Central Utility Plant Expansion Project Environmental Impact Report

Volume 3: Comments, Responses, MMRP, and Revisions to the Draft EIR

State Clearinghouse #: 2023050563

Prepared for:

University of California Davis
Campus Planning and Environmental Stewardship
University of California, One Shields Avenue
Davis, CA 95616
Contact: Heather Davis
Interim Director of Environmental Planning
530.759.3766

Prepared by:

ICF
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Sacramento, CA 95814
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916.737.3000

December 2023

ICF. 2023. *Central Utility Plant Expansion Project*. Final Environmental Impact Report. December. (ICF 104689.0.005) Sacramento, CA. Prepared for University of California, Davis, CA.

Contents

Volume 3: Comments, Responses, MMRP, and Revisions to the Draft EIR

Tables

Acronyms and Abbreviations

CEQA	California Environmental Quality Act
CUP	Central Utility Plant
Draft EIR	draft environmental impact report
EIR	Environmental Impact Report
Final EIR	final environmental impact report
MLD	Most Likely Descendant
MMRP	Mitigation Monitoring and Reporting Program
mph	miles per hour
Sustainable Practices Policy	University of California Policy on Sustainable Practices
the project	California Hospital Tower Project
The Regents	Board of Regents of the University of California's
UC Davis	University of California, Davis
VOC	volatile organic compound

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Chapter 1
Introduction

On September 21, 2023, the University of California, Davis (UC Davis) released for public review the draft environmental impact report (Draft EIR) for the Central Utility Plant (CUP) Expansion Project (project). The Draft EIR was prepared under the Board of Regents of the University of California's (The Regents) direction in accordance with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000–21189.5) and the State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387). The Regents is the lead agency under CEQA for consideration of certification of this EIR and has principal responsibility for approving the project.

1.1 Public Review and Responses to Comments

In accordance with Sections 15087 and 15105 of the State CEQA Guidelines, the Draft EIR was circulated for public review and comment to responsible agencies, as well as members of the public, for 45 days (September 21, 2023, through November 6, 2023) (a 45-day review period was required under CEQA). UC Davis also held a public hearing on October 4, 2023, to receive comments on the Draft EIR. Comment letters received on the Draft EIR and a transcript of oral testimony provided at the public hearing are provided in their entirety in Chapter 2, *Comments and Responses to Comments*, of this volume.

Responses to each of the comments received are provided in this document as part of the final environmental impact report (Final EIR). Although some of the comments have resulted in minor changes to the text of the Draft EIR (see Chapter 4, *Corrections and Revisions to the Draft EIR*), the changes do not constitute "significant new information," which would require recirculation of the Draft EIR. "Significant new information" is defined in Section 15088.5(a) of the State CEQA Guidelines as follows.

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
4. The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

None of these circumstances defined in State CEQA Guidelines Section 15088.5(a) has arisen from comments on the Draft EIR; therefore, recirculation is not required.

The Draft EIR, Final EIR, and associated appendices are available for review online at:

https://environmentalplanning.ucdavis.edu/CUP-Expansion

The Draft EIR, Final EIR, and associated appendices and reference materials are also available at the following locations:

UC Davis, Sacramento Campus
Office of Facilities Design & Construction
Facilities Support Services Building
4800 2nd Avenue, Suite 3010
Sacramento, CA 95817

UC Davis, Davis Campus
Office of Campus Planning and Environmental Stewardship
Mrak Hall
Mrak Hall Drive, Suite 436
Davis, CA 95616

Colonial Heights Library
4799 Stockton Blvd
Mrak Hall
Sacramento, CA 95816

As required by State CEQA Guidelines Section 15088(b), at least 10 days before consideration of the Final EIR for certification, UC Davis provided a written response (hard or electronic copy) to each public agency that submitted written comments on the Draft EIR.

1.2 Organization of the Responses to Comments

Chapter 2 of this document (Volume 3) consists of the written comments received on the Draft EIR and presents responses to environmental issues raised in the comments, as required by State CEQA Guidelines Section 15132. The focus of the responses to comments is on the disposition of significant environmental issues that are raised in the comments, as required by Section 15088(c) of the State CEQA Guidelines.

Each comment letter has been reproduced with individual comments bracketed and numbered according to the type of commenter (i.e., state agency, local/regional agency, organization, individual, and commenter at public hearing). Responses to the comments follow each letter. For example, the response to the second comment of the second local agency letter would be indicated as Response to Comment L2-2. In some instances, clarifications of the text of the Draft EIR may be required. In those cases, the text of the Draft EIR is revised and the changes compiled in Chapter 4 of this volume. The text deletions are shown with strikeout (~~strikeout~~), and additions are shown with underline (<u>underline</u>).

1.3 Project Decision Process

This document (Volume 3) and the Draft EIR (Volumes 1 and 2), as amended through responses to comments, together constitute the Final EIR, which will be considered by The Regents prior to a decision on whether to approve the Central Utility Plant Expansion Project. If The Regents decides to approve the project, The Regents, as required by State CEQA Guidelines Section 15090, must first certify that the Final EIR was completed in compliance with CEQA's requirements, was reviewed and considered by The Regents and UC Davis, and reflects The Regents' independent judgment and

analysis. The Regents would then be required to adopt findings of fact on the disposition of each significant environmental impact, as required by State CEQA Guidelines Section 15091. For the significant and unavoidable impact (an impact that cannot be mitigated to a less-than-significant level) identified in the Draft EIR, if The Regents choose to approve the project, The Regents would need to adopt a statement of overriding considerations, under State CEQA Guidelines Section 15093, explaining the overriding factors that The Regents deem allow the project to move forward. A Mitigation Monitoring and Reporting Program, which is required by State CEQA Guidelines Section 15091(d), has been included as part of Chapter 3 of this document and will be adopted by The Regents in conjunction with any project approval.

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Chapter 2
Comments and Responses to Comments

This chapter of the final environmental impact report (Final EIR) contains the comment letters received during the public review period for the Draft EIR, which concluded on November 6, 2023. In conformance with Section 15088(a) of the State CEQA Guidelines, written responses were prepared to address comments on environmental issues received from reviewers of the Draft EIR (Volumes 1 and 2 of the Final EIR).

2.1 Commenters on the Draft EIR

Table 2-1 indicates the alpha-numerical designation for the comment letters received, the author of the comment letter, and the date of the comment letter. Comment letters have been numbered in the order they were received by UC Davis. In addition, comments were provided during the Draft EIR public hearing on October 4, 2023.

Table 2-1. List of Commenters

Letter Number	Commenter	Agency/Organization	Date
State			
S1	Scott Wiley, Associate Governmental program Analyst	Department of Toxic Substances Control	September 22, 2023
S2	Chris Houlemard, Associate Transportation Planner, Division of Planning, Local Assistance, and Sustainability	California Department of Transportation, District 3	September 22, 2023
Local/Regional			
L1	Molly Wright	SMAQMD	November 6, 2023
L2	Rob Ferrera	SMUD	November 3, 2023
Organizations			
O1	Rick Codina	350 Sacramento Electrification Team	September 28, 2021
Individuals			
I1	Jessica Marin		September 22, 2023
Public Hearing			
PH	Public Hearing	Luke Wilson, 350 Sacramento Electrification Team	October 4, 2023

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State

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S-1

Alex Tremblay

From: Wiley, Scott@DTSC <Scott.Wiley@dtsc.ca.gov>
Sent: Friday, September 22, 2023 7:09 AM
To: Environmental Review
Cc: Kereazis, Dave@DTSC
Subject: RE: UC Davis Sacramento Campus Central Utility Plant Expansion Project

Follow Up Flag: Follow up
Flag Status: Flagged

Hello,

S1-1 Thank you for sending this to us!

For future notices like this, please send them to the inbox at CEQAReview@dtsc.ca.gov.

Thanks!

Scott Wiley
Associate Governmental Program Analyst
CEQA Unit-Permitting/HWMP
(916) 255-6444 | M-F 7:00AM -4:00PM
Scott.wiley@dtsc.ca.gov
Department of Toxic Substances Control
California Environmental Protection Agency

From: Environmental Review <environreview@ucdavis.edu>
Sent: Thursday, September 21, 2023 2:34 PM
Subject: UC Davis Sacramento Campus Central Utility Plant Expansion Project

Dear Agency, Organization or Individual,

We are writing to notify you that UC Davis has published the Draft Environmental Impact Report (EIR) for the Central Utility Plant Expansion Project. Please see the Notice of Availability attached. Project information and the Draft EIR can found on our website: https://environmentalplanning.ucdavis.edu/CUP-Expansion

The 45-day public review period for the Draft EIR begins on **Thursday, September 21, 2023 and ends on Monday, November 6, 2023 at 5:00 p.m.**

A public hearing will be on **October 4, 2023 beginning at 5:30 p.m. and ending at 6:30pm** via Zoom. Registration information can be found on the Draft EIR webpage. Please register in advance.

Please send your written comment letters, with contact information for your agency or yourself, by mail or email using the contact information below:

1

Heather Davis, AICP
Interim Director of Environmental Planning
Campus Planning and Environmental Stewardship
University of California
One Shields Avenue, Davis, CA 95616
Email: environreview@ucdavis.edu

Public and agency comments must be received no later than 5:00 p.m. on November 6, 2023.

Thank you,
The UC Davis Environmental Planning Team
https://environmentalplanning.ucdavis.edu/

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Response to Letter S1—Department of Toxic Substances Control, Scott Wiley, Associate Governmental Program Analyst CEQA Unit - Permitting/HWMP, September 22, 2023

Response to Comment S1-1

The commenter acknowledges receipt and requests that future correspondence be directed to CEQAReview@dtsc.ca.gov.

S-2

Alex Tremblay

From: Houlemard, Chris@DOT <Chris.Houlemard@dot.ca.gov> on behalf of D3 Local Development@DOT <D3.local.development@dot.ca.gov>
Sent: Friday, September 22, 2023 10:37 AM
To: Environmental Review
Cc: Arnold, Gary S@DOT
Subject: RE: UC Davis Sacramento Campus Central Utility Plant Expansion Project

Follow Up Flag: Follow up
Flag Status: Flagged

Good Morning Heather,

S2-1 Thank you for including California Department of Transportation in the review process for Draft Environmental Impact Report (EIR) for the Central Utility Plant Expansion Project. We wanted to reach out and let you know we have no comments at this time.

Please provide our office with copies of any further actions regarding this proposal. We would appreciate the opportunity to review and comment on any changes related to this development.

Should you have questions please contact me, Local Development Review, Equity and System Planning Coordinator, by phone (530) 565-3994 or via email at D3.local.development@dot.ca.gov.

Thank you!

Chris Houlemard, MPA
Associate Transportation Planner
Complete Streets Coordinator and Program Advisor
Division of Planning, Local Assistance, and Sustainability
California Department of Transportation, District 3
Text/Call: 530-565-3994
Email: chris.houlemard@dot.ca.gov

From: Environmental Review <environreview@ucdavis.edu>
Sent: Thursday, September 21, 2023 2:34 PM
Subject: UC Davis Sacramento Campus Central Utility Plant Expansion Project

EXTERNAL EMAIL. Links/attachments may not be safe.

Dear Agency, Organization or Individual,

We are writing to notify you that UC Davis has published the Draft Environmental Impact Report (EIR) for the Central Utility Plant Expansion Project. Please see the Notice of Availability attached. Project information and the Draft EIR can found on our website: https://environmentalplanning.ucdavis.edu/CUP-Expansion

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1

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Please send your written comment letters, with contact information for your agency or yourself, by mail or email using the contact information below:

Heather Davis, AICP
Interim Director of Environmental Planning
Campus Planning and Environmental Stewardship
University of California
One Shields Avenue, Davis, CA 95616
Email: environreview@ucdavis.edu

Public and agency comments must be received no later than 5:00 p.m. on November 6, 2023.

Thank you,
The UC Davis Environmental Planning Team
https://environmentalplanning.ucdavis.edu/

2

Response to Letter S2—California Department of Transportation, District 3, Chris Houlemard, Associate Transportation Planner, Planning, Local Assistance, and Sustainability, September 22, 2023

Response to Comment S2-1

The commenter states that they do not have any comments currently and requests copies of any further actions regarding the project. UC Davis thanks Caltrans for their participation in the CEQA process. No response is required.

Local/Regional

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SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

L1

November 6, 2023

Heather Davis
Interim Director of Environmental Planning
Campus Planning and Environmental Stewardship
University of California
One Shields Avenue, Davis, CA 95616
environreview@ucdavis.edu

Subject: Central Utility Plant Expansion Draft Environmental Impact Report State Clearinghouse # 2023050563

Dear Heather Davis:

L1-1 Thank you for providing the Sacramento Metropolitan Air Quality Management District (Sac Metro Air District) with the opportunity to review the Draft Environmental Impact Report (EIR) for the proposed Central Utility Plant (CUP) Expansion Project for the University of California (UC) at Davis Medical Center's Sacramento campus under the California Environmental Quality Act (CEQA). This project comprises demolishing a portion of the Facility Support Services Building to accommodate a new annex building, construction of a new 40 megavolt amperes electrical yard and new feed from the municipal East City Substation, and changes to associated parking structure access. The project will also address code-required upgrades and utility requirements for the hospital it serves, and provide new water and sewer storage tanks required for CUP operations. Please accept the following comments on air quality and climate considerations for project CEQA review.

Greenhouse Gas Emissions

L1-2 The Draft EIR claims that construction greenhouse gas (GHG) emissions are less than significant because the project would result in a net reduction of GHG emissions. It claims that operational GHG emissions are less than significant because the project would achieve no net additional increase in GHG emissions, is consistent with the UC Sustainable Practices Policy, and it "would set the Sacramento Campus on a path to carbon-free operations and support attainment of the University's and State's long-term 2045 GHG reduction targets." It notes that CEQA review for the UC Davis Medical Center Sacramento Campus Long Range Development Plan (LRDP) update, which includes the CUP Expansion, "concluded that the plan would result in a net reduction of GHG emissions, relative to existing conditions, with implementation of the Sustainable Practices Policy."

L1-3

- Sac Metro Air District recommends that the EIR explicitly include mitigation measure LRDP-GHG2 from the LRDP CEQA review, which incorporates the UC Sustainable Practices Policy, as a mitigation measure for the CUP Expansion. Because the Draft EIR claims that LRDP implementation of the UC Sustainable Practices Policy is a primary reason for the less-thansignificant finding, related mitigation from the LRDP CEQA review should be included as mitigation so that monitoring, reporting, timing, and verification for this mitigation is clearly ensured for the CUP Expansion.

L1-4

The Draft EIR quantifies both operational and construction emissions combined in Table 3.7-3. The source for the numbers in Table 3.7-3 is listed as "Appendix B," although the numbers in this table do not clearly correspond to air quality modeling outputs in Appendix B.

- For adequate public disclosure of project GHG impacts, Sac Metro Air District recommends including a separate quantification table each for construction and for operations, with a clear description of the source of the quantification numbers in each table.

L1-5

Criteria Pollutant Emissions

The Draft EIR finds that construction emissions pollutants regulated by the Clean Air Act ("criteria pollutants"), are less than significant with LRDP and project-specific mitigation. It includes all mitigation measures for construction emissions of criteria pollutants from the LRDP CEQA review (LRDP-AQ-2a through LRDP-AQ-2d), and an additional measure AQ-2 to "Reanalyze project emissions and offset construction-generated NOx [oxides of nitrogen] emissions in excess of [Sac Metro Air District's] threshold of significance." Measure AQ-2 seems to indicate that portions of the CUP construction can be assessed separately from concurrent LRDP construction projects when determining whether Sac Metro Air District thresholds are exceeded during the construction fee mitigation process identified in LRDPAQ-2d.

- Sac Metro Air District recommends amending measure AQ-2 to clarify that construction emissions must be assessed inclusive of all concurrently constructed LRDP projects to determine whether a project exceeds Sac Metro Air District NOx thresholds, when calculating construction mitigation fees pursuant to mitigation measure LRDP-AQ-2d from the LRDP CEQA review.

L1-6

The Draft EIR finds that operational emissions of criteria pollutants are less than significant because they are below Sac Metro Air District's thresholds of significance. The Draft EIR does not include operational mitigation measures for criteria pollutants from the LRDP CEQA review (except for one measure to reduce public exposure to operations generated toxic air contaminants, discussed in the section below). Operational emissions of criteria pollutants are quantified in Table 3.2-5, and the source for the table's numbers is listed as "Appendix B." There is no CalEEMod run for operational emissions in the Appendix B that we accessed. Operational emissions instead seem to be from outputs on pdf pages 133/621 – 137/621 of the Appendix B that we accessed. However, not all numbers in Table 3.2-5 clearly correspond to air quality modeling outputs on those pages, and they are not clearly the combination or variation of multiple numbers within those outputs.

L1-7

- For adequate public disclosure of project impacts, Sac Metro Air District recommends providing a clear description of the source of the quantification numbers Table 3.2-5, including which software was used to determine them.

Toxics and Sensitive Receptors

The Draft EIR analysis of public exposure to toxic air contaminants (TACs) indicates that LRDP CEQA review "concluded that, with implementation of Mitigation Measures LRDP-AQ-2a through LRDP-AQ-2d, receptor exposure to plan-related construction emissions, including localized PM [particulate matter], would be less than significant. However, receptor exposure to operational PM10 emissions would be significant and unavoidable, as would health risks from construction TACs." The Draft EIR incorporates measures LRDP-AQ-2a through LRDP-AQ-2d as construction mitigation measures.

L1-8

The Draft EIR quantifies public health risk from project construction in Table 3.2-7, which includes quantification for public health risk both before and after implementation of the mitigation measures. The Draft EIR concludes that with implementation of measures LRDP-AQ-2a through LRDP-AQ-2d, public health impacts from project construction would be less than significant because the risk calculations are below thresholds of significance.

The Draft EIR quantifies public health risk from project operations in Table 3.2-8, which only includes quantification for project impacts prior to mitigation and not impacts after implementation of mitigation. The DEIR concludes that with implementation of a mitigation measure from the LRDP CEQA review, public health impacts would be less than significant because the risk calculations are below thresholds of significance.

The Draft EIR only includes one of the mitigation measures from the LRDP CEQA review to reduce public TAC exposure from project operations. This measure is LRDP-AQ-3b, which essentially reduces emissions of toxic air contaminants through cleaner technology. However, it does not include the entirety of LRDP3b. Neither does it include measure LRDP-AQ-3a from the LRDP CEQA review, which has actions to reduce public exposure by providing assistance to existing off-campus renters and homeowners to improve their indoor air quality through air filters and portable home air cleaning devices as necessary.

L1-9

Sensitive public receptors, such as the Language Academy school and residential units slated for the LRDP area, are subject to significant public health risk from project operations prior to implementation of mitigation measures.

- Therefore, Sac Metro Air District recommends that the EIR explicitly include all mitigation measures from LRDP CEQA review, for public TAC exposure from project operations, as mitigation measures for the CUP Expansion. Specifically, we recommend inclusion of the entirety of LRDP-AQ-3b, and inclusion of the entirety of LRDP-AQ-3a. We further recommend that construction of this project does not move forward until implementation of the air filter program pursuant to measure LRDP-AQ-3a.

L1-10

L1-11

Finally, for information on the process for permitting CUP sources such as the new boilers in the project description, please visit the Sac Metro Air District permitting webpage at https://www.airquality.org/Businesses/Permits-Registration-Programs. You may also contact Steve Mosunic, Program Supervisor with the Sac Metro Air District Permitting Section, at 279-207-1137 or smosunic@airquality.org.

Demolition

L1-12

Due to the health risks posed by public exposure to asbestos, remodeling and demolition of existing buildings is subject to Rule 902, to limit asbestos exposure during these activities. Sac Metro Air District

L1-12 cont. staff is available to review notifications and answer asbestos related questions, either by emailing asbestos@airquality.org, or calling 279-207-1122.

L1-13

Construction Rules

All projects are subject to Sac Metro Air District rules and regulations in effect at the time of construction. Please visit our website to find a list of the most common rules that apply at the construction phase of projects. As a reminder, all projects undergoing CEQA review must implement Sac Metro Air District Basic Construction Emission Control Practices, available on our website, in order to use the non-zero particulate matter CEQA thresholds of significance.

Conclusion

Thank you for your attention to our comments. If you have questions about them, please contact me at mwright@airquality.org or 279-207-1157.

Sincerely,

Molly Wright

Molly Wright, AICP
Air Quality Planner / Analyst

cc: Paul Philley, AICP, CEQA and Land Use Program Supervisor
Steve Mosunic, Permitting Program Supervisor
Raef Porter, Transportation and Climate Change Division Program Manager
Jaime Lemus, Transportation and Climate Change Division Manager

Response to Letter L1—SMAQMD

Response to Comment L1-1

This comment provides general background information on the Sacramento Metropolitan Air Quality Management District (SMAQMD) and summarizes the commenter's understanding of the proposed project. This information is not a comment on the contents of the Draft EIR or its technical adequacy. No response is required.

Response to Comment L1-2

This comment quotes content from Chapter 3.7, *Greenhouse Gas Emissions*, of the Draft EIR. This information is not a comment on the contents of the EIR or technical adequacy of the GHG analysis. No response is required.

Response to Comment L1-3

This comment asserts that because the project GHG analysis relies on compliance with the University of California Policy on Sustainable Practices (Sustainable Practices Policy), Mitigation Measure LRDP-GHG-2 from the 2020 LRDP Update SEIR must be required as a mitigation measure for the proposed project.

Chapter 3.7, *Greenhouse Gas Emissions*, of the Draft EIR analyzes effects of GHG emissions that would result from implementation of the proposed project. As discussed in Section 3.7.1, *Existing Conditions*, the Board of Regents of the University last approved revision to the Sustainable Practices Policy in 2023. As a component of the UC Davis Sacramento Health Campus, the proposed project is subject to the Sustainable Practices Policy and compliance requirements have been incorporated into the project design and operational criteria. Because the Sustainable Practices Policy is a component of the project design, it is considered prior to making an impact determination and assessing the need for mitigation.

The Sustainable Practices Policy will reduce the severity of GHG emissions generated by the project, and compliance with the policy is properly accounted for in determining the net impact of the project on GHG emissions in Chapter 3.7. Through this analysis, the Draft EIR found that Impacts GHG-1 and GHG-2 would be less than significant. Accordingly, mitigation is not required (CEQA Guidelines § 15126.4(a)(3)).

Response to Comment L1-4

This comment requests separate quantification tables for construction and operational GHG emissions be added to the EIR.

Construction and operational GHG emission are separately and clearly presented in Appendix B and Table 3.7-3 in Chapter 3.7. As stated in the footnotes for Table 3.7-3, the emissions results represent the summation of sources shown in Appendix B. For example, construction emissions include total construction emissions (inclusive of sequestration loss) for the make-ready projects and CUP expansion (excluding the SMUD Component) amortized over 30 years. As discussed in Section 3.7.2, *Environmental Impacts*, construction emissions were modeled using CalEEMod. The CalEEMod output is presented in Appendix B and annual construction emissions were shown on page 9 of the

appendix to the Draft EIR. Emissions from sequestration loss were modeled using the i-Tree Planting Calculator, and the model output was provided as page 132 of Appendix B to the Draft EIR.

Nevertheless, additional section labels and summary tables have been added to Appendix B of the Final EIR in response to this comment. Specifically:

- Section labels for "Construction Emissions" and "Operational Emissions" have been added as pages 1 and 135, respectively.
- A summary table for construction GHG emissions has been added to page 134. This table shows how annual emissions from CalEEMod were combined with the i-Tree results for sequestration loss and amortized over 30 years to obtain the total construction result shown in Table 3.7-3.
- A summary table for operational criteria pollutant emissions has been added to page 153. This table shows how individual source contributions were totaled to ultimately calculate the net change in emissions relative to existing conditions, which is shown in Table 3.2-5 in Chapter 3.2, *Air Quality*. Page references within Appendix B for individual source calculations are given.
- A summary table for operational GHG emissions has been added to page 154. This table shows how individual source contributions were totaled to ultimately calculate the net change in emissions relative to existing conditions, which is shown in Table 3.7-3 in Chapter 3.7. Page references within Appendix B for individual source calculations are given.

Response to Comment L1-5

This comment summarizes the construction conclusion of Impact AQ-2 from the Draft EIR and interprets the intent of Mitigation Measure AQ-2. The commenter requests Mitigation Measure AQ-2 be amended to clarify that for the purposes of calculating required nitrogen oxide (NO_X) offsets, project construction emissions must be assessed concurrently with construction emissions from buildout of the LRDP.

As discussed in Section 3.2.2, *Environmental Impacts*, construction air quality impacts from construction of the SMUD Component were analyzed using conservative and proxy emissions for the Cordova Park Underground Cable Replacement Project. The addition of these proxy emissions to those that would be generated by construction of the make-ready projects and the CUP Expansion Project would result in an exceedance of SMAQMD's NO_X threshold in 2025. As noted in Impact AQ-2, this result is conservative for the whole project because Mitigation Measure LRDP-AQ-2b would reduce NO_X emissions for the SMUD Component, but the magnitude cannot currently be quantified. In addition, construction of the SMUD Component may not occur in 2025; however, the Draft EIR conservatively analyzed construction of the SMUD Component as occurring any time between 2025 and 2029.

The Draft EIR recognizes the conservative estimation approach for the whole project and requires Mitigation Measure AQ-2 to analyze emission contributions of the SMUD Component more comprehensively, should construction occur of the SMUD Component occur in 2025. Should the results of the analysis indicate an exceedance of SMAQMD's NOx threshold, the measure requires UC Davis to pay an existing SMAQMD mitigation fee to reduce emissions below SMAQMD's threshold.

The revised analysis must consider emission contributions from all project construction activities including in 2025, including the SMUD Component, make-ready projects, and the CUP Expansion. Mitigation Measure AQ-2 has been revised to clarify that all concurrent project construction emissions in 2025 must be included in the threshold comparison.

Impact AQ-2 evaluates the potential for construction of the project to substantially worsen regional air quality beyond the impacts disclosed in the 2020 LRDP Update SEIR. Construction emissions generated during buildout of the LRDP are addressed by Mitigation Measure LRDP-2d, as disclosed in the 2020 LRDP Update SEIR. As the CEQA lead agency for the 2020 LRDP Update SEIR, UC Davis is responsible for implementing and enforcing Mitigation Measure LRDP-AQ-2d as outlined in the MMRP for the Final 2020 LRDP Update SEIR. The contribution of project construction emissions to the regional air quality impact disclosed in the 2020 LRDP Update SEIR is addressed by Mitigation Measure AQ-2. This measure requires additional analysis of project emissions, as described above, and the potential procurement of offsets in 2025, which goes beyond the requirements of Mitigation Measure LRDP-2d to address the project's contribution to the cumulative impact.

Response to Comment L1-6

This comment summarizes the operational conclusion of Impact AQ-2 from the Draft EIR and notes that the CalEEMod output for operational area source emissions is missing from Appendix B. The commenter is correct and the CalEEMod outputs for area sources was inadvertently omitted from the draft appendix. The model outputs have been added as pages 136 through 141 and 145 through 150 of Appendix B to the Final EIR.

Response to Comment L1-7

This comment asserts that values provided in Table 3.2-5 do not match the model outputs presented in Appendix B and requests additional information and sourcing be provided for the results presented in Table 3.2-5.

The comment assertion that values presented in Table 3.2-5 do not correspond to the modeling outputs is not supported by information presented on Pages 133 through 137 of Appendix B of the Draft EIR. The emissions results shown in Table 3.2-5 represent the summation of individual source contributions (e.g., boilers) shown in Appendix B, as explained in Section 3.2.2, *Environmental Impacts*. This section of the EIR identifies the individual sources considered in the air quality analysis and clearly describes the quantification methods. Model outputs and detailed calculation tables showing the emission contributions of individual sources are presented in Appendix B.

Nevertheless, additional section labels and summary tables have been added to Appendix B of the Final EIR in response to this comment. Please refer to response to comment L1-4.

Response to Comment L1-8

This comment summarizes selected content from Impact AQ-3. This information is not a comment on the contents of the EIR or technical adequacy of the air quality analysis. No response is required.

Response to Comment L1-9

This comment asserts that the Draft EIR does not include the entirety of Mitigation Measure LRDP-AQ-3b and should thus be revised. The comment also requests Mitigation Measure LRDP-AQ-3a from the 2020 LRDP Update SEIR be identified as required mitigation for the project.

The commenter is correct that a portion of Mitigation Measure LRDP-AQ-3b was not included in its entirety. This has been revised in the Final EIR. As noted in the analysis under Impact AQ-3, the proposed project would fully comply with all requirements of Mitigation Measure LRDP-AQ-3b, including use of renewable diesel and implementation of best available control technology (BACT) for generators at the CUP. Expected risk reductions from the use of renewable diesel and BACT are assessed on page 3.2-20 and demonstrate that with implementation of Mitigation Measure LRDP-AQ-3b, operational health risks to impacted receptors would be less than significant. Page 621 of Appendix B to the Draft EIR presents the mitigated risk calculations. The Mitigation Monitoring and Reporting Program (MMRP) for the Final EIR will include additional details on how Mitigation Measure LRDP-AQ-3b will be implemented.

Mitigation Measure LRDP-AQ-3a outlines best management practices to reduce receptor exposure to construction generated toxic air contaminants from buildout of the LRDP. Table 3.2-7 presents the results of the construction health risk assessment for the proposed project and demonstrates that with implementation of Mitigation Measure LRDP-AQ-2b, construction health risks to impacted receptors would be less than significant. Because health risks are adequately mitigated by Mitigation Measure LRDP-AQ-2b, no further mitigation is required.

Response to Comment L1-10

This comment requests the project does not move forward prior to implementation of the air filter program required by Mitigation Measure LRDP-AQ-3a from the 2020 LRDP Update SEIR.

Mitigation Measure LRDP-AQ-3a requires that UC Davis coordinate with existing off-campus renters and homeowners impacted by construction of the LRDP and offer financial assistance for high efficiency air filters. Please see response to comment L1-9. The Draft EIR found that health risks from construction of the proposed project would be less-than-significant with implementation of Mitigation Measure LRDP-AQ-2b, and thus additional mitigation, including Mitigation Measure LRDP-AQ-3a, is not required to address the project-specific impact.

As the CEQA lead agency for the 2020 LRDP Update SEIR, UC Davis is responsible for implementing and enforcing Mitigation Measure LRDP-AQ-2b as outlined in the MMRP for the Final 2020 LRDP Update SEIR. UC Davis has engaged a nonprofit organization to support implementation of Mitigation Measure LRDP-AQ-2b, and is currently working with impacted renters and homeowners to replace individual filters.

Response to Comment L1-11

This comment provides a weblink to SMAQMD's permitting webpage and staff contact information. The proposed project will comply with all applicable local air quality rules, regulations, and permit obligations in effect at the time of construction.

Response to Comment L1-12

This comment states that demolition activities during construction of the project will be subject to SMAQMD Rule 902 and provides staff contact information. The proposed project will comply with all applicable local air quality rules, regulations, and permit obligations in effect at the time of construction. The commenter is also directed to Impact AQ-3 in Chapter 3.2, *Air Quality*, which specifically discusses project compliance with Rule 902.

Response to Comment L1-13

This comment provides a weblink to common SMAQMD rules that apply to construction activities. The proposed project will comply with all applicable local air quality rules, regulations, and permit obligations in effect at the time of construction.

Response to Comment L1-14

This comment provides a weblink to SMAQMD's construction best management practices (BMPs) and indicates that all projects undergoing CEQA review and relying on the districts non-zero particulate matter (PM) thresholds implement the BMPs.

Application of SMAQMD's BMPs as a condition for use of SMAQMD's non-zero PM thresholds is recognized in Table 3.2-2 and under Impact AQ-2 in Chapter 3.2, *Air Quality*. Implementation of Mitigation Measure LRDP-AQ-2a is required to reduce fugitive dust emissions generated by construction of the project. The measure identifies SMAQMD's basic and enhanced construction emission control practices for fugitive dust.

L2

Powering forward. Together.

SMUD®

Sent Via E-Mail

November 3, 2023

Heather Davis, AICP
Interim Director of Environmental Planning
Campus Planning and Environmental Stewardship
University of California
One Shields Avenue, Davis, CA 95616
environreview@ucdavis.edu

Subject: **Central Utility Plant Expansion Project / DEIR / 2023050563**

Dear Ms. Davis:

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the Draft Environmental Impact Report (DEIR) for the Central Utility Plant Expansion Project (Project, SCH 2023050563).

L2-1 As a Responsible Agency, SMUD's review of projects include supporting the goals of our 2030 Zero Carbon Plan. This plan is a flexible road map to eliminate greenhouse gas emissions from our electricity production by 2030, which is the most ambitious goal of any large utility in the United States, while maintaining reliable and affordable service. This ambitious goal puts the Sacramento region on the map as an example to follow and a region where innovative, climate-friendly businesses want to be. As a community-owned, not-for-profit utility, our customers and community are at the heart of all we do. By pursuing zero carbon, we're helping create a cleaner and healthier region for all.

L2-2 SMUD staff has worked with the Project team to acknowledge impacts related to the following:

- Overhead and or underground transmission and distribution line easements. The following links on smud.org provide information regarding transmission encroachment:
  - https://www.smud.org/en/Business-Solutions-and-Rebates/Design-and-Construction-Services
  - https://www.smud.org/en/Corporate/Do-Business-with-SMUD/Land-Use/Transmission-Right-of-Way
- Utility line routing
- Electrical load needs/requirements

SMUD HQ | 6201 S Street | P.O. Box 15830 | Sacramento, CA 95852-1830 | 1.888.742.7683 | smud.org

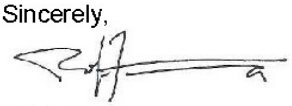
- The need to relocate and or remove any SMUD infrastructure that may be affected in or around the project area

L2-2 cont.

SMUD staff appreciates being involved with discussing the above areas of interest as well as discussing any other potential issues. We aim to continue our partnership with the Project team in the efficient and sustainable delivery of the proposed Project. Please ensure that the information included in this response is conveyed to the Project planners and the appropriate Project proponents.

Environmental leadership is a core value of SMUD, and we look forward to collaborating with you on this Project. If you have any questions regarding this letter, please do not hesitate to contact me at 916.732.6676, or by email at rob.ferrera@smud.org.

Sincerely,



Rob Ferrera
Environmental Services Specialist
Sacramento Municipal Utility District
6201 S Street
Sacramento, CA 95817

cc: Entitlements

Response to Letter L2—SMUD

Response to Comment L2-1

SMUD describes their role as a Responsible Agency for the project and states the mutual goal regarding eliminating greenhouse gas emissions in the near future. UC Davis appreciates collaborating with SMUD on this project.

Response to Comment L2-2

SMUD describes their work with the project team regarding the SMUD component of the project. UC Davis appreciates collaborating with SMUD on this project and looks forward to continuing this partnership with SMUD.

Organizations

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O-1

From: Rick Codina
To: Environmental Review
Subject: Sacramento Med Center CUP Expansion EIR
Date: Thursday, September 28, 2023 6:09:22 PM
Attachments: BA71BA553175482790DB8BD3808DE7F7.png
7B33A7E4C46742318630D51257FAB7E1.png

Heather Davis, AICP
Interim Director of Environmental Planning
Campus Planning and Environmental Stewardship
University of California, One Shields Avenue
Davis, CA 95616

Ms Davis,

O1-1

Thank you for the opportunity to comment on the draft EIR for the UC Medical Center's proposed expansion of the Central Utility Plant (CUP). I am with 350 Sacramento's Electrification Team, a local group concerned with reducing climate impacts in our community.

Let me first commend UC Davis for its plan to phase down the gas cogeneration power plant on the Med Center campus. The unit has proven to be a valuable asset to the campus over the years, providing both power and steam. However, like SMUD's own cogeneration units, it's GHG emissions -- originally unconsidered -- can now be seen as part of the existential threat that climate change poses to our planet. In fact, at approximately 59,000 metric tons annually, the Med Center ranks second only behind SMUD as the largest county-wide GHG emitter in the latest Air Resources Board reporting.

Emitter CO2e from Non-Biogenic Sources

2021	Annual Summary of GHG Mandatory Reporting Non-Confidential Data for Calendar Year 2021		
Rank	ARB ID	Facility Name	Metric Tons CO2e
1	100365	Sacramento Municipal Utility District (SMUD) , Cosumnes Power Plant	1,472,926
	100252	Sacramento Municipal Utility District (SMUD) , Procter & Gamble Power Plant	326,992
	100125	Sacramento Municipal Utility District (SMUD) , Campbell Power Plant	281,889
	100130	Sacramento Municipal Utility District (SMUD) , Carson Power Plant	118,119
		Subtotal	***2,199,926***
2	***104068***	***UC Davis Medical Center***	***58,788***
3	101512	Air Products Manufacturing Corporation, Sacramento	47,444
4	104580	Hood Dairy	21,550
5	104423	Procter & Gamble Manufacturing Co. - Sacramento Plant	20,479
6	104409	State of California Central Utility Plant - General Services	14,494
7	104632	Sacramento Rendering Company	13,917
8	101100	Kiefer Landfill, Department of Waste Management and Recycling	583

As indicated in the EIR's Table 3.7-3, the CUP will be converting to SMUD power in the coming years, reducing its impact to 19,350 metric tons by 2030. It is this laudable reduction that warrants the

O1-1 cont.

EIR's designation for GHG impact as Less Than Significant for the CUP.

Table 3.7-3. Estimated GHG Emissions for Implementation of the Project

Source	Metric Tons CO_2e per Year
Existing (2019)	
Central Utility Plant [a, b]	59,218
2030 Project	
Central Utility Plant [a]	19,347
Central Utility Plant Annex [c]	5,746
Construction [d]	165
Total 2030 Project	25,258
Net Emissions from Existing	**-33,960**

Source: Appendix [B].

O1-2

However, we cannot lose sight of the addition to the CUP Annex of four very large gas boilers, each 10 decatherms in heating capacity for wintertime domestic hot water circulation. Together, this added gas equipment will produce an additional 5,750 metric tons annually of equivalent greenhouse gas. The EIR subsumes this new and major GHG source into the larger savings from reduced operation of the Med Center's gas turbines. We believe the gas boilers should be addressed directly for several reasons, summarized below.

O1-3

Adding Gas Equipment Now Violates the Spirit of Climate Policies. Overall, the LTS designation technically adheres to the UC Sustainability Policy guidelines, recently updated this past July, which call for the totality of Scope 1 stationary sources including gas boilers and generators to reduce total GHG by 90% by 2045 with milestones set for earlier years. But this misses the intent of all current and emerging policies for new construction and major renovation which call for electrification of equipment including the State Scoping Plan, local electrification Reach Codes and Title 24.

O1-4

The EIR Fails to Document Alternative Equipment. Commercial and industrial heat pump technology and equipment availability has made great strides in recent years as the California Building Decarbonization group and others have documented (see, for example: commercial building retrofits). It is not clear if suitable off-the-shelf equipment currently can be adapted to the capacity requirements for this project. But, it is also not clear that EIR staff thoroughly explored any heat pump options, including customized installations.

O1-5

The Gas Boilers Could Become Costly Stranded Assets. By installing gas equipment at this stage, UC will be generating GHG emissions for years to come. But it also runs the risk of having to replace the boilers before their lifetime ends, to comply with its Sustainability guidelines. Section 2.1.3 in the draft EIR admits to this strategy to go all-electric after 2035, only ten years into the lifetime of the boilers:

O1-5 cont.

2.1.3 Future Phases – Not a Part of the Project Evaluated in this EIR

Future phases of CUP modernization have independent utility and are not reliant on other projects or improvements. Design and construction plans for future phases have not been prepared. An environmental assessment for those components will be prepared at a future date.

Convert the CUP to Mostly Electric Energy

These improvements would support campus growth to 2035 and take further strides toward onsite reductions in natural gas combustion and GHG emissions. New chillers, cold-water pumps, and thermal energy storage tanks and pumps would be installed; a second redundant SMUD feed would be constructed as well.

Convert the CUP to All-Electric Energy

Following the above improvements, the final step in CUP modernization would involve adding air-source heat pumps and electric steam boilers in order to complete the CUP's conversion to all-electric energy and fulfill the commitment to onsite reductions in natural gas combustion and GHG emissions.

O1-6

The Project Misses the Opportunity for Incentive Funding. This is a golden moment for electrification projects with funding becoming available from federal and state sources. A project of this scale would be viewed as highly impactful, and any incentive funds could offset potential added costs for the switch to heat pump technology.

Again, thanks for your consideration,

Rick Codina 350 Sacramento Electrification Team
916-531-2004
Coyote1@surewest.net

Sent from Mail for Windows

Response to Letter O1— 350 Sacramento Electrification Team, Rick Codina September 28, 2023

Response to Comment O1-1

The commenter commends UC Davis for its plan to phase down the gas cogeneration power plant on the Sacramento Campus and cites information on greenhouse gas emissions from the EIR. No response is required.

Response to Comment O1-2

The commenter expresses concern regarding the use of four new gas boilers, which will introduce a source of greenhouse gases. In terms of the analysis, the scope of the project includes multiple components, including make-ready work, CUP expansion, and other improvements. The CUP Annex and new boilers are evaluated alongside other project components, including the CUP expansion. By including all of the elements together, as required by CEQA Guidelines Section 15003, which requires that the lead agency consider "the whole of an action" and comparing to existing conditions as required by CEQA Guidelines Section 15125 the EIR reaches a less than significant finding regarding greenhouse gas impacts of the project. The CUP modifications proposed by the project offset the emission increase from the CUP Annex, when the project as a whole is compared to existing conditions. As stated in Section 3.7 of the Draft EIR, implementation of the project would reduce GHG emissions by more than 33,000 metric tons of CO_2e relative to existing conditions.

Response to Comment O1-3

The commenter acknowledges that the project adheres to the UC Sustainable Practices Policy, but asserts that it misses the intent of emerging policies that call for the use of electric equipment. The UC Sustainable Practices Policy, which was updated in July 2023, sets the goal of net zero greenhouse gas (GHG) emissions by 2025 and a path to an 80 percent reduction in onsite natural gas combustion (University of California 2023). As stated in Chapter 2 of the Draft EIR, the proposed project would position UC Davis Health to decarbonize CUP operations over the long term by initiating the first major phase of conversion of the CUP from producing energy to utilizing electricity provided by the Sacramento Municipal Utility District (SMUD). Pursuant to the UC Sustainable Practices Policy, by 2025, at least 20 percent of the natural gas historically combusted onsite will be biomethane; at least 40 percent of natural gas will be biomethane by 2030. This will be achieved by completing future phases of CUP modernization.

Response to Comment O1-4

The commenter asserts that the project does not evaluate alternatives to gas boilers. Currently, in order to provide heating hot water at the scale needed by the campus, gas-fired boilers that can also utilize diesel as a redundant fuel source are required. The California Department of Health care Access and Information (HCAI), formerly the Office of Statewide Health Planning and Development (OSHPD), requires maintaining dual fuel sources for heating equipment (Health and Safety Code Section 326.00). This is to ensure essential electrical power is provided to health care facilities in the event of a power outage. There is currently no HCAI-approved unit, including heat pump technology, that uses electricity to produce heating hot water at the scale and efficiency the campus requires, and thus customized installations are not possible at this time.

Response to Comment O1-5

The commenter is correct that the gas boilers would generate greenhouse gas emissions. However, as stated in Section 3.7 of the Draft EIR, implementation of the project would reduce GHG emissions by more than 33,000 metric tons of CO_2e relative to existing conditions. The commenter is also correct that the campus is required to be all-electric by the year 2035. This project would initiate the first major phase of conversion of the CUP from producing energy to utilizing electricity provided by the Sacramento Municipal Utility District (SMUD). Future phases of CUP modernization would include converting the CUP to all-electric energy. For more information about the relationship of this project to future phases, please refer to Section 2.1 of the DEIR, especially the last three paragraphs on page 2-1 as well as Section 2.1.3.

Response to Comment O1-6

The commenter notes that state and federal funding sources could be applied to this project. As stated above, there is currently no HCAI-approved unit, including heat pump technology, that uses electricity to produce heating hot water at the scale and efficiency the campus requires to ensure safe and reliable health care facilities.

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Individuals

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I1

Alex Tremblay

From: jessicamarin@gmail.com
Sent: Friday, September 22, 2023 7:07 AM
To: Environmental Review
Subject: UC Davis Sacramento Campus Central Utility Plant Expansion Project

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Heather,

I1-1 I am contacting you regarding my concerns for Route 2 proposed for this project. 2nd Ave is a quiet residential street, which in addition is being environmentally impacted by UCD's decision to build a massive 5 story parking garage will now potentially be impacted by this project. Can you please consider taking our quiet street off the plan as I think we will be dealing with enough from the parking garage.

Thank you,
Jessica Marin
5040 2nd Ave
916-468-9017

Sent from my iPhone

1

Response to Letter I1— Jessica Marin September 22, 2023

Response to Comment I1-1

The commenter expresses concern regarding Route 2 of the SMUD feeder, which runs along 2nd Avenue, and the potential for noise in addition to ongoing construction. Both route options are within 20 feet of nearby noise-sensitive land uses (i.e., single-family homes) and both are being evaluated at this time. The final route will ultimately be determined by SMUD based on environmental and logistical constraints (including noise).

Construction noise related to SMUD improvements are discussed in detail on pages 2.11-16 and 17 of the Draft EIR.

Construction would move linearly along the alignment and would not take place at one location for the entire duration of construction. Construction noise from this work would therefore be relatively short term because it would take place for only a matter of days at a given nearby sensitive use. As construction activities move along the alignment and farther from a given receiver, noise levels at that receiver would be reduced. In addition, Mitigation Measure LRDP-NOI-1 would reduce the exposure to construction noise through noise reducing construction practices. However, as presented in the Draft EIR, these noise impacts cannot be reduced to a less than significant level, and therefore were found to be significant and unavoidable in the Draft EIR.

The commenter's request that Route 2 not be considered in order to reduce noise on 2nd Avenue will be transmitted to SMUD for their consideration.

Public Hearing

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PH

UCD Public Hearing

Moderated by Heather Davis,
Emily Hyland,
and Alex Tremblay
Wednesday, October 4, 2023
5:30 p.m.

Remote Proceeding
San Francisco, CA 94104

Officiated by: Erik Thompson
JOB NO.: 6136433

Page 1

A P P E A R A N C E S

List of Attendees:

Heather Davis, UCD Interim Director of Environmental Planning (by videoconference)

Emily Hyland, UCD Environmental Planner (by videoconference)

Alex Tremblay, UCD Assistant Environmental Planner (by videoconference)

Luke Wilson, Member of the Public (by videoconference)

C O N T E N T S

P R O C E E D I N G S

MS. DAVIS: Good evening, and welcome to this public hearing. This public hearing is taking place electronically using the Zoom Webinar platform. Please note that this public hearing is being recorded.

Welcome to this UC Davis hosted event, and thank you for your interest in the UC Davis Central Utility Plant expansion project draft Environmental Impact Report. I would like to thank you for attending tonight and to open this public hearing, starting the official record that will be kept by the court reporter.

My name is Heather Davis; I am the interim director of environmental planning for UC Davis and I will be conducting the public hearing this evening. My co-hosts, my UC Davis colleagues Alex Tremblay and Emily Hyland, will be assisting me this evening.

Before we begin, I would like to inform everyone in attendance that this webinar is being recorded. In addition, a court reporter is present and will be preparing a transcript of the proceedings. This will include any verbal comments made this evening.

Page 4

I will now spend a few minutes explaining the purpose of this public hearing and how it will be conducted.

This is the official public hearing on the UC Davis Environmental Impact Report for the proposed Central Utility Plant expansion project. During this hearing, I will refer to the Environmental Impact Report as the EIR and the Central Utility Plant as the CUP.

This hearing is being conducted pursuant to the University of California's procedures for implementation of the California Environmental Quality Act, or CEQA.

The purpose of this hearing is to provide the public with an opportunity to present verbal testimony for official record concerning the content and completeness of the draft EIR for the proposed CUP expansion project. The draft EIR addresses the project and the cumulative impacts associated with the proposed CUP expansion project. The draft EIR is tiered from the UC Davis Sacramento campus 2020 Long Range Development Plan EIR.

Next slide.

The slide on the screen shows the environmental review process to date. On May 23,

2023, we released our notice of preparation. From May 23rd to June 22nd, we held our scoping period. And on September 21st UC Davis released the draft EIR for public review and comment. The public review period started on September 1st and will end on November 6th of this year at 5 p.m. Today is October 4th and we are hosting our virtual public hearing. And again, November 6th will be the end of our public review period. And it is anticipated that in January of 2024 we are planning to have a final EIR ready for certification and project decision at the UC Board of Regents.

Next slide please.

Those of you who do not wish to speak tonight or who wish to add additional comment may submit your comments in writing. Written comments must be received by 5 p.m. on November 6th in order to be officially considered as part of the record. All written comments should be sent to Heather Davis, interim director of environmental planning for UC Davis using the email address environreview@ucdavis.edu, which you can see on the screen. For the physical mailing address, Heather Davis, Campus Planning and Environmental Stewardship, University of California Davis, One Shields Avenue,

436 Mrak Hall, Davis, California 95616.

As shown on the Zoom Webinar screen, the draft EIR and related project documents are available at the UC Davis website, environmentalplanning.ucdavis.edu/CUP-Expansion.

Next slide, please.

The Sacramento campus Central Utility Plant expansion project is centrally located on the UC Davis Sacramento campus along 2nd Avenue, bounded by 49th Street to the southeast and Aggie Square development to the west, currently under construction.

The CUP provides the campus's normal power, emergency power, and chilled and hot water for heating and cooling, along with process steam to most campus buildings using natural gas. In order to continue to serve the Sacramento campus, achieve the university's sustainability goals, the CUP requires upgrades and expansion, including a new annex building to improve the CUP operating efficiently and an underground utility distribution system.

Next slide.

This slide's diagram is included in the draft EIR as figure 2-3. In the diagram you can see 2nd Avenue, 49th Street --

Alex, do you mind pointing at that with

your cursor? I forgot I couldn't. Thank you.

48th Street to the north. The campus boundary is in white. And the black line is the project site boundary. The existing CUP is on the east side within the project site boundary. The existing office building, called the FSSB, is in the center. Parking Structure 6 is currently under construction and is just to the south there, which will be supporting the future Aggie Square project to the east, which is not seen on this slide.

Next slide.

This is a zoomed-in version of that diagram just to try to highlight the project elements just a little bit more. The major components of the CUP expansion project include the make-ready projects, which are upgrades to the campus site utility distribution lines, a Parking Structure 6 roadway realignment and intersection improvement, annex building site preparation, and a small portion of the FSSB building to allow for the new Parking Structure 6 access to 2nd.

The second major component of the project is the CUP expansion and operations. This includes the CUP annex building construction, existing CUP interior renovations, and electrical service yard

Page 8

improvements.

And the third major component of the project is the SMUD East City substation feeder line.

Next slide, please.

The slide in front of you highlights the new SMUD underground transmission line rail options for the SMUD component. There are two options on the screen. UC Davis Health plans to eliminate dependence on gas and steam turbines for primary energy production and transition to electrical power from SMUD. To accomplish this, the existing normal power service would need to be expanded. The project component would include construction of new underground transmission lines between SMUD's East City substation and the CUP site.

Next slide.

This wraps up the project overview. Details about the project can be found in the draft EIR.

For this public hearing, I have a few recommended procedural items to mention. For comments, please raise your digital hand by clicking on the hand icon labeled "raise hand." If you've joined by your phone, dial star nine to raise your virtual hand. We will request you unmute yourself

when it is your turn to speak. Commenters will be called in the order of hands raised. Do not lower your hand unless -- you will lose your place in the queue.

All comments made during this public hearing will be recorded by the court reporter and will become part of the formal record. The record of this hearing will be used by the University of California to review when considering the final Environmental Impact Report and approval of the project. This Zoom Webinar is also being recorded as a backup copy to the transcript that will be produced by the court reporter. All comments this evening, as well as written comments received during the public comment period, will become part of the final Environmental Impact Report for this project. The university will evaluate comments received on environmental issues and will include written responses to those comments in the final EIR.

All right, next slide.

Because each comment on environmental issues will be formally included in the record and responded to, it need not be repeated. I encourage speakers who agree with previous speakers to simply confirm their agreement in order to reduce repetition.

Everyone who wishes to speak this evening will be allowed to speak.

The purpose of this hearing is to receive testimony and evidence for the University of California, therefore I will not be responding to testimony tonight, but formal responses to written or oral comments on environmental issues will be included in the final EIR. However, I will gladly answer all procedural questions about the hearing this evening.

Before we begin public comment, I would like to ask if there are any procedural questions about the nature of this public hearing. If so, would you please use the Q&A function within Zoom to ask those questions?

All right. With no procedural questions that I see, I will now provide an opportunity for public comment on the UC Davis CUP expansion draft EIR.

In terms of process, in order to receive public comments individually and clearly, we will call on commenters using the raise your hand function so that your testimony can be accurately recorded for the court reporter and so that we can respond adequately in the final EIR.

I ask you to speak slowly and clearly.

Page 11

In addition, please begin comments with your name and spelling of your name for the court reporter.

The first person to request an opportunity to speak is Luke Wilson.

Hi, Luke. Please introduce yourself and begin your comments.

MR. WILSON: Okay. Thank you. Yes. My name is Luke Wilson. It's spelled L-U-K-E and then W-I-L-S-O-N. I'm a member of the 350 Sacramento Electrification Team. We're a local group working for a safe climate. I am also a member of Third Act Sacramento, a group of Elders working for a safe climate and a vibrant democracy. Thanks for giving us a chance to comment on the draft EIR for the UC Davis med center Central Utility Plant project.

PH-1

First, let me say that we are very supportive of your plan to phase down the existing gas cogeneration power plant. When it was constructed, greenhouse gas emissions were probably not considered. But now we know that gas facilities like these contribute to the existential threat of climate change. Switching to SMUD power will substantially reduce med center greenhouse gas emissions by approximately 30,000 metric tons per year. This reduction is the reason that greenhouse gas emissions

impact is rated in the draft EIR as "less than significant" for the project. But there's an opportunity to reduce by another 5,750 metric tons per year.

Part of the central utility project is construction of an annex that will house four large capacity gas boilers which will have greenhouse gas emissions of 5,750 metric tons annually. The emissions impact of these boilers is lost in the overall reduction of emissions listed for the project, but the boilers should be addressed directly for the following reasons.

PH-1 cont.

One, the "less than significant" finding, though technically correct, misses the intent of all current and emerging policies, like the State of California Scoping Plan, which call for use of electric equipment for new and major renovation construction projects.

Two, the draft EIR does not disclose if heat pump options, including customized installations, have been considered as an alternative to the gas fire boilers.

PH-2

Three, installing gas equipment like these boilers when the university sustainability guidelines call for all electric after 2035 could

PH-3

Page 13

Veritext Legal Solutions
Calendar-CA@veritext.com 866-299-5127

PH-3 cont.

PH-4

mandate replacement of the boilers only ten years into their lifetime.

And four: the project misses the opportunity for federal, state, and SMUD incentives for electrification, which could offset potentially higher costs for heat pump technology.

We would like to see a mitigation evaluation of heat pump alternatives to the gas boilers in the Central Utility Plant project EIR.

Again, thanks for providing this opportunity for us to speak.

MS. DAVIS: Thank you, Luke, for your comment. We appreciate you attending.

At this time, there are no additional speakers waiting to comment.

The time is now 5:46 and no additional members of the public have come forward to provide comments.

So that people arriving late to this public hearing will have the opportunity to speak, the hearing will take a ten-minute recess.

The time is now 5:55. There are no additional members of the public that have arrived to provide comments at this time. UC Davis has checked the webinar registration, and no additional members of

Page 14

the public or agencies have registered to attend the meeting, therefore we do not expect anyone else to join this evening.

Alex, will you confirm one more time that no one has registered?

MR. TREMBLAY: Yes. I just checked, and no new people have registered to attend the meeting.

MS. DAVIS: All right. Thank you.

This time we will hold until 6 p.m. and then, if no one else has arrived at that point, I will proceed with closing the public hearing. But we will just give it until six o'clock.

The time is now 6 p.m. and no additional members of the public have arrived to provide comment on the UC Davis CUP expansion project draft EIR. At this time, I am closing the public hearing, and again thank you for coming this evening. Have a good night.

(Whereupon, the meeting concluded at 6:00 p.m.)

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CERTIFICATE OF DEPOSITION OFFICER

I, ERIK THOMPSON, the officer before whom the foregoing proceedings were taken, do hereby certify that any witness(es) in the foregoing proceedings, prior to testifying, were duly sworn; that the proceedings were recorded by me and thereafter reduced to typewriting by a qualified transcriptionist; that said digital audio recording of said proceedings are a true and accurate record to the best of my knowledge, skills, and ability; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this was taken; and, further, that I am not a relative or employee of any counsel or attorney employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

ERIK THOMPSON
Notary Public in and for the
State of California

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CERTIFICATE OF TRANSCRIBER

I, REESE L. THOMPSON, do hereby certify that this transcript was prepared from the digital audio recording of the foregoing proceeding, that said transcript is a true and accurate record of the proceedings to the best of my knowledge, skills, and ability; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this was taken; and, further, that I am not a relative or employee of any counsel or attorney employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

REESE L. THOMPSON

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[12 - california's]

[call - draft]

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[north - pursuant]

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[spend - working]

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Response to Public Hearing Comments (PH-), October 4, 2023

Response to Comment PH-1

The commenter expresses their support for the plan to phase down the existing as cogeneration plant. No response is required.

Response to Comment PH-2

The commenter asserts that greenhouse gases could be further reduced, and that the emissions impact of new boilers is lost in the overall analysis. In terms of the analysis, as discussed in the responses to Comments O1-2 and O1-5, the scope of the project includes multiple components, including make-ready work, CUP expansion, and other improvements. The CUP Annex and new boilers are evaluated alongside other project components, including the CUP expansion. By including all of the elements together and comparing to existing conditions, the EIR reaches a less than significant finding regarding greenhouse gas impacts of the project. The CUP modifications proposed by the project offset the emission increase from the CUP Annex, when the project as a whole is compared to existing conditions. As stated in Section 3.7 of the Draft EIR, implementation of the project would reduce GHG emissions by more than 33,000 metric tons of CO_2e relative to existing conditions.

Response to Comment PH-3

The commenter states that the less than significant finding for greenhouse gas emissions misses the intent of emerging policies that call for electrification of equipment. As stated in Section 3.7 of the Draft EIR, implementation of the project would reduce GHG emissions by more than 33,000 metric tons of CO_2e relative to existing conditions. This project would initiate the first major phase of conversion of the CUP from producing energy to utilizing electricity provided by the Sacramento Municipal Utility District (SMUD). Future phases of CUP modernization would include converting the CUP to all-electric energy.

Response to Comment PH-4

The commenter states that the Draft EIR does not disclose if heat pump options, including customized installations, have been considered, and requests that they be evaluated in the EIR. Currently, in order to provide heating hot water at the scale needed by the campus, gas-fired boilers that can also utilize diesel as a redundant fuel source are required. The California Department of Health Care Access and Information (HCAI), formerly the Office of Statewide Health Planning and Development (OSHPD), requires maintaining dual fuel sources for heating equipment (Health and Safety Code Section 326.00). This is to ensure essential electrical power is provided in the event of a power outage to health care facilities. There is currently no HCAI-approved unit that uses electricity to produce heating hot water at the scale and efficiency the campus requires, and thus customized installations are not possible at this time.

Response to Comment PH-5

The commenter is correct that gas boilers would be replaced in the future. The boilers are needed at this time, as alternative units are not currently available. This project would initiate the first major phase of conversion of the CUP from producing energy to utilizing electricity provided by the

Sacramento Municipal Utility District (SMUD). Future phases of CUP modernization would include converting the CUP to all-electric energy, in compliance with the UC Sustainable Practices Policy and other state regulations guiding greenhouse gas emission reductions.

Response to Comment PH-6

The commenter asserts that the project misses the opportunity for funding opportunities that could be used for heat pump technology. As stated previously, all-electric technology that meets HCAI Health and Safety Code requirements and that meets the needs of the campus are not yet available.

Response to Comment PH-7

The commenter states that they would like to see "a mitigation evaluation of heat pump alternatives to the gas boilers…" As described in detail in the Draft EIR and discussed in the response to the commenter's Comments PH-2 and PH-4, the project does not have a significant impact related to generation of greenhouse gas emissions, and so no mitigation is required, and further, the technology to utilize heat pumps and still meet the requirements of the laws governing the operation of the medical center does not yet exist. For these reasons, the Draft EIR does not discuss heat pumps as either an alternative or a mitigation measure.

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Chapter 3
Mitigation Monitoring and Reporting Program

In accordance with the California Environmental Quality Act (CEQA) Public Resources Code Section 21000 et seq.), UC Davis prepared an Environmental Impact Report (EIR) (State Clearinghouse No. 2023050563) that identified potentially significant impacts and identified mitigation measures that would reduce the identified impacts to a less-than-significant level, where feasible. One significant and unavoidable impact related to potential construction noise was identified.

CEQA and the State CEQA Guidelines (PRC Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097) require public agencies "to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment." A Mitigation Monitoring and Reporting Program (MMRP) is required and has been prepared for the Central Utility Plant Expansion Project because the EIR identifies potential significant adverse impacts related to the project implementation, and mitigation measures have been identified to reduce those impacts. Adoption of the MMRP would occur along with approval of the project.

3.1 Purpose of Mitigation Monitoring and Reporting Program

The MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a satisfactory manner before and during project construction and operation as applicable.

The MMRP table provided herein have been prepared to assist the responsible parties in implementing the mitigation measures. The table identifies the impact, individual mitigation measures, monitoring responsibility, mitigation timing, and provides space to confirm implementation of the mitigation measures. The numbering of mitigation measures follows the numbering sequence found in the EIR.

3.2 Roles and Responsibilities

Unless otherwise specified herein, UC Davis is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. UC Davis, at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor or other designated agent. Section 21081.6 of the Public Resources Code requires the lead agency to identify the "custodian of documents and other material" which constitutes the "record of proceedings" upon which the action on the project was based. The UC Davis Office of Campus Planning and Environmental Stewardship, or designee, is the custodian of such documents for the 2018 LRDP. Inquiries should be directed to:

Heather Davis, Interim Director of Environmental Planning
(530) 759-3766
environreview@ucdavis.edu

The location of this information is:

University of California, Davis
Campus Planning and Environmental Stewardship
University of California, One Shields Avenue
Davis, CA 95616

UC Davis is responsible for overall administration of the MMRP and for verifying that UC Davis staff and/or the construction contractor has completed the necessary actions for each measure. The responsible party for implementation of each item will identify the staff members responsible for coordinating with UC Davis on the MMRP.

3.3 Reporting

UC Davis shall, or may require the contractor(s) to, maintain records documenting compliance of the activity with the required mitigation measures. Information regarding inspections and other requirements shall be compiled and explained in the report. The report shall be designed to simply and clearly identify whether mitigation measures have been adequately implemented. At a minimum, each report shall identify the mitigation measures or conditions to be monitored for implementation, whether compliance with the mitigation measures or conditions has occurred, the procedures used to assess compliance, and whether further action is required.

3.4 Mitigation Monitoring and Reporting Program Table

The categories identified in the following MMRP table (Table 3-1) are described below.

- Impact – This column provides the verbatim text of the identified impact.
- Mitigation Measure – This column provides the verbatim text of the adopted mitigation measure
- Monitoring and Reporting Procedure – This column identifies discrete actions to be implemented as part of the broader mitigation measure.
- Timing – This column identifies the time frame in which the mitigation will be implemented.
- Verification – This column identifies the party responsible for verifying compliance and is to be dated and signed by that party (either project manager or his/her designee).

Table 3-1. Central Utility Plant Expansion Project Mitigation and Monitoring Program

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
Aesthetics					
Impact AES-2: Introduction of a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area	**Mitigation Measure LRDP-AES-2a: Apply design measures to building exteriors** Design for specific projects will provide for the use of textured, nonreflective exterior surfaces and nonreflective glass.	Review project design for use of textured, nonreflective exterior surfaces and nonreflective glass.	DE	Prior to final design approval	Sacramento Campus Facilities Planning and Development and SMUD
	Mitigation Measure LRDP-AES-2b: Utilize directional lighting methods Except as provided in Mitigation Measure LRDP AES-4c, all new outdoor lighting will use directional lighting methods with shielded and cutoff type light fixtures to minimize glare and upward-directed lighting.	Review project design for use of directional lighting methods.	DE	Prior to final design approval	Sacramento Campus Facilities Planning and Development and SMUD
	Mitigation Measure LRDP-AES-2c: Review lighting, landscape, and architectural features prior to installation Non-cutoff, unshielded lighting fixtures used to enhance nighttime views of walking paths, specific landscape features, or specific architectural features will be reviewed by the Sacramento Campus Facilities Design and Construction staff prior to installation to ensure that the minimum amount of required lighting is proposed to achieve the desired nighttime emphasis, and the proposed illumination creates no adverse effect on nighttime views.	Review project design for lighting, landscaping, and architectural features.	DE	Prior to final project design	Sacramento Campus Facilities Planning and Development and SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	Mitigation Measure LRDP-AES-2d: Implement updated lighting design The University will implement the use of the specific lighting design and equipment designed to reduce light spill and glare when older lighting fixtures and designs are replaced over time.	Implement updated lighting design.	OP	During operation; ongoing as older exterior lighting fixtures are replaced	Sacramento Campus Facilities Planning and Development and SMUD
Air Quality					
Impact AQ-2: Cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard	**Mitigation Measure LRDP-AQ-2a: Reduce construction-generated fugitive dust** Land use development projects as part of the implementation of the 2020 LRDP Update will require all construction contractors to implement the following measures to reduce construction-generated fugitive dust. Control of fugitive dust is required per SMAQMD Rule 403 and enforced by SMAQMD staff. The list of required measures was informed by SMAQMD's basic and enhanced construction emission control practices. • Water exposed soil with adequate frequency to prevent fugitive dust and particulates from leaving the project site. However, do not overwater to the extent that sediment flows off the site. Exposed surfaces include, but are not limited to, soil piles, graded areas, and unpaved parking areas. • Suspend excavation, grading, and/or demolition activity when sustained wind speeds exceed 25 miles per hour (mph). • Install wind breaks (e.g., trees, solid fencing) on the average dominant windward side(s)	Incorporate measure as part of construction specifications and documentation and inspect construction site at regular intervals during construction to verify compliance with specified construction-generated fugitive dust reduction measures.	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	Sacramento Campus Facilities Planning and Development and SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	of construction areas. For purposes of implementation, chain-link fencing with added landscape mesh fabric adequately qualifies as solid fencing. • For dust control in disturbed but inactive construction areas, apply soil stabilization measures adequate to mitigate airborne particulates as soon as possible. • Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited. • Treat site accesses from the paved road with a 6- to 12-inch layer of wood chips, mulch, gravel, or other approved method to reduce generation of road dust and road dust carryout onto public roads. • Cover or maintain at least 2 feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered. • Establish a 15-mph speed limit for vehicles driving on unpaved portions of project construction sites. • Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person will respond and take corrective action within 48 hours. The phone number			

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	of the SMAQMD will also be visible to ensure compliance. UC Davis will ensure that the implementation of this mitigation measure is consistent with the UC Davis stormwater program and does not result in offsite runoff as a result of watering for dust control purposes.				
	Mitigation Measure LRDP-AQ-2b: Reduce construction-generated emissions from equipment and vehicle exhaust Land use development projects as part of the implementation of the 2020 LRDP Update will require all construction contractors to implement the following measures to reduce construction-generated emissions from equipment and vehicle exhaust. The list of required measures was informed by SMAQMD's basic and enhanced construction emission control practices. • For all development except Aggie Square Phase I, use construction equipment with engines meeting EPA Tier 3 or better emission standards prior to 2025 and EPA Tier 4 Final or better emission standards beginning in 2025. For Aggie Square Phase I, all engines must be EPA certified Tier 4 Final or better, regardless of construction year. Equipment requirements may be waived by UC Davis, but only under any of the following unusual circumstances: If a particular piece of off-road equipment with Tier 4 Final standards or Tier 3 standards is technically not feasible, not commercially available, or	Incorporate measure as part of construction specifications and documentation and inspect construction site at regular intervals during construction to verify compliance with specified construction-generated emissions reduction measures.	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	Sacramento Campus Facilities Planning and Development and SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	there is a compelling emergency need to use off-road equipment that does not meet the equipment requirements above. If UC Davis grants the waiver, the contractor will use the next cleanest piece of off-road equipment available, in the following order: Tier 4 Interim, Tier 3, and then Tier 2 engines. • Use renewable diesel fuel in all heavy-duty off-road diesel-fueled equipment. Renewable diesel must meet the most recent ASTM D975 specification for ultra low-sulfur diesel and have a carbon intensity no greater than 50 percent of diesel with the lowest carbon intensity among petroleum diesel fuels sold in California. • All diesel on-road trucks used to haul construction materials will use a model year 2010 or newer engine. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (California Code of Regulations, Title 13, Sections 2449[d][3] and 2485). Provide clear signage that posts this requirement for workers at the entrances to the site. • Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation (California Code of Regulations, Title 13, Sections 2449 and 2449.1). • Maintain all construction equipment in proper working condition according to manufacturer's specifications. The			

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.				
	Mitigation Measure LRDP-AQ-2c: Reduce evaporative emissions during architectural coatings Land use development projects as part of the implementation of the 2020 LRDP Update will require all construction contractors to use no- or low-solids content (i.e., no- or low-volatile organic compound [VOC]) architectural coatings with a maximum VOC content of 50 grams per liter.	Incorporate measure as part of construction and contractor specifications and documentation and inspect construction site at regular intervals during construction to verify compliance with specified measure.	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	Sacramento Campus Facilities Planning and Development and SMUD
	Mitigation Measure LRDP-AQ-2d: Offset construction-generated NO_X emissions in excess of SMAQMD's threshold of significance Construction-generated emissions of NO_X would exceed the SMAQMD's threshold of significance during 2020, 2022 and 2024. Because construction-generated NOx emissions would exceed SMAQMD's threshold of significance, UC Davis will pay a mitigation fee in the amount of $4,558 and an administrative fee in the amount of $228 to SMAQMD to reduce the project impacts from construction NO_X emissions to a less-than-significant level. This fee will be used to fund emissions reduction projects within the Sacramento Valley Air Basin. The types of projects that have been used in the past to achieve such reductions include electrification of stationary internal combustion engines (such as agricultural irrigations	UC Davis will pay the mitigation and administrative fees in full prior to issuing a demolition or grading permit.	DE	During project design; prior to construction	Sacramento Campus Facilities Planning and Development and SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	pumps); replacing old trucks with new, cleaner, more efficient trucks; and a host of other stationary and mobile-source emissions-reducing projects. The fee amount is based on an offset cost of $30,000 per ton of NO_X and the total quantity of NO_X emissions in excess of SMAQMD's NO_X threshold (304 pounds or 0.15 ton based on the daily exceedances in 2020, 2022, and 2024). The administrative fee is 5 percent of the fee amount. UC Davis will pay the mitigation and administrative fees in full prior to issuing a demolition or grading permit for the first project developed under the 2020 LRDP Update. For construction projects under the 2020 LRDP Update occurring during 2020, 2022, and 2024, construction contractors will provide annual construction activity monitoring data to estimate actual construction emissions. UC Davis will submit the annual construction activity monitoring data and an estimate of actual annual NO_X emissions to SMAQMD for review by February 1 of each year for the prior construction year. The annual report will reconcile paid fees for the prior year relative to actual emissions. If more emissions were generated than fees paid, UC Davis will submit payment for the deficient amount based on an offset cost of $30,000 per ton of NO_X. If more fees were paid than emissions generated, SMAQMD will either issue UC Davis a refund for the surplus or a credit that can be applied to future fee payments.			

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	An alternative payment plan may be negotiated by UC Davis based on the timing of construction phases that are expected to exceed the SMAQMD's threshold of significance. Any alternative payment plan must be acceptable to SMAQMD and agreed upon in writing prior to issuance of a demolition or grading permit by UC Davis. In coordination with SMAQMD, UC Davis, or its designee, may reanalyze construction NO_X emissions from the 2020 LRDP Update prior to starting construction to update the required mitigation and administrative fees. The analysis must be conducted using SMAQMD-approved emissions model(s) and the fee rates published at the time of reanalysis. The analysis may include onsite measures to reduce construction emissions if deemed feasible by UC Davis. All onsite measures assumed in the analysis must be included in the construction contracts and be enforceable by UC Davis.				
	Mitigation Measure AQ-2: Reanalyze project emissions and offset construction-generated NOX emissions in excess of SMAQMD's threshold of significance If the SMUD Component will be constructed in 2025, construction-generated emissions of NOX may exceed the SMAQMD's threshold of significance during that year. In coordination with SMAQMD, UC Davis, or its designee, will reanalyze construction NOX emissions in 2025 prior to starting construction of the SMUD Component. The analysis must be conducted	UC Davis will reanalyze NOx emissions if SMUD component is constructed. UC Davis will pay the mitigation and administrative fees in full prior to issuing a demolition or grading permit.	DE	During project design; prior to construction	SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	using SMAQMD-approved emissions model(s) and account for all project construction activity scheduled to occur in 2025 (i.e., SMUD Component, make-ready projects, CUP expansion). The analysis may include onsite measures to reduce construction emissions if deemed feasible by UC Davis. All onsite measures assumed in the analysis must be included in the construction contracts and be enforceable by UC Davis. The revised analysis must consider emission contributions from all project construction activities including in 2025, including the SMUD Component, make-ready projects, and the CUP Expansion. Should the results of the analysis indicate an exceedance of SMAQMD's NOx threshold, UC Davis will pay an existing SMAQMD mitigation fee based on the amount of quantified NOx emissions in excess of SMAQMD's threshold of 85 pounds per day and the fee rates published at the time of reanalysis. The fee will be used to fund emissions reduction projects within the SVAB. The types of projects that have been used in the past to achieve such reductions include electrification of stationary internal combustion engines (such as agricultural irrigations pumps); replacing old trucks with new, cleaner, more efficient trucks; and a host of other stationary and mobile source emissions-reducing projects. UC Davis will pay the SMAQMD mitigation and administration fees in full prior to construction of the SMUD component. For construction			

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	occurring during 2025, construction contractors will provide annual construction activity monitoring data to estimate actual construction emissions. UC Davis will submit the annual construction activity monitoring data and an estimate of actual annual NOx emissions to SMAQMD for review by February 1, 2026. The annual report will reconcile paid fees, if any, for 2025 relative to actual emissions. If more emissions were generated than fees paid, UC Davis will submit payment for the deficient amount based on an offset cost per ton of NOX. If more fees were paid than emissions generated, SMAQMD will issue UC Davis a refund for the surplus.				
Impact AQ-3: Exposure of sensitive receptors to substantial pollutant concentrations	**Mitigation Measure LRDP-AQ-2a: Reduce construction-generated fugitive dust** See text above under Impact AQ-2.	Incorporate measure as part of construction specifications and documentation and inspect construction site at regular intervals during construction to verify compliance with specified construction-generated fugitive dust reduction measures.	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	Sacramento Campus Facilities Planning and Development and SMUD
	Mitigation Measure LRDP-AQ-2b: Reduce construction-generated emissions from equipment and vehicle exhaust See text above under Impact AQ-2	Incorporate measure as part of construction specifications and documentation and inspect construction site at regular intervals during construction to	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	Sacramento Campus Facilities Planning and Development and SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
		verify compliance with specified construction-generated emissions reduction measures.			
	Mitigation Measure LRDP-AQ-2c: Reduce evaporative emissions during architectural coatings See text under Impact AQ-2.	Incorporate measure as part of construction and contractor specifications and documentation and inspect construction site at regular intervals during construction to verify compliance with specified measure.	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	Sacramento Campus Facilities Planning and Development and SMUD
	Mitigation Measure LRDP-AQ-2d: Offset construction-generated NOX emissions in excess of SMAQMD's threshold of significance See text under Impact AQ-2	UC Davis will pay the mitigation and administrative fees in full prior to issuing a demolition or grading permit.	DE	During project design; prior to construction	Sacramento Campus Facilities Planning and Development and SMUD
	Mitigation Measure LRDP-AQ-3b: Reduce receptor exposure to operations generated toxic air contaminants UC Davis will require all diesel emergency generators on the Sacramento Campus to use renewable diesel fuel. Renewable diesel must meet the most recent ASTM D975 specification for ultra low-sulfur diesel and have a carbon intensity no greater than 50 percent of diesel with the lowest carbon intensity among petroleum diesel fuels sold in California. All diesel generators must be transitioned to	Incorporate measure as part of construction specifications and documentation and inspect construction site at regular intervals during construction to verify compliance with specified construction-generated emissions reduction measures.	DE/CO	Regular intervals throughout the construction period and during project design	Sacramento Campus Facilities Planning and Development and SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	renewable diesel fuel no later than December 31, 2039. UC Davis will then employ a tiered approach to further reduce sensitive receptor exposure to toxic air contaminants generated by the Sacramento Campus Central Energy Plant. The selected control strategy must be implemented prior to December 31, 2039. The approach will be taken in the following way: • Replace at least three of the existing Tier 0 generators with engines meeting EPA Tier 4 Final or better emission standards. If the engine cannot be replaced, then • Require at least three of the existing Tier 0 generators operate with the most effective California Air Resources Board Verified Diesel Emissions Controls (VDECs) available for the engine type (effectively level 3). If the engine cannot be retrofitted with VDECs, then • Require all existing Tier 0 generators without VDECs to increase the stack height by at least 20 feet. The above options do not preclude replacement of existing diesel engines with zero-emissions equipment (e.g., additional solar with battery backup, fuel cells), should that equipment be cost effective and achieve functional operating requirements for the Sacramento Campus Central Energy Plant.			

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	Mitigation Measure AQ-2: Reanalyze project emissions and offset construction-generated NOX emissions in excess of SMAQMD's threshold of significance See text under Impact AQ-2	UC Davis will reanalyze NOx emissions if SMUD component is constructed. UC Davis will pay the mitigation and administrative fees in full prior to issuing a demolition or grading permit.	DE	During project design; prior to construction	SMUD
Biological Resources					
Impact BIO-2: Disturbance of vegetation-nesting migratory birds and raptors, including Swainson's hawk and white-tailed kite	**Mitigation Measure LRDP-BIO-2: Conduct preconstruction surveys for nesting migratory birds and raptors, including special-status species, and establish protective buffers** For any projects implemented under the 2020 LRDP Update that would require vegetation removal (i.e., trees, shrubs, and ruderal vegetation) or would result in construction disturbances in the vicinity of vegetated areas, the following measures will be implemented prior to initiation of construction to avoid and minimize impacts on Swainson's hawk, white-tailed kite, and other vegetation-nesting migratory birds and raptors and avoid violation of the MBTA, CESA, and California Fish and Game Code Sections 3503, 3503.5, and 3511. • For construction activities that occur during the nesting season for migratory birds and raptors, between February 15 and August 31, the University will ensure that a qualified	Retain a qualified biologist to conduct preconstruction surveys; implement measures as applicable.	DE/CO	Prior to final design approval and ongoing during project construction.	Sacramento Campus Facilities Planning and Development and SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	wildlife biologist familiar with the nesting behavior of bird species that occur in the plan area to conduct a preconstruction nesting bird survey. The nesting bird surveys will be conducted no more than 14 days prior to vegetation removal or construction disturbance activities near nesting habitat. The survey will include a search of all trees and shrubs and ruderal areas that provide suitable nesting habitat for birds and raptors within the construction disturbance area. In addition, a 600-foot area around the construction area will be surveyed for nesting raptors, and a 100-foot area around the construction area will be surveyed for songbirds. • If no special-status raptor species (i.e., Swainson's hawk or white-tailed kite) or active bird or raptor nests are detected during the preconstruction surveys, then no additional measures are required. If an active nest is found in the survey area, a no-disturbance buffer will be established to avoid disturbance or destruction of the nest site until the end of the breeding season (generally August 31) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the construction area (this date varies by species). The extent of these buffers will be determined by a qualified biologist in coordination with any applicable agencies (as determined by species) and will depend on the level of noise or construction			

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	disturbance taking place, the line-of-sight between the nest and the disturbance, ambient levels of noise and other non-project disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species; however, a minimum of 50 feet for songbirds and 300 feet for raptors is typical. In developed habitats, buffer areas may be adjusted based on presence of existing barriers				
Impact BIO-3: Disturbance of structure-nesting migratory birds, including purple martin	**Mitigation Measure LRDP-BIO-3: Modify existing structures during the non-breeding season for purple martin and other structure-nesting migratory birds or implement exclusion measures to deter nesting** For any projects implemented under the 2020 LRDP Update that would modify or demolish any existing building structures, the following measures will be implemented prior to initiation of construction to avoid and minimize impacts on purple martins and other structure-nesting migratory birds and avoid violation of the MBTA and California Fish and Game Code Section 3503. • Conduct building demolition and modification activities during the non-breeding season for structure-nesting migratory birds (generally September 1 through January 31). If this is not possible, the University will implement the following avoidance measures:	Retain a qualified biologist to conduct preconstruction surveys; implement measures as applicable during construction.	DE	Prior to final design approval and project construction	Sacramento Campus Facilities Planning and Development and SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	• Prior to the start of each phase of demolition/construction that is anticipated to occur during the migratory bird breeding season (generally February through August), the University will retain a qualified wildlife biologist to thoroughly inspect structures that would be modified or disturbed to locate remnant bird nests or areas such as drain holes or crevices that could be used as nesting areas by migratory birds such as purple martins. It is preferable to perform this survey in the non-breeding season (September 1 through January 31) so that, if nests are found and are determined to be inactive, they may be removed. • After inactive nests are removed and prior to construction that would occur between February 1 and August 31, known or potential nesting areas on or within the building structure to be modified or demolished will be covered with a suitable exclusion material that will prevent birds from nesting (i.e., 0.5- to 0.75-inch mesh netting, plastic tarp, or other suitable material safe for wildlife). Portions of the existing structures containing drain holes or crevices that would be modified or disturbed also will be covered or filled with suitable material to prevent nesting (i.e., fiberglass insulation, foam padding, and polyvinyl chloride [PVC]/acrylonitrile butadiene styrene [ABS] caps). The University will ensure that a qualified wildlife management specialist experienced with installation of			

Project stage at which implementation of the measure is required:
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Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	bird exclusion materials will ensure that exclusion devices are properly installed and will avoid inadvertent entrapment of migratory birds. All exclusion devices will be installed before February 1 and will be monitored throughout the breeding season (typically several times a week). The exclusion material will be anchored so that birds cannot attach their nests to the structures through gaps in a net. • Exclusion devices for migratory birds will be installed consistent with bat exclusion measures and in a manner that does not entrap day-roosting bats. • If exclusion material is not installed on structures prior to February 1 and migratory birds colonize a structure, removal or modification to that portion of the structure may not occur until after August 31 or until a qualified biologist has determined that the young have fledged and the nest is no longer in use. • If surveys determine that no active bird nests are present within existing structures to be modified or demolished and appropriate steps are taken to prevent migratory birds from constructing new nests, as described in the preceding measures, work can proceed at any time of the year.			

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
Impact BIO-4: Disturbance of structure-roosting bats	**Mitigation Measure LRDP-BIO-4: Conduct pre-construction surveys for roosting bats and implement protection measures** Baseline data about how bats may use structures in the plan area, their individual numbers, or how they vary seasonally are not available. Daily and seasonal variations in habitat use by bats is common. To obtain the highest likelihood of detection, the following pre-construction bat surveys will be conducted within the construction area prior to modification or demolition of existing building structures. If surveys determine that bats are roosting in the construction area, the University will implement the following protective measures. *Conduct Pre-Construction Surveys at Structures* • Before work begins on any building or structure, qualified biologists will conduct a daytime search for bat signs and evening emergence surveys to determine whether the structure is being used as a roost. Biologists conducting daytime surveys will listen for audible bat calls and will use the naked eye, binoculars, and a high-powered spotlight to inspect crevices, drain holes, and other visible features that could house bats. Building surfaces and the ground around the structure will be surveyed for bat signs, such as guano, staining, and prey remains. Surveys will occur no earlier than two weeks prior to the construction start-date.	Retain a qualified biologist to conduct preconstruction surveys; implement measures as applicable during construction.	DE	Prior to final design approval and project construction	Sacramento Campus Facilities Planning and Development and SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	• Qualified biologists also will conduct evening emergence surveys at structures that contain suitable roosting areas. The surveys will consist of at least one biologist stationed near potential entry and exit points of the structure watching for emerging bats from a half hour before sunset to 1–2 hours after sunset for a minimum of 2 nights at each survey location within the season that construction would be taking place. Surveys may take place over several nights to fully cover the extent of structure work. All emergence surveys will be conducted during favorable weather conditions (calm nights with temperatures conducive to bat activity and no precipitation predicted). Survey methodology may be supplemented as new research identifies advanced survey techniques and equipment that would aid in bat detections. Acoustic detectors will be used during emergence surveys to obtain data on bat species present in the survey area at the time of detection. • If a building or structure proposed for modification or demolition is identified as supporting an active bat roost, additional surveys may be required to determine how the structure is used by bats—whether it is used as a night roost, maternity roost, migration stopover, or for hibernation. *Identify Protective Measures for Bats Using Structures*			

Project stage at which implementation of the measure is required:
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Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	• If it is determined that bats are using building structures within or adjacent to the construction area as roost sites, the University will coordinate with CDFW to identify protective measures to avoid and minimize impacts on roosting bats based on the type of roost and timing of activities. These measures could include the following actions. o If a non-maternity roost is located within a structure that would be modified or disturbed in a manner that would expose the roost, bats will be excluded from the structure by a qualified wildlife management specialist working with a bat biologist. An exclusion plan will be developed in coordination with CDFW that identifies the type of exclusion material/devices to be used, the location and method for installing the devices, and monitoring schedule for checking the effectiveness of the devices. Exclusion devices will be installed between September 15 and October 31 to avoid affecting maternal and hibernating bat roosts and will take place during weather and temperature conditions conducive to bat activity. Because bats are expected to tolerate temporary construction noise and vibrations, bats will not be excluded from structures if no direct impacts on the roost are anticipated.			

Project stage at which implementation of the measure is required:
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Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	○ An alternative to installing exclusion devices would be to make structural changes to a known roost proposed for removal to create conditions in the roost that are undesirable to roosting bats and encourage the bats to leave on their own (e.g., open additional portals so that the temperature, wind, light, and precipitation regime in the roost change). Structural changes to the roost will be authorized by CDFW and will be performed during the appropriate exclusion timing (listed above) to avoid harming bats. ○ If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until September 15 or until a qualified biologist has determined that the roost is no longer active.			
Impact BIO-5: Conflict with a local policy or ordinance protecting biological resources, such as a tree preservation policy or ordinance	**Mitigation Measure BIO-5: Tree Protection** Prior to site disturbance, SMUD shall provide a plan of all tree work to the City. A Certified Arborist shall approve all work plans prior to submittal to the City. For trees that will be preserved on site during project construction, the following guidelines are recommended to ensure the long-term survival and stability of the trees. • Educate Workers: Educate all workers on site about tree protection guidelines and requirements prior to construction.	Retain a Certified Arborist to approve SMUD's work plans and implement measures as applicable during construction.	DE	Prior to site disturbance	SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	• Establish a Tree Protection Zone: Establish a tree protection zone (TPZ) around any tree or group of trees designated for retention. The TPZ should at minimum be equal to 1.5 times the radius of the dripline. The TPZ may be adjusted on a case-by-case basis after consultation with a Certified Arborist. • Install Fencing and Signage: Install fencing around the TPZ of all trees or groups of trees designated for retention. The fencing should remain in place for the duration of construction activities. Post appropriate signage to help convey the importance of the TPZ to workers. • Prohibit Construction Activities within the TPZ: Prohibit construction-related activities, including grading, trenching, construction, demolition, or other work, within the TPZ. No heavy equipment or machinery should be operated within the TPZ. No construction materials, equipment, machinery, or other supplies should be stored within the TPZ. Vehicle and foot traffic should not be permitted within the TPZ. No wires or signs should be attached to any trees designated for retention. • Selected Trees: Prune selected trees to provide necessary clearance during construction and to remove any defective limbs or other tree parts that may pose a failure risk. All pruning should be completed by a Certified Arborist or Tree Worker and			

Project stage at which implementation of the measure is required:
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Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	adhere to the Tree Pruning Guidelines of the International Society of Arboriculture. • Monitor Trees and TPZs: Monitor the integrity of the TPZs and the health of the trees designated for retention regularly throughout the construction process. A Certified Arborist should monitor the health and condition of the protected trees and, if necessary, recommend additional mitigations and appropriate actions. This could include the monitoring of trees adjacent to project facilities to determine if construction activities (including the removal of nearby trees) would affect protected trees in the future. • Treat Impacted Trees: Provide supplemental irrigation and other care, such as mulch and fertilizer, as deemed necessary by a Certified Arborist, to any trees impacted by construction. Treatment of any injuries should be performed by a Certified Arborist.				
Cultural Resources					
Impact CUL-1: Potential to cause a substantial adverse change in the significance of a historical resource	**Mitigation Measure NOI-3b: Equipment Buffer Distances to Nearby Vibration-Sensitive Structures** See text below under Impact NOI-3b	Include measure in contract specifications; SMUD to inspect construction site to verify measure is implemented.	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	Sacramento Campus Facilities Planning and Development, UC Davis Environmental Planning and SMUD
Impact CUL-2: Potential to cause a substantial adverse change in the significance of an	**Mitigation Measure LRDP-CUL-2a: Conduct cultural resources sensitivity training** Prior to any ground disturbance, construction crews will be required to attend cultural	Include training in construction contract; complete informal training.	DE/CO	During project design; prior to construction and at regular intervals	UC Davis Environmental Planning and SMUD

Project stage at which implementation of the measure is required:
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Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
archaeological resource	resources sensitivity training. The training will focus on identifying potential archaeological resources as well as human remains. If potential archaeological resources or human remains are encountered, construction crews will be instructed to notify the University immediately.			throughout the construction period	
	Mitigation Measure LRDP-CUL-2b: Stop work in the event of discovery of an archaeological resource If an archaeological resource is discovered during construction, all project-related ground disturbance within 100 feet of the find will cease. The University will contact a qualified archaeologist within 24 hours to inspect the site. If a resource is determined to qualify as a unique archaeological resource (as defined by CEQA) and the University determines, in compliance with PRC 21083.2, which requires preservation in place as a first option, the University will devote retain a qualified archaeologist to conduct excavation to recover the material. Any archaeologically important artifacts recovered during monitoring will be cleaned, cataloged, and analyzed, with the results presented in an archaeological data recovery report.	Include measure in construction contracts and verify that work is halted; retain archaeologist to assess find. If find is significant, implement additional measures as specified, including documentation.	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	UC Davis Environmental Planning and SMUD
Impact CUL-3: Disturbance of any human remains, including those interred outside of dedicated cemeteries	**Mitigation Measure LRDP-CUL-3b: Stop work if human remains are encountered** In the event of a discovery on campus of human bone, suspected human bone, or a burial, all excavation within 100 feet of the find will halt	Include measure in construction contracts and verify that work is halted in the event of discovery of suspected human bone; retain	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	UC Davis Environmental Planning and SMUD

Project stage at which implementation of the measure is required:
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Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	immediately and the University will contact a qualified archaeologist or the county coroner within 24 hours to determine whether the bone is human. Consistent with California Health and Safety Code Section 7050.5(b), which prohibits disturbance of human remains uncovered by excavation until the coroner has made a finding relative to PRC Section 5097.5 procedures, the University will ensure that the remains, and a reasonable buffer around the remains established in coordination with the coroner or archaeologist, are protected against further disturbance. If it is determined that the find is of Native American origin, the University will comply with the provisions of PRC Section 5097.98 regarding identification and involvement of the Native American Most Likely Descendant (MLD). If human remains cannot be left in place, the University will ensure that the qualified archaeologist and the MLD are provided opportunity to confer on archaeological treatment of human remains and that appropriate studies, as identified through this consultation, are carried out prior to reinterment. The University will provide results of all such studies to the local Native American community and will provide an opportunity of local Native American involvement in any interpretative reporting. If the human remains are determined to be historic and cannot be avoided and preserved in place, the area of the project site will be	archaeologist and contact county coroner.			
		Arrange for archaeologist to confer with MLD to develop appropriate treatment options; document repatriation or reinterment.	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	UC Davis Environmental Planning and SMUD
		Archaeologist to supervise excavation and burial, as described.	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	UC Davis Environmental Planning and SMUD

Project stage at which implementation of the measure is required:
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Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	excavated under the supervision of an archaeologist, and all human remains and associated artifacts will be removed from the site and analyzed. After analysis, all recovered human remains and associated artifacts will be placed in caskets and buried in a single mass grave at a local cemetery.				
Geology, Soils, and Seismicity					
Impact GEO-1: Potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction	**Mitigation Measure LRDP-GEO-1: Conduct Geotechnical Investigation** A site-specific, design-level geotechnical investigation will be conducted during the design phase of each building project under the 2020 LRDP Update. This investigation will be conducted by a licensed geotechnical engineer and include a seismic evaluation of ground acceleration under the design event as well as relevant soil conditions at the site. Geotechnical recommendations will subsequently be incorporated into the foundation and building design for the building project.	Retain a certified engineering geologist or licensed geotechnical engineer to conduct site-specific geotechnical investigation; document implementation of geotechnical recommendations.	DE	Prior to final design approval and project construction.	Sacramento Campus Facilities Planning and Development
Impact GEO-2: Potential to result in substantial soil erosion or the loss of topsoil	**Mitigation Measure LRDP-GEO-1: Conduct Geotechnical Investigation** See text above under Impact GEO-1.	Retain a certified engineering geologist or licensed geotechnical engineer to conduct site-specific geotechnical investigation; document implementation of geotechnical recommendations.	DE	Prior to final design approval and project construction.	Sacramento Campus Facilities Planning and Development

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Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
Hazards and Hazardous Materials				
Impact HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	**Mitigation Measure LRDP-HAZ-2: Prepare a Phase I Environmental Site Assessment** To minimize the risk of encountering unknown contamination during construction under the 2020 LRDP Update, the UC Davis Sacramento Campus would prepare a Phase I Environmental Site Assessment before all ground-disturbing construction in areas not previously investigated. A Phase I Environmental Site Assessment would conform with the American Society for Testing and Materials Standard Practice E1527-05 and include at a minimum the following site assessment requirements. • An onsite visit to identify current conditions (e.g., vegetative dieback, chemical spill residue, presence of above- or underground storage tanks). • An evaluation of possible risks posed by neighboring properties. • Interviews with persons knowledgeable about the site's history (e.g., current or previous property owners, property managers). • An examination of local planning files to check prior land uses and any permits granted. • File searches with appropriate agencies (e.g., State Water Board, fire department, county health department) having oversight authority relative to water quality and groundwater and soil contamination.	Conduct environmental site assessment and document findings. Conduct remediation activities as necessary.	DE	Prior to final design approval and project construction	Sacramento Campus Facilities Planning and Development and SMUD
		Monitor construction site, perform testing, and implement safety procedures, as necessary.	CO	Monitor construction site	Sacramento Campus Facilities Planning and Development and SMUD

Project stage at which implementation of the measure is required:
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Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	• Examination of historical aerial photography of the site and adjacent properties. • A review of current and historic topographic maps of the site to determine drainage patterns. • An examination of chain-of-title for environmental liens and/or activity and land use limitations. If the Phase I Environmental Site Assessment indicates likely site contamination, a Phase II Environmental Site Assessment will be performed (also by an environmental professional). A Phase II Environmental Site Assessment would comprise the following. • Collection of original surface and/or subsurface samples of soil, groundwater, and building materials to analyze for quantities of various contaminants. • An analysis to determine the vertical and horizontal extent of contamination (if the evidence from sampling shows contamination). If contamination is uncovered as part of Phase I or II Environmental Site Assessments, remediation per EPA's RCRA regulations in 40 CFR Parts 260–299 will be required, and materials will be properly managed and disposed of prior to construction. Any contaminated soil identified on a project site must be properly disposed of in accordance			

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Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	with Department of Toxic Substances Control regulations in effect at the time. If, during construction, soil or groundwater contamination is suspected, construction activities will cease and appropriate health and safety procedures will be implemented, including the use of appropriate personal protective equipment (e.g., respiratory protection, protective clothing, helmets, goggles).				
Impact HAZ-4: Place project-related facilities on a site that is included on a list of hazardous materials sites, resulting in creation of a significant hazard to the public or the environment	**Mitigation Measure LRDP-HAZ-2: Prepare a Phase I Environmental Site Assessment** See text above under Impact HAZ-2.	Conduct environmental site assessment and document findings. Conduct remediation activities as necessary.	DE	Prior to final design approval and project construction	Sacramento Campus Facilities Planning and Development
		Monitor construction site, perform testing, and implement safety procedures, as necessary.	CO	Monitor construction site	Sacramento Campus Facilities Planning and Development
Hydrology and Water Quality					
Impact WQ-3: Substantial alteration of existing drainage patterns in a manner that would result in substantial erosion or siltation onsite or offsite, substantial increase in the amount of surface runoff in a manner that would	**Mitigation Measure LRDP-WQ-1: Implement a Subsoil Drainage System to Avoid Damage to Buildings** In the event a sub-soil drainage system is required (as determined by a geotechnical analysis), the system will be installed underground to remove excessive water from the soil and avoid damage to buildings or landscaping. Groundwater from exterior building footings will be conveyed to a sump pump. The effluent will be pumped into the	Implement a subsoil drainage system, if required.	DE	Prior to final design approval	Sacramento Campus Facilities Planning and Development

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
result in flooding onsite or offsite, creation of or contribution to runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or alteration of the existing drainage pattern in a manner that would impede or redirect flood flows	building storm drainage system. Subsoil drainage systems that cannot discharge to the storm sewer by gravity flow will be drained by gravity to sump pumps and will be pumped into the building storm drainage system. Each sump pump will be sized for 100 percent of the estimated design flow. Sump pumps will be connected to the emergency (standby) power system to permit operation during a loss of normal power. Design criteria for the subsoil drainage system will be defined by the geotechnical report**.**				
Noise					
Impact NOI-1: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project from construction activities in excess of applicable standards	**Mitigation Measure LRDP-NOI-1: Implementation of Measures to Reduce Construction Noise** For construction activities associated with future projects under the 2020 LRDP Update, UC Davis will implement or incorporate the following noise reduction measures into construction specifications for contractor(s) implementation during project construction: 1. Construction activities will be limited to the daytime hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday and between 9:00 a.m. and 6:00 p.m. on Sunday, when feasible. 2. Pile driving will not occur outside of the daytime hours of 7:00 a.m. and 6:00 p.m.	Include measure in contract specifications; inspect construction site to verify measure is implemented.	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	Sacramento Campus Facilities Planning and Development and SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	Monday through Saturday and between 9:00 a.m. and 6:00 p.m. on Sunday. 3. All construction equipment used for future projects will be equipped with suitable exhaust and intake silencers in good working order. All construction equipment will be properly maintained and equipped with intake silencers and exhaust mufflers and/or engine shrouds, in accordance with manufacturer recommendations. Equipment engine shrouds, if used, will be closed during equipment operation. 4. All construction equipment and equipment staging areas will be located as far as possible from nearby noise-sensitive land uses and/or located such that existing or constructed noise attenuating features (e.g., temporary noise wall or blankets) block line of sight between affected noise-sensitive land uses and construction staging areas, to the extent feasible. 5. Individual operations and techniques will be replaced with quieter procedures (e.g., using welding instead of riveting, mixing concrete offsite instead of onsite) where feasible and consistent with building codes and other applicable laws and regulations. 6. Stationary noise sources such as generators or pumps will be located as far as feasible from noise-sensitive land uses. 7. No less than one week prior to the start of construction activities at a particular location, notification will be provided to			

Project stage at which implementation of the measure is required:
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Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	academic, administrative, and residential or noise-sensitive uses (such as schools) located within 500 feet of the construction site. 8. For any construction activity that must extend beyond the daytime hours of 7:00 a.m. and 6:00 p.m. on weekdays and Saturdays, and between 9:00 a.m. and 6:00 p.m. on Sundays, the construction contractor for that project will ensure that noise levels at the nearest noise-sensitive land use do not exceed 55 dBA during the hours of 7:00 a.m. to 10:00 p.m. and 50 dBA during the hours of 10:00 p.m. to 7:00 a.m., as feasible. In addition to measures described above, the following measures may also help achieve this performance standard. a. Install temporary noise barriers as close as possible to the noise source or the receptor and located within the direct line-of-sight path between the noise source and nearby sensitive receptor(s). The barrier should be constructed of material that has a surface weight of at least 1 pound per square foot and has an acoustical rating of at least 25 STC (Sound Transmission Class). This can include a temporary barrier constructed with plywood support on a wood frame, sound curtains supported on a frame, or other comparable material. b. Use "quiet" gasoline-powered compressors or electrically powered			

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Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	compressors as well as electric rather than gasoline- or diesel-powered forklifts for small lifting, where feasible. c. Prohibit idling of inactive construction equipment for prolonged periods (i.e., more than 2 minutes). d. Retain a qualified noise specialist to conduct noise monitoring to ensure that noise reduction measures achieve the necessary reductions such that levels at the receiving land uses do not exceed 55 dBA during the hours of 7:00 a.m. to 10:00 p.m. and 50 dBA during the hours of 10:00 p.m. to 7:00 a.m.				
Impact NOI-2: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project from operations in excess of applicable standards	**Mitigation Measure LRDP-NOI-2a: Reduce noise exposure from emergency generators** Prior to approval of a building permit for individual LRDPs proposing the installation of emergency generators, documentation will be submitted to the University demonstrating with reasonable certainty that noise from testing of the proposed generator(s) would not exceed 55 dBA at the nearest residential land use. Acoustical treatments to reduce noise from generator testing may include, but are not limited to, the following. • Enclosing generator(s) • Incorporating the use of exhaust mufflers or silencers to reduce exhaust noise • Selecting a relatively quiet generator model	Provide documentation related to expected generator noise; incorporate acoustical treatments, as necessary.	DE	Prior to final project approval	Sacramento Campus Facilities Planning and Development and SMUD
		Conduct testing during hours specified.	OP	During operation	Sacramento Campus Facilities Planning and Development and SMUD

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Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	• Orienting or shielding generator(s) to protect noise-sensitive receptors to the greatest extent feasible • Increasing the distance between generator(s) and noise-sensitive receptors • Placing barriers or enclosures around generator(s) to facilitate the attenuation of noise. In addition, all project generator(s) will be tested only between the hours of 7:00 a.m. and 10:00 p.m. All recommendations from the acoustical analysis necessary to ensure that generator noise would meet the above requirements will be incorporated into the building design and operations.				
Impact NOI-3: Generation of excessive ground-borne vibration or ground-borne noise levels	**Mitigation Measure NOI-3a: Limit Nighttime Vibration-Generating Construction Activities for In-Street SMUD Work** For in-street construction activities under the SMUD component that take place during nighttime hours, the following buffer distances shall be maintained between vibration-generating equipment and the nearest off-site sensitive use where people may sleep: • Vibratory Roller: 140 feet • Large bulldozer: 78 feet • Small bulldozer: 10 feet Specifically, a vibratory roller and a large bulldozer shall not be used within 140 feet and 78 feet, respectively, of land uses where people	Include measure in contract specifications; SMUD to inspect construction site to verify measure is implemented.	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	sleep during nighttime hours. As a result of these buffer distances, the use of a large bulldozer and vibratory roller likely would not be permitted during nighttime hours along roadway segments developed with residential land uses. Any construction work requiring this equipment would be limited to daytime hours within these distances of residences.				
	Mitigation Measure NOI-3b: Equipment Buffer Distances to Nearby Vibration-Sensitive Structures For in-street construction activities under the SMUD component, vibration levels at the nearest off-site sensitive structures similar to "historic and some old buildings" shall be limited to 0.25 PPV in/sec, or less, and vibration levels at the nearest "older residential structure" shall be limited to 0.3 PPV in/sec, or less. To ensure these vibration levels are not exceeded, the following buffer distances shall be maintained between vibration-generating equipment (or similar) and the nearest off-site sensitive structures similar to "historic and some old buildings" (with a vibration-related damage criterion of 0.25 PPV in/sec): • Vibratory Roller: 23 feet • Large bulldozer (or similar, such as an excavator): 13 feet • Small bulldozer: 2 feet In addition, the following buffer distances shall be maintained between vibration-generating	Include measure in contract specifications; SMUD to inspect construction site to verify measure is implemented.	DE/CO	During project design; prior to construction and at regular intervals throughout the construction period	SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure		Timing	Verification
	equipment and the nearest off-site sensitive structures similar to "older residential structures" (with a vibration-related damage criterion of 0.3 PPV in/sec): • Vibratory Roller: 20 feet • Large bulldozer (or similar, such as an excavator): 12 feet • Small bulldozer: 2 feet Once final equipment for the in-street SMUD component construction has been selected, tailored buffer distances based on the size and types of equipment proposed for use (and based on the same damage criteria described above) may be generated and utilized in lieu of the aforementioned buffer distances.				
Transportation, Circulation, and Parking					
Impact TRA-5: Result in construction activity that could cause temporary impacts on transportation and traffic	**Mitigation Measure LRDP-TRA-5: Prior to the issuance of any grading or building permits, a Construction Traffic Management Plan (TMP) will be prepared to the satisfaction of UC Davis Health and the City of Sacramento Department of Public Works for City-owned roadways** The Construction TMP will include items such as the following. • Preserving emergency vehicle access routes to existing buildings on the Sacramento Campus • Providing truck circulation routes/ patterns that minimize effects on existing vehicle	Preparation of a construction traffic management plan.	DE	Prior to final project approval	Sacramento Campus Facilities Planning and Development, UC Davis Environmental Planning, and SMUD

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	traffic during peak travel periods and maintain safe bicycle circulation • Monitoring for roadbed damage and timing for completing repairs • Preserving safe and convenient passage for bicyclists and pedestrians through/around construction areas • Creating methods for partial (i.e., single-lane)/complete street closures (e.g., timing, signage, location and duration restrictions), if necessary • Identifying detour routes for roadways subject to partial/complete street closures • Identifying temporary UC Davis shuttle stops and detoured shuttle routes if existing stops or routes are affected • Identifying temporary SacRT bus stops and detoured bus routes, if existing stops or routes are affected • Developing criteria for use of flaggers and other traffic controls • Providing a point of contact for nearby residents, Sacramento Campus staff, students, visitors, and other stakeholders to contact to obtain construction information and have questions answered The Construction TMP will be developed so that the following performance standards are achieved throughout project construction.			

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	• Maintain emergency vehicle access to all buildings on the Sacramento Campus at all times. • Maintain identified emergency vehicle routes to UC Davis Health medical facilities at all times. Notify appropriate contacts for UC Davis Health and/or emergency responders at least 24 hours prior to any construction-related partial/complete closures that may affect emergency vehicle routes, and provide clear identification of detours when necessary. • Minimize construction traffic during morning and evening peak periods when traffic on local and campus streets is highest • Close (i.e., partially or fully) any construction-related public roadways only during off-peak periods and provide appropriate construction signage, including detour routing • Limit detour routing to campus roadways or City collector and arterial roadways, such as Stockton Boulevard and Broadway, to the extent feasible. Include measures to minimize traffic increases on local residential roadways; this may include signage and law enforcement presence during partial/complete closures to discourage through-traffic use of local residential roadways • Clear roadways, sidewalks, crosswalks, and bicycle facilities of debris (e.g., rocks) that could otherwise impede travel and affect			

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Table 3-1. Continued

Impacts	Mitigation Measures	Monitoring and Reporting Procedure	Timing	Verification
	public safety, and maintain them in this condition UC Davis will also consider any concurrent construction activity and other active Construction TMPs when reviewing new Construction TMPs for specific LRDP implementation projects. This review will address the effects of simultaneous construction activity.			

Project stage at which implementation of the measure is required:
SS = site selection; DE = detailed project planning or project design prior to project approval; CO = construction; OC = prior to occupancy; OP = operation.

Chapter 4
Corrections and Revisions to the Draft EIR

This section contains changes to the text of the Draft EIR in response to certain comments. These changes are generally referenced in the responses to comments in Chapter 2 or are provided to be consistent with changes referenced in Chapter 2 of this Final EIR. The changes are presented in the order in which they appear in the Draft EIR and are identified by Draft EIR page number. Text deletions are shown in strikeout (~~strikeout~~) and additions are shown in underline (underline). The changes identified below do not alter the conclusions of the Draft EIR with respect to any of the significant impacts of the project and do not necessitate recirculation of the Draft EIR.

Minor corrections such as typos have been corrected and are not shown as text changes to the Draft EIR.

4.1 Volume 1: Draft EIR

Executive Summary

Mitigation Measure AQ-2 on pages ES-10 and ES-40 has been amended as follows to incorporate changes made in Volume 1, Section 3.2, Air Quality:

Mitigation Measure AQ-2: Reanalyze project emissions and offset construction-generated NO_X emissions in excess of SMAQMD's threshold of significance

If the SMUD Component is constructed in 2025, construction-generated emissions of NO_X may exceed SMAQMD's threshold of significance during that year. In coordination with SMAQMD, UC Davis, or its designee, will reanalyze construction NO_X emissions in 2025 prior to starting construction of the SMUD Component. The analysis will be conducted using SMAQMD-approved emissions models and account for all project construction activity scheduled to occur in 2025 (i.e., SMUD Component, make-ready projects, CUP expansion). The analysis may include onsite measures to reduce construction emissions if deemed feasible by UC Davis. All onsite measures assumed in the analysis must be included in the construction contracts and enforceable by UC Davis.

The revised analysis must consider emission contributions from all project construction activities including in 2025, including the SMUD Component, make-ready projects, and the CUP Expansion. Should the results of the analysis indicate an exceedance of SMAQMD's NOx threshold, UC Davis will pay an existing SMAQMD mitigation fee ~~The required mitigation fee will be~~ based on the amount of quantified NO_X emissions in excess of SMAQMD's threshold of 85 pounds per day as well as the fee rates published at the time of reanalysis. The fee will be used to fund emissions reduction projects within the SVAB. The types of projects that have been used in the past to achieve such reductions involve electrification of stationary internal-combustion engines, such as those used with agricultural irrigation pumps; the replacement of old trucks with newer, cleaner, more efficient trucks; and a host of other stationary- and mobile-source emissions-reducing projects.

Mitigation Measure LRDP-AQ-3b on pages ES-12 and ES-43 has been corrected as follows to include text that was erroneously omitted:

Mitigation Measure LRDP-AQ-3b: Reduce receptor exposure to operations generated toxic air contaminants

UC Davis will require all diesel emergency generators on the Sacramento Campus to use renewable diesel fuel. Renewable diesel must meet the most recent ASTM D975 specification for ultra low-sulfur diesel and have a carbon intensity no greater than 50 percent of diesel with the lowest carbon intensity among petroleum diesel fuels sold in California. All diesel generators must be transitioned to renewable diesel fuel no later than December 31, 2039.

UC Davis will then employ a tiered approach to further reduce sensitive receptor exposure to toxic air contaminants generated by the Sacramento Campus Central Energy Plant. The selected control strategy must be implemented prior to December 31, 2039. The approach will be taken in the following way:

- Replace at least three of the existing Tier 0 generators with engines meeting EPA Tier 4 Final or better emission standards. If the engine cannot be replaced, then
- Require at least three of the existing Tier 0 generators operate with the most effective California Air Resources Board Verified Diesel Emissions Controls (VDECs) available for the engine type (effectively level 3). If the engine cannot be retrofitted with VDECs, then
- Require all existing Tier 0 generators without VDECs to increase the stack height by at least 20 feet.

<u>The above options do not preclude replacement of existing diesel engines with zero-emissions equipment (e.g., additional solar with battery backup, fuel cells), should that equipment be cost effective and achieve functional operating requirements for the Sacramento Campus Central Energy Plant.</u>

Chapter 2, Project Description

The following text has been added on page 2-14 to indicate that non-condensing boilers will be used. The use of non-condensing boilers allows the CUP to achieve higher temperature for heating hot water near the efficiency of a condensing boiler, but would not require upgrades to multiple campus buildings and additional campus infrastructure. Non-condensing boilers would not result in a change in emissions intensity (lb/MMBTU), and fuel usage would not change compared to what was analyzed in the Draft EIR. Therefore, no additional analysis is required. Figure 2-6 of the EIR reflects this change as well.

As stated above, the southwest corner of the FSSB would be demolished, as well as existing landscaping, sidewalks, utilities, and a stormwater system, to clear way for the new CUP Annex. Construction of the CUP Annex would require a roadway configuration that would allow ingress and egress at PS6. A new pedestrian pathway would be added from the west end of PS6 to the new west entry to the FSSB (Figure 2-4).

The CUP Annex would be a two-story, 40,000 square foot, approximately 40-foot-tall structure with a partial basement. The basement would house pumps and large water pipes, with improved access to a utility loop and future tie-in for the chiller building. The building itself would house the CUP

operator's administrative offices, non-condensing boilers for hot water, the normal-power switchgear room, and motor control centers. In addition, the CUP Annex would house three emergency generators and diesel fuel tanks. The second floor would house the emergency system operators and server equipment, emergency distribution switchgear, and backup batteries.

The roof height would be approximately 40 feet above ground level, which would leave ample height for rooftop equipment, visual screening devices, additional equipment storage, and solar panels.

The CUP Annex is proposed for a location west of the three-story FSSB and east of the existing CUP cooling towers and PS6 driveway (Figure 2-3). The CUP Annex is envisioned as a building, in addition to the existing CUP, with major industrial equipment components that would be assembled as needed over a span of approximately 20 years. Equipment would include large tanks and other large pad and rooftop equipment. The annex would be constructed to maintain the existing CUP's reliability for uninterrupted service to the Sacramento Campus and main hospital. With the CUP Annex in place, the facility can expand in the future to incorporate future technologies as they are developed, providing longevity and resiliency as well as new opportunities for sustainability on the Sacramento Campus.

Hot Water for Heating

Although the heat recovery chillers provide most campus heating, a supplemental heat source would be needed in the winter. Four new 10-million-BTU gas-fired non-condensing boilers would be installed in the new CUP Annex. The existing steam boilers and hot-water converters would remain in the existing CUP to provide a backup heat source for the Sacramento Campus.

The temperature of hot water for campus heating at both the existing CUP and the new CUP Annex would be reduced from 220 degrees Fahrenheit to 160 degrees Fahrenheit.

Section 3.2, Air Quality

The following text has been added on page 3.2-1 to indicate that non-condensing boilers will be used. The use of non-condensing boilers allows the CUP to achieve higher temperature for heating hot water near the efficiency of a condensing boiler, but would not require upgrades to multiple campus buildings and additional campus infrastructure. Non-condensing boilers would not result in a change in emissions intensity (lb/MMBTU), and fuel usage would not change compared to what was analyzed in the Draft EIR. Therefore, no additional analysis is required.

In response to the notice of preparation (NOP) for this environmental impact report (EIR), commenters expressed the following concerns related to air quality:

- Coordination with the Sacramento Metropolitan Air Quality Management District (SMAQMD) and Sacramento Municipal Utility District (SMUD), respectively, to obtain necessary permits and optimize the route alignment for emissions reductions.
- Consideration of nitrogen oxide– (NO_X-) free heating options for the new gas-fired non-condensing boilers.
- Consistency with the 2020 Long-Range Development Plan Update Supplemental EIR (2020 LRDP Update SEIR), including Mitigation Measures AQ-1 through AQ-3.

- Analysis of construction-generated NO_X emissions against SMAQMD's thresholds of significance.
- Consideration of SMAQMD rules and basic construction emissions control practices.

Mitigation Measure LRDP-AQ-3b on page 3.2-2- has been corrected as follows to include text that was erroneously omitted:

Mitigation Measure LRDP-AQ-3b: Reduce receptor exposure to operations generated toxic air contaminants

UC Davis will require all diesel emergency generators on the Sacramento Campus to use renewable diesel fuel. Renewable diesel must meet the most recent ASTM D975 specification for ultra low-sulfur diesel and have a carbon intensity no greater than 50 percent of the diesel with the lowest carbon intensity among petroleum diesel fuels sold in California. All diesel generators must be transitioned to renewable diesel fuel no later than December 31, 2039.

UC Davis will employ a tiered approach to reduce further sensitive-receptor exposure to TACs generated by the Sacramento Campus Central Energy Plant. The selected control strategy must be implemented prior to December 31, 2039. The approach will be implemented as follows:

- Replace at least three of the existing Tier 0 generators with engines that meet EPA Tier 4 Final or better emission standards.

If the engine cannot be replaced, then:

- Require at least three of the existing Tier 0 generators to operate with the most effective CARB Verified Diesel Emissions Controls (VDECs) available for the engine type (effectively Level 3).

If the engine cannot be retrofitted with VDECs, then:

- Require all existing Tier 0 generators without VDECs to increase the stack height by at least 20 feet.

<u>The above options do not preclude replacement of existing diesel engines with zero-emissions equipment (e.g., additional solar with battery backup, fuel cells), should that equipment be cost effective and achieve functional operating requirements for the Sacramento Campus Central Energy Plant.</u>

The following text has been added to clarify Mitigation Measure AQ-2 on page 3.2-21 to clarify that construction all concurrent project construction emissions in 2025 must be included in the threshold comparison.

Mitigation Measure AQ-2: Reanalyze project emissions and offset construction-generated NO_X emissions in excess of SMAQMD's threshold of significance

If the SMUD Component is constructed in 2025, construction-generated emissions of NO_X may exceed SMAQMD's threshold of significance during that year. In coordination with SMAQMD, UC Davis, or its designee, will reanalyze construction NO_X emissions in 2025 prior to starting construction of the SMUD Component. The analysis will be conducted using SMAQMD-approved

emissions models and account for all project construction activity scheduled to occur in 2025 (i.e., SMUD Component, make-ready projects, CUP expansion). The analysis may include onsite measures to reduce construction emissions if deemed feasible by UC Davis. All onsite measures assumed in the analysis must be included in the construction contracts and enforceable by UC Davis.

The revised analysis must consider emission contributions from all project construction activities including in 2025, including the SMUD Component, make-ready projects, and the CUP Expansion. Should the results of the analysis indicate an exceedance of SMAQMD's NOx threshold, UC Davis will pay an existing SMAQMD mitigation fee ~~The required mitigation fee will be~~ based on the amount of quantified NO_X emissions in excess of SMAQMD's threshold of 85 pounds per day as well as the fee rates published at the time of reanalysis. The fee will be used to fund emissions reduction projects within the SVAB. The types of projects that have been used in the past to achieve such reductions involve electrification of stationary internal-combustion engines, such as those used with agricultural irrigation pumps; the replacement of old trucks with newer, cleaner, more efficient trucks; and a host of other stationary- and mobile-source emissions-reducing projects.

Section 3.7, Greenhouse Gases

The following text has been added on page 3.7-1 to indicate that non-condensing boilers will be used. The use of non-condensing boilers allows the CUP to achieve higher temperature for heating hot water near the efficiency of a condensing boiler, but would not require upgrades to multiple campus buildings and additional campus infrastructure. Non-condensing boilers would not result in a change in emissions intensity (lb/MMBTU), and fuel usage would not change compared to what was analyzed in the Draft EIR. Therefore, no additional analysis is required.

In response to the Notice of Preparation for this Environmental Impact Report (EIR), commenters expressed the following concerns related to GHG emissions:

- Coordination with the Sacramento Municipal Utility District (SMUD) to optimize the route alignment for emission reduction and electric vehicle charging options.
- Consideration of carbon-neutral heating options for the new gas-fired non-condensed boilers.

The following text has been added on page 3.7-6 to indicate that non-condensing boilers will be used. The use of non-condensing boilers allows the CUP to achieve higher temperature for heating hot water near the efficiency of a condensing boiler, but would not require upgrades to multiple campus buildings and additional campus infrastructure. Non-condensing boilers would not result in a change in emissions intensity (lb/MMBTU), and fuel usage would not change compared to what was analyzed in the Draft EIR. Therefore, no additional analysis is required.

- **New Sources***:* Four new 10-million-British-thermal-unit gas-fired non-condensing boilers would be installed in the CUP Annex. The CUP Annex would also represent a new area source of emissions and consume electricity. A 100-foot natural gas line and one new gas meter would be installed.

4.2 Volume 2: Appendices

Appendix B, Air Quality Modeling Results

Appendix B has been revised to include additional section labels and summary tables including the following.

- Section labels for "Construction Emissions" and "Operational Emissions" have been added as pages 1 and 135, respectively.
- A summary table for construction GHG emissions has been added to page 134. This table shows how annual emissions from CalEEMod were combined with the i-Tree results for sequestration loss and amortized over 30 years to obtain the total construction result shown in Table 3.7-3.
- A summary table for operational criteria pollutant emissions has been added to page 153. This table shows how individual source contributions were totaled to ultimately calculate the net change in emissions relative to existing conditions, which is shown in Table 3.2-5 in Chapter 3.2, *Air Quality*. Page references within Appendix B for individual source calculations are given.
- A summary table for operational GHG emissions has been added to page 154. This table shows how individual source contributions were totaled to ultimately calculate the net change in emissions relative to existing conditions, which is shown in Table 3.7-3 in Chapter 3.7. Page references within Appendix B for individual source calculations are given.