Attachment 1).

1.2 BACKGROUND

Manufactured gas plants (MGPs) were operated by public utilities and private businesses before natural gas became readily available. These plants produced gas from coal and/or oil, and produced coal tar, lampblack, and other residues as by-products. By-product residues may still be buried at some of these sites.

Some of the chemical compounds in these residues may pose a potential health or environmental risk as they have been defined as hazardous under various Federal and State regulations. Because of this potential risk, these guidelines must be followed whenever Company employees, PG&E-contractors, or non-contracted persons (outside PG&E) undertake any excavation activity on or adjacent to those PG&E-owned sites listed in Attachment 1.

1.3 GAS PLANT RESIDUES

Gas plant residues are composed primarily of lampblack and coal tar materials. Residues are usually black or dark gray and often have a characteristic hydrocarbon odor. They may be dry and crumbly, oily, or tar-like. Concentrated deposits of this material are generally readily detectable visually and by odor.

2.0 GENERAL RESPONSIBILITIES AND APPROVALS

2.1 APPLICABILITY

These guidelines apply to all Company personnel, personnel working under contract to PG&E, and non-contracted (outside) personnel working on PG&E-owned properties. These guidelines apply when working on or adjacent to the former manufactured gas plant sites listed in Attachment 1. In addition to these guidelines, all applicable safety and engineering precautions concerning excavation, trenching, and earthwork procedures should be followed.

2.2 RESPONSIBILITIES

The operating department or Region responsible for the excavation work is responsible for complying with these guidelines. However, while work is physically underway, the management on-site supervisor has the primary responsibility for ensuring that these guidelines are adhered to.

The operating department or Region responsible for the work is responsible for all costs incurred in complying with these guidelines, including those costs related to monitoring at the site, and the proper handling and disposal of hazardous wastes generated as a result of the excavation.

2.3 WORK PLAN PREPARATION

A work plan (Attachment 2) describing the need and the scope of work involving the proposed excavation must be submitted to the Manufactured Gas Plant Project Manager, Environmental Services Department with a copy sent to the Vice-President of General Services at least 30 days in advance of the formal job authorization process (i.e., job estimate), except in cases of emergency excavations, routine (non-leaking) underground storage tank work, and excavations adjacent to former manufactured gas plant sites (Sections 7.0 and 8.0). If this deadline cannot be met, the operating department should contact the Manufactured Gas Plant Project Manager to arrange for an alternative deadline for work plan submittal and approval.

As stated above, cases not requiring work plan submittal and approval include emergency excavations, routine underground storage tank work, and excavations adjacent to former MGP sites. Routine underground tank work is defined as underground storage tank work where only unaffected, imported fill would be disturbed during the excavation activities. Prior to initiation of excavation activities at these sites, the Environmental Services Department will be notified of the site work as soon as is possible. This will provide coordination with the Company's Manufactured Gas Plant Project and help ensure that appropriate work procedures, safety precautions, and agency notifications are made.

In addition to the work plan, a site safety plan (Attachment 2) should be prepared and submitted with the work plan to the Manufactured Gas Plant Project Manager. The Manufactured Gas Plant Project Manager will coordinate the review and approval of these plans with the Vice-President of General Services and other appropriate Company departments (e.g., the Safety, Health and Claims Department).

For small-scale excavations (less than 5 cubic yards) for recurring projects such as installation or removal of poles, installation and removal of fence posts and gates, patch paving where only the pavement base will be affected, etc., the Environmental Coordinator shall be contacted prior to initiation of the work in lieu of preparing a work plan and site safety plan. For these projects, the Environmental Coordinator will be

responsible for ensuring the that appropriate work procedures and safety precautions are followed, and for notifying the Company's Manufactured Gas Plant Project of the small-scale excavation.

Approval of the work plan, in writing, by the Vice President - General Services must be obtained before excavation (including core samples and test borings) is undertaken at any site listed in Attachment 1. This is in addition to the normally required job authorization.

Attempts should be made to locate the excavation in an area which is unlikely to contain gas plant residue. A historical evaluation of the site should be conducted prior to work plan preparation in an attempt to determine the locations most likely to contain (or not contain) gas plant residues. The Manufactured Gas Plant Project Team (Section 11.0) should be contacted for assistance in this area. The size of any necessary excavation should be minimized (in both surface area and depth). The work plan should also address reasonable alternatives to the proposed action, including a no-action alternative.

2.4 PRE-EXCAVATION TESTING

Pre-excavation testing should be performed in accordance with Section 3.0. Pre-excavation testing is not required in the case of routine underground storage tank work, emergency work, small-scale recurring excavations (as defined in Section 2.3), or excavations adjacent to former manufactured gas plant sites as specified in Section 3.0.

2.5 UNDERGROUND TANK WORK AT FORMER MANUFACTURED GAS PLANT SITES

Underground tank work at sites listed in Attachment 1 should be handled in accordance with Section 6.0.

2.6 EMERGENCY WORK

Emergency work at sites listed in Attachment 1 should be handled in accordance with Section 7.0.

2.7 EXCAVATION ADJACENT TO FORMER MANUFACTURED GAS PLANT SITES

Excavation work at locations adjacent to the sites listed in Attachment 1 should be handled in accordance with Section 8.0.

2.8 AGENCY CONTACTS

- State and Federal agency contacts concerning releases, spills, or similar situations on a former manufactured gas plant site are to be coordinated through the Manufactured Gas Plant Project Team, or if team members are unavailable and cannot be reached (Section 11.0), by a Environmental Coordinator. In no case, however, shall any agency notification legally required be deferred due to the unavailability of Manufactured Gas Plant Project Team members or Environmental Coordinators. The Manufactured Gas Plant Project Team is to be notified as soon as possible following notification of any agency contacts.

- Local agency contacts are to be coordinated through the Environmental Coordinator. The Manufactured Gas Plant Project Team is to be notified as soon as possible following notification of any agency contacts.

2.9 SITE RUNOFF CONTROL

Water runoff which could potentially transport gas plant residues off-site should be handled in accordance with Section 9.0.

3.0 PRE-EXCAVATION TESTING

This section applies to all excavation work at the sites listed in Attachment 1, with the exception of emergency excavations, routine (non-leaking) underground tank work, and small-scale recurring work. Pre-excavation testing is not required at excavation sites adjacent to former manufactured gas plant sites unless there is evidence to suggest that gas plant residues are also located adjacent to the former manufactured gas plant.

- A proposed pre-excavation subsurface testing program should be described in the excavation work plan. The number and location of samples should be identified in the work plan. Test borings should extend no further than two feet below the proposed excavation depth.

- Each site will be evaluated by the Manufactured Gas Plant Project Team at the time the work plan is submitted so that a recommendation regarding pre-excavation testing can be made to the Vice President - General Services.

- Any waiver of pre-excavation testing must be approved in writing by the Manufactured Gas Plant Project Manager as part of the work plan approval process.

- The area to be excavated should be clearly defined, preferably by staking, prior to commencement of testing. All known underground facilities and/or obstructions should also be identified and clearance from Underground Services Alert (USA) obtained.

- Upon approval of the excavation work plan, test borings should be conducted by or under the supervision of either PG&E's Technical and Ecological Services Department (TES), a member of the Manufactured Gas Plant Project Team, an environmental coordinator, or any qualified alternative consultant.

- Visual examination of the cored material, coupled with air monitoring for volatile organic compounds (using appropriate air monitoring equipment such as a photoionization detector), should be used during drilling of the test borings. Laboratory analysis of samples taken from the borings should be performed to determine if residues are present. This determination will be used to assess the manner in which the excavation should proceed. Soil samples are to be analyzed for polynuclear aromatic hydrocarbons (PNAs) by either U.S. Environmental Protection Agency (EPA) Method 8270 or 8310, lead, mercury and arsenic by EPA Method 200.7, and cyanide using EPA Method 335.2. If petroleum hydrocarbon compounds are observed in a soil boring by visual observation or odor detection, at least one soil sample from that boring should be analyzed for total petroleum hydrocarbon compounds by EPA Method 8015. Copies of all analytical results should be sent to the Manufactured Gas Plant Project for record keeping.

- If residues are found during the test borings, the operating department and/or Region must evaluate the need for the work and the impact of the residues on project cost and schedule. All wastes generated during the test borings and subsequent excavations must be managed in accordance with the procedures outlined in Sections 4.0 and 5.0. In addition, the operating department or Region is responsible for the proper disposal of the excavated material. The Environmental Services Department or Environmental Coordinator is available to provide assistance in this matter.

4.0 EXCAVATION AT FORMER MANUFACTURED GAS PLANT SITES WHERE NO RESIDUE IS KNOWN OR ANTICIPATED

If no residue is found during the pre-excavation test borings or if testing is waived, the excavation work may proceed normally upon approval of the work plan using the following guidelines:

1. All excavation activities performed by PG&E employees shall be supervised by a management on-site supervisor or his/her designated representative, who has the authority to stop work if residues are encountered.

2. All excavation activities performed by a contractor shall be overseen by a PG&E management on-site supervisor or his/her designated representative, who has the authority to stop work if residues are encountered. All contractor procedures shall conform to these guidelines.

3. If required, dust-control measures should be employed during excavation. This can usually be accomplished by wetting the area with a fine mist of water in a manner which does not create runoff.

4. A site safety plan shall be implemented in all cases should residues be confirmed. Implementation of the site safety plan includes the use of personal protective clothing and equipment, and air monitoring of the work zone area and/or the excavation.

If residue is discovered during the excavation, the following steps will be taken:

1. The excavation work shall be temporarily suspended so that any impact on the project due to the discovery of residue can be evaluated. All excess soils generated from the excavation activities shall be covered by polyethylene sheeting/tarp and actions to minimize dust or odor generation from the excavation shall be implemented.

2. The Manufactured Gas Plant Project Team shall be notified.

3. The Environmental Coordinator shall be contacted to assist in project evaluation, waste disposal arrangements, notifications, and arrangements for Safety, Health and Claims and TES services.

4. Excavated material which contains gas plant residue and which is not to be reused must be assumed to be a hazardous waste and managed according to the provisions of Section 5.0.

5. The excavation shall proceed following the guidelines set forth in Section 5.0.

5.0 EXCAVATION AT FORMER MANUFACTURED GAS PLANT SITES WHERE RESIDUE IS KNOWN OR ANTICIPATED

If residues are found in pre-excavation test borings (Sections 2.0 and 3.0) or are suspected to be present for other reasons, the excavation work should proceed upon approval of the work plan using the following guidelines.

- Excavation work must proceed in accordance with the approved Site Safety Plan to determine the proper precautionary worker safety measures to be employed during excavations performed by Company personnel.

- Construction personnel (PG&E and/or contractor) are to be informed of the potential nature of the subsurface material. PG&E employees should be advised of any changes in normal work procedures prior to commencement of excavation activity. Contractors should be informed that gas plant residue may be present and should be advised of the same safety precautions that PG&E recommends to its own employees. Non-construction PG&E personnel at the site should be informed of the potential nature of the subsurface material, and given a contact point for additional information.

- State and Federal agency notifications will be coordinated through the Manufactured Gas Plant Project Team (Section 11.0).

- All excavation performed by PG&E employees shall be supervised by a management on-site supervisor or his/her designated representative to ensure that proper safety precautions are employed.

- All excavation performed by a contractor shall be overseen by a PG&E management on-site supervisor or his/her designated representative.

- All personal protective clothing and equipment listed in the Site Safety Plan (Section 3.0) appropriate to the work shall be utilized. Work shall be performed in accordance with work practices given in the Site Safety Plan (Section 6.0).

- Dust-control measures must be employed during excavation. This can usually be accomplished by wetting the area with a fine mist of water in a manner which does not create runoff.

- Excavated material which contains gas plant residue intermixed with soil and is suitable for reuse (and thus is not a waste) may be returned to the hole from which it was taken without testing, provided it is covered with at least one to two feet of clean fill (two feet preferred).

- If the excavated material is to be temporarily stockpiled on-site, it must be placed in a secured area, isolated by a barrier, and covered and underlain with waterproof tarps. If there is any possibility of water runoff from the stockpiled material, appropriate measures, such as dikes, berms, or roll-off boxes must be employed to contain the runoff (Section 9.0, Runoff Control).

- Excavated material which contains gas plant residues and which is not to be reused must be assumed to be a hazardous waste unless it has been analyzed by a State-certified laboratory (for PNAs, lead, mercury, arsenic, and cyanide) and determined to be non-hazardous. For assistance in sampling, contact your Environmental Coordinator. For information on how to properly manage hazardous waste, consult your Environmental Coordinator or the Company *Hazardous Waste Manual*.

- In no case shall excavated material, which has been tested and shown to be a hazardous waste, remain on-site for more than 90 days following commencement of the excavation. Such material must be transported by a registered hazardous waste hauler to an EPA- and State-approved disposal site, accompanied by a uniform hazardous waste manifest. During temporary storage of such material on-site pending disposal, the accumulation area should be cordoned-off and posted with hazardous waste warning signs (visible from all directions and bilingual, where necessary).

6.0 UNDERGROUND TANK WORK AT FORMER MANUFACTURED GAS PLANT SITES

Underground tank testing, leak response and closure activities should be performed according to procedures outlined in PG&E's *Underground Tank Manual*.

Work plan preparation and approval, pre-excavation testing, and advance notifications are not required for routine underground tank work, for installation of monitoring systems (such as the TLS-250), or for tank removal/replacement which involves excavation in what is anticipated to be clean backfill. Routine underground tank work is defined as underground storage tank work where only unaffected, imported fill would be disturbed during the excavation activities.

The Manufactured Gas Plant Project Team should receive a copy of all local agency transmittal letters (not test reports) summarizing the testing results for tanks located at any site listed in Attachment 1.

If a tank leak is confirmed based on precision test data or upon excavation of the tank, the Manufactured Gas Plant Project Team should be notified as soon as possible prior to performing soil borings or other soil disturbance work. TES should be contacted to conduct a preliminary subsurface investigation before proceeding with any closure or remedial action activities.

The Environmental Coordinator will contact the local permitting agency if field testing indicates leakage may have occurred from the tank.

A Manufactured Gas Plant Project Team member will make the necessary State and Federal agency notifications if field testing indicates leakage may have occurred from the tank. Local agency contacts for a leaking underground tank are to be coordinated by the Environmental Coordinator. The Manufactured Gas Plant Project Team will be notified as soon as possible following any agency contact.

The Environmental Coordinator will coordinate with a Manufactured Gas Plant Project Team member any actions to further characterize the site, or if necessary, to prepare a remedial action plan for the tank leak at the site.

7.0 EMERGENCY WORK AT FORMER MANUFACTURED GAS PLANT SITES

This section is intended to allow for an expedited approach when dealing with emergency work on sites identified in Attachment 1. "Emergency work" means unanticipated excavation work that must be done immediately to correct a hazardous condition or restore service to customers, and for which alternatives that avoid excavation are not feasible.

- Excavation work shall proceed in accordance with the procedures in Section 5.0, with the exception that the work plan, pre-excavation testing and evaluation by Safety, Health and Claims are not required. However, a management employee must be on-site to supervise the work and insure that the following guidelines and the safety procedures contained in Attachment 2 are followed.

- The following individuals and departments must be contacted as soon as possible by the on-site supervisor:

  1. Project safety personnel;

  2. Any Manufactured Gas Plant Project Team Member (Section 11.0);

  3. The Industrial Hygiene Section of Safety, Health, and Claims (Section 11.0); or

  4. The Environmental Coordinator.

- Protective clothing and equipment is listed in the generic Site Safety Plan (Attachment 2). A supply of protective clothing and equipment should be kept on hand for emergency situations.

- Employees should be on the alert for abrupt changes in color and/or odor of excavated soil. If tar or dark gray to black soil is encountered, protective overalls, hood or hard hat, shoe covers, and impermeable gloves should be worn for any activities that require close or direct contact with the soil. Respiratory protection should also be used if it is necessary to enter the trench or excavation.

8.0 EXCAVATION WORK ADJACENT TO FORMER MANUFACTURED GAS PLANT SITES

A. The work plan and pre-excavation testing requirements described in Sections 2.0 and 3.0 are required where there is evidence which suggests that gas plant residues are also on the property adjacent to the former manufactured gas plant.

B. If there is no evidence of gas plant residues on the property adjacent to the former manufactured gas plant, the work plan and pre-excavation testing described in Sections 2.0 and 3.0 are not required for excavation work adjacent to former manufactured gas plant sites. However, the following individuals and departments must be verbally notified within 48 hours of commencement of planned excavation work adjacent to the sites listed in Attachment 1 prior to beginning the work (this applies to excavations on both PG&E and franchised property):

1. Project safety personnel;
2. The Manufactured Gas Plant Project Manager (Section 11.0);
3. The Industrial Hygiene Section of Safety, Health and Claims (Section 11.0); and
4. The Environmental Coordinator.

Written notification of the planned excavation work should follow the verbal notification within 5 days of commencement of excavation activities.

C. In emergency work situations adjacent to manufactured gas plant sites, prior notification of the above is not required. However, a management employee must be on-site to supervise the work and to ensure that the guidelines and the safety procedures contained in Attachment 2 are followed. Normal work procedures should be followed.

D. If residue or material suspected to be residue is discovered during the excavation, the following steps shall be taken:

1. Except in emergency work situations (Section 7.0), the excavation work shall be temporarily suspended so that the impact to the project due to discovery of residue can be evaluated.
2. Excavated material which contains gas plant residue and which is not to be reused must be assumed to be a hazardous waste and managed according to the provisions of Section 5.0.
3. Contact any Manufactured Gas Plant Project Team member (Section 11.0).
4. Refer to the generic Site Safety Plan and/or contact the Industrial Hygiene Section of Safety, Health and Claims regarding proper safety procedures and protective clothing (Section 11.0).
5. Notify the Environmental Coordinator.
6. The excavation shall proceed as described in Section 5.0, keeping the following in mind:
   a. In no case shall excavated gas plant residue be left unsecured on-site (Section 5.0).
   b. The Environmental Coordinator should be contacted to determine how excess excavated gas plant residues in soils and/or water are to be removed from the site.

9.0 RUNOFF CONTROL

This section is intended to provide guidance in cases where water runoff has the potential to transport gas plant residues off-site and/or into waterways. Such situations include, but are not limited to, rainfall flooding or a waterline break while an excavation is underway.

These guidelines are to be used where no other water runoff control measures, such as SPCC Plan Secondary Containment, are in place at a site. Existing procedures for runoff control, if adequate (i.e., if they contain runoff on-site), should be followed whenever possible.

- The on-site supervisor responsible for the job has primary responsibility for determining the appropriate runoff control measures and ensuring that they are implemented in a timely manner.

- All reasonable attempts should be made to contain water runoff on-site through the use of dikes, berms, or other appropriate means. If clean material is unavailable, excavated material may be used to form the berms, provided that containment is complete (i.e., no berm material is washed away).

- If runoff cannot be fully contained on-site, or in the interim before adequate measures are in place to prevent runoff off-site, use berms of clean absorbent, not excavated material, to minimize runoff. These berms can also serve to filter out suspended material before water leaves the site.

- Samples of the contained runoff shall be collected by TES or a qualified individual and sent to a State-certified laboratory for analysis. At a minimum, water samples should be analyzed for polynuclear aromatic hydrocarbon compounds (PNAs), lead, mercury, arsenic, and cyanide. Runoff should remain on-site (in storage tanks, if necessary) pending receipt of analytical results. The Facility Hazardous Waste Coordinator, with the assistance of the Departmental or Environmental Coordinator, is responsible for determining how the accumulated runoff is to be removed from the site.

- The possibility of disposal of the water into the local sewer system should be investigated through the local sanitation district office or department of public works once the test results have been received.

- In the event that there is a discharge or suspected discharge of material which may contain gas plant residue off-site, the Manufactured Gas Plant Project Team (Section 11.0) shall be notified immediately. The Manufactured Gas Plant Project Team will coordinate notification of the appropriate State or Federal agencies of the release.

- If other members of the Manufactured Gas Plant Project Team are unavailable, the Manufactured Gas Plant Project Manager (Section 11.0) shall be notified. The Project Manager shall make the required agency notifications. Notification of the appropriate Company personnel shall be made as soon as practicable upon knowledge of the discharge or release.

10.0 ADDITIONAL CONSIDERATIONS

10.1 POTENTIAL COSTS

The potential cost of a complete subsurface investigation of the affected area and the possible development and implementation of a remedial action plan, including excavation and off-site disposal of material that may be classified as a hazardous waste, are the responsibility of the sponsoring department and should be considered in the evaluation of a proposed project. The high cost of hazardous waste disposal (currently $200 to $300 per cubic yard) may have a major impact on the economic viability of the proposed work. Installation of permanent structures or facilities on these sites is to be avoided if there is a reasonable alternative.

10.2 TRANSFER OF OWNERSHIP

Since some residues may exist at former manufactured gas plant sites, any transfer of title, leasing, rental, or similar transaction regarding the PG&E property that is identified as a former manufactured gas plant site should be undertaken with the express approval and guidance of the Vice President - General Services, the Manufactured Gas Plant Project, and the Law Department.

10.3 SAFETY PRECAUTIONS

Many of the chemical compounds found in gas plant residues are commonly found in other materials and locations, such as cigarette tars, asphalt products, barbecues, fireplaces, automobile exhaust, motor oils, etc. Some of these compounds, however, are classified as hazardous. For this reason, these guidelines have been established to provide procedures for managing any excavations or soil disturbance activities on or adjacent to these properties. Brief exposure to these chemical compounds will not generally pose any significant health risk, however, exposure to lampblack, coal tar, and other gas plant residues should be avoided. Safety issues related to gas plant residues are addressed in Attachment 2. A generic site safety plan and instructions for preparing and approving a site safety plan for excavation at a former manufactured gas plant site are also included in Attachment 2.

10.4 TRAINING

All PG&E personnel working on-site will have participated in Company Hazard Communication Training, First Aid Training, Respirator Training and Fit Testing, and Facility Environmental Emergency Plan Training. In addition, sufficient training to comply with 29CFR1910.120 will be give in areas such as safe work practices; nature of anticipated hazards; handling emergencies; safe use of field equipment; handling, storage, and transportation of hazardous materials; use, care, and limitations of personal protective equipment; and safe sampling techniques. The above training can be satisfied by specific courses given by qualified trainers, by PG&E-required training, or by a combination of the two. Contact the Environmental Coordinator for further information on available courses.

Those personnel who may be exposed above Permissible Exposure Limits (PELs) for substances on-site or who may be required to wear respirators must receive a minimum of 40 hours of OSHA-standardized training followed by 3 days of on-site experience under the direct supervision of a trained, experienced supervisor, prior to conducting unsupervised work at an excavation where gas plant residues have been found.

Those on-site personnel who will not be exposed above the PELs and will not be required to wear respirators must receive a minimum of 24 hours of training followed by one day of supervised on-site experience. On-site supervisors must receive training equivalent to the personnel that they supervise plus an additional 8 hours on such topics as the health and safety program, personal protective equipment program, spill prevention program, air monitoring, etc.

It is the responsibility of the Site Safety Officer to ensure that all personnel are properly trained, that all those who will wear negative pressure respirators are currently fit-tested, and that personnel are trained in the use of the specific protective clothing and equipment that will be used. The Site Safety Officer, with the assistance of the Health and Safety Officer, will hold a safety briefing prior to the start of work as well as daily on-site briefings. See Attachment 2 for further guidance on determination of proper personal protective equipment and work practices.

11.0 INFORMATION AND ASSISTANCE

For additional information and assistance, contact:

Manufactured Gas Plant Project Team (Environmental Services Department)

Ms. Marti Coffman Steiner	PG&E 223-2520 PT&T (415)973-2520
Mr. Robert Doss	PG&E 223-7601 PT&T (415)973-7601
Mr. Darrell Klingman (MPG Program Manager)	PG&E 223-0902 PT&T (415)973-0902

ATTACHMENT 1

HISTORIC MANUFACTURED GAS PLANT SITES

The following is a list of former manufactured gas plant sites that are located within PG&E's service area. Those sites marked with an asterisk (*) are owned (in whole or in part) by PG&E.

Redwood Region: Debora Fudge - Environmental Coordinator

Benicia	East H and East Second Streets.
* Eureka	14th Street and Railroad Ave.
Eureka	1st, H, 2nd, and I Streets.
Eureka	2nd, 3rd, G and H Streets.
Healdsburg	SE corner of East and North Streets.
Healdsburg	Matheson and NW Pacific Railroad.
Mendocino	Near Talmage State Hospital.
Napa	Cross and Elm Streets.
Napa	5th between Main and Brown Streets.
Napa	South Oak, North Oak and Cedar Drives.
* Petaluma	First and D Streets (Petaluma Substation A).
Petaluma	Between Main Street and Petaluma River, near Martha Street.
* St. Helena	Main and Pope Streets.
* San Rafael	3rd and Lindaro Streets (Redwood Regional Offices, San Rafael Service Center, & Substation complex).
San Rafael	Between 4th and Julia Streets near A Street.
Santa Rosa	1st and B Streets.
Santa Rosa	5th and Mendocino Streets.
Ukiah	Leslie between Perkins and Peach Streets
Vallejo	Maryland between Sonoma and Marin Streets.
Vallejo	Foot of Maine Street.

Sacramento Valley Region: Mark S. Hays - Environmental Coordinator

• Chico	2nd and Cherry Streets (PG&E's Building Maintenance Department).
Chico	Vicinity of 3rd and Broadway Streets.
• Colusa	2nd and Main Streets (Colusa Service Center and Substation).
Grass Valley	Idaho-Maryland Road near Hwy. 49.
Grass Valley	Main, Auburn, Stewart, and Bank Streets.
• Marysville	4th and A Streets (Marysville Service Center and Substation).
Marysville	2nd and B Streets.
Nevada City	Coyote Street and near Main Street.
Oroville	Huntoon and Safford Streets.
Oroville	Montgomery and Downer Streets.
Placerville	Spring and Colona Streets.
Red Bluff	Oak and Rio Streets.
• Redding	South and Center Streets (District Regulator Set).
• Sacramento	Front and T Streets.
Sacramento	Jibboom near I Street.
Sacramento	Foot of Broadway near Sacramento River.
• Willows	E. Wood and Colusa Streets (Willows Service Center).
Woodland	4th and Main Streets.
Yreka	North and Main Streets (outside service territory).

ATTACHMENT 1 (continued)

San Joaquin Valley Region: William J. Frazier - Environmental Coordinator

Bakersfield	20th between P and Q Streets.
Coalinga	S. Louisiana, E. Houston, and E. Sacramento Streets.
Columbia	Gold Street.
Fowler	W. 8th Street near Fresno Street.
* Fresno	N. Thorne Ave. and S.P. Railroad ROW (Fresno Gas Load Center).
* Fresno	F and Mariposa Streets.
Jackson	Water and Main Streets.
Jackson	Middle Fork Jackson Creek and Broadway Street.
Lodi	S. Sacramento and Spruce Streets.
Lodi	Main and Locust Streets.
* Madera	South E. and East 9th Streets (Madera Pole Yard).
* Merced	West 15th and L Streets (Merced Service Center).
Modesto	9th and C Streets.
* Oakdale	J Street and Bryan Ave. (Oakdale Service Center).
* Selma	North and Sylvia Streets (Selma Service Center).
Sonora	NE corner of Shepard Street and Lyon Streets.
* Stockton	Center and Hazelton Streets (Stockton Gas Service Center and Substation Department).
* Tracy	Franklin Ave. and East Grant Line Road (Tracy Service Center and Substation).
Turlock	Golden State Hwy. and F Street.

Mission Trail Region: Rudy Promani - Environmental Coordinator

Agnews	Montegue Expressway, Lafayette Streets and Nelson Drive (State Hospital).
Gilroy	Sixth and Railroad Streets.
• Hollister	Sixth and Sally Streets (Hollister Service Center).
Los Gatos	Elm Street and Santa Cruz Avenue.
• Monterey	Del Monte and Figueroa Streets (Monterey Substation).
Monterey	Del Monte and Southern Pacific Railroad intersection.
• Salinas	Soledad and E. Lake Streets (District Regulator Set).
• San Luis Obispo	Higuera and Walker Streets.
San Luis Obispo	Dana and Nippomo Streets.
San Jose	N. Montgomery and St. John Streets (San Jose Service Center and Gas Load Center).
San Jose	3rd and E. San Fernando Streets.
Santa Clara	Benton and Railroad Avenue.
Santa Cruz	N. Pacific and River Streets.
• Watsonville	Walker and Front Streets (Watsonville Service Center).
• Watsonville	Main near 5th Street.

ATTACHMENT 1 (continued)

Golden Gate Region: Michael Bennett - Environmental Coordinator

Redwood City	East Marshall, Washington, and Broadway Streets.
* San Francisco	Illinois and 23rd Streets (Potrero Power Plant).
* San Francisco	Maryland and 23rd Streets (adjacent to Potrero Power Plant).
* San Francisco	Bay and Buchannan Streets (Marina Substation).
* San Francisco	Stevenson between 5th and 6th Streets (Station T steam plant).
San Francisco	1st and Howard Streets.
San Francisco	Market and New Montgomery Streets.
San Francisco	Columbus between Leavenworth and Hyde.
San Francisco	King and 2nd Street.
San Francisco	Townsend near 3rd Street.
San Francisco	Beach, Powell, Jefferson, and Mason Streets.
San Francisco	Fillmore, Bay, Steiner, and Francisco Streets.
San Francisco	9th and Brannan Streets.
* Daly City	Geneva and Schwerin Streets (Martin Station Service Center).

East Bay Region: Loretta Altshuler - Environmental Coordinator

Martinez	Marina Vista and Mill Streets.
* Oakland	1st and Market Streets (Oakland Gas Load Center).
Oakland	First and Washington Streets.
Pittsburg	Near E. 3rd and Columbia Streets.
San Leandro	Alvardo and St. John Streets.
Livermore	O Street near Railroad right-of-way.

ATTACHMENT 2

PG&E
EXCAVATION WORK PLAN
AND
SITE SAFETY PLAN
for Excavations at
Former Manufactured Gas Plant Sites

Prepared by:

Technical and Ecological Services
Environmental Services Department
Safety, Health and Claims Department

September 1991

INSTRUCTIONS FOR SUBMITTAL OF EXCAVATION WORK PLAN AND SITE SAFETY PLAN FOR APPROVAL:

1. Please read entire form before filling it out completely.

2. Pages that need to be filled in are the following two pages (Excavation Work Plan), and pages 1, 2, 3, and 4 of the Site Safety Plan.

3. Submit completed Excavation Work Plan and Site Safety Plan to the Manufactured Gas Plant Project Manager, with a copy to the Vice-President of General Services, for approval.

4. Retain a copy of the Work Plan and Site Safety Plan for your records.

5. Call your Environmental Coordinator or the Manufactured Gas Plant Project Team if you have any questions. (See Section 11.0 of the Excavation Guidelines).

SUBMITTAL FORM
EXCAVATION WORK PLAN
FORMER MANUFACTURED GAS PLANT SITES

Site: Date:

Description of Proposed Work (attach sketch showing location). Use additional sheets if necessary. _____

Alternatives Reviewed (including no action). Use additional sheets if necessary.

Submitted by: (Name) Print _____

Signature _____ Phone No._____

Reviewed by: (Name) Print _____
Manufactured Gas
Plant Project Signature _____ Date:_____
Team

Approved by: (Name) Print _____
Vice-President,
General Services Signature _____ Date:_____

(Note: The above approval is only for authorization to excavate within the gas plant site; the physical work must be approved through the normal job authorization process.)

Potential Routes of Exposure: Inhalation, ingestion, skin absorption ☐ ☐ ☐

Levels of Protection Anticipated: (Table 1)

Level D (Overalls, gloves, goggles, rubber boots or PVC boot covers): ☐

Level C (Level D plus half-mask respirator): ☐

Level C2 (Level D plus full-mask respirator and no goggles): ☐

Physical Hazards: (Circle all that apply)

Buried utilities, trenches, slips, trips, falls, equipment operation, overhead equipment, energized equipment

U.S.A. Dig to be Notified? (1-800-642-2444)

Yes ☐ No ☐

If not, why? _____

_____

_____

Circumstances Prompting Air Monitoring:

Excessive Dusts ☐ Volatile Organic Compounds ☐

Air Monitoring Equipment Anticipated:

Ram-1 (dusts) ☐

Photovac TIP (VOCs) ☐

NIOSH PCAM 184 Sampling Train (PNAs) ☐

Location of nearest phone from work zone(s): _____

_____

_____

_____

_____

_____

_____

PG&E
SITE SAFETY PLAN
for Excavations at
Former Manufactured Gas Plant Sites

TABLE OF CONTENTS

		Page
1.0	**BACKGROUND**	1
	1.1 PURPOSE	1
	1.2 PREVIOUS SITE INVESTIGATIONS	1
	1.3 PROJECT DESCRIPTION	1
2.0	**PROJECT HAZARD EVALUATION**	4
	2.1 POTENTIAL HAZARDS	4
	2.2 CHEMICAL HAZARDS	4
	2.2.1 **Polynuclear Aromatic Hydrocarbon Compounds**	4
	2.2.2 **Volatile Organic Compounds**	5
	2.2.3 **Metals**	5
	2.2.4 **Oil and Grease**	5
	2.2.5 **Cyanide**	5
	2.3 PHYSICAL HAZARDS	6
	2.3.1 **Excavation Hazards**	6
	2.3.2 **Heat Stress**	6
	2.3.3 **Confined and Enclosed Spaces**	7
3.0	**PERSONAL PROTECTIVE EQUIPMENT**	8
4.0	**ROLES AND RESPONSIBILITIES**	12
	4.1 PROJECT MANAGER	12
	4.2 ON-SITE PROJECT COORDINATOR	12
	4.3 SITE SAFETY OFFICER (PRIMARY)	12
	4.4 HEALTH AND SAFETY OFFICER	12
	4.5 QUALITY CONTROL OFFICER - ALTERNATIVE SITE SAFETY OFFICER	12
	4.6 OFF-SITE CONSTRUCTION MANAGER	13
	4.7 ENVIRONMENTAL SERVICES/ ENVIRONMENTAL COORDINATORS	13
	4.8 TECHNICAL AND ECOLOGICAL SERVICES	13
	4.9 GOVERNMENT AGENCIES	13
	4.10 CREW MEMBERS	13

TABLE OF CONTENTS

		Page
5.0	EMERGENCY RESPONSE PROCEDURES	14
	5.1 EMERGENCY PROCEDURES	14
	5.2 EMERGENCY COMMUNICATIONS PROTOCOL	14
6.0	WORK PRACTICES	15
	6.1 WORK ZONES	15
	6.2 DUST SUPPRESSION	15
	6.3 AIR MONITORING	16
	6.4 DECONTAMINATION	16
	6.5 WASTE HANDLING	17
7.0	TRAINING	20
8.0	MEDICAL SURVEILLANCE	21

LIST OF ACRONYMS USED IN THIS DOCUMENT

ACGIH	American Conference of Governmental Industrial Hygienists
APR	Air Purifying Respirator
BZ	Breathing Zone
CGI	Combustible Gas Indicator
CPR	Cardiopulmonary Resuscitation
CRC	Contamination Reduction Corridor
CRZ	Contamination Reduction Zone
EZ	Exclusion Zone
FID	Flame Ionization Detector
HSO	Health and Safety Officer
IDLH	Immediately Dangerous to Life and Health
LEL	Lower Explosive Limit
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PID	Photoionization Device
PM	Project Manager
PNA	Polynuclear Aromatic Hydrocarbon Compounds
PPE	Personal Protective Equipment
PPM	Parts Per Million
REL	Recommended Exposure Limits
SSO	Site Safety Officer
STEL	Short-Term Exposure Limit
SZ	Support Zone

LIST OF ACRONYMS USED IN THIS DOCUMENT (Continued)

TLV	Threshold Limit Value
TWA	Time-Weighted Average
VOC	Volatile Organic Compound

1.0 BACKGROUND

1.1 PURPOSE

The purpose of this Site Safety Plan is to assign responsibilities, and to establish personal protection standards, safety procedures, and monitoring requirements that may be implemented during PG&E's excavation activities at former manufactured gas plant sites.

The provisions of the plan are mandatory for all workers during excavation work. It is the responsibility of all workers involved in the project to contact their supervisor and request clarification of any questions regarding the Site Safety Plan before beginning any work on the project.

This Site Safety Plan is designed to provide ample protection to excavation workers and the public from potential chemical exposures and other injuries during the project. Site conditions will be monitored according to the procedures outlined in Sections 2.0 and 6.0 of this plan.

1.2 PREVIOUS SITE INVESTIGATIONS

Describe any previous investigations conducted at the site and the results of any sampling conducted: _____

1.3 PROJECT DESCRIPTION

Date Prepared: _____
Site Name/Location: _____
Proposed Dates of Work: _____
Objective of Work: _____

Anticipated or Possible Contaminants:

- ☐ PNAs
- ☐ VOCs
- ☐ Oil and Grease
- ☐ Metals
- ☐ Cyanide
- ☐ Unknown

Land Use of Area the Surrounding Site:

- ☐ Industrial
- ☐ Commercial
- ☐ Residential

Anticipated Waste Types:

- ☐ Solids
- ☐ Sludges
- ☐ Liquids

Primary Emergency Contacts:

Ambulance:	911 or _____
Fire Department:	911 or _____
Poison Control:	911 or _____
Police:	911 or _____

Name, address, phone number, and two routes to/of nearest hospital. (You must include a map with the shortest route highlighted.)

PG&E Contacts:
(Complete to the extent known)

Title	Contact	Telephone

Site Safety Officer _____

Excavation Project Manager _____

Construction Manager _____

Project Manager _____

Environmental Coordinator _____

Supervisor, Construction Manager _____

Other PG&E contacts (if necessary) _____
(i.e., Quality Control Officer)

Employees' and Contractors' acknowledgement of Site Safety Plan briefing.
(To be completed immediately prior to starting work)

Employee/Contractor	Signature and Date

2.0 PROJECT HAZARD EVALUATION

2.1 POTENTIAL HAZARDS

Substance	Range of Soil Concentrations Measured or Expected	Potential Routes of Entry
Polynuclear Aromatic Hydrocarbon Compounds (PNAs)	_____	Skin Absorption Inhalation Ingestion
Volatile Organic Compounds	_____	Inhalation Skin Absorption
Metals	_____	Inhalation Ingestion
Oil and Grease	_____	Ingestion Skin Absorption
Cyanide	_____	Ingestion

The following additional hazards are anticipated on site: Overhead and buried utilities, equipment operation, possible groundwater intrusion, trenching, slips, falls, trips, heat stress, noise, and possible confined spaces.

2.2 CHEMICAL HAZARDS

The chemical hazards associated with excavations at former manufactured gas plant sites are due to residues often remaining from gas manufacturing processes. Possible hazards result from potential contact with polynuclear aromatic hydrocarbons (PNAs), volatile organic compounds (VOCs), cyanide, metals, and oil and grease. These chemical compounds may be present in soils in the form of solids or sludge, or in groundwater encountered during excavation.

Following is a summary of the toxicological hazards for PNAs, VOCs, metals, oil and grease, and cyanide. OSHA PELS given are Final Limits under revised 29CFR1910.1000, effective 9/1/89. The proper selection of skin and respiratory protection, which is critical to prevent exposure, is addressed later in this document. These selections should be reevaluated as additional sampling information becomes available.

2.2.1 Polynuclear Aromatic Hydrocarbon Compounds (PNAs)

Polynuclear aromatic hydrocarbon compounds (PNAs) may pose an inhalation and/or skin absorption hazard. These compounds include specific species that are known skin carcinogens when exposed to bare skin for long periods. Inhalation exposure to airborne PNAs can, in some circumstances, increase the risk of respiratory cancer, again, with long term exposure. However, PNAs have relatively low vapor pressures, which reduce risk of inhalation. PNAs can be an inhalation hazard if airborne dust is contaminated with PNAs, or if PNAs are subjected to enough heat to cause significant vaporization.

The OSHA PEL for total PNAs (designated "coal tar pitch volatiles") is 0.2 mg/m^3 (8-hr time-weighted average [TWA]). Because PNAs are comprised of many individual compounds, there are individual PELs, threshold limit values (TLVs), and recommended exposure limits (RELs) for some of these compounds. The PEL for naphthalene is 50 mg/m^3. The American Conference of Government Industrial Hygienists (ACGIH) has designated benzo(a)pyrene and chrysene as suspected human carcinogens, category A2. National Institute for Occupational Safety and Health (NIOSH) has an REL for coal tar pitch volatiles of 0.1 mg/m^3. NIOSH has also designated chrysene as an occupational carcinogen.

2.2.2 Volatile Organic Compounds (VOCs)

VOCs commonly associated with petroleum hydrocarbon compounds include benzene, toluene, ethylbenzene, and xylenes (BTEX). Ingestion of BTEX can occur through inadequate decontamination procedures or poor personal hygiene. BTEX is also readily absorbed through the skin and readily volatilize. Short-term inhalation/absorption of BTEX has been known to cause fatigue, drowsiness, vomiting, and headaches. Long-term exposure to BTEX is known to increase the risk of cancer, liver failure, and leukemia. The OSHA PELs (8-hr TWA) are 1 ppm for benzene, 100 ppm for ethylbenzene, 100 ppm for toluene, and 100 ppm for xylenes. The OSHA short term (15 minute) exposure limits (STELs) for BTEX are 5 ppm for benzene, 150 ppm for toluene, 125 ppm for ethylbenzene, and 150 ppm for xylenes. NIOSH set a REL for benzene at 0.1 ppm (8-hr TWA), and a STEL for benzene at 1 ppm.

2.2.3 Metals

Metals often found on-site include lead, arsenic, and mercury. Accidental ingestion of metals may occur through inadequate decontamination procedures or personal hygiene practices. Inhalation of metals can occur if contaminated dust becomes airborne during excavation. Dermal contact, particularly to the eyes, is also of concern because of possible irritation reactions.

2.2.4 Oil and Grease

Oil and grease exposure can cause skin irritation or dermatitis. While oil mist presents an inhalation hazard which may target the respiratory system or skin, a mist form is not anticipated in this setting. The OSHA PEL for mineral oil mist is 5 mg/m^3 (8hr-TWA). Dermatitis may be a sign of overexposure to either oil and grease or PNAs. Ingestion of oil and grease can occur through inadequate decontamination procedures or poor personal hygiene

2.2.5 Cyanide

Cyanides are readily absorbed via inhalation, ingestion and skin absorption. The nervous system is the major target organ in cyanide poisoning. Symptoms of chronic exposure to cyanide in humans and laboratory animals include enlargement of the thyroid gland which is through to result from an iodine imbalance caused by thiocyanate, the principal metabolite of cyanide. Symptoms of cyanide exposure (as HCN) include weakness, headaches, confusion, nausea, vomiting, incoordination, skin and eye irritation, and slow, gasping respiration.

2.3 PHYSICAL HAZARDS

Potential physical hazards associated with this work include eye and skin contact hazards during excavation, tripping, falling, or slipping during project work, noise, excavation cave-ins, and possibly heat stress due to the wearing of impermeable protective clothing.

2.3.1 Excavation Hazards

A physical survey of the site must be conducted in an attempt to locate the various utility lines and pipes which may be present. Boring logs that may have been prepared during pre-excavation testing adjacent to the proposed work area(s) may be used to evaluate potential subsurface conditions and will be shared with personnel performing the work. All overhead and underground lines will be identified and all conductive equipment, booms, poles, lines, or any other conductive objects will be kept at least 10 feet away from any excavation procedures.

All excavations 5 feet or greater in depth will be shored, sloped, or benched to prevent cave-in in accordance with the PG&E *Excavation Safety Manual* and CAL/OSHA regulations. In addition, all open excavations shall be inspected daily by a "competent person". These inspections shall be maintained, in writing, at the work site and will be available for review at all times.

Face shields, safety glasses and/or goggles, and hearing protection may be required in the event unidentified obstructions are encountered during the project. Noise levels will be monitored, if necessary, by the On-Site Project Coordinator to determine if hearing protection is required.

2.3.2 Heat Stress

Use of impermeable protective clothing limits the ability of the body to cool itself by evaporation of perspiration. Therefore, even in mild weather, and especially in hot weather, heat stress is a potential problem. The Site Safety Officer will inform all personnel wearing protective clothing (and others as necessary) of the signs, symptoms and hazards of heat stress. These include minor symptoms such as heat rash and heat cramps, or severe effects such as heat exhaustion and heat stroke. Heat rash is a skin irritation resulting from prolonged contact with wet clothing. It can be prevented by allowing the skin to dry completely during rest periods and by showering at the end of the work day.

Heat cramps, heat exhaustion, and heat stroke all result from the excessive loss of body fluids and electrolytes. The symptoms of heat cramps are spasms in the abdomen or limbs. Heat exhaustion results from more severe dehydration. Symptoms include pale, clammy skin, profuse perspiration, weakness, headache, and nausea. Heat stroke is a life-threatening condition that occurs when the body's temperature-regulating system no longer functions properly. Symptoms include hot, dry skin; a high fever (often 105°F or more); dizziness; nausea; rapid pulse; and unconsciousness. Brain damage and death may follow if the body temperature is not reduced. All personnel should be familiar with the symptoms of heat stress and appropriate first aid and precautionary measures. The proper work regime, including rest in a cool, shaded place, adequate fluid intake, and electrolyte replacement, are vital in the prevention of heat stress.

For workers wearing impermeable protective clothing in ambient temperatures of 75 degrees F and above, the following work/rest regimen should be followed:

- 75 degrees to 80 degrees F - 15 minutes of rest per every 2 hours of work.
- 80 degrees to 85 degrees F - 15 minutes of rest per every 1.5 hours of work.
- above 85 degrees F - 15 minutes of rest every 1 hour of work.

This regimen may require rescheduling work to cooler periods of the day. The use of cooling ice vests can extend work periods. The use of direct, personal heat-stress dosimeters may also extend work periods by giving a more accurate indication of tolerance times.

2.3.3 Confined and Enclosed Spaces

A "confined space" is defined as a space that has both of the following conditions concurrently:

(1) Restricted access and egress that would make removal of an incapacitated person difficult; and

(2) Insufficient ventilation to remove or correct dangerous air contamination or oxygen deficiency. Dangerous air contamination is considered to be the Immediately Dangerous to Life or Health (IDLH) level of a contaminant, or greater than 20 percent of the Lower Explosive Limit (LEL) of a flammable or combustible substance. Oxygen deficiency is considered to be an oxygen concentration of less than 19.5 percent, by volume.

Presence of condition (1) alone makes the space an "enclosed space."

If enclosed or confined spaces are present, testing and entry procedures as specified in the PG&E *Accident Prevention Rulebook (APR)* and the PG&E Gas Operations *Confined and Enclosed Space Policy and Procedures* shall be followed.

3.0 PERSONAL PROTECTIVE EQUIPMENT

Four levels of protective clothing ensembles (Levels A, B, C, and D) are designated to be used for different levels of hazards. Level D is the least protective and Level A is the most protective. Based on evaluation of potential hazards, we anticipate that personal protective equipment may not be required unless obvious discoloration of the soils or odor is detected.

The personal protective equipment (PPE), listed in Tables 1 and 2, are available should the Health & Safety Officer (HSO) determine it is warranted. The use of Level A or B PPE is not anticipated for this project. For this project, regular work attire consisting of coveralls, heavy boots, and work gloves, etc., is required.

Level D PPE is intended for use when contact with gas plant residues is anticipated (See Table 1 for reference). Level C PPE is intended for use when exposure to VOCs or airborne contaminated dust is anticipated. If air purifying respirators are required, the cartridges specified in Table 2 shall be used. These are the appropriate cartridges for use with the involved substances and concentrations that may be anticipated. All personnel using air purifying respirators must be currently fit-tested for the respirator that they use, and must be trained in respirator use according to the PG&E *Respirator Manual*.

No changes to the specified levels of protection shall be made without the approval of the Site Safety Officer (SSO) and the Health and Safety Officer (HSO). Table 3 provide decision criteria for selection and up-grading of PPE.

TABLE 1
PROTECTIVE CLOTHING LEVELS

Item	Safety Equipment Guide Reference (March 1991 Edition)
LEVEL D:	
• Tyvek coveralls	p. A-4
• NBR (Sol-Vex) outer gloves	p. B-7
• Rubber surgical inner gloves (optional)	p. B-13
• Safety shoes and PVC boot covers, or rubber boots (if properly decontaminated)	p. A-14
• Safety glasses/goggles/face shield, when warranted	p. D-1 - D-13, D-28 - D-30
• Hard hat/cap	p. C-1, C-2
LEVEL C:	
• Half-mask, air-purifying respirator (e.g. MSA Comfo II)	See Table 2
• Combination organic vapor/acid gas/ HEPA particulate cartridges plus	See Table 2
• Level D	
LEVEL C2:	
• Full-face, air-purifying respirator	See Table 2
• Combination organic vapor/acid gas/HEPA	See Table 2
• Level D (except safety glasses/goggles or shield)	
OPTIONS:	
• Hearing Protection (ear plugs or muffs)	Section G
• For welding--Dura-Kev Flash Suit w/Airline Respirator	p. A-13

TABLE 2
RESPIRATOR INFORMATION

Manufacturer	Cartridge/Facepiece	Size & Type	M&S Code	Safety Equip. Guide Ref.
HALF-MASK RESPIRATORS:				
MSA	Comfo II Rubber	small	20-6938	F-9
MSA	Comfo II Rubber	medium	20-6584	F-9
MSA	Comfo II Rubber	large	20-6940	F-9
MSA	Comfo II Silicone	small	20-8904	F-9
MSA	Comfo II Silicone	medium	20-8905	F-9
MSA	Comfo II Silicone	large	20-8906	F-9
MSA	Comfo Elite Silicone	small	03-1642	F-10
MSA	Comfo Elite Silicone	medium	03-1643	F-10
MSA	Comfo Elite Silicone	large	03-1644	F-10
Glendale	Glenaire MX/PF 9500	(one size)	01-6556	F-13
U. S. Safety	200	small	01-6581	F-5
U. S. Safety	200	medium	01-6580	F-5
U. S. Safety	200	large	01-6579	F-5
Protech	1482	small	20-6070	F-7
Protech	1482	medium	20-8907	F-7
Protech	1482	large	20-8908	F-7
FULL-FACE RESPIRATORS:				
MSA	Ultra-Twin	small	20-8706	F-19
MSA	Ultra-Twin	medium	20-7027	F-19
MSA	Ultra-Twin	large	20-8707	F-19
U. S. Safety	151	medium	20-7519	F-21
CARTRIDGES:				
MSA	GMA-H	Organic Vapors, Acid Gases, HEPA filter	20-7573	F-11
Glendale	C23-50	Organic Vapors, Acid Gases, HEPA filter	01-6563	F-14
U. S. Safety	158-T-46	Organic Vapors, Acid Gases, HEPA filter	20-7582	F-6
Protech	G104-G208	Organic Vapors, Acid Gases, HEPA filter	20-8631	F-8

TABLE 3

DECISION CRITERIA FOR SELECTION AND UPGRADING
OF PERSONAL PROTECTIVE EQUIPMENT

AGENT(S)	MONITORING INSTRUMENT	DECISION LEVEL	REQUIRED PROTECTION
Dust	RAM	< 1.0 mg/m^3 during work	Level D*
Dust	RAM	> 1.0 mg/m^3 during work	Level C
Hydrogen Sulfide	Detector Tube or H_2S Monitor	< 10 ppm	Level D*
Hydrogen Sulfide	Detector Tube or H_2S Monitor	> 10 ppm	Level B or leave area
Organics (Volatile)	Hnu or OVA	< 5 ppm above background	Level D*
Organics (Volatile)	Hnu or OVA	5 - 10 ppm above background	Level C
Organics (Volatile)	Hnu or OVA	> 50 ppm above background	Level C2 or leave area
Radiation	Radiation Survey Meter	0.1 - 1.0 mR/h	Level D*
Radiation	Radiation Survey Meter	1.0 - 2.5 mR/h	Level C
Radiation	Radiation Survey Meter	> 2.5 mR/h	Leave area
Combustible Gas	Combustible Gas Indicator	< 20% LEL	Level D*
Combustible Gas	Combustible Gas Indicator	> 20% LEL	Leave area
Oxygen	Oxygen Monitor	> 19.5 %	Level D*
Oxygen	Oxygen Monitor	< 19.5 %	Level B or leave area

* Level D or minimum work attire as determined by SSO/HSO.

4.0 ROLES AND RESPONSIBILITIES

The following personnel have key responsibilities and authority for site safety and health matters. Primary personnel responsible for the day-to-day management of the excavation activities are the Project Manager, the On-Site Project Coordinator, and the Site Safety Officer. Please note, however, that any one person on a project may fill more than one of the following roles (for example, the Project Manager may also act as the Site Safety Officer).

4.1 PROJECT MANAGER

The Project Manager (PM) is responsible for overall coordination of design and construction work. The Project Manager may act as Site Safety Officer if no contamination exposure is anticipated or if he/she is properly trained to identify and address potential hazards.

4.2 ON-SITE PROJECT COORDINATOR

The On-Site Project Coordinator (OPC) is responsible for coordinating the day-to-day project activities occurring at a site. The On-Site Project coordinator may also act as Site Safety Officer if no contamination exposure is anticipated or if he/she is properly trained to identify and address potential hazards.

4.3 SITE SAFETY OFFICER (PRIMARY)

A person will be designated as the primary Site Safety Officer (SSO) for work in areas found to be contaminated. This person will provide technical guidance regarding the establishment of the exclusion zones, support zones, contamination reduction, and command post locations; will institute decontamination procedures; and will have the authority to stop work on-site in the event of a violation of the Site Safety Plan or any other act that threatens personnel health or safety. Work can be resumed only after corrective measures have been taken and approved by the Site Safety Officer in consultation with the On-Site Project Coordinator and/or Site Safety Officers Supervisor. This person will also be responsible for all air sampling, when necessary.

4.4 HEALTH AND SAFETY OFFICER

The Health and Safety Officer's (HSO) responsibilities include review and approval of the Site Safety Plan and any subsequent changes to the plan. He/she will be available for consultation with the Site Safety Officer, Project Manager or On-Site Project Coordinator during the first phase of the work. If warranted, this person will conduct site safety audits to ensure the Site Safety Plan is being implemented correctly.

4.5 QUALITY CONTROL OFFICER - ALTERNATIVE SITE SAFETY OFFICER

The quality control (QC) officer will be responsible for auditing the implementation of all phases of the Site Safety Plan and communicating any discrepancies to the Primary Site Safety Officer. He/she will be responsible for arranging for lab work, observing soils removed during the excavations, analyses of soil samples if required, stockpile tracking forms, manifests, etc. He/she will provide a written report documenting the implementation of all phases of the Site Safety Plan and the operating procedures. The QC officer will be responsible for verifying the establishment of the work zones, overseeing decontamination procedures, managing the waste generated during the project to ensure appropriate storage and disposition of all waste material. He/she is also

responsible for making disposal arrangements in consultation with a contractor. He/she will assume the responsibilities of the Primary Site Safety Officer in his/her absence and will communicate any discrepancies to the Health and Safety Officer. The only exception will be air monitoring, which will be deferred to the Health and Safety Officer.

4.6 OFF-SITE CONSTRUCTION MANAGER

The off-site construction manager will be the key contact for technical questions on the construction portion of the job and will coordinate necessary arrangements to ensure the Site Safety Plan is being properly implemented. This person is responsible for ensuring that all procedures pertaining to physical hazards are followed throughout the project.

4.7 ENVIRONMENTAL SERVICES/ENVIRONMENTAL COORDINATORS

These people can be contacted for technical guidance on environmental concerns such as waste handling, interpretation of analytical results, etc. One or the other MUST be contacted if the job is shut down for environmental reasons. They are responsible for keeping each other apprised of job progress and, if necessary, the appropriate regulatory agencies. They will be responsible for spot checking the record keeping and stockpile management on a periodic basis.

4.8 TECHNICAL AND ECOLOGICAL SERVICES

Technical and Ecological Services (TES) can be contacted for technical guidance on waste handling, interpretation of analytical data, and other technical matters as required.

1.	Rich McCurdy	PG&E 251-5303/PT&T 415-866-5303
2.	Jeri Pollock	PG&E 251-5575/PT&T 415-866-5575
3.	Bryan Nicholson	PG&E 251-5477/PT&T 415-866-5477

4.9 GOVERNMENT AGENCIES

The California Environmental Protection Agency, the California Department of Health Services, the California Regional Water Quality Control Board, and the local County and City Public or Environmental Health Departments are agencies with which we maintain communications. If agency notification is required, the Environmental Coordinator or the Environmental Services contact shall be notified immediately and they will make the appropriate agency notification. In no case, however, should any agency notification legally required be deferred due to unavailability of Manufactured Gas Plant Project Team members or Environmental Coordinators

4.10 CREW MEMBERS

Responsible for donning/doffing personal protective equipment in accordance with the Site Safety Plan and instructions given by the Site Safety Officer and in his absence the On-site Project Coordinator.

5.0 EMERGENCY RESPONSE PROCEDURES

5.1 EMERGENCY PROCEDURES

If an injury occurs, take the following steps:

1. Prevent further injury.
2. Initiate first aid and get medical attention for the injured immediately.
3. Notify Site Safety Officer and On-Site Project Manager.

In the event that an emergency develops on-site, such as hazardous material spill or exposure problem, the following emergency procedures should be followed:

1. The Site Safety Officer will direct personnel to the appropriate evacuation routes and will make all project personnel aware of these routes prior to the first on-site activities.
2. In the event a member of the field crew experiences any adverse health effects or symptoms of exposure while on site, the entire field crew shall immediately halt work and act according to the instructions given by the Site Safety Officer.
3. The discovery of any condition that would suggest the existence of a situation more hazardous than anticipated shall result in the evacuation of the field team and re-evaluation of the hazard and the level of personal protection required.
4. Notify appropriate parties.

One of two designated routes to the nearest Medical Center will be used in the case of an emergency or the need for immediate medical treatment. The Site Safety Officer will determine if an ambulance is required or if the person(s) requiring medical aid can be transported by PG&E personnel.

5.2 EMERGENCY COMMUNICATIONS PROTOCOL

The following visual signals will be used as emergency communications signals:

- Hands clutching throat: out of air/can't breath
- Hands on top of head: need assistance
- Thumbs up: OK/I'm alright/I understand
- Thumbs down: no/negative
- Grip partner's wrist/both hands around partner's waist: leave area immediately

6.0 WORK PRACTICES

This section contains the procedures that will be followed during the excavation work in the event gas plant residues are encountered during any portion of the project.

- Work Zone
- Dust Suppression
- Air Monitoring
- Decontamination
- Waste Handling (including procedures for handling clean soils)

6.1 WORK ZONES

The work zones described in this section are designed to prevent the transfer of potentially hazardous materials to off-site locations by workers or equipment. There will be three work zones established at the job site if necessary: the exclusion zone, the contaminant reduction zone, and the support zone. The zones will be separated by barrier tape or other methods to clearly delineate the zone boundaries.

Exclusion Zone (EZ)

This is the area where excavation activities are taking place and is considered to be potentially contaminated. Real-time air monitoring of worker breathing zones for particulates and volatile organic compounds will take place in this zone. Proper protective clothing and equipment must be worn by all personnel working in this area. The Site Safety Officer, in conjunction with this plan, will determine the level of protective clothing required.

Contaminant Reduction Zone (CRZ)

This area is located immediately outside the exclusion zone and is used for the decontamination of personnel and equipment. Protective clothing, such as coveralls and gloves, and disposable equipment, are to be removed and placed in drums. Non-disposable equipment and protective clothing (i.e., boots) are to be washed and rinsed in this zone.

Support (or clean) Zone (SZ)

The support zone is considered to be uncontaminated. No contaminated equipment shall enter this zone. While wearing of protective gear is not required in this zone, it should be readily available in case of emergencies. All equipment and materials are stored and maintained in this zone.

6.2 DUST SUPPRESSION

Dust suppression measures will be used when visual or instrumental indications of dust levels indicate their necessity. A fine water spray will be used to wet soils, as necessary, using only enough water to provide dust control, so as to minimize runoff.

6.3 AIR MONITORING

Air monitoring of excavation activities will be implemented to screen ambient air concentrations of particulates in the work zone, if required by the Site Safety Officer. In addition, other equipment will be used, as appropriate, to measure oxygen levels, combustible gas, noise, and temperature in the exclusion zone.

The Site Safety Officer is responsible for establishing daily ambient background air concentrations and for ensuring that all equipment is properly calibrated prior to initiating field activities. The SSO will monitor worker breathing zones at an interval judged appropriate by the SSO for dust and volatile organic vapors. The results will be logged. Personal, integrated samples for PNAs and volatile organic vapors will be collected by the SSO and HSO at appropriate intervals to characterize worker exposure.

Ambient air monitoring will be performed, when warranted, according the following methods:

- Real-time measurement of dust in the work zone: This will be performed by using a RAM-1, or similar instrument. If the measured concentration of dust exceeds 1.0 mg/m^3, employees in the work area will don respirators (see Section 3.0) and dust suppression measures (Section 6.2) will be implemented.

- Real-time management of volatile organic compounds in the work zone: This will be performed by using an organic vapor analyzer utilizing a flame ionization or photoionization detector. If concentrations of volatile organic compounds exceed 5 ppm above the ambient background concentration, employees will don respirators (Section 3.0) and dust suppression measures (Section 6.2) will be implemented.

- Time-weighted average of PNAs in particulates measured at upwind and downwind locations: This will be performed using a low-volume particle collector at each of the two locations in accordance with NIOSH Method 5506 or 5575.

The Site Safety Officer will establish ambient background concentrations of particulates.

6.4 DECONTAMINATION

Employees exiting the exclusion zone and equipment used in the exclusion zone must follow the decontamination procedures as outline below if contamination has been encountered.

- Personnel Decontamination Procedure:

  - Remove disposable booties (if applicable) and place in drum for disposal.

  - Wash boots with detergent solution and rinse with clean water.

  - Wash outer gloves in detergent solution and rinse in clean water. Remove outer gloves and place into plastic bag for later reuse or place in drum for disposal.

  - Remove outer disposal coveralls and place in drum for disposal.

- At end of shift, remove respirator (if used) and place filters or cartridges into drum. Place the respirator into a separate bag for later cleaning and disinfection. Respirators must be disinfected daily according to the procedures in the PG&E *Respirator Manual.*

- Remove inner gloves (if used) and place in drum for disposal.

- Remove rubber boots (or other work boots) and place in storage area. Don street shoes.

- Thoroughly wash hands and face.

Equipment Decontamination Procedures:

All equipment which comes into the exclusion zone or in contact with potentially contaminated soils or water shall be cleaned prior to and after each use on the project. Decontamination will consist of combinations of hot water cleaning and/or detergent wash, water rinse, isopropyl rinse (if necessary), and distilled water rinse (if necessary). All rinsate generated from decontamination activities shall be placed in appropriate containers. Drums containing solid waste and drums containing rinsate must be closed hand-tight, properly labeled, and placed in a pre-designated drum storage area at the end of each work day. Proper disposal methods for these materials are provided in the Waste Handling Section (Section 6.5).

6.5 WASTE HANDLING

1. **Quality Control Officer Responsibilities:**

The Quality Control Officer is responsible for monitoring the excavated material to ensure that contaminated material is not inadvertently categorized as clean fill. The Site Safety Officer or Quality Control Officer must check or have arranged to check the soil periodically for signs of gas plant residues or other unsuspected contaminants or hazards (chemical or physical). For this purpose, "check" is intended to mean a visual inspection or actual measurement using applicable monitoring equipment, whichever is necessary. The Quality Control Officer shares the responsibilities with the Project Manager for limiting the release of materials off-site. This includes measures to prevent the generation of dust and the volatilization of chemicals causing odors. The Quality Control Officer is responsible for assuring that hazardous wastes, including soil and protective clothing and equipment, are handled properly.

2. **Employee Responsibilities:**

Employees are responsible for proper waste handling practices, as directed by the Site Safety Officer.

3. **Proper Management of Contaminated Soils:**

In the event contaminated soils are encountered during excavation, the following procedures will be followed:

- The material removed as a result of excavation will be segregated based on visual observations and/or air monitoring readings as follows: apparently clean soil, apparently contaminated soil; and potentially contaminated soil.

- These soils will be stockpiled on polyethylene sheeting/tarp. Each pile will be kept covered with polyethylene sheeting or other suitable synthetic membrane. The sheeting must be a minimum of 4 millimeters or 0.16 inches thick. The sheeting shall be secured over the piles with tires, sandbags or other appropriate weights. The weight shall be spaced at approximately 10-foot centers on top of the sheeting. The Project Manager and/or Quality Control Officer shall monitor the covered piles each working day to make sure the sheeting is secured.

- Runoff from the piles shall be prevented by placing berms made of clean fill or other material around each pile.

- Dust suppression measures should be implemented during excavation and stockpiling of soils to minimize dust generation.

4. **Proper Management of Excavated Soils Determined to be Clean:**

Soils resultant from the project are assumed to not contain gas plant residue when the assumption is based upon previous analytical data.

- The excavated soil will be visually inspected for the presence of gas plant residues. Clean soil will be placed back in the excavation. Apparently contaminated soil will be placed on polyethylene sheeting and covered. The Environmental Coordinator or Technical and Ecological Services will then be notified regarding disposal of these soils.

5. **Decontamination Solutions and Rinsewaters:**

Wastewaters generated from decontamination of protective clothing and equipment will be stored in a type 17C, 55-gallon drum. All drums will be stored as if they were hazardous waste in a fenced, posted, and secured area. At the end of the project, the contents of each liquid containing drum will be analyzed prior to disposal. The results of the analysis will determine the proper disposal method of the wastewater. The Quality Control Officer will arrange for sampling and proper disposal of wastewaters.

6. **Groundwater Handling Procedures:**

Groundwater may be encountered during the excavation. This water will be contained in Baker tanks or 55-gallon drums if removal from the excavation is required. The water will be sampled in accordance with the discharge requirements for the local sanitary sewer system and will include analysis for PNAs. If the water exceeds the discharge restrictions, arrangements will be made to dispose of it properly.

7. **Protective Clothing and Disposal Equipment:**

Protective suits and clothing will be issued each day as necessary. Disposable suits and equipment will be placed in plastic storage bags and placed in a type 17C, 55-gallon open top drum at the end of each working day. The drums containing protective clothing and disposal equipment will be stored as hazardous waste in a fenced, posted and secure area. At the end of the project, the drums will be transported and disposed of at an approved disposal facility.

7.0 TRAINING

All PG&E personnel working on or in the excavation will have participated in Company Hazard Communication Training, First Aid Training, Respirator Training and Fit Testing, and Facility Environmental Emergency Plan Training. In addition, sufficient training to comply with 29CFR1910.120 will be give in areas such as safe work practices; nature of anticipated hazards; handling emergencies; safe use of field equipment; handling, storage, and transportation of hazardous materials; use, care, and limitations of personal protective equipment; and safe sampling techniques. The above training can be satisfied by specific courses given by qualified trainers, by PG&E-required training, or by a combination of the two.

Those personnel who may be exposed above Permissible Exposure Limits (PELs) for substances or who may be required to wear respirators must receive a minimum of 40 hours of OSHA-standardized training followed by 3 days of on-the-job experience under the direct supervision of a trained, experienced supervisor, prior to conducting unsupervised work at an excavation where gas plant residues have been found.

Those personnel who will not be exposed above the PELs and will not be required to wear respirators must receive a minimum of 24 hours of training followed by one day of supervised on-the-job experience. Excavation project supervisors must receive training equivalent to the personnel that they supervise plus an additional 8 hours on such topics as the health and safety program, personal protective equipment program, spill prevention program, air monitoring, etc.

It is the responsibility of the Site Safety Officer to ensure that all personnel are properly trained, that all those who will wear negative pressure respirators are currently fit-tested, and that personnel are trained in the use of the specific protective clothing and equipment that will be used. The Site Safety Officer, with the assistance of the Health and Safety Officer, will hold a safety briefing prior to the start of work as well as daily on-site briefings.

8.0 MEDICAL SURVEILLANCE

PG&E provides a pre-employment physical examination to determine any limitations to work that a person will perform. Medical exams are also given periodically to those personnel exposed to asbestos or arsenic above regulatory limits, and audiometric exams are given to those personnel exposed to high noise levels.

In compliance with 29CFR1910.120, any employee who may be exposed to hazardous chemicals above their Permissible Exposure Limit for more that 30 days per year or who may wear a respirator for more that 30 days per year must undergo medical examinations at the following times:

- Prior to assignment,
- At least every 12 months,
- As soon as possible after signs or symptoms of an overexposure to a hazardous substance, and
- At termination or reassignment to an area where the employee would not be covered if there has not been an examination in the last six months.

If an employee feels he/she has been overexposed to a hazardous substance or has otherwise been injured, a DWC-1 form and a Company form, "Report of Industrial Injury to Employee" (Pink Slip) should be filled out and the employee should consult with a physician if necessary. The work-relatedness of the situation will then be determined by the Workers Compensation Section of the Safety, Health and Claims Department.

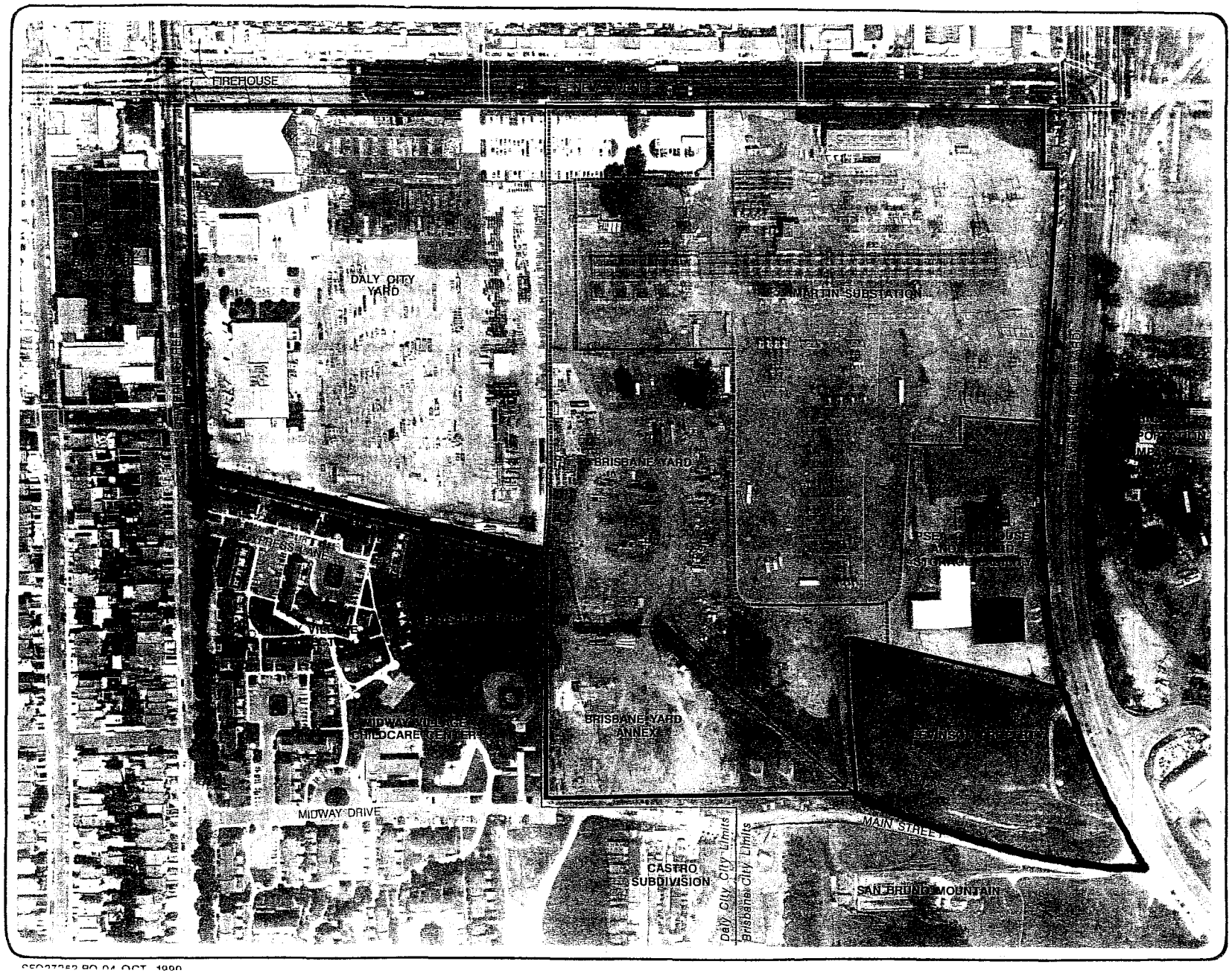


Figure 1
SITE MAP
Martin Service Center
and Levenson Property

SF037252.PO.04 OCT. 1990

EXHIBIT C

Martin Service Center Operation and Maintenance Costs

Chip Seal	$23,600/yr.
Groundwater Monitoring, Well Repairs, and Reporting	$16,000/yr
Trench Monitoring, O&M, Permitting, and Reporting	$55,000/yr
OU-1 Maintenance/Repair	$1,000/yr
Five year Review	$4,000/yr
Bayshore Sanitary District Sewer Service Charge	$10,000/yr
DTSC Oversight Costs	$5,000/yr
Total Yearly Cost	$114,600
Net Present Value for Thirty Years @ 9.12% Interest Rate and 3.0% Inflation Rate	$1,587,331

EXHIBIT D

ATTACHMENT D

Soil Management Plan (2017)

Haley & Aldrich, Inc.
2033 N. Main Street
Suite 309
Walnut Creek, CA 94596
925.949.1012

15 June 2017
File No. 128523-007

California Environmental Protection Agency
Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, California 94710

Attention: Ms. Jessica Tibor

Subject: Soil Management Plan
Pacific Gas and Electric Company
Martin Service Center/Daly City MGP
3004 Geneva Avenue
Daly City, California

Dear Ms. Tibor:

Haley & Aldrich, Inc. (Haley & Aldrich) is pleased to submit this revised Soil Management Plan (SMP) to the Department of Toxic Substances Control (DTSC) on behalf of Pacific Gas and Electric Company (PG&E) for PG&E's Martin Service Center (Site). This SMP was prepared to outline plans for the management of potentially contaminated shallow soil at the Site during future excavation activities with the goal of reducing the potential for human or environmental exposure to manufactured gas plant (MGP) waste residues. Please contact the undersigned should you have any questions regarding this SMP.

Sincerely yours,
HALEY & ALDRICH, INC.

Jessica Ely
Senior Project Manager

Vincent Tilotta, PE
Senior Engineer

Enclosures

cc: Pacific Gas and Electric Company; Melitta Rorty
Pacific Gas and Electric Company; William White

\\WNC\Common\36891_PG&E_Martin Service Center\SMP\REVISED SMP\DCMGP_RevisedSMP_Text_20170615_HAI_Final.docx

HALEY ALDRICH

www.haleyaldrich.com

REPORT ON

SOIL MANAGEMENT PLAN
PACIFIC GAS AND ELECTRIC COMPANY
MARTIN SERVICE CENTER/DALY CITY MGP
3004 GENEVA AVENUE
DALY CITY, CALIFORNIA

by Haley & Aldrich, Inc.
Walnut Creek, California

For Pacific Gas and Electric Company
San Ramon, California

File No. 128523-007
June 2017



Table of Contents

Page

List of Figures iii

1. Introduction 1

2. Background 2

2.1 SITE HISTORY AND DESCRIPTION 2
2.2 PREVIOUS INVESTIGATIONS 2
2.2.1 Site Soil 2
2.2.2 Site Groundwater Monitoring 3

3. Health Risk Exposure Routes 4

4. Mitigation Measures 5

4.1 REMEDIAL ACTION SELECTION AND IMPLEMENTATION 5
4.2 OPERATION AND MAINTENANCE 5

5. Management of MGP Impacted Soil 7

5.1 SOIL 7
5.1.1 Soil Handling, Excavation, and Disposal Procedures 7
5.1.2 Criteria for Soil Reuse/Disposal 8

6. Additional Considerations for Project Specific Plans 10

References 1

List of Figures

Figure No.	Title
1	Site Location Map
2	Site Map
3	Extent of Known MGP Impacts
4	Site Operable Units

1. Introduction

At the request of Pacific Gas and Electric Company (PG&E), Haley & Aldrich, Inc. (Haley & Aldrich) has prepared this revised Soil Management Plan (SMP) as a guideline for handling disturbed soil for future planned activities at PG&E's Martin Service Center at 3004 Geneva Avenue, Daly City, California (Site; Figures 1 and 2). This SMP may be used to develop project-specific plans. Project-specific work plan shall be submitted to Department of Toxic Substances Control (DTSC) for approval before each new project. The site-specific work plan shall include a list of work activities, locations, depths of excavation, a work schedule, and site maps showing any planned soil stockpile and/or dewatering tank locations.

Martin Service Center is a former manufactured gas plant (MGP) site and activities that may disturb subsurface soil are under the Department of Toxic Substances Control (DTSC) oversight. Areas of known MGP impacts have been documented across a large portion of the Site (CH2M HILL, 2001) (Figure 3). MGP-impacted soils are managed in-place under a cap composed of asphalt, concrete, and/or chipseal. A land use restriction is recorded for this Site which includes a requirement that capped soils are not disturbed without approval of a health and safety plan and an SMP by DTSC (DTSC and PG&E, October 17, 2002). This SMP outlines the handling of soil from future excavations within the known and possible MGP-impacted areas of the Site and complies with DTSC guidelines.

This SMP was prepared to mitigate exposure of MGP-impacted soils to Site and vicinity workers and to ensure that all proposed work complies with DTSC's requirements for the Site. Work performed at the Site will adhere to a site-specific health and safety plan (HASP). The HASP shall be prepared in accordance with the Operations and Maintenance Agreement executed January 6, 1995 between PG&E and DTSC (Docket No. HAS-94/95-010) and provided to DTSC.

This SMP contains a summary of the investigation activities conducted, identifies chemicals detected in soil at the Site, and assesses exposure routes that may generate a health risk for Site occupants or Site workers. This SMP also provides a summary of mitigation measures that are protective of human health under the proposed on-Site current land use. In general, these mitigation measures include requirements for maintaining adequate cover (cap) over soil at the Site.

2. Background

2.1 SITE HISTORY AND DESCRIPTION

The Site is located at 3004 Geneva Avenue in Daly City, California. The Site covers approximately 52 acres. The Site is bounded to the north by Geneva Avenue; to the west by Schwerin Street; to the east by Bayshore Boulevard; and to the south by Midway Village housing, Bayshore Park, and Main Street.

The Site is divided into several sections, including Daly City Yard, Brisbane Yard, Brisbane Yard Annex, Martin Substation, Levinson North Parcel, and the building located at 2850 Bayshore Blvd, Brisbane that was formerly the PSEA Clubhouse/Records Center and is now used as office and warehouse space for PG&E's General Construction Gas and Corporate Real Estate (Figure 2).

From 1905 to 1916, an MGP operated on the Site at the current location of the PG&E Martin Service Center. Residual waste associated with the MGP operations, including lampblack and tar, is known to exist locally in the Site fill and on adjacent areas to the south and west. Previous environmental investigations conducted at the Site indicate that such waste variably exists under much of the Site to depths up to 16 feet below ground surface (bgs).

Since the 1980s, DTSC has overseen environmental characterization, monitoring, and remedial action activities for the Site as the lead environmental regulatory agency. After subsurface characterization results showed that the soil and groundwater had contaminant concentrations above acceptable DTSC criteria, environmental controls were implemented. The controls include the installation of concrete, asphalt, and chip seal caps, a network of monitoring wells, and a groundwater interceptor trench, in addition to requiring off-site disposal of certain soil and groundwater and cap integrity monitoring. The State Water Resources Control Board (SWRCB) administers storm water control requirements for the Site.

The Site is currently developed with a PG&E service center, substation, and associated structures, office spaces, storage buildings, and paved parking lots. An undeveloped wetland extends through the southern portion of the Site.

2.2 PREVIOUS INVESTIGATIONS

Results of soil sampling performed at the Site (CH2M Hill, 1987, 1988, 1990, 2003 and PG&E, 1986) indicate the presence of the following constituents of potential concern (COPCs): total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), cyanide, and metals including arsenic, cadmium, chromium, lead, nickel, and mercury. These reports along with the analytical results of samples can be viewed on the DTSC Envirostor website[1].

2.2.1 Site Soil

Multiple soil investigation and characterization reports were prepared between 1987 and 2003. Data from the 1988 soil characterization report indicated that soil on portions of the Site was impacted with

[1] http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=41360100

PAHs from MGP residues from 3 to 12 feet bgs, depending on the thickness of the overlying fill, with concentrations of total PAHs up to 6,951 milligrams per kilogram (mg/kg) (CH2M HILL, 1988). Total phenol concentrations in the soil samples ranged from 0.6 to 300 mg/kg and were detected in 11 out of the 25 borings. Benzene, toluene, ethylbenzene and xylenes (BTEX) concentrations ranged from 0.1 to 13.4 mg/kg. BTEX was detected in 7 of the 25 borings. The maximum concentration of cyanide was 7.11 mg/kg. Cyanide was detected in 16 of the borings, including 3 of the borings where field observations did not indicate the presence of MGP residues. Areas containing known MGP impacts in soils are shown in Figure 3.

2.2.2 Site Groundwater Monitoring

The 1988 Site Characterization Report noted groundwater contamination in the artificial fill zone, the shallow zone and the deep zone (CH2M HILL, 1988). PAHs were detected in groundwater on the Site above RWQCB Environmental Screening Levels (ESLs) beginning in 1987. Annual groundwater monitoring was performed between 1987 and 2011, with a final groundwater monitoring event occurring in 2015. A groundwater interceptor trench designed to prevent offsite migration of PAHs was installed in 2002.

PAHs were not detected on the Site in concentrations above RWQCB ESLs between 2008 and 2015 (Haley & Aldrich, 2015). The groundwater monitoring program was discontinued and the groundwater interceptor trench was taken offline on December 31, 2015 with DTSC approval.

3. Health Risk Exposure Routes

TPH, VOCs, PAHs, cyanide, and metals including arsenic, cadmium, chromium, lead, nickel, and mercury were detected in Site soil above applicable environmental screening levels and regional background levels. All other COPCs in soil present on the Site were below applicable environmental screening levels.

A risk assessment report was prepared to evaluate potential impacts to public and environmental health (CH2M HILL, 1991). This report concluded that the most significant potential risk to public health was direct exposure to PAH-contaminated soil and the most significant potential risk to environmental health was the offsite migration of PAHs in groundwater. The subsequent remedial action plan (CH2M HILL, 1993a) indicated that mitigating these risks could be accomplished most effectively using limited capping, grading and groundwater control.

The Site was divided into two Operable Units (OU-1 and OU-2, Figure 4). OU-1 includes the areas where the potential existed for contact with surface soil containing PAHs. These areas are on the western portion of the Site, including the bermed area along the southern boundary of the Daly City Yard and the Schwerin Street Strip. OU-2 encompasses the eastern portion of the Site and addresses the potential routes of PAH transport by surface water and groundwater. It includes the drainage ditch, storm drain and groundwater flowing offsite to the east. A second remedial action plan (CH2M HILL, 1998a) was prepared to address the potential additional risks of the Bayshore Storm Drain Improvement Project (BSDIP), and added the management and disposal of excavated soil from the BSDIP to the remedy for OU-2.

Groundwater monitoring between 2008 and 2015 indicated that groundwater at the Site is no longer impacted with MGP residues above ESLs; therefore, direct exposure to MGP-impacted soils is presently considered the primary potential health risk exposure route for the Site.

4. Mitigation Measures

The following sections summarize the remedial actions selected and implemented at the Site as well as the operation and maintenance (O&M) of the remedies.

4.1 REMEDIAL ACTION SELECTION AND IMPLEMENTATION

Because of the complexity and variation of the contamination at the Site, DTSC organized the work into two operable units, OU-1 and OU-2, addressing specific areas where action was appropriate. OU-1 includes areas on the western portion of the Site, where the potential exists for contact with surface soil containing PAHs, including the bermed area along the southern boundary of the Daly City Yard and a strip of land between Schwerin Street and the Daly City Yard. OU-2 includes areas on the eastern portion of the Site and addresses potential routes of PAH transport by surface water and groundwater, including the drainage ditch, storm drain and groundwater flowing off-site to the east.

The results of the 1991 risk assessment (CH2M HILL, 1991) indicated that soil in OU-2 did not pose a significant risk to human health via the dermal contact pathway. Direct exposure to COPCs in the soil was unlikely because access to the Site was controlled by a fence around the property. Also, most soil is covered by concrete, asphalt, or clean fill, which limited potential contact with soil containing COCs. The Remedial Action Plan (RAP) for OU-1 (CH2M HILL, 1993a) was approved by DTSC in June 1993. The Remedial Design and Implementation Plan (RDIP) (CH2M HILL, 1993b) for OU-1 was approved in December 1993. A revised RAP for OU-2 was completed in July 1998 (CH2M HILL, 1998a) and DTSC approved a modified RAP for OU-2 in September 2000.

On 28 June 1991, PG&E entered into a Consent Order with the State Department of Health Services (DHS) and the RWQCB. The objective of the Consent Order was to ensure that any release or threatened release of a hazardous substance (as defined in section 25316 of the California Health and Safety Code) to the air, soil, surface water, or groundwater at or from the Site is thoroughly investigated and appropriate remedial actions are taken.

Additionally, a land use restriction was approved by DTSC and filed by PG&E in 2002 at the San Mateo County Recorder's Office (DTSC and PG&E, 2002). The land use restriction limits the use of the Site to industrial, utility, commercial or office space use, and prohibits the future development of the Site for health clinics, schools, daycare centers or senior citizen facilities. The land use restriction also prohibits drilling for water for drinking or irrigation purposes, raising of food, and bans activities that disturb capped soils without approval of a health and safety plan and an SMP by DTSC.

4.2 OPERATION AND MAINTENANCE

Operation and maintenance (O&M) activities as well as monitoring of the remediation systems are being conducted at the Site with DTSC oversight. O&M activities are being conducted in accordance with the following DTSC-approved documents:

- Revised Operations and Maintenance Plan for Martin Service Center Operable Unit 1 (The Daly City Yard Berm Cap and Schwerin Street Strip Capped Areas) and Operable Unit 2 (Brisbane Yard and Annex Cap and Interceptor Trench) (PG&E, 2005).

- 2015 Fourth Five-year Review Report for PG&E Martin Service Center, Daly City, CA. (Haley & Aldrich, 2015).

Current O&M and compliance monitoring reporting requirements are described below.

In accordance with the O&M Plan, PG&E representatives conducted a monthly inspection of the cap, drainage ditch, and irrigation system during the first year after construction (CH2M HILL, 1994). After the first year, the inspection schedule decreased to once every three months and included annual inspection of perimeter fencing. The current O&M Plan (revised in 2005) addresses a corrective action procedure, landscape monitoring, and an irrigation schedule (PG&E, 2005).

Chip seal surfaces are inspected semi-annually for deterioration and, if found to be deteriorated, worn, or damaged sufficiently to allow significant dust generation, the chip seal surface is repaired as needed.

A PG&E representative periodically (at least annually) inspects the perimeter fence to check for holes or other damage. If damage is found, PG&E makes the necessary repairs (PG&E, 2005).

Annual reports will be submitted; which include the completed annual and semiannual Site activities. The report will also include anticipated work for the next year.

Groundwater monitoring will be competed every five years in accordance to the DTSC approved plan to reduce groundwater monitoring across the Site as stipulated in the 2015 Fourth Five-year Review Report for PG&E Martin Service Center (Haley & Aldrich, 2015).

5. Management of MGP Impacted Soil

In the event of future excavation and/or soil movement at the Site, appropriate precautions and controls should be instituted to protect workers and the environment from exposure to COPC concentrations as documented herein. The COPC concentrations may be presumed to extend across the entire Site (including under any hardscape areas).

The following sections describe procedures to be used to identify and/or manage soil containing residual chemical concentrations that could potentially be encountered on the Site during and after Site development or maintenance activities.

5.1 SOIL

As previously discussed, based on investigation to date, MGP residues containing TPH, VOCs, PAHs, cyanide, and metals including arsenic, cadmium, chromium, lead, nickel, and mercury are the COPCs that have been documented at the Site.

Multiple soil investigation and characterization reports between 1987 and 2003 indicated that soil on portions of the Site was impacted with PAHs from MGP residues from 3 to 12 feet bgs, depending on the thickness of the overlying fill, with total PAH concentrations up to 6,951 milligrams per kilogram (mg/kg) (CH2M HILL, 1988).

The following risk management measures should be implemented before, during, and after any work is conducted that will penetrate below the surface cap outlined in Section 4 and into native soil and/or fill.

5.1.1 Soil Handling, Excavation, and Disposal Procedures

Soil in the Site was previously sampled for characterization. Soil in an area encompassing the southern portion of the Site has known MGP impacts (Figure 3). Soil disturbed within the area of known MGP impacts is assumed to be hazardous, and shall be handled appropriately as described below. Soil disturbed on the Site outside of the area of known MGP impacts should be handled as hazardous material if MGP impacts are observed during excavation. Excavated soil from outside of the area of known impacts should be observed by a professional qualified to identify MGP impacts. The environmental professional shall identify the potential presence of MGP-impacted soil by observing staining, odors, or the identification of MGP residues within the disturbed area.

Excavated soil from inside of the area of known MGP impacts, or suspected of containing MGP residues, shall be contained at the Site on either a 10-mil plastic sheet, in a roll-off bin, or in a Department of Transportation-rated drum until profiled and accepted for disposal. Excavation soil will be segregated based on visual observation of MGP residues. Soil will be stored in a secure location within the Site, which will be identified on project-specific work plans. The soil will be sampled and profiled for removal from the Site to an approved waste disposal facility. All individuals working in the excavation or with the excavation soil should be 40-Hour HAZWOPER trained.

Soil samples shall be collected in laboratory-provided containers as required by the receiving disposal facility. A four-point composite soil sample shall be collected from the excavated soil stockpile. All soil

samples shall be immediately placed on ice and transported to a State of California certified laboratory under chain of custody protocol for the following analyses:

1. VOCs by United States Environmental Protection Agency (EPA) Method 8260B;
2. CAM 17 metals and cyanide by EPA method 600/7400 series;
3. Total Extractable Petroleum Hydrocarbons by EPA Method 8015B;
4. Semivolatile Organic Compounds by EPA Method 8270 Selective Ion Monitoring (SIM);
5. Benzene Toxicity Characteristic Leaching Procedure (TCLP);
6. Lead Soluble Threshold Limit Concentration (STLC); and
7. Lead (TCLP).

A completion report with all permits, chains of custody, field forms, waste manifests, and laboratory analytical data shall be submitted to DTSC following the completion of each project as specified in the project-specific work plan.

5.1.2 Criteria for Soil Reuse/Disposal

All excavated soil from inside the area of known MGP impacts shall be removed for disposal at an off-Site disposal facility. Soil excavated from outside the area of known MGP impacts may be reused on the site based on the following Soil Reuse Criteria table.

Soil may be reused at the Site only if analytical results from its corresponding composite soil sample analysis are below its corresponding commercial/industrial limit, as shown below. These criteria are based on DTSC-Modified Screening Levels [2] (DTSC-SLs) established by DTSC in the Human Health Risk Assessment (HHRA) Note 3, and Environmental Screening Levels[3] (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (RWQCB) for screening for environmental concerns at sites with contaminated soil and groundwater. The criteria are appropriate for this Site because the property is a restricted commercial/industrial site. ESLs were used for analytes for which a corresponding DTSC-SLs was not identified to be established. ESLs for direct exposure human health risk for commercial/industrial site were selected over more conservative groundwater leaching ESLs because the soil that is potentially being reused onsite is going to be placed in its excavation of origin, and years of groundwater monitoring indicate that groundwater migrating offsite is no longer a viable exposure pathway for COPCs at the Site (Haley & Aldrich, 2015). Any soil imported onto the Site for use as backfill will be subject to the same screening levels as soil reused onsite. All analytical data for imported soil will be submitted to DTSC.

[2] 2016. California Department of Toxic Substances Control, *Human Health Risk Analysis Note 3.* June 2016. (Table 1 (DTSC Recommended Screening Levels for Soil *industrial/commercial use))*.

[3] 2016. California Regional Water Quality Control Board, San Francisco Region. *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final. February* 2016. ((Direct Exposure Human Health Risk Levels, Table S1 (shallow soil for industrial/commercial use)*).*

SOIL REUSE CRITERIA		
Analyte	Limit (in Milligrams per kilogram)	Source
ACENAPHTHENE	45,000	ESL
ANTHRACENE	230,000	ESL
ANTIMONY	470	ESL
ARSENIC	0.36	DTSC-SL
BARIUM	220,000	ESL
BENZO(a)ANTHRACENE	2.9	ESL
BENZO(b)FLUORANTHENE	2.9	ESL
BENZO(k)FLUORANTHENE	29	ESL
BENZO(a)PYRENE	0.29	ESL
BERYLLIUM	210	DTSC-SL
CADMIUM	7.3	DTSC-SL
CHROMIUM III	170,000	DTSC-SL
CHROMIUM VI	6.2	ESL
CHRYSENE	260	ESL
COBALT	350	ESL
COPPER	47,000	ESL
DIBENZO(a,h)ANTHTRACENE	0.29	ESL
FLUORANTHENE	30,000	ESL
FLUORENE	30,000	ESL
INDENO(1,2,3-cd) PYRENE	2.9	ESL
LEAD	320	DTSC-SL
MERCURY	4.5	DTSC-SL
METHYLNAPHTHALENE (total 1- & 2-)	3,000	ESL
MOLYBDENUM	5,800	ESL
NAPHTHALENE	14	ESL
NICKEL	11,000	ESL
PYRENE	23,000	ESL
SELENIUM	5,800	ESL
SILVER	1,500	DTSC-SL
THALLIUM	12	ESL
TOTAL PETROLEUM HYDROCARBONS - diesel range	1,100	ESL
TOTAL PETROLEUM HYDROCARBONS - motor oil range	140,000	ESL
VANADIUM	1,000	DTSC-SL
ZINC	350,000	ESL

If the result for any analyte exceeds its corresponding limit, the impacted soil must be disposed of at an acceptable off-site disposal facility. Soil designated for off-site disposal may require additional chemical analysis to meet specific requirements set forth by the receiving disposal facility.

6. Additional Considerations for Project Specific Plans

This SMP may be used to develop project-specific plans, however some of the requirements for project-specific plans may vary due to the circumstances of each individual project. The following list contains additional items that may be included in project-specific plans to help expedite the DTSC review process.

- Information for best management practices regarding stockpile management, storm-water runoff, odor suppression, and dust and noise mitigation and monitoring;
- Traffic plan and decontamination protocols for trucks entering and leaving the Site;
- A plan for dewatering, groundwater storage, analysis and disposal; and
- A quality assurance/quality control plan for all samples collected.

A project-specific HASP shall be developed by the contractor preforming the work. This HASP shall include the following:

- A plan for sudden emergencies;
- Contingencies for when unknown or unexpected contamination is encountered, including procedures to evaluate these materials and DTSC notification;
- Procedures for containing accidental releases during work activities;
- Utility procedures, including the Underground Service Alert protocol; and
- Project-specific hazards and mitigation procedures.

References

California Department of Toxic Substances Control (DTSC) and Pacific Gas & Electric Company (PG&E). 2002. *Covenant to Restrict Use of Property.* Environmental Restriction. (Re: PG&E Martin Service Center Brisbane and Daly City). Online: http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/3047818839/SMBR_DEED_41360100.pdf. 17 October.

California Department of Toxic Substances Control (DTSC). 2016. (Table 1 (DTSC Recommended Screening Levels for Soil *industrial/commercial use)). Human Health Risk Analysis Note 3.* June.

California Regional Water Quality Control Board - San Francisco Bay Region (RWQCB). 2016. *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater. Interim Final.* February 2016.

CH2M HILL. 1988. *Final Site Characterization Report Volume I; Daly City Former Manufactured Gas Plant, Pacific Gas and Electric.* November.

CH2M HILL. 1991. *Human Health and Environmental Risk Assessment Report. PG&E Daly City Manufactured Gas Plant Site*. August.

CH2M HILL. 1993a. Remedial Action Plan: *PG&E Martin Service Center Former Manufactured Gas Plant Site (Operable Units 1 and 2).* June.

CH2M HILL. 1993b. *Remedial Design and Implementation Plan: PG&E Martin Service Center Site OU-1, Daly City Yard Berm and Schwerin Street Strip.* 17 December.

CH2M HILL. 1994. *Final Construction Report PG&E Martin Service Center Site OU-1 Daly City Yard Berm and Schwerin Street Strip.* December.

CH2M HILL. 1998a. F*inal Revised Remedial Action Plan. PG&E Martin Service Center Former Manufactured Gas Plant – Operable Unit 2.* July.

CH2M HILL. 1998b. *Draft Remedial Design and Implementation Plan. PG&E Martin Service Center Former Manufactured Gas Plant – Operable Unit 2.* August.

CH2M HILL. 2001. *Final Five-Year Review Report for PG&E Martin Service Center; Operable Unit 1.* March.

CH2M HILL. 2002a. *Construction Completion Report: PG&E Martin Service Center Former Manufactured Gas Plant: Operable Unit 2.* April.

CH2M HILL. 2002b. *Operations and Maintenance Plan for Martin Service Center Operable Unit 1 and Operable Unit 2.* August.

CH2M HILL. 2003. *Remediation Completion Report Landscape Strip Remediation PG&E Martin Service Center Former Manufactured Gas Plant Site.* May.

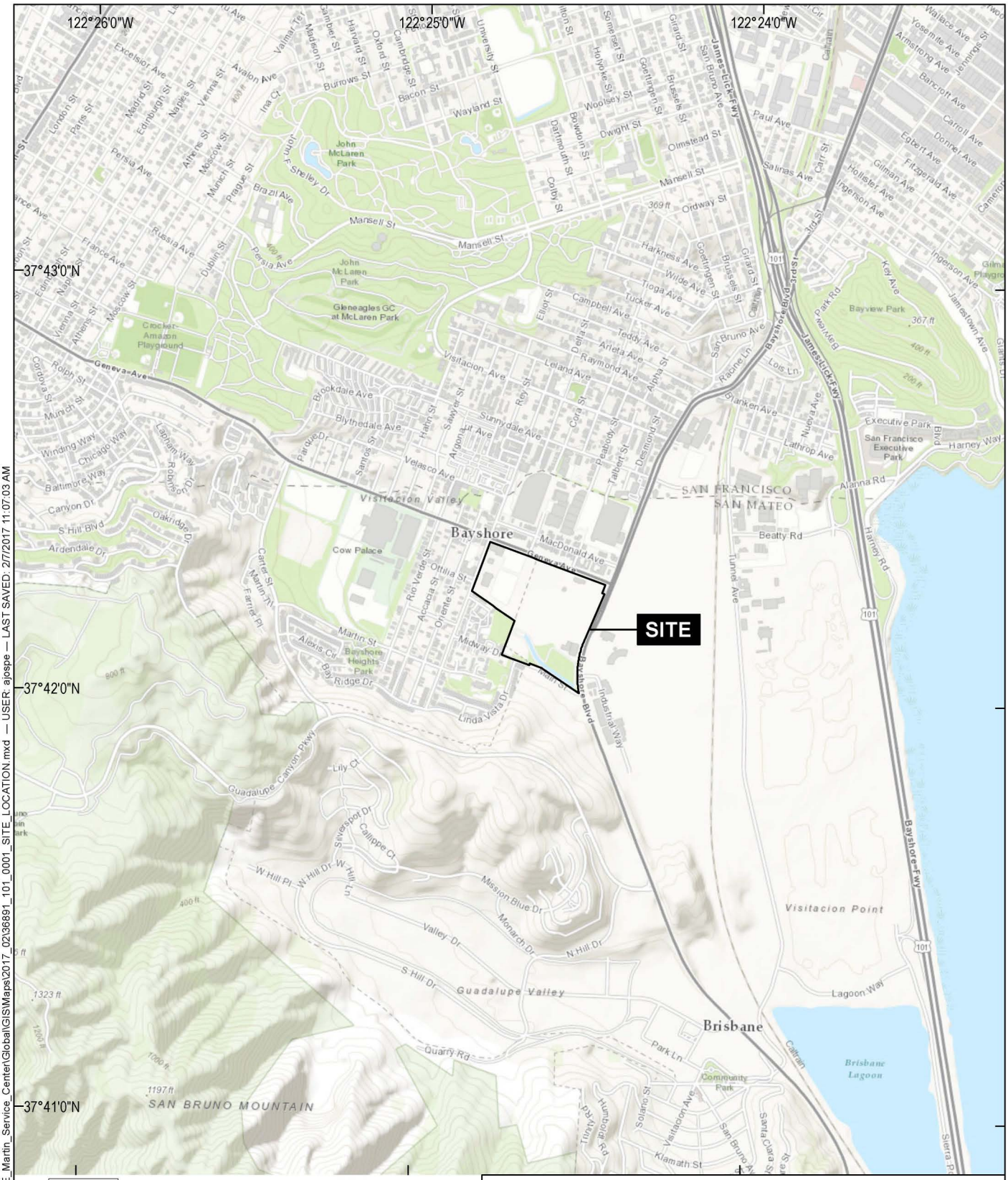
ENV America Incorporated. 2008. *Site Health and Safety Plan, Pacific Gas and Electric Company Martin Service Center.* January.

Haley & Aldrich. 2012. Proposal to Reduce Groundwater Sampling and Groundwater Level Monitoring at Pacific Gas and Electric Company's Martin Service Center. 12 March.

Haley & Aldrich. 2015 *Fourth Five-year Review Report for PG&E Martin Service Center, Daly City, CA*. 30 October.

Pacific Gas and Electric Company (PG&E). 2005. *Revised Operations and Maintenance Plan for Martin Service Center Operable Unit 1 (The Daly City Yard Berm Cap and Schwerin Street Strip Capped Areas) and Operable Unit 2 (Brisbane Yard and Annex Cap and Interceptor Trench).* 12 October.

FIGURES


122°26'0"W
122°25'0"W
122°24'0"W
37°43'0"N
37°42'0"N
37°41'0"N
SITE
Bayshore
Visitacion Valley
SAN FRANCISCO
SAN MATEO
Brisbane
Visitacion Point
Guadalupe Valley
SAN BRUNO MOUNTAIN
Brisbane Lagoon
Cow Palace
John McLaren Park
Bayshore Heights Park
Community Park
Executive Park
San Francisco Executive Park
Bayview Park
Crocker Amazon Playground
Gleneagles GC at McLaren Park
Geneva Ave
Bayshore Fwy
James Lick Fwy
Beatty Rd
Harney Way
Lagoon Way
Quarry Rd
Guadalupe Canyon Pkwy
Industrial Way
MacDonald Ave
Visitacion Ave
Sunnydale Ave
Velasco Ave
Blythedale Ave
Brookdale Ave
Leland Ave
Tucker Ave
Campbell Ave
Wilde Ave
Harkness Ave
Olmstead St
Dwight St
Woolsey St
Wayland St
Bacon St
Burrows St
Mansell St
Ordway St
Paul Ave
Salinas Ave
Avalon Ave
Excelsior Ave
Persia Ave
Russia Ave
France Ave
Brazil Ave
Prague St
Munich St
Moscow St
Athens St
Vienna St
Madrid St
Naples St
Edinburgh St
Dublin St
Rolph St
Cordova St
Winding Way
Chicago Way
Baltimore Way
Canyon Dr
S Hill Blvd
Ardendale Dr
Oakridge Dr
Robinson Dr
Lapham Way
Carter St
Martin St
Farrer Pl
Alexis Ct
Bay Ridge Dr
Midway Dr
Linda Vista Dr
Lily Ct
Silverspot Dr
Calippe Ct
W Hill Pl
W Hill Dr
W Hill Ln
Mission Blue Dr
Monarch Dr
Valley Dr
N Hill Dr
S Hill Dr
Park Ln
Klamath St
Solano St
Humboldt Rd
Tunnel Rd
Tunnel Ave
Alanna Rd
Lathrop Ave
Nuevo Ave
Blanken Ave
Lois Ln
Racine Ln
San Bruno Ave
Bayshore Blvd
3rd St
Key Ave
Jamestown Ave
Ingerson Ave
Hollister Ave
Gilman Ave
Fitzgerald Ave
Egbert Ave
Donner Ave
Carroll Ave
Barneveld Ave
Armstrong Ave
Yosemite Ave
Wallace Ave
Jennings St
Cameron
Caltrain
Ina Ct
John F Shelley Dr
Mansell St
Persia Ave
Harkness Ave
Goettingen St
Brussels St
Girard St
Tioga Ave
Teddy Ave
Arleta Ave
D Raymond Ave
Alpha St
Elliot St
Della St
Ray St
Cora St
Peabody St
Tabert St
Desmond St
Sawyer St
Argonaut Ave
Harth St
Santos St
Pardee Dr
Rio Verde St
Acacia St
Oriente St
Ottilia St
Carter St
Martin Tl
Farrer Pl
Cambridge St
Oxford St
Harvard St
Madison St
Amber St
Vallejo Ter
University St
Somerset St
Holyoke St
Girard St
Goettingen St
Brussels St
San Bruno Ave
Dartmouth St
Bowdoin St
Colby St
Elliot St
Campbell Ave
Tucker Ave
Wilde Ave
Harkness Ave
Olmstead St
Dwight St
Woolsey St
Wayland St
Bacon St
Burrows St
Mansell St
Ordway St
Paul Ave
Salinas Ave
Carr St
3rd St



LEGEND

- LEVINSON NORTH PARCEL
- PG&E PROPERTY BOUNDARY
- GEOGRAPHIC BOUNDARY WITHIN PG&E PROPERTY
- PARCEL

NOTES

1. AERIAL IMAGERY SOURCE: ESRI

0 200 400
SCALE IN FEET

HALEY ALDRICH

PACIFIC GAS AND ELECTRIC COMPANY
MARTIN SERVICE CENTER
FORMER MANUFACTURED GAS PLANT SITE
DALY CITY AND BRISBANE, CALIFORNIA

SITE MAP

JUNE 2017

FIGURE 2

GIS FILE PATH: \\oak\common\336891_PGE_Martin_Service_Center\Global\GIS\Maps\2017_02\336891_101_0002_SITE_GROUNDWATER_ELEVATIONS.mxd — USER: ajospe — LAST SAVED: 2/17/2017 10:47:50 AM

GENEVA AVENUE

SCHWERIN STREET

BAYSHORE BOULEVARD

MARTIN SUBSTATION DRAIN

MARTIN SUBSTATION

DALY CITY YARD

BRISBANE YARD

BAYSHORE PARK

BRISBANE YARD ANNEX

LEGEND

- PG&E PROPERTY BOUNDARY
- GEOGRAPHIC BOUNDARY WITHIN PG&E PROPERTY
- PARCEL
- EXTENT OF KNOWN MANUFACTURED GAS PLANT (MGP) IMPACTS

NOTES

1. EXTENT OF KNOWN MGP IMPACTS SOURCE: CH2M HILL, 1988, FINAL SITE CHARACTERIZATION REPORT VOLUME I, DALY CITY FORMER MANUFACTURED GAS PLANT, PACIFIC GAS AND ELECTRIC, NOVEMBER

2. AERIAL IMAGERY SOURCE: ESRI

N

0 200 400

SCALE IN FEET

HALEY ALDRICH

PACIFIC GAS AND ELECTRIC COMPANY (PG&E)
MARTIN SERVICE CENTER
FORMER MANUFACTURED GAS PLANT SITE
DALY CITY AND BRISBANE, CALIFORNIA

EXTENT OF KNOWN MGP IMPACTS

JUNE 2017

FIGURE 3

GIS FILE PATH: \\oak\common\36891_PGE_Martin_Service_Center\Global\GIS\Maps\2017_01\36891_101_0002_SITE_GROUNDWATER_ELEVATIONS.mxd — USER: ajospe — LAST SAVED: 3/13/2017 4:20:15 PM

GENEVA AVENUE

SCHWERIN STREET

DALY CITY YARD

BRISBANE YARD

MARTIN SUBSTATION DRAIN

MARTIN SUBSTATION

BAYSHORE BOULEVARD

BAYSHORE PARK

BRISBANE YARD ANNEX

LEGEND

- OU-1 AREA
- OU-2 AREA
- PG&E PROPERTY BOUNDARY
- GEOGRAPHIC BOUNDARY WITHIN PG&E PROPERTY
- PARCEL

NOTE

AERIAL IMAGERY SOURCE: ESRI

0 200 400

SCALE IN FEET

HALEY ALDRICH

PACIFIC GAS AND ELECTRIC COMPANY (PG&E)
MARTIN SERVICE CENTER
FORMER MANUFACTURED GAS PLANT SITE
DALY CITY AND BRISBANE, CALIFORNIA

SITE OPERABLE UNITS

JUNE 2017

FIGURE 4

GIS FILE PATH: \\oak\common\136891_PGE_Martin_Service_Center\Global\GIS\Maps\2017_0113689\1_101_0002_SITE_GROUNDWATER_ELEVATIONS.mxd — USER: ajospe — LAST SAVED: 3/13/2017 4:20:15 PM

ATTACHMENT E

Voluntary Cleanup Agreement for Crystal Springs Pipeline No. 1. Replacement (2000)

STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of:	)	Docket No. _____
	)	
Martin Service Center	)	Voluntary Cleanup Agreement
	)	
Project Proponent	)	Health and Safety Code
City & County of San	)	Section 25355.5 (a)(1)(C)
Francisco, SFWD	)	
_____	)	

I.
INTRODUCTION.

1.1 Parties. The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) enters into this Voluntary Cleanup Agreement (Agreement) with City and County of San Francisco, Public Utilities Commission, San Francisco Water Department (Proponent).

1.2 Site. The property which is the subject of this Agreement (Site) is located at intersection of Geneva Avenue and Bayshore Boulevard, in Daly City, Ca. Site is part of PG&E property known as Martin Service Center. A diagram of the Site and a location map are attached as Exhibit A and Exhibit B.

1.3 Jurisdiction. This Agreement is entered into by DTSC and Proponent pursuant to Health and Safety Code (H&SC) section 25355.5(a)(1)(C). This section authorizes DTSC to enter into an enforceable agreement with Proponents to oversee the characterization and cleanup of a Site.

1.4 Purpose. The purpose of this Agreement is for the Proponent to remove existing 44-inch diameter steel pipe; install new 48-inch diameter steel pipe and venturi meter at the same location; construct a concrete vault around the venturi meter; related excavation, backfill and removal of soil from project site under the oversight of DTSC. The purpose of this Agreement is also for DTSC to obtain reimbursement from the Proponent for DTSC's oversight costs.

II.
BACKGROUND

2.1 Ownership. The Site is owned by Pacific Gas & Electric Co. The proponent has an easement for a water line through the site.

2.2 Substances Found at the Site. Owner, PG&E has conducted various investigations and sampling at the site. Reports, containing the results of environmental media sampling conducted at the Site, indicate that the site is contaminated with polynuclear aromatic hydrocarbons (PNAs). DTSC has indicated that the PNAs are the only substances of significant concern.

2.3 Physical Description. The pipeline easement, where work is to be conducted, is 50 feet wide and runs approximately north- south through the site. This area is very flat, level ground with overhead electrical improvements on either side of the easement.

2.4 Site History. PG&E operated a "manufactured gas" plant, historically called the Martin Gas Plant, in the northern portion of the site between 1906 and 1913. In the process of manufacturing gas, the plant generated hydrocarbon residues consisting of lampblack (a powdered carbon) and tars, some of which were sold, recycled or disposed of on site. Chemical compounds associated with the lampblack and tar include polynuclear aromatic hydrocarbons (PNAs) and to a lesser degree, volatile organic compounds (VOCs) such as benzene, toluene, xylene and ethylbenzene are typically found in trace levels in oil gassification residues.

The Martin plant was dismantled in 1916, after which the property remained undeveloped for many years. During World War II, the Federal Housing Authority (FPHA, which later became HUD) acquired the site where the plant was located. In 1944, FPHA graded the area and constructed Navy housing over it. During site grading and construction activities, soil from the former gas plant property was moved, spread around and used as fill material.

More details about the site history can be obtained from PG&E.

III.
AGREEMENT

3.0 IT IS HEREBY AGREED THAT DTSC will provide review and oversight of the

response activities conducted by the Proponent in accordance with the Scope of Work contained in Exhibit C. The Proponent shall conduct the activities in the manner specified herein and in accordance with the schedule specified in Exhibit C. All work shall be performed consistent with H&SC section 25300 et seq., as amended; the National Contingency Plan (40 Code of Federal Regulations (CFR) Part 300), as amended; U.S. EPA and DTSC Superfund guidance documents regarding site investigation and remediation.

3.1 Scope of Work and DTSC Oversight. DTSC shall review and provide Proponent with written comments on all Proponent deliverables as described in Exhibit C (Scope of Work) and other documents applicable to the scope of the project. DTSC shall provide oversight of field activities, including sampling and remedial activities, as appropriate. DTSC's completion of activities described above shall constitute DTSC's complete performance under this Agreement.

3.2 Additional Activities. Additional activities may be conducted and DTSC oversight provided by amendment to this Agreement or Exhibits hereto in accordance with Paragraph 3.17. If DTSC expects additional oversight costs to be incurred related to these additional activities, it will provide an estimate of the additional oversight cost to the Proponent.

3.3 Agreement Managers. Barbara J Cook, Chief, Northern California Coastal Cleanup Operations is designated by DTSC as its Manager for this Agreement. Tasso Mavroudis, Project Manager for the pipeline replacement project, is assigned by the Proponent as Manager for this Agreement. Each Party to this Agreement shall provide at least ten (10) days advance written notice to the other of any change in its designated manager.

3.4 Notices and Submittals. All notices, documents and communications required to be given under this Agreement, unless otherwise specified herein, shall be sent to the respective parties at the following addresses in a manner that produces a record of the sending of the notice, document or communication such as certified mail, overnight delivery service, facsimile transmission or courier hand delivery service:

3.4.1 To DTSC:

Barbara J Cook, P.E.
Attn: Alfred Wanger
Department of Toxic Substances Control

Northern Cal Coastal Cleanup Operations
700 Heinz Ave, Suite 200
Berkeley, CA 94708

3.4.2 To the Proponent:

Tasso Mavroudis, P.E.
Project Manager
Utilities Engineering Bureau
1155 Market Street, 5th Fl; San Francisco, CA 94103

3.4.3 To the Property Owner:

PG&E
Attn: Nick Goultas
275 Industrial Road
San Carlos, CA 94070

3.5 DTSC Review and Approval. If DTSC determines that any report, plan, schedule or other document submitted for approval pursuant to this Agreement fails to comply with Health or safety or the environment, DTSC may (a) Return comments to the Proponent with recommended changes; or (b) Modify the document as deemed necessary and approve the document as modified.

3.6 Communications. All DTSC approvals and decisions made regarding submittals and notifications will be communicated to the Proponent in writing by DTSC's Agreement Manager or his/her designee. No informal advice guidance, or suggestions or comments by DTSC regarding reports, plans, specifications, schedules or any other writings by the Proponent shall be construed to relieve the Proponent of the obligation to obtain such written approvals.

3.7 Endangerment during Implementation. In the event DTSC determines that any activity (whether or not pursued in compliance with this Agreement) may pose an imminent or substantial endangerment to the health and safety of people on the Site or in the surrounding area or to the environment, DTSC may order the Proponent to stop further implementation of this Agreement for such period of time as may be needed to abate the endangerment.

3.8 Payment. The Proponent agrees to pay (1) all cost incurred by DTSC in association with preparation of this Agreement and for review of documents submitted prior to the effective date of the Agreement, and (2) all costs incurred by DTSC in providing oversight pursuant to this Agreement, including review of the documents described in Exhibit C and associated documents, and in providing oversight of field activities. An estimate of DTSC's oversight costs is attached as Exhibit D. It is understood by the parties that Exhibit D is an estimate and cannot be relied upon as the final cost figure. DTSC will bill the Proponent quarterly. Proponent agrees to make payment within sixty (60) days of receipt of DTSC's billing. Such billings will reflect any amounts that have been advanced to DTSC by the Proponent.

3.8.1 In anticipation of services to be rendered, Proponent shall make an advance payment of $ 2,900 to DTSC. That payment shall be made no later than ten (10) days after this Agreement is fully executed. If the Proponent's advance payment does not cover all costs payable to DTSC under this paragraph, Proponent agrees to pay the additional costs within sixty (60) days of receipt of a bill from DTSC.

3.8.2 If any bill is not paid by the Proponent within sixty (60) days after it is sent by DTSC, the Proponent may be deemed to be in material default of this Agreement.

3.8.3 All payments made by the Proponent pursuant to this Agreement shall be by a check made payable to the "Department of Toxic Substances Control", and bearing on its face the project code for the site and the docket number of this Agreement. Payment shall be sent to:
Department of Toxic Substances Control

Accounting/Cashier
400 P Street, 4th Floor
P. O. Box 806
Sacramento, California 95812-0806

A photocopy of the check shall be sent concurrently to DTSC's Agreement Manager.

3.8.4 If the advance payment exceeds DTSC's actual oversight costs, DTSC will provide an accounting for expenses and refund the difference within one hundred-twenty (120) days after termination of this Agreement in accordance with Paragraph 3.18. In no other case

shall the Proponent be entitled to a refund from DTSC or to assert a claim against DTSC for any amount paid or expended under this Agreement.

3.9 Condition Precedent. It is expressly understood and agreed that DTSC's receipt of the advance payment described in Paragraph 3.8.1. is a condition precedent to DTSC's obligation to provide oversight, review and/or comment on documents.

3.10 Record Retention. DTSC shall retain all cost records associated with the work performed under this Agreement for such time periods as may be required by applicable state law. The Proponent may request to inspect all documents which support DTSC's cost determination in accordance with the Public Records Act, government Code section 6250 et seq.

3.11 Project Coordinator. The work performed pursuant to this Agreement shall be under the direction and supervision of a qualified project coordinator, with expertise in hazardous substance site cleanup. The Proponent shall submit: a) the name and address of the project coordinator; and b) in order to demonstrate expertise in hazardous substance site cleanup, the resume of the coordinator. The Proponent shall promptly notify DTSC of any change in the identity of the Project Coordinator. All engineering and geological work shall be conducted in conformance with applicable state law, including but not limited to, Business and Professions Code sections 6735 and 7835.

3.12 Access. Proponent shall provide, and/or obtain access to the Site and offsite areas to which access is necessary to implement this Agreement. Such access shall be provided to DTSC's employees, contractors, and consultants at all reasonable times. Nothing in this paragraph is intended or shall be construed to limit in any way the right of entry or inspection that DTSC or any other agency may otherwise have by operation of any law. DTSC and its authorized representatives shall have the authority to enter and move freely about all property at the Site at all reasonable times for purposes including, but not limited to: inspecting records, operating logs, sampling and analytic data, and contracts relating to this Site; reviewing the progress of the Proponent in carrying out the terms of this Agreement; conducting such tests as DTSC may deem necessary; and verifying the data submitted to DTSC by the Proponent.

3.13 Sampling, Data and Document Availability. When requested by DTSC, the Proponent shall make available to DTSC, and shall provide copies of, all data and information concerning contamination at the Site, including technical records and contractual documents,

sampling and monitoring information and photographs and maps, whether or not such data and information was developed pursuant to this Agreement.

3.14 Notification of Field Activities. The Proponent shall inform DTSC at least seven (7) days in advance of all field activities pursuant to this Agreement and shall allow DTSC and its authorized representatives to take duplicates of any sample collected by the Proponent pursuant to this Agreement.

3.15 Notification of Environmental Condition. The Proponent shall notify DTSC's Agreement Manager immediately upon learning of any condition posing an immediate threat to public health or safety or the environment. Within seven (7) days of the onset of such a condition, the Proponent shall furnish a report to DTSC, signed by the Proponent's Agreement Manager, setting forth the events, which occurred, and the measures taken in the response thereto.

3.16 Preservation of Documentation. The Proponent shall maintain a central repository of the data, reports, and other documents prepared pursuant to this Agreement. All such data, reports and other documents shall be preserved by the Proponent for a minimum of six (6) years after the conclusions of all activities carried out under this Agreement. If DTSC requests that some or all of these documents be preserved for a longer period of time, the Proponent shall either comply with that request, deliver the documents to DTSC, or permit DTSC to copy the documents prior to destruction. The Proponent shall notify DTSC in writing at least ninety (90) days prior to the expiration of the six-year minimum retention period before destroying any documents prepared pursuant to this Agreement. If any litigation, claim, negotiation, audit or other action involving the records has been started before the expiration of the six year period, the related records shall be retained until the completion and resolution of all issues arising therefrom or until the end of the six-year period, which ever is later.

3.17 Amendments. This Agreement maybe amended or modified solely upon written consent of all parties. Such amendments or modifications may be proposed by any party and shall be effective the third business day following the day the last party signing the amendment or modification sends its notification of signing to the other party. The parties may agree to a different effective date.

3.18 Termination for Convenience. Except as otherwise provided in this Paragraph,

each party to this Agreement reserves the right unilaterally to terminate this Agreement for any reason. Termination may be accomplished by giving a thirty (30) day advance written notice of the election to terminate this Agreement to the other Party. In the event that this Agreement is terminated under this Paragraph, the Proponent shall be responsible for DTSC costs through the effective date of termination.

3.19 Exhibits. All exhibits attached to this Agreement are incorporated herein by this Reference.

3.20 Time Period. Unless otherwise specified, time periods begin from the date this Agreement is fully executed, and "days" means calendar days. "Business days" means all calendar days that are not weekends or official State holidays.

3.21 Proponent Liabilities. Nothing in this Agreement shall constitute or be considered a satisfaction or release from liability for any condition or claim arising as a result of Proponent's past, current, or future operations. Nothing in this Agreement is intended or shall be construed to limit the rights of any of the parties with respect to claims arising out of or relating to the deposit or disposal at any other location of wastes or substances removed from the Site.

3.22 Government Liabilities. The State of California (State) shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by the Proponent or by related parties in carrying out activities pursuant to this Agreement, nor shall the state of California be held as a party to any contract entered into by the Proponent or its agents in carrying out the activities pursuant to this Agreement.

3.23 Third Party Actions. In the event that the Proponent is a party to any suit or claim for damages or contribution relating to the Site to which DTSC is not a party, the Proponent shall notify DTSC in writing within ten (10) days after service of the complaint in the third-party action. Proponent shall pay all costs incurred by DTSC relating to such third-party actions, including but not limited to responding to subpoenas.

3.24 Reservation of Rights. DTSC and the Proponent reserve the following rights.

3.24.1 DTSC reserves its right to pursue cost recovery under the Comprehensive Environmental Response, Compensation and Liability act of 1980 (CERCLA), as amended, Health and Safety Code section 25360, and any other applicable section of the law.

3.24.2 Nothing in this Agreement is intended or shall be construed to limit or preclude DTSC from taking any action authorized by law or equity to protect public health and safety or the environment and recovering the costs thereof.

3.24.3 Nothing in this Agreement shall constitute or be construed as a waiver of the Proponent's rights, (including any covenant not to sue or release) with respect to any claim, cause of action, or demand in law or equity that the Proponent may have against any "person", as defined in Section 101(21) of CERCLA, or Health and Safety Code section 25319, that is not a signatory to this Agreement.

3.24.4 By entering into this Agreement, Proponent does not admit to any fact, fault or liability under any statute or regulation.

3.25 Compliance with Applicable Laws. Nothing in this Agreement shall relieve the Proponent from complying with all applicable laws and regulations, and the Proponent shall conform all actions required by this Agreement with all applicable federal, state and local laws and regulations.

3.26 California Law. This Agreement shall be governed, performed and interpreted under the laws of the State of California.

3.27 Severability. If any portion of this Agreement is ultimately determined not to be enforceable, that portion will be severed from the Agreement and the severability shall not affect the enforceability of the remaining terms of the Agreement.

3.28 Parties Bound. This Agreement applies to and is binding, jointly and severally, upon each signatory and its officers, directors, agents, receivers, trustees, heirs, executors, administrators, successors, and assigns, and upon any successor agency of the State of California that may have responsibility for and jurisdiction over the subject matter of this Agreement. No change in the ownership or corporate or business status of any signatory, or of the facility or Site shall alter any signatory's responsibilities under this Agreement.

3.29 Effective Date. The effective date of this Agreement is the date when this Agreement is fully executed.

3.30 Representative Authority. Each undersigned representative of the parties to this Agreement certifies that she or he is fully authorized to enter into the terms and conditions of this Agreement and to execute and legally bind the parties to this Agreement.

3.31 Counterparts. This Agreement may be executed and delivered in any number of

counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one and the same document.

Barbara J Cook, P. E., Chief
Northern California Coastal Cleanup Operations
Department of Toxic Substances Control

Date: 3/29/2000

Michael E Quan, Manager
Utilities Engineering Bureau

Date: 3/23/00

Approved as to form

Deputy City Attorney
City and County of San Francisco

Date: 3/23/00

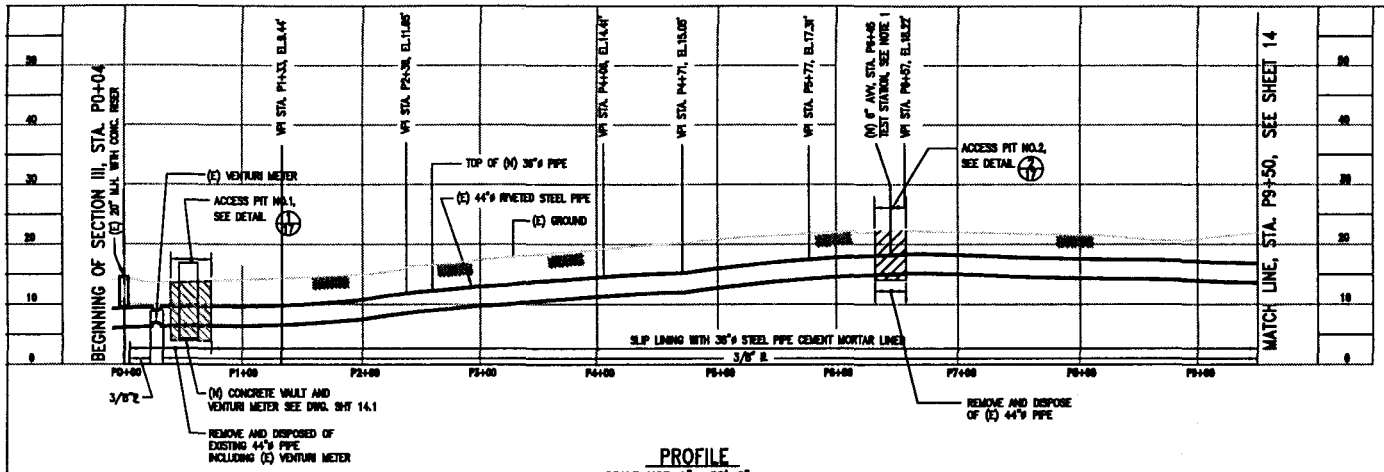
EXHIBITS

A - Site Diagram

B - Site Location Map

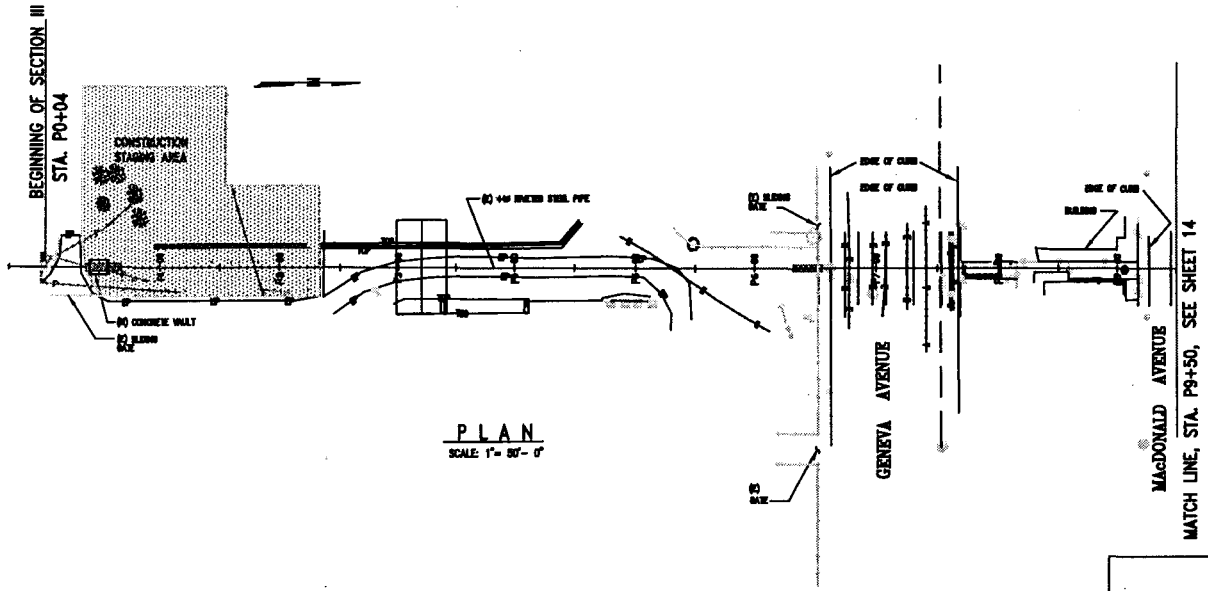
C - Scope of Work, Cost Estimate and Schedule

D. DTSC Cost Estimate



PROFILE

SCALE: HOR. 1" = 50'-0"
VERT. 1" = 10'-0"



PLAN

SCALE: 1" = 50'- 0"

NOTES:

1. THE STEEL PIPE LINER SHALL BE BELL AND SPIGOT WITH INSIDE FULL CIRCUMFERENTIAL WELD.
2. INSERT 36"ø STEEL PIPE ONE 20 FEET SECTION AT A TIME TO DESIGN LOCATION.
3. FOR CORROSION CONTROL TEST STATION AND INSULATED FLANGE JOINT, SEE DRAWING E-6183.1, E-6183.2.

CONTRACT NO. WD - 2184

CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION
UTILITIES ENGINEERING BUREAU

CRYSTAL SPRINGS PIPELINE NO.1 REPLACEMENT

PLAN AND PROFILE

SECTION III FROM STA. P0+04 TO STA. P9+50

APPROVED | DESIGNED BY | NO. | BY | DATE
APPROVED | DRAWN BY | NO. LT. | APR. 1999

APPROVED | CHECKED | SHEET 13 OF

E - 6165

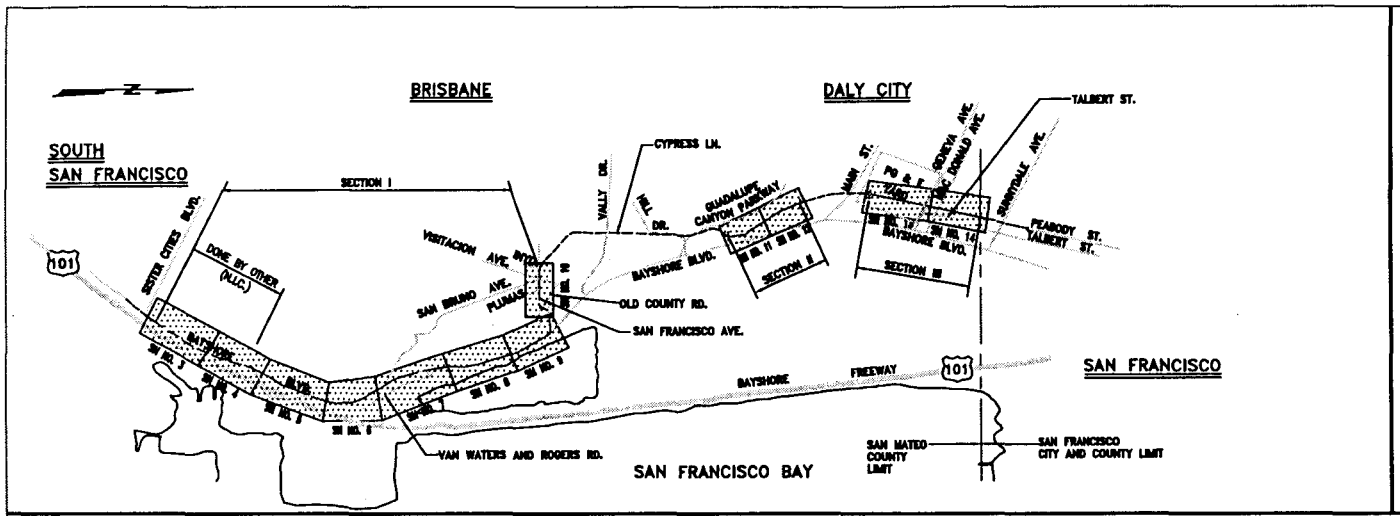
ELEVATION DATUM

REVISIONS

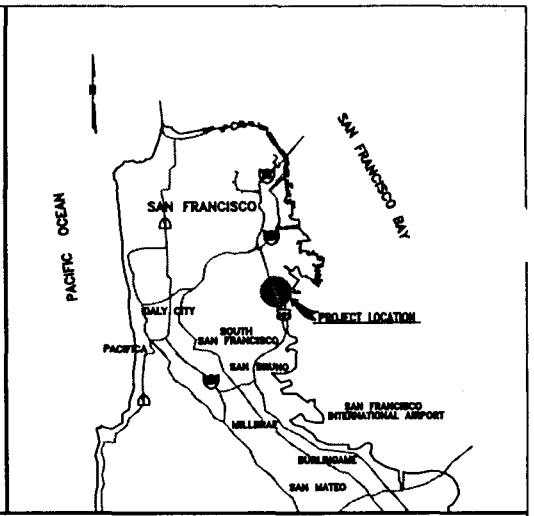
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4

PLOT: E
SCALE: 1=1
SIZE: 36,24
COLOR: No.
RED .030
YELLOW .010
GREEN .010
CYAN .008
BLUE .020
MAGENTA .010
WHITE .010
GRAY .008

G:\W0061\PGNEYD\DWG-ALIG (Y1)



LOCATION MAP
N.T.S.



VICINITY MAP
N.T.S.

LIST OF DRAWINGS

SHEET No.	DRAWING No.	TITLE
1	E- 6153	VICINITY MAP, LOCATION MAP AND LIST OF DRAWINGS
2	E- 6154	ABBREVIATIONS, LEGEND AND GENERAL NOTES
3	E- 6155	PLAN AND PROFILE–SECTION I FROM STA. 0+00 TO STA. 12+50 (NOT IN CONTRACT)
4	E- 6156	PLAN AND PROFILE–SECTION I FROM STA. 12+50 TO STA. 25+00
5	E- 6157	PLAN AND PROFILE–SECTION I FROM STA. 25+00 TO STA. 37+50
6	E- 6158	PLAN AND PROFILE–SECTION I FROM STA. 37+50 TO STA. 50+00
7	E- 6159	PLAN AND PROFILE–SECTION I FROM STA. 50+00 TO STA. 63+00
8	E- 6160	PLAN AND PROFILE–SECTION I FROM STA. 63+00 TO STA. 76+00
9	E- 6161	PLAN AND PROFILE–SECTION I FROM STA. 76+00 TO STA. 87+00
10	E- 6162	PLAN AND PROFILE–SECTION I FROM STA. 87+00 TO STA.97+65.37
11	E- 6163	PLAN AND PROFILE–SECTION II FROM STA. M0+27 TO STA. M11+75
12	E- 6164	PLAN AND PROFILE–SECTION II FROM STA. M11+75 TO STA. M15+63
13	E- 6165	PLAN AND PROFILE–SECTION III FROM STA. P0+04 TO STA. P9+80
14	E- 6166	PLAN AND PROFILE–SECTION III FROM STA. P9+50 TO STA. P17+17.77
15	E- 6167	PROPOSED TRAFFIC ROUTING–SECTION I FROM STA. 11+00 TO STA. 33+00
16	E- 6168	PROPOSED TRAFFIC ROUTING–SECTION I FROM STA. 34+00 TO STA. 86+00
17	E- 6169	SECTION III, ACCESS PIT EXCAVATION AND PIPE CONNECTION DETAILS
18	E- 6170	LOCATIONS OF PIPELINE TO BE REMOVED, REPLACED OR ABANDONED AND BULKHEAD
19	E- 6171	STEEL PIPE AND SEWER LATERAL DETAILS
20	E- 6172	STANDARD STEEL PIPE FIELD JOINT DETAILS
21	E- 6173	PIPELINE APPURTENANCE DETAILS AND SCHEDULE
22	E- 6173.1	AIR AND VACUUM VALVE ASSEMBLY, PLAN, ELEVATION AND DETAIL
23	E- 6174	NOZZLE LAYOUT AND DETAILS
24	E- 6175	STANDARD METAL COVER DETAILS FOR MANHOLE RISERS
25	E- 6176	27–INCH FRAME GRATING AND COVER FOR MANHOLES IN PAVED ROAD AND STREET
26	E- 6177	STANDARD MISCELLANEOUS METAL WORK FOR MANHOLE RISERS
27	E- 6178	PIPE EASEMENT DETAILS
28	E- 6179	BLOW–OFF AT STA.10+35, 1–INCH TEST TAP AND REDUCER DETAILS (NOT IN CONTRACT)
29	E- 6180	VENTURI METER INSTALLATION
30	E- 6181	ELECTRICAL PLAN, DIAGRAMS, LEGEND AND NOTES
31	E- 6182	ELECTRICAL DETAIL, SECTIONS, AND SHEET NOTES
32	E- 6183.1	CORROSION CONTROL SYSTEM DIAGRAM
33	E- 6183.2	TEST STATIONS
34	E- 6183.3	UTILITY CROSSING AND MISCELLANEOUS DETAILS
35	E- 6183.4	INSTALLATION OF RECTIFIERS
36	E- 6183.5	INSTALLATION OF DEEP WELL ANODE

CONTRACT NO. WD–2184

CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION
UTILITIES ENGINEERING BUREAU

CRYSTAL SPRINGS PIPELINE NO.1 REPLACEMENT

VICINITY MAP, LOCATION MAP AND LIST OF DRAWINGS

ELEVATION DATUM

REVISIONS

E-6153

PLOT: E
SCALE: 1=1
SIZE: 36,24
COLOR: No.
RED .030
YELLOW .010
GREEN .010
CYAN .008
BLUE .008
MAGENTA .015
WHITE .010
GRAY .008

FILENAME: G:\WD2184\CSIROAD\DETAIL\CS1-MAPS.DWG(MS-VIEW 1)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4

EXHIBIT C
SCOPE OF WORK

Existing Data The Owner of the site (PG&E) has submitted all background information, sample analysis results, environmental assessment reports and any other pertinent information to the hazardous waste management and/or release, characterization and cleanup of the site. DTSC has reviewed the information, identified areas and media of concern and determined the work required to remediate the site.

SFWD Project: SFWD has a pipeline easement, traversing roughly north to south, through the PG&E property. The 44-inch diameter Crystal Springs Pipeline No 1, which is more than 100 years old, is located in this easement and will be replaced under this project. To minimize impact to the site, new steel pipe, 36-inch diameter, will be installed by sliplining it within the existing pipe. Project work includes:

1. Installation of approximately 1000 lf of 36-inch diameter steel pipe by sliplining through the existing 48-inch steel pipe.
2. Excavation and backfill two access pits, as shown on the drawings. The access pits will be used to facilitate sliplining of the new pipe. The northernmost access pit will be backfilled using native material.
3. At the southern access pit, a venturi meter will be installed and housed in a concrete vault. Excess material will be tested and disposed off appropriately.
4. Testing, disinfection and other related work to bring pipe into service.

Health and Safety Plan: Contractor shall prepare and submit a Health and Safety Plan in accordance with California Code of Regulations, Title 8, Section 5192 and DTSC guidance. The plan shall cover all measures, including contingency plans, which will be taken during field activities to protect the health and safety of the workers at the site and the general public from exposure to hazardous waste, substances or materials. The Health and Safety Plan shall describe the specific personnel, procedures and equipment to be utilized.

SCHEDULE

It is estimated that work within the PG&E yard will take approximately two months and will take place within the overall project schedule, which presently extends from February 2000 to December 2000. Contractor will schedule the work within the PG&E yard according to his overall project schedule.

SAN FRANCISCO WATER DEPARTMENT PIPELINE REPLACEMENT PROJECT
PG&E MARTIN SERVICE CENTER
Cost Estimate For Voluntary Cleanup Agreement

Title	Projected Date	Project Manager	Supervisor	Industrial Hygiene	Public Participation	Toxicology	Legal	Geologist	Miscellaneous Staff	Clerical
Classification		HSS/HSE	SHSE/SHSS	AIH	Specialist	Staff Toxicologist	Staff Counsel	HSEG		WPT
Tasks:										
Agreement Preparation/Negotiation		10	4				2			
Work Notice/Fact Sheet		4	1		12					
Health and Safety Plan		4	1	15						
Implementation Report		6	1							
Total No. Hours/Class		24	7	15	12		2			
Total No. Hours	60									
Hourly Rate/Class		$93	$119	$98	$91		$133			
Costs/Class		$2,232	$833	$1,470	$1,092		$266			
Total Costs	$5,893									

ATTACHMENT E
AIR QUALITY SUPPORTING DOCUMENTATION

PAGE INTENTIONALLY BLANK

RAMBOLL

ENVIRONMENT
& HEALTH

MEMO

Date: **September 26, 2025**

To: **Karen Lancelle, Environmental Science Associates**

From: **Michael Keinath, PE**
Ivy Tao

Subject: **Revisions to CAP Emissions and Health Risks from the Martin Substation Project Component**

INTRODUCTION

At the request of Environmental Sciences Associates (ESA), Ramboll Americas Engineering Solutions, Inc. (Ramboll) conducted an analysis of criteria air pollutant (CAP) emissions and air quality health risk impacts associated with the implementation of the Pacific Gas and Electric (PG&E) Power Asset Acquisition Project (referred to hereafter as "Project"). The report "Air Quality and Health Risk Assessment Results" (hereafter referred to as "AQ Report") prepared by Ramboll and dated November 27, 2024 presented the results of the analysis. After recent review, Ramboll discovered an error in the analysis performed for the mass emissions and health risks associated with the Martin Substation component of the Project. The error was related to a typo in the emissions database that was used to summarize criteria air pollutant (CAP) emissions and calculate health risks. This led to emissions for two subphases of the Martin Substation Project component being excluded from the summary tables presented in the report.

Ramboll
333 Bush St.
Suite 1500
San Francisco, CA

T +1 510 655 7400
www.ramboll.com

This memorandum presents a summary of revisions made to several tables and a figure from the AQ Report and included as Appendix F in the Draft Environmental Impact Report (DEIR). These revisions do not change the analysis and conclusions presented in the DEIR. Deletions in tables are shown in ~~strike-through~~, and new text is shown in <u>underline</u>. The table below summarizes the revisions made to each report table and figure.

SUMMARY OF ERRATA

The error found in the calculations supporting the AQ Report affected two subphases of the Martin Substation Project component: Site Excavation, and Equipment and Gate Installation. Table A below summarizes revisions that were made to tables and figures from the AQ Report.

Please note that due to these changes, the year the maximum chronic HI and $PM_{2.5}$ concentration occurred also changed to 2027 for the maximally exposed individual (MEI) locations among receptors outside of San Francisco (as shown in Tables 20a and 21a). This is due to the majority of construction activities affected by the error occurring in 2027. Additionally, the correction caused the MEI location among receptors located in San Francisco to shift. Figure 3 was updated accordingly with the new $PM_{2.5}$ MEI location for the controlled scenario. The MEI

Confidential

location shifted because the correction increased construction emissions at the modeled Project site but did not increase emissions along modeled haul routes. This caused the MEI location to shift closer to the modeled Project site.

Table A: Summary of Revised Tables and Figures

Ramboll Report Table/Figure Number	Description of Changes
Table 12a	Criteria air pollutant emissions from off-road equipment for the Martin Substation component were updated. Annual Average Daily totals for the Project by year were also updated.
Table 12b	Criteria air pollutant emissions from off-road equipment for the Martin Substation component were updated. Annual Average Daily totals for the Project by year were also updated.
Table 13a	Criteria air pollutant emissions from off-road equipment for the Martin Substation component were updated. Annual Average Daily totals for the Project by year were also updated.
Table 13b	Criteria air pollutant emissions from off-road equipment for the Martin Substation component were updated. Annual Average Daily totals for the Project by year were also updated.
Table 20a	Cancer Risk, Chronic HI and $PM_{2.5}$ Concentration were updated for the Martin Substation component. The year the max Chronic HI and $PM_{2.5}$ concentration occurred was also updated as well as the $PM_{2.5}$ concentration MEI location.
Table 20b	Cancer Risk, Chronic HI and $PM_{2.5}$ Concentration as well as MEI locations were updated for the Martin Substation component. The year the max Chronic HI was also updated.
Table 21a	Cancer Risk, Chronic HI and $PM_{2.5}$ Concentration were updated for the Martin Substation component. The year the max Chronic HI and $PM_{2.5}$ concentration occurred was also updated.
Table 21b	Cancer Risk, Chronic HI and $PM_{2.5}$ Concentration were updated for the Martin Substation component. The $PM_{2.5}$ concentration MEI location was also updated.
Table 23	Cancer Risk and $PM_{2.5}$ from the Martin Substation component were updated. Background risks and cumulative total risks were also updated.
Table 24	Cancer Risk and $PM_{2.5}$ from the Martin Substation component were updated. Project-level risks and cumulative total risks were also updated.
Figure 3	$PM_{2.5}$ concentration MEI for the Project among receptors in San Francisco was updated.

Confidential

REVISED TABLES

Confidential

Table 12a (Revised)
Uncontrolled Criteria Air Pollutants Emissions- Project (Assume Rail Haul)
SFPUC PG&E Power Asset Acquisition
San Francisco, CA

Summary of Construction Emissions by Project Component and Construction Year

Project Component[1]	Year	Source	CAP Emissions[2]			
			ROG	NOx	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
			lb/yr			
Martin Substation	2026	Off-Road Equipment	279 ~~68~~	2415 ~~586~~	94 ~~23~~	87 ~~21~~
		Onroad Vehicles	18	155	1.4	1.4
		Rail	10	249	5.6	5.2
		Paving	15	--	--	--
	2027	Off-Road Equipment	303 ~~61~~	2579 ~~519~~	99 ~~20~~	91 ~~19~~
		Onroad Vehicles	17	97	1.0	1.0
		Rail	15	368	8.2	7.6
		Paving	17	--	--	--
	2028	Off-Road Equipment	125 ~~51~~	1053 ~~424~~	40 ~~16~~	37 ~~15~~
		Onroad Vehicles	8.0	23	0.27	0.26
		Rail	5.3	131	2.9	2.7
		Paving	3.5	--	--	--
Distribution Express Feeders	2026	Off-Road Equipment	400	3,303	129	119
		Onroad Vehicles	51	2,619	20	19
		Paving	13	--	--	--
Local Distribution System Separation	2026	Off-Road Equipment	400	3,303	129	119
		Onroad Vehicles	23	218	1.8	1.7
		Paving	6.8	--	--	--
	2027	Off-Road Equipment	395	3,245	124	114
		Onroad Vehicles	22	206	1.8	1.7
		Paving	6.8	--	--	--
System Reinforcements	2026	Off-Road Equipment	400	3,303	129	119
		Onroad Vehicles	24	605	4.6	4.4
		Paving	6.3	--	--	--
	2027	Off-Road Equipment	395	3,245	124	114
		Onroad Vehicles	23	572	4.5	4.3
		Paving	6.3	--	--	--
	2028	Off-Road Equipment	126	1,036	39	36
		Onroad Vehicles	7.3	175	1.4	1.4
		Paving	2.1	--	--	--
Operations Control Center	2026	Off-Road Equipment	28	231	7.7	7.0
		Onroad Vehicles	7.1	145	1.13	1.08
Modifications to Retain PGE Access to Non-Electrical Facilities	2026	Off-Road Equipment	16	141	5.3	4.8
		Onroad Vehicles	1.0	10	0.080	0.076
Operations and Maintenance Service Yards	2026	Off-Road Equipment	61	539	20	18
		Onroad Vehicles	1.8	13	0.11	0.10

Annual Average Daily Construction Emissions by Year

Year	ROG	NOx	PM_{10}	$PM_{2.5}$
	lb/day			
2026	6.7 ~~5.9~~	66 ~~59~~	2.1 ~~1.8~~	1.9 ~~1.7~~
2027	4.6 ~~3.7~~	40 ~~32~~	1.4 ~~1.1~~	1.3 ~~1.0~~
2028	1.9 ~~1.4~~	16 ~~12~~	0.57 ~~0.41~~	0.52 ~~0.37~~

Notes:

1. The estimated emissions include those from construction related to the telecommunications equipment. The telecommmunications equipment would be installed along the other Project components, and therefore do not require additional or separate construction activities.
2. Construction emissions were estimated with methodology equivalent to CalEEMod® 2022.1. Off-road equipment represents emissions from construction equipment, while onroad vehicles includes emissions from worker, vendor, and hauling trucks. This scenario assumes that all the hazardous materials will be transferred to the Port of San Francisco transfer facility on Cargo Way (at Pier 94) by trucks and then conveyed by rail to the ECDC Landfill in Utah.

Table 12a
Uncontrolled Criteria Air Pollutants Emissions- Project (Assume Rail Haul)
SFPUC PG&E Power Asset Acquisition
San Francisco, CA

Abbreviations:

CalEEMod® - California Emissions Estimator Model®
CAP - Criteria Air Pollutants
lb/day - pound per day
lb/yr - pounds per year
NOx - nitrogen oxides
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
ROG - reactive organic gases

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2022.1. Available online at http://www.caleemod.com/

Table 12b (Revised)
Uncontrolled Criteria Air Pollutants Emissions - Project (Assume Truck Haul)
SFPUC PG&E Power Asset Acquisition
San Francisco, CA

Summary of Construction Emissions by Project Component and Construction Year

Project Component[1]	Year	Source	CAP Emissions[2]			
			ROG	NOx	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
			lb/yr			
Martin Substation	2026	Off-Road Equipment	279 ~~68~~	2415 ~~586~~	94 ~~23~~	87 ~~21~~
		Onroad Vehicles	20	326	3.0	2.8
		Paving	15	--	--	--
	2027	Off-Road Equipment	303 ~~61~~	2579 ~~519~~	99 ~~20~~	91 ~~19~~
		Onroad Vehicles	20	292	2.8	2.7
		Paving	17	--	--	--
	2028	Off-Road Equipment	125 ~~51~~	1053 ~~424~~	40 ~~16~~	37 ~~15~~
		Onroad Vehicles	8.6	64	0.66	0.63
		Paving	3.5	--	--	--
Distribution Express Feeders	2026	Off-Road Equipment	400	3,303	129	119
		Onroad Vehicles	51	2,619	20	19
		Paving	13	--	--	--
Local Distribution System Separation	2026	Off-Road Equipment	400	3,303	129	119
		Onroad Vehicles	23	218	1.8	1.7
		Paving	6.8	--	--	--
	2027	Off-Road Equipment	395	3,245	124	114
		Onroad Vehicles	22	206	1.8	1.7
		Paving	6.8	--	--	--
System Reinforcements	2026	Off-Road Equipment	400	3,303	129	119
		Onroad Vehicles	24	605	4.6	4.4
		Paving	6.3	--	--	--
	2027	Off-Road Equipment	395	3,245	124	114
		Onroad Vehicles	23	572	4.5	4.3
		Paving	6.3	--	--	--
	2028	Off-Road Equipment	126	1,036	39	36
		Onroad Vehicles	7.3	175	1.4	1.4
		Paving	2.1	--	--	--
Operations Control Center	2026	Off-Road Equipment	28	231	7.7	7.0
		Onroad Vehicles	7.1	145	1.1	1.1
Modifications to Retain PGE Access to Non-Electrical Facilities	2026	Off-Road Equipment	16	141	5.3	4.8
		Onroad Vehicles	1.0	10	0.080	0.076
Operations and Maintenance Service Yards	2026	Off-Road Equipment	61	539	20	18
		Onroad Vehicles	1.8	13	0.11	0.10

Annual Average Daily Construction Emissions by Year

Year	ROG	NOx	PM_{10}	$PM_{2.5}$
	lb/day			
2026	6.7 ~~5.9~~	66 ~~59~~	2.1 ~~1.8~~	1.9 ~~1.7~~
2027	4.6 ~~3.6~~	39 ~~31~~	1.4 ~~1.1~~	1.3 ~~1.0~~
2028	1.9 ~~1.3~~	16 ~~12~~	0.55 ~~0.39~~	0.51 ~~0.36~~

Notes:

1. The estimated emissions include those from construction related to the telecommunications equipment. The telecommmunications equipment would be installed along the other Project components, and therefore do not require additional or separate construction activities.
2. Construction emissions were estimated with methodology equivalent to CalEEMod® 2022.1. Off-road equipment represents emissions from construction equipment, while onroad vehicles includes emissions from worker, vendor, and hauling trucks. This scenario assumes that all the hazardous materials will be hauled by trucks to the nearest class I landfill in Kern County.

Table 12b
Uncontrolled Criteria Air Pollutants Emissions - Project (Assume Truck Haul)
SFPUC PG&E Power Asset Acquisition
San Francisco, CA

Abbreviations:

CalEEMod® - California Emissions Estimator Model®
CAP - Criteria Air Pollutants
lb/day - pound per day
lb/yr - pounds per year
NOx - nitrogen oxides
PM_{10} - particulate matter less than 10 microns
$PM_{2.5}$ - particulate matter less than 2.5 microns
ROG - reactive organic gases

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2022.1. Available online at http://www.caleemod.com/

Table 13a (Revised)
Controlled Criteria Air Pollutants Emissions - Project (Assume Rail Haul)
SFPUC PG&E Power Asset Acquisition
San Francisco, CA

Summary of Construction Emissions by Project Component and Construction Year

Project Component[1]	Year	Source[3]	CAP Emissions[2]			
			ROG	NOx	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
			lb/yr			
Martin Substation	2026	Off-Road Equipment	57 ~~14~~	856 ~~237~~	9.5 ~~2.1~~	9.5 ~~2.1~~
		Onroad Vehicles	18	155	1.4	1.4
		Rail	10	249	5.6	5.2
		Paving	15	--	--	--
	2027	Off-Road Equipment	63 ~~12~~	938 ~~217~~	10.5 ~~1.9~~	10.5 ~~1.9~~
		Onroad Vehicles	17	97	1.0	1.0
		Rail	15	368	8.2	7.6
		Paving	17	--	--	--
	2028	Off-Road Equipment	28 ~~11~~	380 ~~180~~	4.7 ~~1.7~~	4.7 ~~1.7~~
		Onroad Vehicles	8.0	23	0.27	0.26
		Rail	5.3	131	2.9	2.7
		Paving	3.5	--	--	--
Distribution Express Feeders	2026	Off-Road Equipment	70	1,611	10	10
		Onroad Vehicles	51	2,619	20	19
		Paving	13	--	--	--
Local Distribution System Separation	2026	Off-Road Equipment	70	1,611	10	10
		Onroad Vehicles	23	218	1.8	1.7
		Paving	6.8	--	--	--
	2027	Off-Road Equipment	70	1,611	10	10
		Onroad Vehicles	22	206	1.8	1.7
		Paving	6.8	--	--	--
System Reinforcements	2026	Off-Road Equipment	70	1,611	10	10
		Onroad Vehicles	24	605	4.6	4.4
		Paving	6.3	--	--	--
	2027	Off-Road Equipment	70	1,611	10	10
		Onroad Vehicles	23	572	4.5	4.3
		Paving	6.3	--	--	--
	2028	Off-Road Equipment	23	525	3.1	3.1
		Onroad Vehicles	7.3	175	1.4	1.4
		Paving	2.1	--	--	--
Operations Control Center	2026	Off-Road Equipment	4.6	141	0.51	0.51
		Onroad Vehicles	7.1	145	1.1	1.1
Modifications to Retain PGE Access to Non-Electrical Facilities	2026	Off-Road Equipment	3.6	44	0.64	0.64
		Onroad Vehicles	1.0	10	0.080	0.076
Operations and Maintenance Service Yards	2026	Off-Road Equipment	14	168	2.5	2.5
		Onroad Vehicles	1.8	13	0.11	0.10

Annual Average Daily Construction Emissions by Year

Year	ROG	NOx	PM_{10}	$PM_{2.5}$
	lb/day			
2026	1.8 ~~1.6~~	39 ~~36~~	0.29 ~~0.26~~	0.29 ~~0.26~~
2027	1.2 ~~1.0~~	21 ~~18~~	0.17 ~~0.14~~	0.17 ~~0.14~~
2028	0.52 ~~0.40~~	8.4 ~~7.0~~	0.084 ~~0.064~~	0.082 ~~0.062~~

Notes:

1. The estimated emissions include those from construction related to the telecommunications equipment. The telecommmunications equipment would be installed along the other Project components, and therefore do not require additional or separate construction activities.

2. Construction emissions were estimated with methodology equivalent to CalEEMod® 2022.1. Off-road equipment represents emissions from construction equipment, while onroad vehicles includes emissions from worker, vendor, and hauling trucks. This scenario assumes that all the hazardous materials will be transferred to the Port of San Francisco transfer facility on Cargo Way (at Pier 94) by trucks and then conveyed by rail to the ECDC Landfill in Utah.

3. All off-road diesel equipment is assumed to use Tier 4 Final engines under controlled scenarios. Emissions from on-road vehicles and rail sources remain the same under both uncontrolled and controlled scenarios.

Table 13a
Controlled Criteria Air Pollutants Emissions - Project (Assume Rail Haul)
SFPUC PG&E Power Asset Acquisition
San Francisco, CA

Abbreviations:

CalEEMod® - California Emissions Estimator Model®
CAP - Criteria Air Pollutants
lb/day - pound per day
lb/yr - pounds per year
NOx - nitrogen oxides
PM_{10} - particulate matter less than 10 microns
$PM_{2.5}$ - particulate matter less than 2.5 microns
ROG - reactive organic gases

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2022.1. Available online at http://www.caleemod.com/

Table 13b (Revised)
Controlled Criteria Air Pollutants Emissions - Project (Assume Truck Haul)
SFPUC PG&E Power Asset Acquisition
San Francisco, CA

Summary of Construction Emissions by Project Component and Construction Year

Project Component[1]	Year	Source[3]	CAP Emissions[2]			
			ROG	NOx	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
			lb/yr			
Martin Substation	2026	Off-Road Equipment	57 ~~14~~	856 ~~237~~	9.5 ~~2.1~~	9.5 ~~2.1~~
		Onroad Vehicles	20	326	3.0	2.8
		Paving	15	--	--	--
	2027	Off-Road Equipment	63 ~~12~~	938 ~~217~~	10.5 ~~1.9~~	10.5 ~~1.9~~
		Onroad Vehicles	20	292	2.8	2.7
		Paving	17	--	--	--
	2028	Off-Road Equipment	28 ~~11~~	380 ~~180~~	4.7 ~~1.7~~	4.7 ~~1.7~~
		Onroad Vehicles	8.6	64	0.66	0.63
		Paving	3.5	--	--	--
Distribution Express Feeders	2026	Off-Road Equipment	70	1,611	10	10
		Onroad Vehicles	51	2,619	20	19
		Paving	13	--	--	--
Local Distribution System Separation	2026	Off-Road Equipment	70	1,611	10	10
		Onroad Vehicles	23	218	1.8	1.7
		Paving	6.8	--	--	--
	2027	Off-Road Equipment	70	1,611	10	10
		Onroad Vehicles	22	206	1.8	1.7
		Paving	6.8	--	--	--
System Reinforcements	2026	Off-Road Equipment	70	1,611	10	10
		Onroad Vehicles	24	605	4.6	4.4
		Paving	6.3	--	--	--
	2027	Off-Road Equipment	70	1,611	10	10
		Onroad Vehicles	23	572	4.5	4.3
		Paving	6.3	--	--	--
	2028	Off-Road Equipment	23	525	3.1	3.1
		Onroad Vehicles	7.3	175	1.4	1.4
		Paving	2.1	--	--	--
Operations Control Center	2026	Off-Road Equipment	4.6	141	0.51	0.51
		Onroad Vehicles	7.1	145	1.1	1.1
Modifications to Retain PGE Access to Non-Electrical Facilities	2026	Off-Road Equipment	3.6	44	0.64	0.64
		Onroad Vehicles	1.0	10	0.080	0.076
Operations and Maintenance Service Yards	2026	Off-Road Equipment	14	168	2.5	2.5
		Onroad Vehicles	1.8	13	0.11	0.10

Annual Average Daily Construction Emissions by Year

Year	ROG	NOx	PM_{10}	$PM_{2.5}$
	lb/day			
2026	1.8 ~~1.6~~	38 ~~36~~	0.28 ~~0.25~~	0.27 ~~0.24~~
2027	1.14 ~~0.94~~	20 ~~17~~	0.15 ~~0.12~~	0.15 ~~0.11~~
2028	0.49 ~~0.37~~	7.8 ~~6.4~~	0.067 ~~0.047~~	0.067 ~~0.046~~

Notes:

1. The estimated emissions include those from construction related to the telecommunications equipment. The telecommmunications equipment would be installed along the other Project components, and therefore do not require additional or separate construction activities.
2. Construction emissions were estimated with methodology equivalent to CalEEMod® 2022.1. Off-road equipment represents emissions from construction equipment, while onroad vehicles includes emissions from worker, vendor, and hauling trucks. This scenario assumes that all the hazardous materials will be hauled by trucks to the nearest class I landfill in Kern County.
3. All off-road diesel equipment is assumed to use Tier 4 Final engines under controlled scenarios. Emissions from on-road vehicles and rail sources remain the same under both uncontrolled and controlled scenarios.

Abbreviations:

CalEEMod® - California Emissions Estimator Model®
CAP - Criteria Air Pollutants
lb/day - pound per day
lb/yr - pounds per year
NOx - nitrogen oxides
PM_{10} - particulate matter less than 10 microns
$PM_{2.5}$ - particulate matter less than 2.5 microns
ROG - reactive organic gases

References:

California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod®), Version 2022.1. Available online at http://www.caleemod.com/

Table 20a (Revised)
Martin Substation/Variant - Uncontrolled Maximum Project Excess Lifetime Cancer Risk, Chronic HI and PM2.5 for Receptors outside of San Francisco
SFPUC PG&E Power Asset Acquisition
San Francisco, CA

Project Component	Construction (Project)		
	Excess Lifetime Cancer Risk[1] in a million	Chronic HI[2] Unitless	$PM_{2.5}$ Concentration $\mu g/m^3$
Martin Substation	8.3 ~~1.9~~	0.0133 ~~.0031~~	0.062 ~~0.015~~
Year	--	2027 ~~2026~~	2027 ~~2026~~
UTMx	552096	552236	552236
UTMy	4173294	4173174	4173174 ~~4173194~~
Receptor Type	Residential	Offsite Worker	Offsite Worker

Project Component	Construction (Variant)		
	Excess Lifetime Cancer Risk[1] in a million	Chronic HI[2] Unitless	$PM_{2.5}$ Concentration $\mu g/m^3$
Variant	13	0.026	0.12
Year	--	2026	2026
UTMx	552096	552236	552236
UTMy	4173294	4173174	4173174
Receptor Type	Residential	Offsite Worker	Offsite Worker

Note:

1. Excess lifetime cancer risks were estimated using the following equation:

   $Risk_{inh} = \Sigma C_i \times CF \times IF_{inh} \times CPF_i \times ASF$

   Where:

   $Risk_{inh}$ = Cancer Risk for the Inhalation Pathway (unitless)
   C_i = Annual Average Air Concentration for Chemical "i" ug/m^3
   CF = Conversion Factor (mg/ug)
   IF_{inh} = Intake Factor for Inhalation $(m^3/kg\text{-}day)$
   CPF_i = Cancer Potency Factor $(mg/kg\text{-}day)^{-1}$
   ASF = Age Sensitivity Factor (unitless)

2. Chronic HI for each receptor was estimated using the following equation:

   $HI_{inh} = \Sigma C_i / cREL$

   Where:

   HI_{inh} = Chronic HI for the Inhalation Pathway (unitless)
   C_i = Annual Average Air Concentration for Chemical "i" (ug/m^3)
   cREL = Chronic Reference Exposure Level (ug/m^3)

Abbreviations:

HI - Hazard Index
m^3 - cubic meter
µg - microgram
UTM - Universal Transverse Mercator

Reference:

OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February.

Table 20b (Revised)
Martin Substation/Variant - Uncontrolled Maximum Project Excess Lifetime Cancer Risk, Chronic HI and PM2.5 for Receptors in San Francisco
SFPUC PG&E Power Asset Acquisition
San Francisco, CA

Project Component	Construction (Project)		
	Excess Lifetime Cancer Risk[1]	Chronic HI[2]	$PM_{2.5}$ Concentration
	in a million	Unitless	$\mu g/m^3$
Martin Substation	0.44 ~~0.10~~	3.0E-04 ~~7.4E-05~~	.0022 ~~0.0013~~
Year	--	2027 ~~2026~~	2026
UTMx	552400 ~~552380~~	552520 ~~552460~~	552460 ~~552400~~
UTMy	4173640	4173640	4173640 ~~4173680~~
Receptor Type	Residential	Offsite Worker	Offsite Worker ~~Residential~~
In APEZ?	Yes	Yes	Yes

Project Component	Construction (Variant)		
	Excess Lifetime Cancer Risk[1]	Chronic HI[2]	$PM_{2.5}$ Concentration
	in a million	Unitless	$\mu g/m^3$
Variant	0.65	7.5E-04	0.0051
Year	--	2026	2026
UTMx	552380	552460	552460
UTMy	4173640	4173640	4173640
Receptor Type	Residential	Offsite Worker	Offsite Worker
In APEZ?	Yes	Yes	Yes

Note:

1. Excess lifetime cancer risks were estimated using the following equation:
   $Risk_{inh} = \Sigma C_i \times CF \times IF_{inh} \times CPF_i \times ASF$
   Where:
   $Risk_{inh}$ = Cancer Risk for the Inhalation Pathway (unitless)
   C_i = Annual Average Air Concentration for Chemical "i" ug/m^3
   CF = Conversion Factor (mg/ug)
   IF_{inh} = Intake Factor for Inhalation (m^3/kg-day)
   CPF_i = Cancer Potency Factor $(mg/kg\text{-}day)^{-1}$
   ASF = Age Sensitivity Factor (unitless)
2. Chronic HI for each receptor was estimated using the following equation:
   $HI_{inh} = \Sigma C_i / cREL$
   Where:
   HI_{inh} = Chronic HI for the Inhalation Pathway (unitless)
   C_i = Annual Average Air Concentration for Chemical "i" (ug/m^3)
   cREL = Chronic Reference Exposure Level (ug/m^3)

Abbreviations:

HI - Hazard Index
m^3 - cubic meter
µg - microgram
UTM - Universal Transverse Mercator

Reference:

OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February.

Table 21a (Revised)
Martin Substation/Variant - Controlled Maximum Project Excess Lifetime Cancer Risk, Chronic HI and PM2.5 for Receptors outside of San Francisco
SFPUC PG&E Power Asset Acquisition
San Francisco, CA

Project Component[3]	Construction (Project)		
	Excess Lifetime Cancer Risk[1]	Chronic HI[2]	$PM_{2.5}$ Concentration
	in a million	Unitless	µg/m^3
Martin Substation	0.88 ~~0.18~~	1.4E-03 ~~2.9E-04~~	0.0078 ~~0.0023~~
Year	--	2027 ~~2026~~	2027 ~~2026~~
UTMx	552096	552236	552236
UTMy	4173294	4173174	4173194
Receptor Type	Residential	Offsite Worker	Offsite Worker

Project Component[3]	Construction (Variant)		
	Excess Lifetime Cancer Risk[1]	Chronic HI[2]	$PM_{2.5}$ Concentration
	in a million	Unitless	µg/m^3
Variant	1.5	0.0027	0.015
Year	--	2026	2026
UTMx	552096	552236	552236
UTMy	4173294	4173174	4173174
Receptor Type	Residential	Offsite Worker	Offsite Worker

Note:

1. Excess lifetime cancer risks were estimated using the following equation:
   $Risk_{inh} = \Sigma C_i \times CF \times IF_{inh} \times CPF_i \times ASF$
   Where:
   $Risk_{inh}$ = Cancer Risk for the Inhalation Pathway (unitless)
   C_i = Annual Average Air Concentration for Chemical "i" ug/m^3
   CF = Conversion Factor (mg/ug)
   IF_{inh} = Intake Factor for Inhalation (m^3/kg-day)
   CPF_i = Cancer Potency Factor (mg/kg-day)$^{-1}$
   ASF = Age Sensitivity Factor (unitless)
2. Chronic HI for each receptor was estimated using the following equation:
   $HI_{inh} = \Sigma C_i / cREL$
   Where:
   HI_{inh} = Chronic HI for the Inhalation Pathway (unitless)
   C_i = Annual Average Air Concentration for Chemical "i" (ug/m^3)
   cREL = Chronic Reference Exposure Level (ug/m^3)
3. All off-road diesel equipment is assumed to use Tier 4 Final engines under controlled scenarios.

Abbreviations:

HI - Hazard Index
m^3 - cubic meter
µg - microgram
UTM - Universal Transverse Mercator

Reference:

OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February.

Table 21b (Revised)
Martin Substation/Variant - Controlled Maximum Project Excess Lifetime Cancer Risk, Chronic HI and PM2.5 for Receptors in San Francisco
SFPUC PG&E Power Asset Acquisition
San Francisco, CA

Project Component[3]	Construction (Project)		
	Excess Lifetime Cancer Risk[1] in a million	Chronic HI[2] Unitless	$PM_{2.5}$ Concentration $\mu g/m^3$
Martin Substation	0.050 ~~0.014~~	3.4E-05 ~~1.2E-05~~	0.0011 ~~0.0010~~
Year	--	2026	2026
UTMx	552380	552460	552400 ~~552520~~
UTMy	4173640	4173640	4173680 ~~4173800~~
Receptor Type	Residential	Offsite Worker	Residential ~~Offsite Worker~~
In APEZ?	Yes	Yes	Yes

Project Component[3]	Construction (Variant)		
	Excess Lifetime Cancer Risk[1] in a million	Chronic HI[2] Unitless	$PM_{2.5}$ Concentration $\mu g/m^3$
Variant	0.090	9.5E-05	0.0022
Year	--	2026	2026
UTMx	552380	552460	552400
UTMy	4173640	4173640	4173680
Receptor Type	Residential	Offsite Worker	Residential
In APEZ?	Yes	Yes	Yes

Note:

1. Excess lifetime cancer risks were estimated using the following equation:
   $Risk_{inh} = \Sigma C_i \times CF \times IF_{inh} \times CPF_i \times ASF$
   Where:
   $Risk_{inh}$ = Cancer Risk for the Inhalation Pathway (unitless)
   C_i = Annual Average Air Concentration for Chemical "i" ug/m^3
   CF = Conversion Factor (mg/ug)
   IF_{inh} = Intake Factor for Inhalation $(m^3/kg\text{-}day)$
   CPF_i = Cancer Potency Factor $(mg/kg\text{-}day)^{-1}$
   ASF = Age Sensitivity Factor (unitless)
2. Chronic HI for each receptor was estimated using the following equation:
   $HI_{inh} = \Sigma C_i / cREL$
   Where:
   HI_{inh} = Chronic HI for the Inhalation Pathway (unitless)
   C_i = Annual Average Air Concentration for Chemical "i" (ug/m^3)
   cREL = Chronic Reference Exposure Level (ug/m^3)
3. All off-road diesel equipment is assumed to use Tier 4 Final engines under controlled scenarios.

Abbreviations:

HI - Hazard Index
m^3 - cubic meter
µg - microgram
UTM - Universal Transverse Mercator

Reference:

OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February.

Table 23 (Revised)
Existing Plus Project Health Risks Impacts for MEIs Located in San Francisco (Martin Substation)
SFPUC PG&E Asset Acquisition
San Francisco, CA

Uncontrolled

Source	Risk Assumption	Health Risks (Project)	
		Excess Lifetime Cancer Risk in a million	$PM_{2.5}$ Concentration $\mu g/m^3$
Martin Substation	Estimated	0.44 ~~0.10~~	0.0022 ~~0.0013~~
Distribution Express Feeders	Hypothetical Locations of Maximum Impacts	7.5	0.14
Local Distribution System Separation		5.4	0.072
System Reinforcements		5.8	0.085
Rail		0.050	1.9E-04
Emergency Generator		1.7	0.0023
Employee Vehicle Trips[1]		0.37	0.021
Total Project Risk		21	0.33
San Francisco Citywide Background Risk for Martin Substation[2]		62 ~~59~~	10
Total Existing + Project / Cumulative Total Risk[3,4]		**83 ~~80~~**	**11**

Controlled

Source	Risk Assumption	Health Risks (Project)	
		Excess Lifetime Cancer Risk in a million	$PM_{2.5}$ Concentration $\mu g/m^3$
Martin Substation	Estimated	0.050 ~~0.014~~	0.0011 ~~0.0010~~
Distribution Express Feeders	Hypothetical Locations of Maximum Impacts	2.7	0.089
Local Distribution System Separation		0.56	0.019
System Reinforcements		1.0	0.031
Rail		0.050	1.9E-04
Emergency Generator		1.7	0.0023
Employee Vehicle Trips[1]		0.37	0.021
Total Project Risk		6.4	0.16
San Francisco Citywide Background Risk for Martin Substation[2]		59	10 ~~12~~
Total Existing + Project Risk / Cumulative Risk [3,4]		**65**	**11 ~~12~~**

Notes:

1. Health risks from employee vehicle trips were estimated using San Francisco-specific regressions between vehicle volumes and health risks, as detailed in Table 22. The health risks from employee vehicle trpis are not included for MEIs outside of San Francisco.
2. Background cancer risks and $PM_{2.5}$ concentrations for maximally exposed individuals (MEIs) due to the construction of Martin Substation were obtained from the 2020 San Francisco Citywide HRA database. The background $PM_{2.5}$ concentrations differ between the uncontrolled and controlled scenarios because the $PM_{2.5}$ MEIs in San Francisco for the two scenarios were identified at different locations, as shown in Table 20b and Table 21b.
3. The total existing plus project conservatively combines the cancer risk and $PM_{2.5}$ concentration from all project components. Note the maximum health risks from linear components (Distribution Express Feeders, Local Distribution System Separation, and System Reinforcements), rail, emergency generator, and employee vehicle trips were used in the sum, conservatively assuming that MEIs from each Project component would be located at the same location. In reality, there is little likelihood that all MEIs from different Project components would be co-located.
4. No quantifiable risks from foreseeable future cumulative development sources were identified for this project, as listed in Table 27. Therefore, cumulative health risk impacts are considered the same as the existing plus project health risk impacts.

Abbreviations:

$\mu g/m^3$ - microgram per cubic meter
HI - hazard index
MEIs - maximally exposed individuals
UTM - Universal Transverse Mercator

References:

San Francisco Department of Public Health (SF DPH), San Francisco Planning Department (SF Planning), and Ramboll. 2020. San Francisco Citywide Health Risk Assessment: Technical Support Documentation. September.

Table 24 (Revised)
Existing Plus Project Health Risks Impacts for MEIs Located Outside of San Francisco (Martin Substation)
SFPUC PG&E Power Asset Acquisition
San Francisco, CA

Uncontrolled

	Health Risks (Project)		
	Excess Lifetime Cancer Risk in a million	**Chronic HI Unitless**	**$PM_{2.5}$ Concentration $\mu g/m^3$**
Martin Substation	8.3 ~~1.9~~	0.0133 ~~0.0031~~	0.0619 ~~0.0151~~
Distribution Express Feeders	7.5	0.018	0.14
Local Distribution System Separation	5.4	0.013	0.072
System Reinforcements	5.8	0.014	0.085
Rail	0.050	4.1E-05	1.9E-04
Total Project Risk	27 ~~21~~	0.059 ~~0.049~~	0.36 ~~0.32~~
Background Risks at the Martin Substation MEIs			
Stationary Sources[1]	22	0.13	0
Roadways[2]	13	0.022	0.16
Railways[2]	6.0	0.0021	0.010
Total Existing + Project / Cumulative Risk[3,4]	**68 ~~62~~**	**0.21 ~~0.20~~**	**0.53 ~~0.48~~**

Controlled

Project Component	Health Risks (Project)		
	Excess Lifetime Cancer Risk in a million	**Chronic HI Unitless**	**$PM_{2.5}$ Concentration $\mu g/m^3$**
Martin Substation	0.88 ~~0.18~~	1.4E-03 ~~2.9E-04~~	0.0078 ~~0.0023~~
Distribution Express Feeders	2.7	0.0065	0.089
Local Distribution System Separation	0.56	0.0014	0.019
System Reinforcements	1.0	0.0024	0.031
Rail	0.050	4.1E-05	1.9E-04
Total Project Risk	5.1 ~~4.5~~	0.012 ~~0.011~~	0.15 ~~0.14~~
Background Risks at the Martin Substation MEIs			
Stationary Sources[1]	22	0.13	0
Roadways[2]	13	0.022	0.16
Railways[2]	6.0	0.0021	0.010
Total Existing + Project / Cumulative Risk[3,4]	**46 ~~45~~**	**0.17**	**0.32 ~~0.31~~**

Notes:

1. Background health impacts from Stationary Sources at the identified MEIs due to the construction of Martin Substation were estimated using BAAQMD Stationary Source Screening Analysis Tool. Risk values listed are maximum values, not expected values. Results have been adjusted by the BAAQMD-recommended distance multiplier, where relevant.
2. Background health impacts from Roadway and Railway sources were determined using BAAQMD screening tools and are based on the maximum impact of a raster cell located at the identified MEIs due to the construction of Martin Substation.
3. The total existing plus project risk conservatively combines the cancer risk and $PM_{2.5}$ concentration from all project components, except for the emergency generator and the employee vehicle trips at the operations control center. This exclusion is due to the generator being located in southeast San Francisco, over 1,000 feet away from the identified MEIs in San Mateo County. Note the maximum health risks from linear components (Distribution Express Feeders, Local Distribution System Separation, and System Reinforcements) and rail, were used in the sum, conservatively assuming that MEIs from each Project component would be located at the same location. In reality, there is little likelihood that all MEIs from different Project components would be co-located.
4. No quantifiable risks from foreseeable future cumulative development sources were identified for this project, as listed in Table 27. Therefore, cumulative health risk impacts are considered the same as the existing plus project health risk impacts.

Abbreviations:

$\mu g/m^3$ - microgram per cubic meter
HI - hazard index
MEIs - maximally exposed individuals
UTM - Universal Transverse Mercator

Table 24
Existing Plus Project Health Risks Impacts for MEIs Located Outside of San Francisco (Martin Substation)
SFPUC PG&E Power Asset Acquisition
San Francisco, CA

References:

Bay Area Air Quality Management District (BAAQMD). 2020. Permitted Sources Risk and Hazards Map. June. Available at: https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65

Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Roadway Screening Tool - Cancer Risk. Available at: https://data.bayareametro.gov/Environment/CEQA-Roadway-Screening-Tool-Cancer-Risk/kz4a-ueki

Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Roadway Screening Tool - Chronic Hazard. Available at: https://data.bayareametro.gov/Environment/CEQA-Roadway-Screening-Tool-Chronic-Hazard/sfnx-xg6j

Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Roadway Screening Tool - PM2.5. Available at: https://data.bayareametro.gov/Environment/CEQA-Roadway-Screening-Tool-PM2-5/r9gy-qwxe

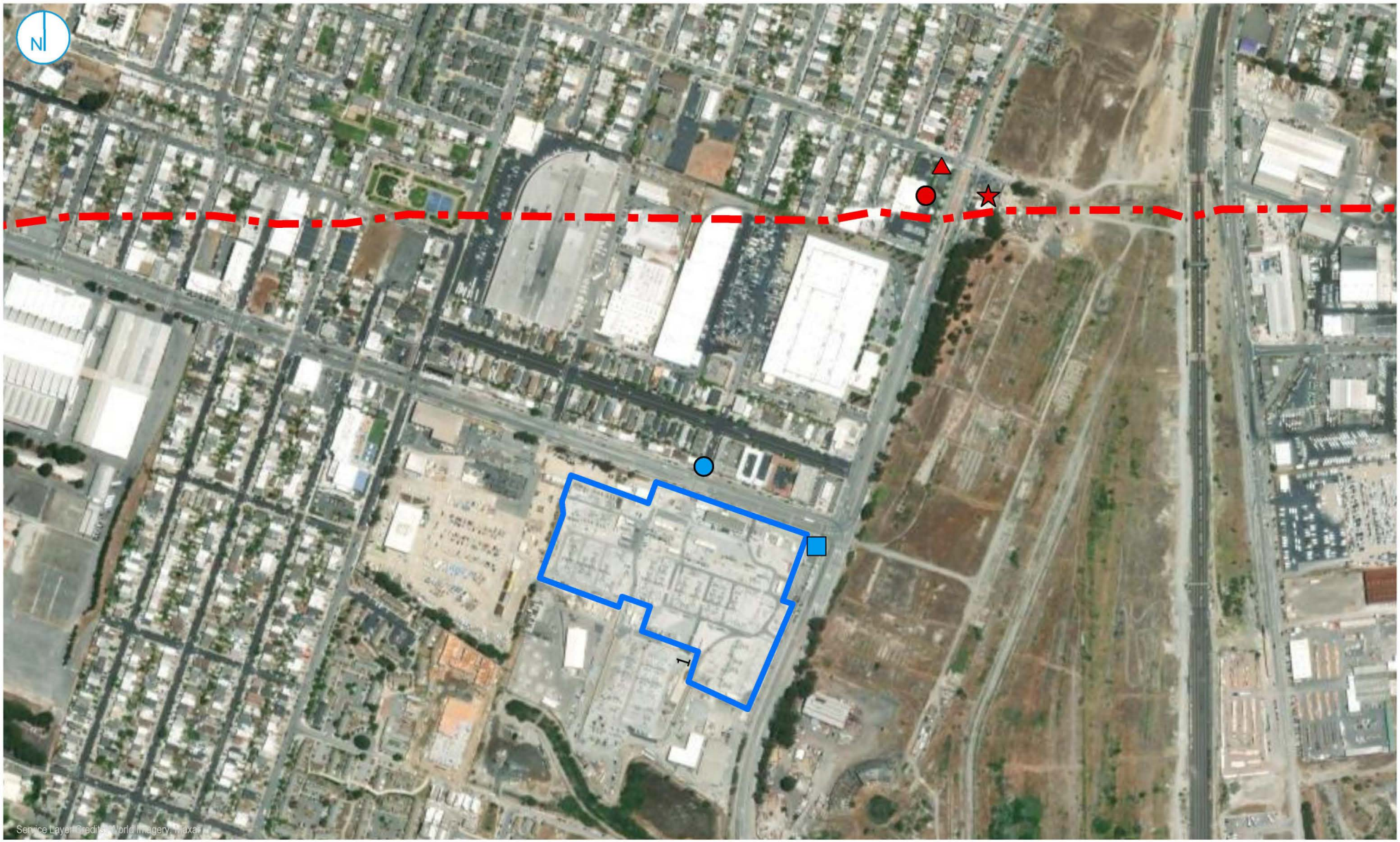
Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Rail Screening Tool - Cancer Risk. Available at: https://data.bayareametro.gov/Environment/CEQA-Rail-Screening-Tool-Cancer-Risk/6eut-z6mm

Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Rail Screening Tool - Chronic Hazard. Available at: https://data.bayareametro.gov/Environment/CEQA-Rail-Screening-Tool-Chronic-Hazard/p57h-bktk

Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Rail Screening Tool - PM2.5. Available at: https://data.bayareametro.gov/Environment/CEQA-Rail-Screening-Tool-Chronic-Hazard/p57h-bktk

REVISED FIGURE

Confidential



San Francisco County Boundary
Martin Substation Project Boundary
Project and Variant Cancer Risk MEI
Project and Variant Chronic HI/PM2.5 MEI
Project and Variant Cancer Risk MEI (San Francisco)
~~MSS PM2.5 MEI (San Francisco)~~
Project and Variant Chronic HI MEI (San Francisco)
Project and Variant PM2.5 MEI (San Francisco)

0 1,250 2,500 Feet

MAXIMALLY EXPOSED INDIVIDUAL (MEI) LOCATIONS FOR THE MARTIN SUBSTATION AND VARIANT COMPONENTS

SFPUC PG&E Power Asset Acquisition
San Francisco, CA

FIGURE 3 (Revised)

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL