Initial Study

for:

EL CENTRO GENERATING STATION UNIT 4 REPOWERING PROJECT

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SECTION 1

I. INTRODUCTION

A. PURPOSE

This document is a ☐ policy-level, ☒ project-level Initial Study for evaluation of potential environmental impacts resulting from the proposed improvements to the Imperial Irrigation District (IID) El Centro Generating Station (ECGS). The proposed ECGS Unit 4 Repowering Project (Project) would decommission the existing natural gas fired boiler (Boiler 4) and replace it with six reciprocating internal combustion engines (RICE). A black start engine, maintenance building, and ammonia storage tank will also be constructed.

B. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REQUIREMENTS

As defined by Section 15063 of the California Environmental Quality Act (CEQA) Guidelines, an **Initial Study** is prepared primarily to provide the Lead Agency with information to use as the basis for determining whether an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND) would be appropriate for providing the necessary environmental documentation and clearance for any proposed project.

☐ According to Section 15065, an **EIR** is deemed appropriate for a particular proposal if the following conditions occur:

- The proposal has the potential to substantially degrade quality of the environment.
- The proposal has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The proposal has possible environmental effects that are individually limited but cumulatively considerable.
- The proposal could cause direct or indirect adverse effects on human beings.

☐ According to Section 15070(a), an **ND** is deemed appropriate if the proposal would not result in any significant effect on the environment.

☒ According to Section 15070(b), an **MND** is deemed appropriate if it is determined that though a proposal could result in a significant effect, mitigation measures are available to reduce these significant effects to insignificant levels.

This Initial Study (IS) is prepared in conformance with the California Environmental Quality Act of 1970, as amended (Public Resources Code, Section 21000 et. seq.); Section 15070 of the State Guidelines for Implementation of the California Environmental Quality Act of 1970, as amended (California Code of Regulations, Title 14, Chapter 3, Section 15000, et. seq.); applicable requirements of the IID; and the regulations, requirements, and procedures of any other responsible public agency or an agency with jurisdiction by law.

The IID is designated the Lead Agency, in accordance with Section 15050 of the CEQA Guidelines. The Lead Agency is the public agency that has the principal responsibility for approving the necessary environmental clearances and analyses for the Project.

C. INTENDED USES OF INITIAL STUDY

This IS is an informational document that is intended to inform the IID decision-makers, other responsible or interested agencies, and the general public of the potential environmental effects of the

proposed Project. The environmental review process has been established to enable public agencies to evaluate environmental consequences and examine and implement methods of eliminating or reducing any potentially adverse impacts. While CEQA requires consideration to be given to avoid environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, including economic and social goals.

The IS prepared for the Project will be circulated for a period of 30 days for public and agency review and comments. At the conclusion, if comments are received, the IID will prepare a document entitled "Responses to Comments," which will be forwarded to any commenting entity and be made part of the record within 10 days of any Project consideration.

D. CONTENTS OF INITIAL STUDY

This IS is organized to facilitate a basic understanding of the existing setting and environmental implications of the proposed application.

SECTION 1

I. **INTRODUCTION** presents an introduction to the entire report. This section discusses the environmental process, scope of environmental review, and incorporation by reference documents.

SECTION 2

II. **ENVIRONMENTAL CHECKLIST FORM** contains the Environmental Checklist Form. The checklist form presents results of the environmental evaluation for the proposed applications and those issue areas that would have either a significant impact, potentially significant impact, or no impact.

   A. **PROJECT SUMMARY, LOCATION AND ENVIRONMENTAL SETTINGS** describes the proposed Project entitlements and required applications. A description of discretionary approvals and permits required for Project implementation is also included. It also identifies the location of the Project and a general description of the surrounding environmental settings.

   B. **EVALUATION OF ENVIRONMENTAL IMPACTS** evaluates each response provided in the environmental checklist form. Each response checked in the checklist form is discussed and supported with sufficient data and analysis as necessary. As appropriate, each response discussion describes and identifies specific impacts anticipated with Project implementation.

SECTION 3

III. **MANDATORY FINDINGS** presents Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

IV. **PERSONS AND ORGANIZATIONS CONSULTED** identifies those persons consulted and involved in preparation of this Initial Study and Negative Declaration.

V. **REFERENCES** lists bibliographical materials used in preparation of this document.

VI. **FINDINGS**

SECTION 4

VII. **RESPONSE TO COMMENTS (IF ANY)**

VIII. **MITIGATION MONITORING & REPORTING PROGRAM (MMRP) (IF ANY)**

E. SCOPE OF ENVIRONMENTAL ANALYSIS

For evaluation of environmental impacts, each question from the Environmental Checklist Form is summarized, and responses are provided according to the analysis undertaken as part of the Initial Study. Impacts and effects will be evaluated and quantified, when appropriate. To each question, there are four possible responses, including:

1. **No Impact:** A "No Impact" response is adequately supported if the impact simply does not apply to the proposed applications.
2. **Less Than Significant Impact:** The proposed applications will have the potential to impact the environment. These impacts, however, will be less than significant; no additional analysis is required.
3. **Less Than Significant with Mitigation Incorporated:** This applies where incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact".
4. **Potentially Significant Impact:** The proposed applications could have impacts that are considered significant. Additional analyses and possibly an EIR could be required to identify mitigation measures that could reduce these impacts to less than significant levels.

F. POLICY-LEVEL OR PROJECT-LEVEL ENVIRONMENTAL ANALYSIS

This IS will be conducted under a ☐ policy-level, ☒ project-level analysis. Regarding mitigation measures, it is not the intent of this document to "overlap" or restate conditions of approval that are commonly established for future known projects or the proposed applications. Additionally, those other standard requirements and regulations that any development must comply with, that are outside the IID's jurisdiction, are also not considered mitigation measures and, therefore, will not be identified in this document.

G. TIERED DOCUMENTS AND INCORPORATION BY REFERENCE

Information, findings, and conclusions contained in this document may be based on incorporation by reference of tiered documentation, which are discussed in the following section.

I. TIERED DOCUMENTS

As permitted in Section 15152(a) of the CEQA Guidelines, information and discussions from other documents can be included in this document. Tiering is defined as follows:

"Tiering refers to using the analysis of general matters contained in a broader EIR (such as the one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project."

Tiering also allows this document to comply with Section 15152(b) of the CEQA Guidelines, which discourages redundant analyses, as follows:

"Agencies are encouraged to tier the environmental analyses which they prepare for separate but related projects including the general plans, zoning changes, and development projects. This approach can eliminate repetitive discussion of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy, or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration."

Further, Section 15152(d) of the CEQA Guidelines states:

"Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:

(1) Were not examined as significant effects on the environment in the prior EIR; or

(2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means."

II. INCORPORATION BY REFERENCE

Incorporation by reference is a procedure for reducing the size of EIRs/MND and is most appropriate for including long, descriptive, or technical materials that provide general background information, but do not contribute directly to the specific analysis of the project itself. This procedure is particularly useful when an EIR or ND relies on a broadly drafted EIR for its evaluation of cumulative impacts of related projects (*Las Virgenes Homeowners Federation v. County of Los Angeles* [1986, 177 Ca.3d 300]). If an EIR or ND relies on information from a supporting study that is available to the public, the EIR or ND cannot be deemed unsupported by evidence or analysis (*San Francisco Ecology Center v. City and County of San Francisco* [1975, 48 Ca.3d 584, 595]).

When an EIR or ND incorporates a document by reference, the incorporation must comply with Section 15150 of the CEQA Guidelines as follows:

- The incorporated document must be available to the public or be a matter of public record (CEQA Guidelines Section 15150[a]). This document must be available for inspection by the public at an office of the lead agency (CEQA Guidelines Section 15150[b]).
- These documents must summarize the portion of the document being incorporated by reference or briefly describe information that cannot be summarized. Furthermore, these documents must describe the relationship between the incorporated information and the analysis in the tiered documents (CEQA Guidelines Section 15150[c]). As discussed above, the tiered EIRs address the entire project site and provide background and inventory information and data which apply to the project site. Incorporated information and/or data will be cited in the appropriate sections.
- These documents must include the State identification number of the incorporated documents (CEQA Guidelines Section 15150[d]).

The material to be incorporated in this document will include general background information (CEQA Guidelines Section 15150[f]). This has been previously discussed in this document.

SECTION 2

II. ENVIRONMENTAL CHECKLIST

1. **Project Title**: El Centro Generating Station (ECGS) Unit 4 Repowering Project (Project)
2. **Lead Agency:** Imperial Irrigation District (IID)
3. **Contact Person and Phone Number:** Donald Vargas, Compliance Administrator II, (760) 482-3609
4. **Address:** 333 East Barioni Boulevard, Imperial, CA 92251
5. **E-mail**: dvargas@iid.com
6. **Project Location:** Southwest corner of the intersection of Dogwood Road and East Villa Avenue; 485 East Villa Avenue, El Centro, California, 92243

   APN: 044-430-008
7. **Project Sponsor's Name and Address:** IID, 333 East Barioni Boulevard, Imperial, CA 92251
8. **General Plan Designation**: Public
9. **Zoning**: Limited Use (LU)
10. **Summary Description of Project:** The ECGS Unit 4 Repowering Project (Project) proposes to decommission the existing natural gas fired boiler (Boiler 4) and replace it with six reciprocating gas engine internal combustion engines (RICE) at the IID ECGS (see "Project Description" below for more information).
11. **Surrounding Land Uses And Setting**: Land uses surrounding the Project site include a combination of public utilities, light industrial, and agricultural on privately owned land. The Project site is contained within the ECGS facility, which is developed with industrial land uses.
12. **Other Public Agencies Whose Approval Is Required** (e.g., permits, financing approval, or participation agreement.)**:** Imperial County Air Pollution Control District (ICAPCD), City of El Centro.
13. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1?** No.

    If so, has consultation begun? Not applicable.

    Letters were sent to the following tribes and agencies on **June 24, 2024;** none requested consultation.

    - Agua Caliente Band of Cahuilla Indians
    - Augustine Band of Cahuilla Mission Indians
    - Barona Band of Mission Indians
    - Cahuilla Band of Mission Indians
    - California Native American Heritage Commission
    - Campo Band of Kumeyaay Indians
    - Chemehuevi Indian Tribe
    - Cocopah Indian Tribe
    - Colorado River Indian Tribes
    - CRIT Tribal Historic Preservation Office
    - Ewilaapaayp Band of Kumeyaay Indians
    - Fort Mojave Indian Tribe
    - Fort Yuma Quechan Indian Tribe
    - Historic Preservation Office
    - Iipay Nation of Santa Ysabel
    - Inaja-Cosmit Band of Indians

- Internal-Tribal Cultural Resource Protection Council
- Jamul Indian Village A Kumeyaay Nation
- Kumeyaay Cultural Repatriation Committee
- Kwaaymii Laguna Band of Mission Indians
- La Jolla Band of Luiseno Indians
- La Posta Band of Mission Indians
- Los Coyotes Band of Cahuilla and Cupeno Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Mission Indians
- Morongo Band of Mission Indians
- Native American Heritage Commission
- Pala Band of Mission Indians
- Pauma Band of Luiseno Indians
- Rincon Band of Luiseno Indians
- San Manuel Band of Mission Indians
- San Pasqual Band of Mission Indians
- Santa Rosa Band of Cahuilla Indians
- Soboba Band of Luiseno Indians
- Sycuan Band of the Kumeyaay Nation
- Torres-Martinez Desert Cahuilla Indians
- Viejas Band of Kumeyaay Indians
- Cabazon Band of Mission Indians
- Ramona Band of Cahuilla

The period to request consultation closed on July 24, 2024. During this time, the following tribes provided responses but did not request consultation:

- Augustine Band of Cahuilla Mission Indians – The Band is unaware of specific cultural resources that may be affected by the Project; however, in the event that the IID discovers any cultural resources during the development of this Project, the Band requests to be contacted immediately for further evaluation.
- Cahuilla Band of Mission Indians – The Band posed questions regarding ground disturbance, mitigation measures, and tribal monitoring.
- Rincon Band of Luiseño Indians - The location identified within Project documents is not within the Band's specific Area of Historic Interest (AHI).
- Morongo Band of Mission Indians – The Project is not within the boundaries of the ancestral territory of the traditional use area of the Band.
- San Manuel Band of Mission Indians - The location identified within Project documents is not within the Band's specific AHI and will not request consulting status.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process (see Public Resources Code, Section 21083.3.2). Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code, Section 5097.96, and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that the Public Resources Code, Section 21082.3 (c) contains provisions specific to confidentiality.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture/Forestry Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas	☐ Hazards and Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

LEAD AGENCY'S ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because the revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENT IMPACT REPORT is required.

☐ I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects, (1) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE DE MINIMIS IMPACT FINDING: ☒ Yes ☐ No

Vargas, Donald Digitally signed by Vargas, Donald Date: 2025.03.18 13:23:20 -07'00'

Signature

03/18/2025

Date

Printed Name, Title

Lead Agency

A. PROPOSED PROJECT

1. **Project Location:** The Project is within the boundaries of the IID ECGS facility located at the southwest corner of the intersection of Dogwood Road and East Villa Avenue in El Centro, California. The address is 485 East Villa Avenue, El Centro, California, 92243 (see Figure 1 and Figure 2).

2. **Project Description**: IID is a publicly owned utility providing irrigation water and power to its customers. It is a full-service power utility providing generation, transmission, and distribution services. IID operates the ECGS. As part of IID's 1945 Power Development Project, IID constructed Unit 1 at the ECGS. During the years following, Units 2, 3, and 4 were added and respectively powered in 1952, 1957, and 1968. Subsequently, Unit 1 was retired, and Units 2 and 3 were repowered; Unit 2 in 1993 at a capacity of 115 megawatts (MW) and Unit 3 in 2012 at a capacity of 152 MW.

   The Project proposes to decommission the existing natural gas fired boiler (Boiler 4) and replace it with six natural gas fired RICE at the ECGS. It includes the installation of a black-start engine, a maintenance building, and an ammonia storage tank. The Project conforms with the IID's *2024 Integrated Resource Plan*[1]. The planning process was a public process, and this plan has been adopted by the IID Board. Figure 2 presents the Project site layout and proposed Project elements.

   Background

   Currently, the station operates three combustion turbine generators (Unit 3 consists of two twin turbines), three steam turbine generators, one boiler (Unit 4 or Boiler 4), one diesel emergency standby generator, an emergency fire pump, a portable sandblaster, and three-unit specific cooling towers under the ICAPCD's Title V permit No. V-2152 (2023). The ECGS serves as one of the major components of the IID's energy generation portfolio. Each of the units at ECGS operates as intermediate load generation resources, providing energy and ancillary services for the IID Balancing Authority.

   The total capacity of ECGS is 347 MW. The power generating units are primarily natural gas fired, although ECGS has the ability to utilize fuel oil for Unit 2. Colorado River water diverted via the Dogwood Canal is utilized to provide water for cooling and other operations.

   Unit 4 comprises a steam turbine generator permitted at a net rating of 74 MW, a natural gas fired steam boiler, and a unit-specific cooling tower. On average, due to a decrease in production at other IID facilities, the operation of Unit 4 has continually increased. On average, Unit 4 has operated 4,848 hours per year for the past two years (2022, 2023) based on annual data compiled for the ICAPCD.

   Proposed Project

   The Project proposes to decommission the existing natural gas fired boiler (Boiler 4) and replace it with six natural gas fired RICE at the ECGS. The project also includes the installation of a black-start engine (BSE), a maintenance building and an ammonia storage tank. The Project conforms with the IID's *2024 Integrated Resource Plan*[2]. The planning process was a public process, and this plan has been adopted by the IID Board.

   The IID expects to operate the six new engines as peaking units at a maximum permitted annual operating schedule equivalent to 4,000 hours, including 800 startup/shutdown events. A startup event will take a maximum of a half hour before normal operations, and a shutdown event will take 60 seconds and have insignificant emissions compared to normal operations. Each generating unit

[1] https://www.iid.com/power/renewable-energy/integrated-resource-plan

will operate independently, and the use of multiple smaller units allows the IID to effectively produce from approximately 8 MW to the full 113 MW, as needed, to meet fluctuating demands during periods of peak demand. The RICE technology of the proposed units provides fuel efficiency in comparison to similar simple cycle gas turbines that are also used in peaking operations. The proposed technology is also less water intensive in demand than many available alternative technologies. The diesel BSE emergency generator will be permitted to operate 50 hours annually for maintenance.

The proposed RICE will be equipped with selective catalytic reduction systems (SCR) to control NOx emissions. They will also be equipped with oxidation catalysts to control CO, VOC and other organic air pollutants. The Project is designed to meet limits of 0.07 pound per megawatt-hour (lb/MW-hr) NO_X, 0.20 lb/MW-hr CO, 0.10 lb/MW-hr VOC, and 5 parts per million by volume (ppmv) ammonia emissions. These levels have been recently considered Best Available Control Technology (BACT) and the Lowest Achievable Emission Rate (LAER) for stationary natural gas internal combustion engine applications by the U.S. Environmental Protection Agency (EPA) and the neighboring South Coast Air Quality Management District (SCAQMD). The proposed concentrations are also specified in the SCAQMD's Rule 1110.2 and have recently been applied by the SCAQMD to a project that uses the same engine model. The NO_X and CO emission rates have also been specified by the EPA to a similar project in Southern California. NO_X and CO emissions will be monitored continuously, and the engines will be tested for other pollutants such as VOC, ammonia and PM_{10} on a periodic basis.

The Project, rated at 113 MW, will not result in a net increase in generating capacity of 50 MW or more, therefore the California Energy Commission (CEC) licensing will not be required. The Project will be subject to CEQA, and the IID intends to serve as the Lead Agency.

Each engine, generator and emission control system unit will be approximately 24 feet wide, by 211 feet long, and 18 feet high. The exhaust stack height is expected to be approximately 120 feet tall, similar to the existing on-site exhaust stack heights. The six exhaust stacks will be collocated in a common structure. The engines and associated generators will be housed in a new Engine Building, measuring approximately 100 feet by 222 feet and reaching approximately 32 feet tall. In addition to the Engine Building, the Project would include a number of small ancillary structures housing a control room and a continuous emission monitoring system (CEMS) measuring 10 feet by 10 feet. A new combined material storage and maintenance building will be constructed and cover approximately 110 feet by 80 feet. With additional parking space the total impervious surface area dedicated to the combined facility will be 110 feet by 110 feet.

In addition, underground natural gas supply lines would extend from the boiler building southward to the six new engines (see Appendix A). Power generated by the new units will be transmitted to the grid by way of the El Centro Switching Station.

Construction Process and Timing

Construction is anticipated to commence in the summer or fall of 2025. Construction is expected to last approximately 24–26 months. The generating units will be partially constructed at a manufacturing facility and transported to the site for final assembly and the addition of the emission control systems. Equipment is expected to be transported via Interstate 8 and Dogwood Road to the Project site. It is also possible that some equipment will be transported to a point near the site via rail. The equipment laydown areas are depicted on Figure 2. The laydown areas would cover approximately 3.5 acres, and while it would not be paved construction processes would conform with the ICAPCD Rules covering fugitive dust from construction activities.

Demolition of existing obsolete structures will occur at the onset of construction. Tanks 2, 3, and 6, which were previously fuel storage tanks, will be demolished to make room for the Project. Tanks 2 and 3 are approximately 75 feet in diameter and 20 feet tall and are currently used as parts storage. Tank 6 is currently an empty fuel oil storage tank that is 135 feet in diameter and 45 feet tall. Tank 6 may have some residual diesel and will need to be cleaned prior to demolition. Cleaning will be conducted pursuant to API standards and coordinated with the local Certified Unified Program Agency (CUPA) office. Tank shells will be recycled offsite. Foundations to be demolished and landfilled. Piping connected to tank 6 will also need to be demolished. Boiler 4 will be rendered inoperable and retained in place.

Soil will then be grubbed and graded to achieve the appropriate contour and elevation. Excavation/boring will then take place to build foundations for the new structures. Trenches for fuel, electrical, and water lines will also be excavated. Excavation is not expected to exceed 10 feet below ground surface. Based on prior geotechnical recommendation piles or poured posts will likely be required for the engine/generator foundation to mitigate excessive settlement. Piles were anticipated to be driven from 20 feet below ground surface to 70 feet below ground surface dependent on the final design of foundations (reference: Geotechnics Inc., Document no. 06-0132, March 17, 2006).

Once foundation work is completed, construction work on the buildings will commence, including erection of structures and delivery of the equipment for assembly, installation, and testing. Although equipment will largely arrive to the site pre-painted, there will be some exterior architectural painting that occurs. Once equipment and buildings are in place, pavement and landscaping will be initiated.

Commissioning is expected to occur in the summer or fall of 2027. The IID envisions that commissioning of the engines would be conducted sequentially, and during that time Boiler 4 will likely remain in operation with reductions in loads until at least four engines are commissioned. The commissioning period is expected to last up to four months.

Project Conceptual Renderings[3]

The IID prepared a series of visual renderings to provide a conceptual representation of how the Project could look. All renderings present a general representation of the Project and may be refined as a result of further Project design development and refinement. The renderings include the following:

Figure Number and Title	Figure Purpose and Description
Figure 3: Simulations Location Map	Presents a map showing the viewpoint location of each of the following renderings and the direction they point. The figure also indicates the Project's general footprint on the IID property.
Figure 4a: Location 1 – Current Condition	Represents the current view from ground level at the edge of East Villa Avenue; a publicly accessible viewpoint.
Figure 4b: Location 1 – Project Condition	Represents the future view with the Project included.
Figure 5a: Location 2 – Current Condition	Represents the current view from ground level at the edge of Dogwood Road; a publicly accessible viewpoint.
Figure 5b: Location 2 – Project Condition	Represents the future view with the Project included.
Figure 6a: Location 3 – Current Condition	Represents the current onsite view from the south-southeast direction. It is not a publicly accessible viewpoint.
Figure 6b: Location 3 – Project Condition	Represents the future view with the Project included.
Figure 7: Location 4 – Bird's Eye View, Project Condition	Represents the future view with the Project included from an elevated vantage point.

[3] These visual representations are conceptual in nature and are based on the current initial designs. With the development of more precise and advanced engineering design, modifications may result.

3. **Environmental Setting:** Figure 2 portrays the areas that would be impacted by Project implementation. The area has been occupied by the IID for over 80 years and has been regularly disturbed while in use for tank farms and vehicle traffic. The Project is surrounded by the following abutting uses: a solar array and the existing IID industrial facility to the north, agricultural land use to the east, existing industrial uses to the south, and a solar array to the west.

4. **General Plan Consistency**: The Project is within the existing boundaries of the IID ECGS facility which is within the City of El Centro. The Project site has a City of El Centro General Plan land use designation of "Public", which includes parcels owned by the IID and pertains to land used for the production and transmission of electrical gas, geothermal, or other forms of energy. The Project is consistent with this designation, as it is the decommissioning and replacement of the existing IID infrastructure on land owned and operated by the IID.

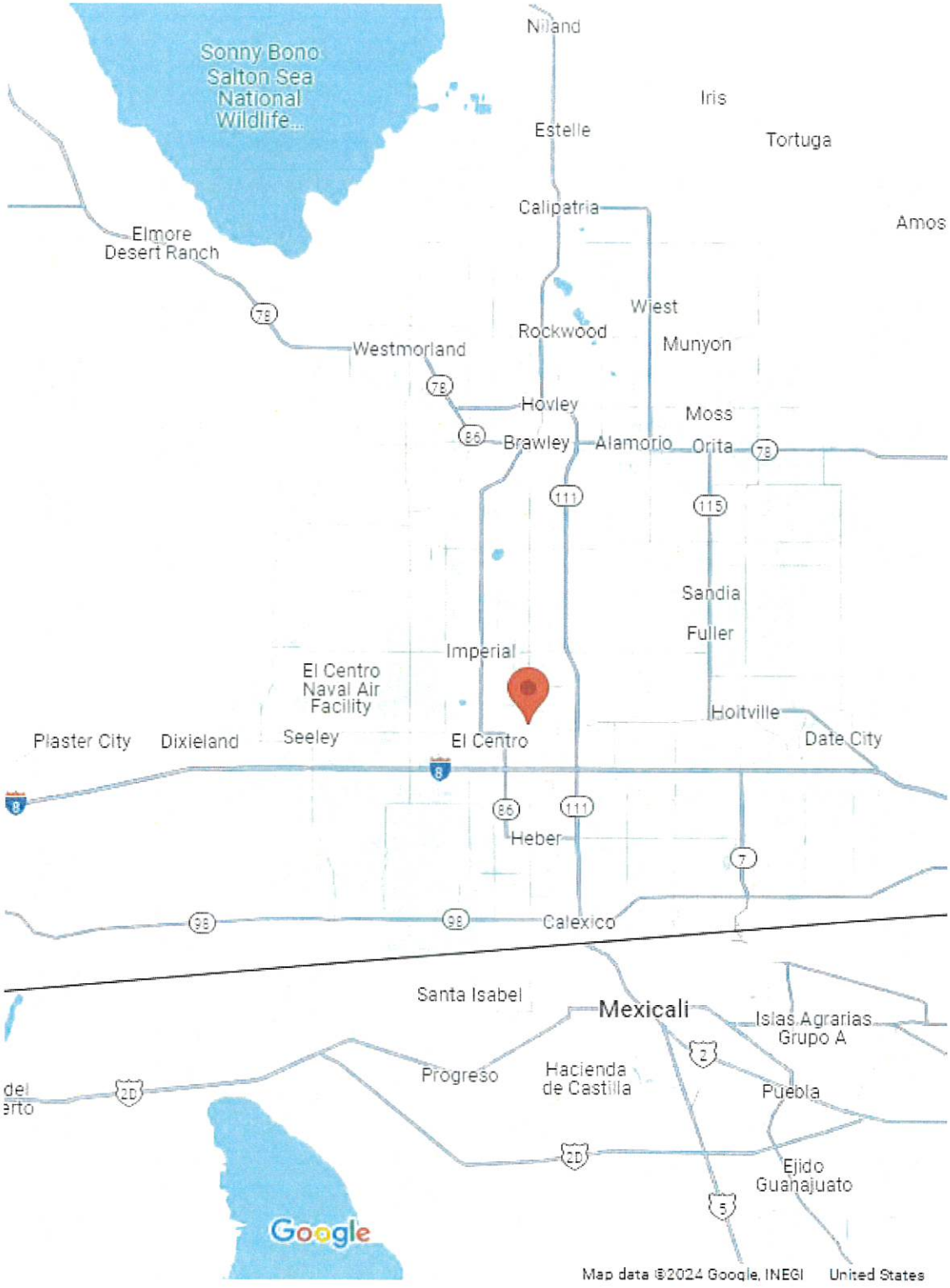

Figure 1 - Regional Location

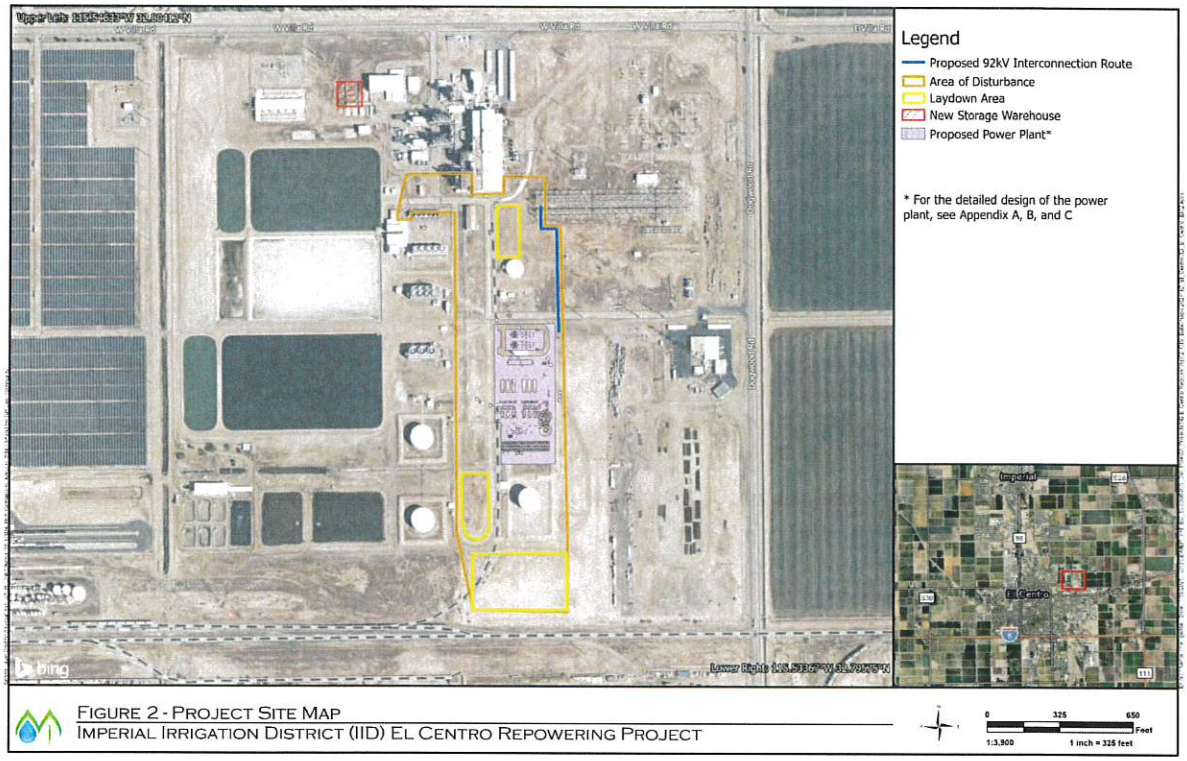

Figure 2: Project Site and Elements

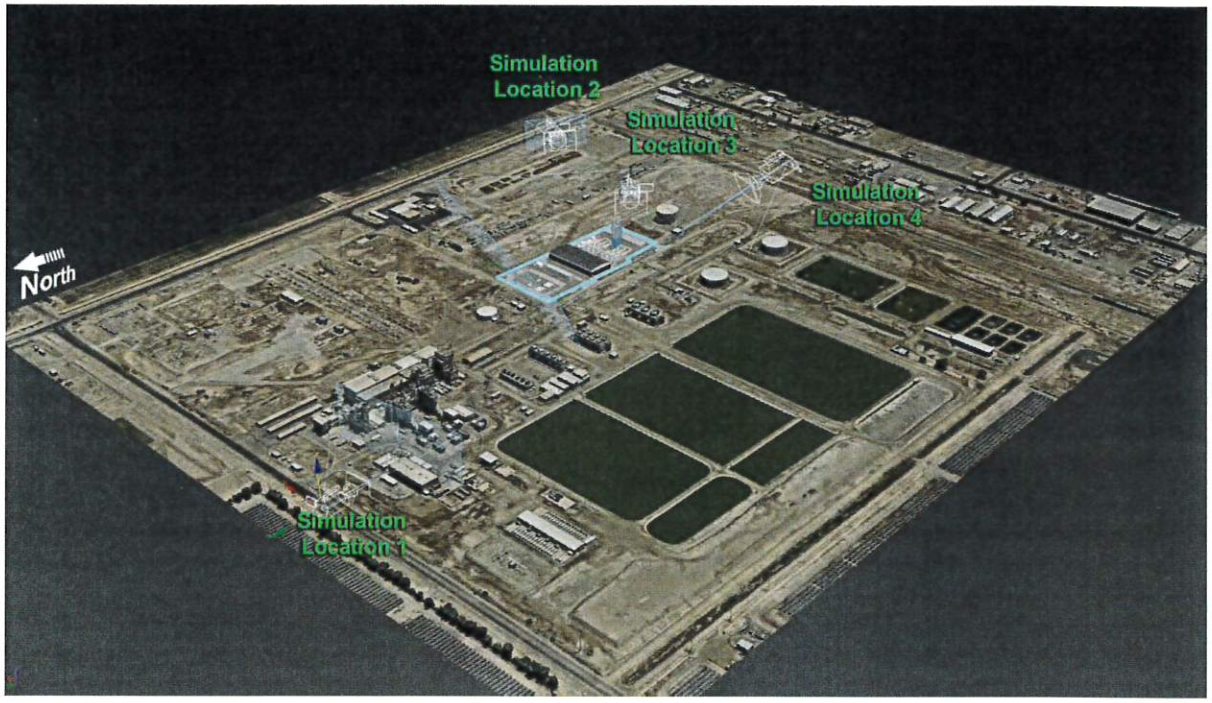

Figure 3: Simulations Location Map

Figure 4a: Location 1 – Current Condition

Figure 4b: Location 1 – Project Condition

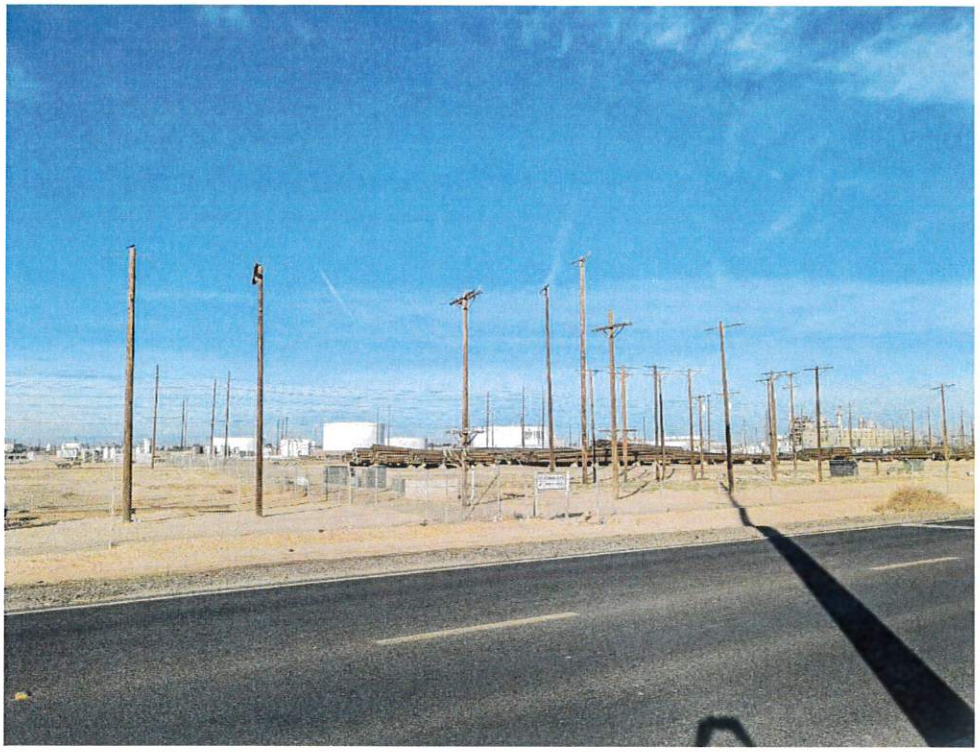

Figure 5a: Location 2 – Current Condition

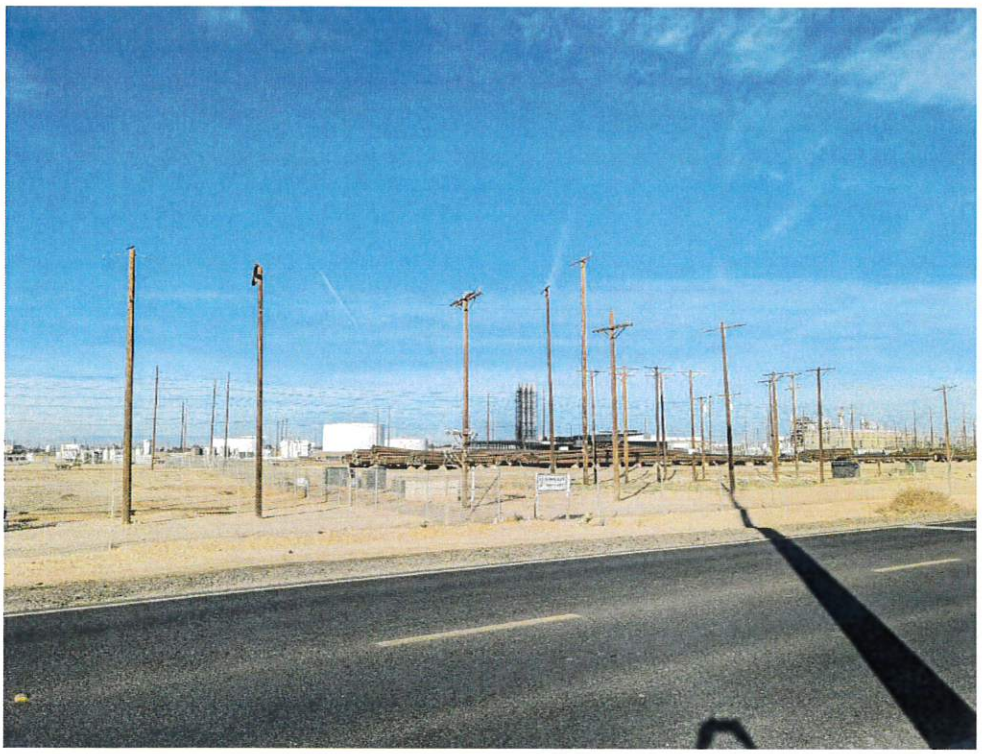

Figure 5b: Location 2 – Project Condition

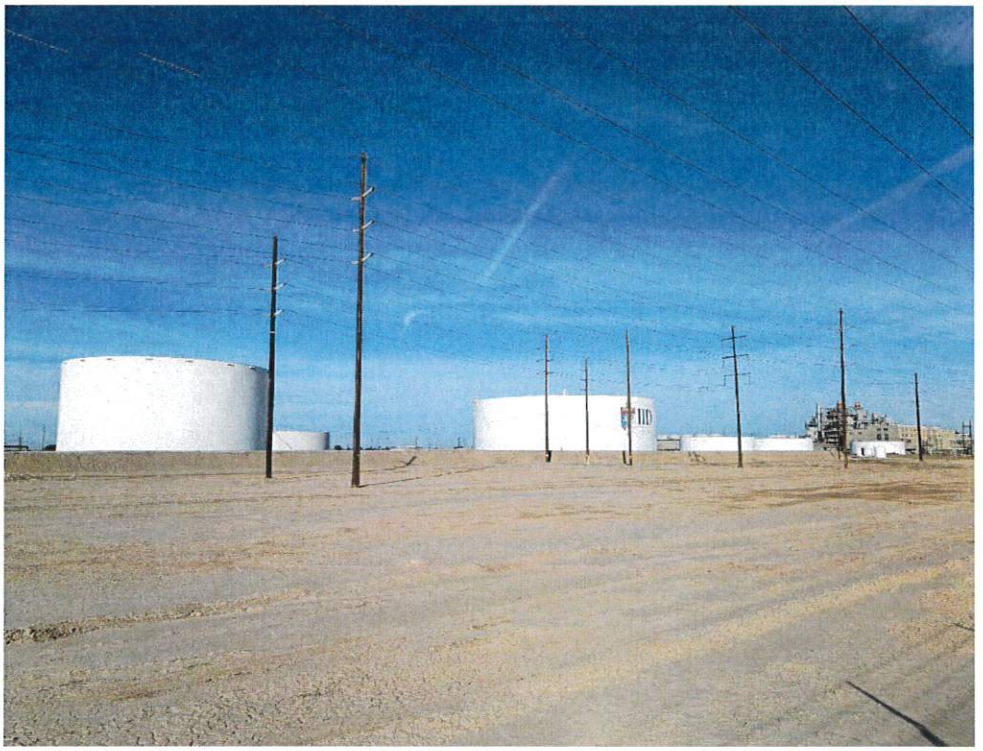

Figure 6a: Location 3 – Current Condition

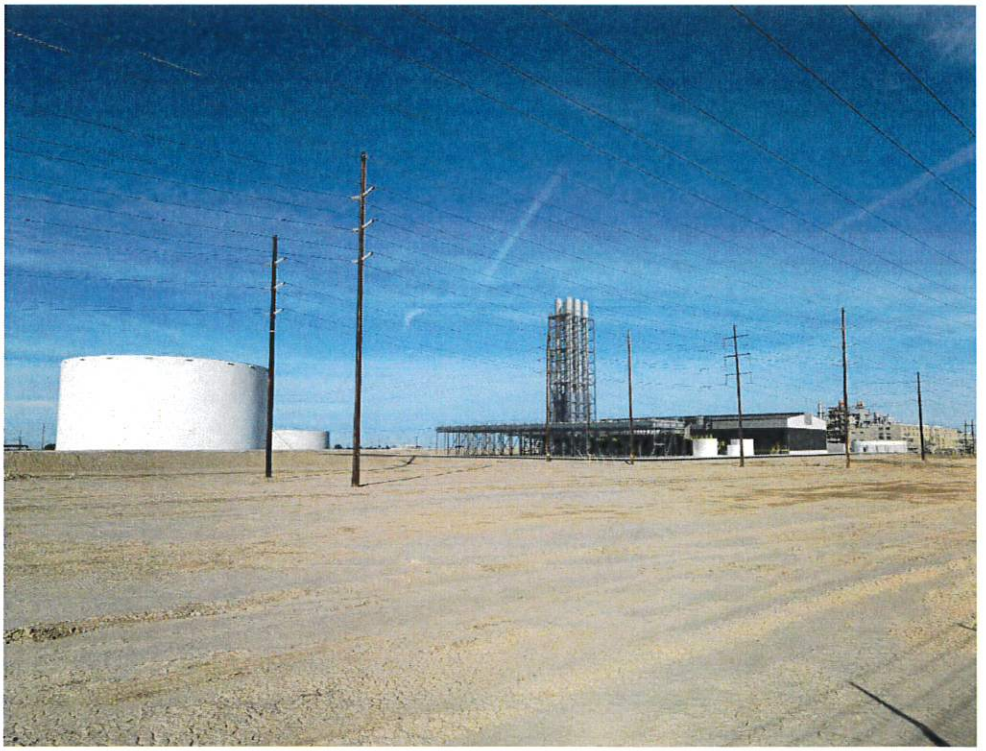

Figure 6b: Location 3 – Project Condition

Figure 7: Location 4 – Bird's Eye View, Project Condition

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. the mitigation measure identified, if any, to reduce the impact to less than significance.

I. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒

A scenic vista is generally defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the public. Scenic vistas are commonly identified in local planning documents but can also include public viewpoints not identified within an adopted regulatory document. There are no designated scenic vistas in the City's General Plan. The City is generally flat and lacking natural resources. The most prevalent resources are primarily agricultural land with the remaining natural resources existing along irrigation canal rights-of-way and other lowland areas created by agriculture and irrigation. No impact would occur.

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

The Project site is contained within the ECGS facility, which is developed with industrial land uses. The Project site does not include trees, rock outcroppings, historic buildings, or any scenic resources.

There are no designated state scenic highways (California Department of Transportation [Caltrans] 2018) in the vicinity of the Project or Imperial County; the nearest officially designated state scenic highway is a portion of Highway 76, near Ocotillo Wells, approximately 45 miles northwest of the Project site. There is a portion of Highway 111, near the Salton Sea, approximately 40 miles north of the Project site that is eligible but not a designated state scenic highway. No impact would occur.

c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐

Public Resources Code 21071 defines the term "urbanized area" for the purpose of CEQA to mean an incorporated city that has a population of at least 100,000 persons or has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons. U.S. Department of Commerce Bureau of the Census (U.S. Census Bureau) 2020 Decennial Census indicates that El Centro has a population of 44,322; and Imperial (a contiguous city) has a population of 20,263 (US Census Bureau. 2024) therefore, for purposes of this CEQA threshold, the Project is in a non-urbanized area.

Public views are those that are available from areas open and accessible to the public and are generally afforded from roadways and other public lands such as parks and recreation areas. Land uses surrounding the Project site are a combination of light industrial and agricultural on privately owned land. Thus, in relation to this Project, public views are restricted to the surrounding roadway

network. As discussed in items I. a) and b), the Project site is confined within the industrially developed ECGS facility and there are no scenic vistas. The visual environment in the Project area is dominated by the equipment and structures that support the generation of energy as well as the system of electrical transmission lines and poles, including double circuit lattice towers, that are prevalent in the area and disrupt any long-range views. From the surrounding roadways, primarily East Villa Avenue and Dogwood Road, the views are fleeting as vehicles traverse through the Project area. Further, the Project area does not support any distant or panoramic views that have scenic value. A less than significant impact would occur.

d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

There are two primary sources of light: light emanating from building interiors that passes through windows and light from exterior sources (e.g., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). The introduction of light can be a nuisance by affecting adjacent areas and diminishing the view of the clear sky depending on the location of the light sources and its proximity to nearby light-sensitive areas. Glare impacts can occur because of artificial light or sunlight reflecting off a surface. Glare can create discomfort or present safety concerns.

The Project site is in an area that is developed primarily with industrial uses. The existing light sources in the Project area include building lights, streetlights, and security lights. The Project would generate additional light consistent with the existing industrial type lighting. It would be confined within the existing ECGS, and lighting associated with the Project would be absorbed into the existing lit environment. The Project's exhaust stack height is expected to be approximately 120 feet tall, similar to the existing on-site exhaust stack heights. The six exhaust stacks will be collocated in a common structure. These stacks will be less than 200 feet high, thus aviation warning lights would likely not be required,[4] The Imperial County Airport is located approximately four miles northwest of the Project site and is outside of the planning boundaries for the airport compatibility zones (County 2024). Regardless, their inclusion would have a minimal lighting impact. A less than significant impact would occur.

[4] https://www.faa.gov/faq/what-are-requirements-aircraft-warning-lights-tall-structures

II. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

The Project is on a site that does not include farmland or agricultural resources. According to the California Department of Conservation's (CDOC 2022a) online Important Farmland Finder map, the Project site is classified as "Urban and Built-Up Land," which is land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel and does not contain agricultural uses or areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. However, there is "Prime Farmland" and "Farmland of Statewide Importance" to the east of the Project site, across Dogwood Road. The Project would not impact this farmland; therefore, no impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☐	☒

The Williamson Act applies to parcels within an established agricultural preserve consisting of at least 20 acres of Prime Farmland or at least 40 acres of land not designated as Prime Farmland. The purpose of the Act is to preserve agriculture and open space lands by discouraging premature and unnecessary conversion to urban uses. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land for use as agricultural or related open space.

The Project site is not zoned for agricultural use, and it is not within an established agricultural preserve consisting of at least 20 acres of Prime Farmland or at least 40 acres of land not designated as Prime Farmland. As a result, development of the Project site would not conflict with a Williamson Act contract. The Project area is classified as "Urban and Built-Up Land" by the CDOC, a designation upon which the Williamson Act does not enforce development restrictions (CDOC 2022a, CDOC 2022b). Therefore, the Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? ☐ ☐ ☐ ☒

Forest land is land that can support ten-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Riparian habitat can be considered forest land if it meets these criteria. The Project site is on developed land and includes an existing IID generation facility.

Timberland is land, other than land owned by the Federal government and designated by the California Department of Forestry and Fire (CAL FIRE) Board of Forestry as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. There are no existing timberlands within the City. Additionally, a timberland production zone or timberland preserve zone is an area that is zoned and devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses. There is no timberland-related zoning within the City. No impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use? ☐ ☐ ☐ ☒

The Project is on previously developed land where there are no forestry resources. The Project location is designated as "Urban and Built-Up Land" by the CDOC (CDOC 2022a). Please see item II., c) above. No impact would occur.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? ☐ ☐ ☐ ☒

Implementation of the Project would have no impact on agriculture and/or forestry resources. The Project location is classified as "Urban and Built-Up Land," which does not contain any agricultural uses or areas designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (CDOC 2022a). Furthermore, there are no Williamson Act contracts or forest lands in the Project area. Implementation of the Project would not involve changes to the existing environment or result in the conversion of Farmland to non-agricultural use or forest land to non-forest use. Please see items II a) through II d). No impact would occur.

III. AIR QUALITY

This section describes and evaluates the potential air quality impacts from the Project. In assessing air quality impacts, the following sources were considered: emissions from equipment used during construction-related activities, operational-related emissions generated from electricity and water use, emissions from motor vehicles generated by trips to and from the Project site, and emissions generated from the power generating equipment and supporting equipment. This section incorporates information from the air quality emissions calculations contained in the Comprehensive Air Quality and Greenhouse Gas Technical Report provided in Appendix B.

a. Ambient Air Quality

The Project is located within the Salton Sea Air Basin (SSAB), which is under the jurisdiction of the ICAPCD and is required to comply with applicable ICAPCD rules and regulations. The site is subject to the Clean Air Act (CAA) which protects public health and welfare nationwide by requiring the EPA to establish national ambient air quality standards (NAAQS) for certain common and widespread pollutants based on the latest science. EPA has set air quality standards for six common criteria pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur oxides (SOx), particulate matter (PM_{10} and $PM_{2.5}$), and lead (Pb). These pollutants are considered harmful to the public health and the environment.

The EPA designates the attainment status of areas in the nation for each criteria pollutant, based on whether NAAQS are met. A "non-attainment area" does not meet the standard and is subject to a State Implementation Plan to attain the standard. Similarly, the California Air Resources Board (CARB) has set its own stricter ambient air quality standards for California to regulate the concentration of: O_3, CO, NO_2, SO_X, PM_{10}, and $PM_{2.5}$, Pb, Visibility Reducing Particles, Sulfates, Hydrogen Sulfide, and Vinyl Chloride and designates regions in the state as attainment or non-attainment based on the California Ambient Air Quality Standards (CAAQS).

California (CARB) and federal (EPA) ambient air quality standards are provided as the maximum allowable concentration over an averaging time of measurement. Maximum concentrations reflect levels of pollutants that can adversely affect human health. The averaging times reflect the potential for short-term or long-term effects. Table 3-1 shows the NAAQS and CAAQS.

Table 3-1 Ambient Air Quality Standards

Pollutant	Averaging Time	State Standards (CAAQS)	Federal Standards (NAAQS)
Ozone	1-Hour (ppm)	0.09	--
	8-Hour (ppm)	0.070	0.070 [a]
Carbon Monoxide	1-Hour (ppm)	20	35
	8-Hour (ppm)	9	9
Nitrogen Dioxide	1-Hour (ppm)	0.18	0.100 [b]
	AAM (ppm)	0.03	0.053
Sulfur Dioxide [c]	1-Hour (ppm)	0.25	0.075
	3-Hour (ppm)	--	0.5
	24-Hour (ppm)	0.04	0.14
	AAM (ppm)	--	0.030
PM_{10}	24-Hour ($\mu g/m^3$)	50	150
	AAM ($\mu g/m^3$)	20	--
$PM_{2.5}$	24-Hour ($\mu g/m^3$)	--	35 [d]
	AAM ($\mu g/m^3$)	12	9 [e]
Lead	30-Day ($\mu g/m^3$)	1.5	--
	Rolling 3-Month ($\mu g/m^3$)	--	0.15
Sulfate	24-Hour ($\mu g/m^3$)	25	--
Hydrogen Sulfide	1-Hour (ppm)	0.03	--
Vinyl Chloride	24-Hour (ppm)	0.01	--

Notes:
AAM = Annual Arithmetic Mean
µg/m3 = microgram(s) per cubic meter
ppm = parts per million

(a) On October 1, 2015, EPA established a new 8-hour ozone standard of 0.070 ppm, effective December 28, 2015.
(b) Based on the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area.
(c) On June 2, 2010, EPA established a new 1-hour SO2 standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The EPA also revoked both the 24-hour SO2 standard of 0.14 ppm and the annual primary SO2 standard of 0.030 ppm, effective August 23, 2010.
(d) Based on 98 percent of the daily concentrations averaged over 3 years.
(e) Based on the 3-year average of the weighted annual mean concentrations.

Sources:
California Air Resources Board, 2016. http://www.arb.ca.gov/research/aaqs/aaqs2.pdf (CARB 5/4/2016)

Table 3-2 provides the attainment status of the ICAPCD relative to federal and state ambient air quality standards. The SSAB is currently not in attainment with federal or state Ozone standards, state PM_{10} standards, and federal $PM_{2.5}$ standards.

Table 3-2. State and Federal Air Quality Designations for Salton Sea Air Basin

Pollutant	Averaging Time	State Designation	Federal Designation
Ozone	1-Hour	Non-attainment	N/A
	8-Hour	Non-attainment	Non-attainment (maintenance)
Carbon Monoxide	1-Hour	Attainment	Unclassified/Attainment
	8-Hour	Attainment	Unclassified/Attainment
Nitrogen Dioxide	1-Hour	Attainment	Unclassified/Attainment
	Annual	Attainment	Unclassified/Attainment
Sulfur Dioxide	1-Hour	Attainment	Unclassified/Attainment
	24-Hour	Attainment	N/A
PM_{10}	24-Hour	Non-attainment	Attainment
	Annual	Non-attainment	N/A
$PM_{2.5}$	24-Hour	N/A	Non-attainment
	Annual	Attainment	Non-attainment
Lead	30-Day	Attainment	N/A
	Quarter	N/A	Unclassified/Attainment
Hydrogen Sulfide	1-Hour	Unclassified	N/A
Sulfates	24-Hour	Attainment	N/A

Notes:
N/A = not applicable

Sources:
ARB: www.arb.ca.gov/desig/changes.htm#summaries;
EPA: http://www3.epa.gov/airquality/greenbook/

Existing Conditions - Background Concentrations

When conducting air dispersion modeling to demonstrate compliance against NAAQS and CAAQS, background concentrations are required to be included in the analysis for all attainment pollutants. Background concentrations, as described in the U.S. EPA's Appendix W, Guideline on Air Quality Models Section 8.3.1.1, refers to the "…portion of the background attributable to natural sources, other unidentified sources in the vicinity of the project, and regional transport contributions from more distant sources" where "…the ambient concentrations from these sources are typically accounted for through use of ambient monitoring data…". Monitoring data for Imperial County were obtained from CARB's Air Quality Data, or U.S. EPA's Air Data webpages. Section 8.3.2 of the U.S. EPA's Appendix W was referenced for guidance for selecting monitoring station(s) to represent the background present at the source. Generally, the closest upwind monitor was selected, with preference to the monitor that has the most similar characteristics to the area for the source under consideration.

The site is located within the northeast part of El Centro and is bound by Villa Avenue to the north, Dogwood Road to the east, a solar farm to the west, and train tracks to the south. The closest monitoring station to the Project site is the El Centro - 9th Street Monitoring Station. This monitoring station is located approximately 1.2 miles west of the Project site. For pollutants not monitored by the El Centro – 9th Street station, the Calexico - Ethel Street Monitoring Station, located approximately 8.5 miles south of the Project, is also used for representative ambient air quality data. The most recent 3 years of available monitoring data was used to develop background concentration values. Table 3-3 provides the maximum value from

the most recent 3 years used for background concentrations for the Air Quality Impacts Analysis (AQIA) for State and Federal Ambient Air Quality Standards (AAQS) analysis provided in the Comprehensive Air Quality and Greenhouse Gas Technical Report in Appendix B.

Table 3-3. Ambient Air Quality Data Near Project Site

Pollutant	Nearest Ambient Air Quality Monitoring Site	Averaging Time	2021	2022	2023	Maximum Concentration
Ozone	El Centro - 9th Street	1-Hour (ppm)	0.05	0.05	0.06	0.06
	El Centro - 9th Street	8-Hour (ppm)	0.044	0.048	0.049	0.049
PM_{10}	El Centro - 9th Street	24-Hour ($\mu g/m^3$)	194	145	231	231
	El Centro - 9th Street	Annual ($\mu g/m^3$)	41.2	42.8	36	42.8
$PM_{2.5}$	El Centro - 9th Street	24-Hour ($\mu g/m^3$)	19.1	30.6	42	42
	El Centro - 9th Street	Annual ($\mu g/m^3$)	8.3	8.9	8	8.9
NO2	El Centro - 9th Street	1-Hour (ppm)	0.056	0.051	0.051	0.056
	El Centro - 9th Street	Annual (ppm)	0.007	0.007	0.006	0.007
CO	Calexico - Ethel Street	1-Hour (ppm)	0.3	0.3	0.3	0.3
	Calexico - Ethel Street	8-Hour (ppm)	0.3	0.3	0.3	0.3
SO_2	Calexico - Ethel Street	1-Hour (ppm)	0.001	0.001	0.001	0.001
	Calexico - Ethel Street	24-Hour (ppm)	0.0004	0.0004	0.0003	0.0004

Notes:

Pollutant concentrations represent the highest recorded values in each data year.

Sources:

EPA: https://aqs.epa.gov/aqsweb/airdata/download_files.html

Sensitive receptors are children, elderly, asthmatics, and others whose are at a heightened risk of negative health outcomes due to exposure to air pollution. The locations where these sensitive receptors congregate are considered sensitive receptor locations. Sensitive receptor locations may include hospitals, schools, and day care centers, and such other locations as the air district board or CARB may determine (California Health and Safety Code § 42705.5(a)(5)). Sensitive receptors were identified for the Project and the sensitive receptor location was evaluated using applicable pollutant impact concentration maps to identify locations of maximum impact. Sensitive receptors evaluated for the Project include schools, parks and clinics and residences. Commercial receptors evaluated for the Project include the neighboring solar farm, agricultural fields, commercial sites, and industrial sites. Table 3-4 provides a summary of the specific receptors evaluated.

Table 3-4. Project Area Receptor List

Receptor	UTM Coordinates		Address	Type	Distance to Project (feet)	Direction from Project
	Meters East	Meters North				
Swarthout Park Field	635,867	3,629,999	350 W. Euclid	Sensitive Receptor (Park soccer fields)	2,500	West
Booker T Washington Elementary	636,525	3,629,249	223 S 1st St	Sensitive Receptor (Elementary School)	2,080	South
El Centro Outpatient Clinic	635,636	3,629,236	385 Main St	Sensitive Receptor (Medical Facility)	3,865	Southwest
Residence on Residential Street	637,519	3,630,492	76 Block E Villa Rd	Residential Receptor	2,600	Northeast
Residences on N 3rd Street	635,912	3,630,081	800 Block N 3rd St	Residential Receptor	2,700	West
Residence on Residential Street	636,776	3,629,203	200 Block E State Street	Residential Receptor	2,175	South
Business East Agricultural Field	637,129	3,630,007	500 Block Dogwood Rd (Hwy S31)	Worker Receptor (Business)	550	East
Business West Solar Installation	636,292	3,629,989	100 Block West Villa Ave	Worker Receptor (Business)	1,100	West

ICAPCD Air Quality Plans

The SSAB is currently designated as non-attainment for ozone by both the EPA and CARB. The EPA-approved State Implementation Plan (SIP) demonstrates that Imperial County attained the 2008 8-Hr Ozone Standard "but for" emissions from Mexico. This is also known as a "179B demonstration." The Clean Air Act requires SIPs for non-attainment areas to require reasonably available control technology (RACT) that are economically and technologically feasible. The phase 2 rule sets forth guidelines for making RACT determinations in 8-hour Ozone non-attainment areas.

The SSAB is designated as attainment by the EPA and non-attainment by CARB for PM_{10} standards. The region of the SSAB containing the Project area is designated as non-attainment by the EPA and attainment by CARB for $PM_{2.5}$ standards. ICAPCD has adopted the 2018 SIP for the 24-Hour PM_{10} Nonattainment Area to demonstrate that Imperial County has attained and will maintain the 24-hour PM_{10} standard out to 2030 and addresses all requirements under the federal Clean Air Act. ICAPCD has adopted the 2018 SIP for the Annual $PM_{2.5}$ Nonattainment Area and the 2013 SIP for the 2006 24-Hour $PM_{2.5}$ Moderate Nonattainment Area to show that the Imperial County $PM_{2.5}$ nonattainment area would be in attainment "but for" emissions from the Mexicali Metropolitan area. The construction of new emission sources such as those proposed for the Project that are in compliance with New Source Review (NSR) and applicable local, state, and federal air quality regulations would conform with the PM_{10} / $PM_{2.5}$ SIPs.

ICAPCD Significance Thresholds

ICAPCD has issued CEQA guidelines that include Air Quality Significance Thresholds for construction and operations as summarized in Table 3-5. If modeled emissions or the Project emission inventory exceed the ICAPCD significance thresholds, mitigation efforts or a more detailed CEQA document may be required.

Table 3-5. ICAPCD Criteria Pollutant Significance Thresholds

Emissions Determination	VOC	CO	NOx	SOx	PM_{10}	$PM_{2.5}$
ICAPCD Thresholds of Significance for Construction Activities	75 lbs/day	550 lbs/day	100 lbs/day	--	150 lbs/day	--
ICAPCD Thresholds of Significance for Project Operations (Tier I)	137 lbs/day	550 lbs/day	137 lbs/day	150 lbs/day	150 lbs/day	550 lbs/day

b. Construction

The proposed Project would repower the ECGS by replacing existing Boiler 4 with new and more efficient natural gas-fired RICE. Construction is anticipated to commence once ICAPCD issues the Authority to Construct for the Project and funding is available. Construction activities are anticipated to last approximately 24 - 26 months. Construction activities will be limited to five (5) days per week between 7:30 AM and 6:00 PM. The generating units will be partially constructed at a manufacturing facility and transported to the site for final assembly and the addition of the emission control systems. Construction for the Project will include minor clearing and grading activities, before excavation for structure footings, and boring/piledriving activities, if required. Major equipment will be constructed off site to varying degrees, then transported to the Project site for installation. Equipment is expected to be transported via Interstate 8 and Dogwood Road. It is also possible that some equipment will be transported to a point near the site via rail. The equipment laydown area is expected to be in the vacant area to the north and south of the construction zone and will comprise approximately 3.5 acres.

Once equipment and proposed buildings are constructed, painting operations of buildings will likely occur, and portions of the Project site will be paved or covered with aggregate. Construction activities will implement standard mitigation measures for construction equipment and fugitive PM_{10} in accordance with ICAPCD CEQA Air Quality Handbook guidance.

CalEEMod Assumptions

Construction activities were modeled using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.26. CalEEMod is developed by the California Air Pollution Control Officers Association and recommended by the ICAPCD. CalEEMod provides default values based on known information for construction schedule, equipment usage, and other construction- and operations-related factors. Construction phase details can be found in the Air Quality and Greenhouse Gas Technical Report in Appendix B.

Criteria Pollutant Emissions

CalEEMod provides daily emissions rates (lbs/day) for selected criteria pollutants based on the construction schedule, equipment and vehicles used, workers, and hauling and material movement. For modeling purposes, the Project construction phase emissions were evaluated in CalEEMod using a construction start date of 1/1/2025 for a duration of 3 years. The average daily emissions during the construction phase are summarized in Table 3-6. The ICAPCD significance thresholds are not expected to be exceeded during construction activities, indicating less than significant impacts. Additional construction emissions information can be found in Appendix B.

Table 3-6. Construction Emissions Compared Against ICAPCD Thresholds

Emissions Determination	VOC	CO	NOx	PM_{10}
ICAPCD Construction Mass Daily Significance Threshold (lbs/day)	75	550	100	150
Maximum Average Daily Emissions During Construction (lbs/day)	2.79	18.6	13.0	2.25 [a]
Significant? (Yes/No)	No	No	No	No

Notes:
a) PM_{10} emissions from off-road vehicle exhaust are reduced by 30% based on the use of renewable diesel fuel. PM_{10} from dust-generating activities are unchanged.

Construction Health Risk

Toxic air contaminants (TAC) are expected to be emitted in the form of PM in diesel exhaust from off-road equipment exhaust during construction. Table 3-7 summarizes the maximum hourly, daily, and annual diesel PM emissions during construction.

Table 3-7. TAC Emissions from Construction Activities

Toxic	Max. Hourly Emissions (lbs/hr)	Max. Daily Emissions (lbs/day)	Max. Annual Emissions (tons/year)
Diesel Particulate Matter [a]	0.01 [b]	1.02	0.06

Notes:
a) PM_{10} emissions from off-road vehicle exhaust are reduced by 30% based on the use of renewable diesel fuel.
b) Maximum hourly emissions are determined by the maximum daily emissions and construction work hours per day.

Project construction is anticipated to occur over a period of 24 months. Due to the temporary nature of the construction phase and the PM emissions well below the ICAPCD significance thresholds, TAC emissions from construction activity are not expected to have health significant impacts on cancer and non-cancer risks. The impacts of construction activity will largely occur within the property line of the existing power plant. Therefore, the TAC emission impacts on health from the construction activity are expected to be less than significant.

c. Operations

The existing Gas Turbines 2 and 3 will be operational through the duration of construction activities. Boiler 4 and its associated cooling tower will be decommissioned upon successful commissioning of the Project. When the construction phase is complete, the facility will include an additional six (6) engines fired exclusively on pipeline quality natural gas and one (1) black start engine (BSE) operating on diesel. Operational emissions calculations reflect potential emissions of the Project and historic actual emissions of the decommissioned Boiler 4 and cooling tower.

Project Occupancy CalEEMod Assumptions

Operational activities not directly related to the operation of the proposed engines that will be permitted by ICAPCD were modeled using CalEEMod version 2022.1.1.26. CalEEMod provides expected ancillary activity such as vehicle trips statistics, energy/water use, and waste generation based on land use and the

Project description. Defaults for vehicle trips generation were used but the Project may not result in any new trips due to workers already employed at the facility and being reassigned to the new engines. Additional operational phase details and CalEEMod inputs can be found in Appendix B.

Project Operating Profile

IID will restrict operations of the six new engines at a maximum permitted annual operating schedule equivalent to 4,000 hours at 100 percent load, including 800 startup events. Each startup event is expected to last for no more than 30 minutes and emissions from startups are determined based on manufacturer data for cold, warm, and hot startup events. A cold startup occurs when the catalyst temperature is close to ambient temperature. Cold starts are expected after overhaul periods or when the engine has not been operated during the last 24 hours. A warm startup occurs when the catalyst temperature is above ambient but less than 100°C. Warm starts are expected after the engine has not been operated for 12 hours, but less than 24 hours. A hot startup occurs when the catalyst temperature is greater than 100°C. Hot starts are expected after the engine has been operated within the previous 12 hours. The BSE will operate in emergency situations when none of the six engines are in operation and power to the facility is not available to start the first of the six engines. Starting operations generally last less than one hour in these events. The BSE will also be permitted for no more than 50 hours of maintenance operations per year. Maintenance operations include starting the engine for readiness testing and diagnosis.

Operations Criteria Pollutant Emissions

Criteria pollutant emissions for the 6 RICE and 1 BSE were calculated using manufacturer guaranteed emission rates that meet Best Available Control Technology (BACT) standards, as applicable. The short-term startup emissions are based on the worst-case startup scenario (cold catalysts). The long-term startup emissions are based the worst-case combination of 3 startups per day (1 cold startup, 1 warm startup, and 1 hot startup). Unit shutdowns occur very quickly and emissions greater than normal levels during shutdowns are not expected. Facility occupancy emissions are determined by CalEEMod to reflect maximum average daily emissions and an operating schedule of 365 days per year. Table 3-8 compares the calculated operational impacts in pounds per day (lbs/day) to ICAPCD Tier 1 thresholds. A detailed emissions inventory is included in Appendix B. The ICAPCD significance thresholds are not exceeded during operational activities, indicating less than significant impacts.

Table 3-8. Operational Emissions Compared Against ICAPCD Thresholds

Source	VOC (lbs/day)	CO (lbs/day)	NO_x (lbs/day)	SO_x (lbs/day)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
Facility Occupancy	2.31	6.76	1.14	0.02	1.16	0.33
Six New Natural Gas-Fired Engines and One Diesel-Fired Black Start Engine	148.24	375.00	210.75	9.56	181.49	481.49
Total Operational Emissions	150.55	381.76	211.89	9.58	182.65	181.82
Less: Emissions from Boiler 4 and Cooling Tower	21.72	8.63	266.85	2.39	48.72	48.72
Net Emission Increase	128.83	373.13	-54.96	7.19	133.93	133.10
Significance Threshold	137	550	137	150	150	550
Significant (Y / N)	N	N	N	N	N	N

Notes:
a) The net emissions increase does not reflect emission offsets that will be required pursuant to ICAPCD Rule 207. The required NSR offsets would further reduce the net emission increase from operations to zero for VOC and PM_{10}.

Note that ICAPCD significance thresholds are generally used to assess only those emissions that are not subject to ICAPCD permit. For permitted emissions, ICAPCD Rule 207 - New and Modified Stationary Source Review ensures that the Project impacts will be less than significant. The ICAPCD permitting process further ensures that air quality impacts will be less than significant through its New Source Review permitting process that includes the application of BACT; complex modeling to ensure that the Project will not lead to a violation or significant increase in ambient concentrations of criteria pollutants, relative to California and federal air quality standards; and the surrender of emission offsets when the facility total potential to emit for a nonattainment or precursor pollutant exceeds 137 pounds per day. Offsets are surrendered based upon the increase in permitted pollutants. For the Project, offsets will be surrendered for VOC and PM_{10} emission increases. Offsets are not required for NOx and SOx because the project presents a net reduction in those pollutants. The basin is in attainment with ambient air quality standards for CO and will not require offsets. Rule 207 does not require offsets for $PM_{2.5}$.

Table 3-9 presents a summary of offset requirements for each criteria pollutant. IID envisions using NOx emission reduction credits previously generated at the facility to offset increases in VOC and PM_{10} in accordance with ICAPCD policy. Rule 207 specifies that offsets from onsite reductions can be provided at a 1:1 ratio. Because IID envisions inter-pollutant trading, it also envisions that NO_x offsets will be provided to offset VOC and PM_{10} at a 2:1 ratio in accordance with past district practice. The final number of offsets to be required may be adjusted due to fluctuations in net emission increases on a quarterly basis.

Table 3-9. Estimated Offset Needs for Operational Criteria Pollutant Emissions

Source	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	SOx (tons/yr)	PM_{10} (tons/yr)	$PM_{2.5}$ (tons/yr)
Six New Natural Gas-Fired Engines and One Diesel-Fired Black Start Engine	27.05	68.44	38.46	1.75	33.12	33.12
Less: Emissions from Boiler 4 and Cooling Tower	3.96	1.58	48.70	0.44	8.89	8.89
Net Emission Increase	23.09	66.86	-10.24	1.31	24.23	24.23
Offset Assumption [a]	23.09	N/A	-10.24	1.31	24.23	N/A
Offsets Held by IID	2.50	N/A	73.72	8.28	2.21	N/A
Net Offset Needs	20.59	N/A	-83.96	-6.97	22.02	N/A

Notes:
a) A 1:1 offset ratio is assumed pursuant to Rule 207 Section C.3.a for offsets located within the same source.
b) Negative value for net offset needs reflects net offset availability.

Air Dispersion Modeling

This section describes the AQIA and Health Risk Assessment (HRA) air dispersion modeling methodology and analysis results that pertains to the Unit No. 4 Repower Project. Sources modeled include the proposed 6 RICE exhaust stacks and the BSE exhaust stack. American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee Dispersion Model (AERMOD), Version 23132 was utilized for the air dispersion modeling associated with the AQIA and HRA. AERMOD is a Gaussian plume dispersion model that is based on planetary boundary layer principles for characterizing atmospheric stability. The model evaluates the non-Gaussian vertical behavior of plumes during convective conditions with the probability density function and the superposition of several Gaussian plumes. AERMOD modeling system has three components: AERMAP, AERMET, and AERMOD. AERMAP is the terrain preprocessor program. AERMET is the meteorological data preprocessor. The models were executed using the rural model option which matches the surrounding Imperial County terrain and is generally more conservative. AERMOD is recommended by both the USEPA and the CARB for stationary source air dispersion modeling projects. AQIA and HRA model inputs are detailed in Appendix B.

The following steps were followed for the project impact analysis: Determine the project's maximum impact for all receptors for all averaging periods for the three operating scenarios (full load, minimum load, and startup/full load) with all seven sources operating simultaneously. Compare the project's impacts with the corresponding significant impact level (SIL) concentrations for each applicable criteria pollutant, which are based on federal Significant Impact Levels (SILs) for NAAQS and South Coast Air Quality Management District (SCAQMD) SILs for CAAQS because it is the closest air district with published SILs for CAAQS.

Modeling SILs are thresholds for changes in ambient concentrations from a project. Increases in ambient concentrations below a SIL are not considered to contribute to any predicted exceedance of air quality standards. When the modeled Project impacts were shown to be above the SIL, a cumulative analysis was then conducted to determine if the Project has the potential to cause or contribute to a violation. A cumulative analysis is completed by adding the associated AAQS modeled pollutant impacts for the Project with the maximum ambient air background concentration for that AAQS pollutant from a representative monitoring station, then those cumulative results are compared to the applicable ambient air quality standard. The representative ambient air background monitoring data used in the cumulative analysis is outlined in Table 3-3.

Table 3-10 compares the maximum Project impacts plus background to the respective federal (NAAQS) or State (CAAQS) standards and demonstrates the Project does not cause or significantly contribute to an exceedance for any federal or state ambient air quality standard.

Table 3-10 State and Federal AAQS Analysis

Pollutant	Averaging Period	Concentration ($\mu g/m^3$)			Value of Standard ($\mu g/m^3$)	% of Standard
		Project[A]	Background Sources[B]	Total		
SO_2	1-hr - state std[C]	0.413	2.62	3.033	655	0.5%
	1-hr - federal std[C]	0.413	N/A	0.413	7.8 - SIL	5.3%
	3-hr - federal std[C]	0.267	N/A	0.267	25.0 - SIL	1.1%
	24-hr - state std[C]	0.121	N/A	0.121	5.0 - SIL	2.4%
	Annual - federal std	0.012	N/A	0.012	1.0 - SIL	1.2%
PM_{10}	24-hr - federal std[C]	2.070	N/A	2.070	5.0 - SIL	41.4%
	24-hr - state std[C]	2.070	N/A	2.070	2.5 - SIL	82.8%
	Annual - state std	0.202	N/A	0.202	1.0 - SIL	10.1%
$PM_{2.5}$	24-hr - federal std[D]	1.027	N/A	1.027	1.2 - SIL	85.6%
	Annual - state std	0.091	N/A	0.066	0.2 - SIL	33.0%
	Annual - federal std[D]	0.091	N/A	0.066	0.13 - SIL	50.8%
NO_2 as NO_X	1-hr - state std[C,E]	24.965	105.30	130.27	339	38.4%
	Annual - state std	1.137	13.16	14.30	57	25.1%
NO_2 (ARM2)	1-hr - federal std[E,F]	19.921	71.10	91.02	188	48.4%
	Annual - federal std[F]	1.024	13.16	14.18	100	14.2%
CO	1-hr - federal std[C]	42.630	N/A	42.63	2000 - SIL	2.1%
	8-hr - federal std[C]	20.600	N/A	20.60	500 - SIL	4.1%

[A] The modeling was conducted using EPA's AERMOD dispersion model (version 23132).

[B] See Table 3-3 for the background concentrations. The 1-hour SO_2 state background is conservatively used for the 3-hour background and the 1-hour CO concentration is conservatively used for the 8-hr concentration.

[C] The listed modeled concentrations are the maximum highest first-high (H1H) concentrations.

[D] The listed 24-hour modeled concentration is the overall highest 24-hr concentration, averaged over 5 years. The listed annual modeled concentration is the overall highest annual concentration, averaged over 5 years. Both listed modeled concentrations include secondary $PM_{2.5}$ based on EPA's worst-case MERPs for the climate zone.

[E] Per EPA's March 1, 2011 memorandum, the BSE maintenance operations are modeled following intermittent emission guidance.

[F] The 1-hour federal NO_2 modeling used ARM2 to model the NOx to NO_2 conversion and the listed modeled concentration is the highest 98th percentile maximum daily 1-hr concentration modeled over 5 years.

Operations Health Risk Assessment (HRA)

The HRA addressed the potential impacts associated with air toxic emissions from the Project. The HRA for this Project was completed in accordance with the updated Risk Assessment Guidelines from the Office of Environmental Health Hazard Assessment (OEHHA). This includes using the latest version of CARB's Hotspots Analysis and Reporting Program software (HARP 2) in conjunction with the derived OEHHA methodology for risk assessment and dispersion modeling plot files generated by AERMOD. Details of the Human Health Risk Assessment are outlined in Appendix B.

Table 3-11 provides the ICAPCD Agency's CEQA Guidelines Screening Thresholds which are based on the Imperial County AB2588 District Prioritization Scores and Risk Threshold Levels.

Table 3-11. ICAPCD Agency's CEQA Guideline Screening Thresholds

Risk Category	Threshold[1]
Maximum Individual Cancer Risk (MICR)	1×10^{-5}
Non-Cancer Acute Hazard Index	1.0
Non-Cancer Chronic Hazard Index	1.0
Cancer Burden[2]	0.5

1. AB 2588 District Prioritization Scores and Risk Threshold Levels for Imperial County
2. Calculation of cancer burden is only required if MICR $\geq 1 \times 10^{-6}$.

The risk assessment model was run twice for each set of dispersion model results – once to evaluate sensitive and residential receptor risk levels and again for off-site worker risk. The following HRA modeling scenarios were run in HARP 2:

To analyze risk for residential and sensitive receptors the following options was used:

Analysis Type:	Cancer, Chronic, and Acute Risk
Receptor Type:	Individual Resident
Exposure Duration:	30 years
Intake Rate Percentile:	OEHHA derived method
Pathways to Evaluate (*):	Inhalation; Soil Ingestion; Dermal; Mother's Milk; and Homegrown Produce

(*) The selected pathways reflect "mandatory minimum" pathways for residential/sensitive receptors.

To analyze risk for off-site worker receptors the following options was used:

Analysis Type:	Cancer, Chronic, 8-Hr Chronic, and Acute Risk
Receptor Type:	Worker
Exposure Duration:	25 years
Intake Rate Percentile:	OEHHA derived method
Pathways to Evaluate (*):	Inhalation; Soil Ingestion; Dermal; and Mother's Milk

(*) The selected pathways reflect all required "worker" pathways.

Once both HARP 2 runs were completed, the model outputs were evaluated to determine whether the Project will comply with ICAPCD requirements. For both models, the maximally exposed individual (MEI) risk levels were determined. The MEI represents an actual receptor location where risk levels are the highest for one or more risk categories. The location of the MEI may vary depending on the risk category being analyzed and may not necessarily reflect the point of maximum impact (PMI) for that risk category. In cases where the PMI is also the MEI, the PMI was used to compare with the applicable risk threshold. When the PMI for a particular risk category did not reflect an actual receptor location, the MEI was used with justification as to why it is more representative than the PMI.

Health Risk Assessment

TAC emissions are expected from the combustion of natural gas from the six new natural gas-fired engines and diesel combustion from the one diesel-fired BSE. TAC emissions were estimated based upon AP-42,

AB2588 and vendor reference factors and proposed maximum hourly and maximum annual fuel consumption and reflect annual operations of 4,000 hours for the prime engines and 50 hours of testing and maintenance for the BSE. Appendix B contains the inventory of TAC emissions from the Project.

Tables 3-12 and 3-13 summarize the health risk assessment which demonstrates that local risks and hazards from operational activities are estimated to be below the cancer and hazard index risk thresholds at the point of maximum impact, MEI at an existing residential receptor, and MEI at an existing occupational worker receptor. Additional information from the HRA is provided in Appendix B.

Table 3-12. Health Risk Impacts from Operational Activities

Receptor Type	Cancer Risk		Chronic		Acute		8-Hour Chronic	
	Receptor ID	Risk Per Million	Receptor ID	Hazard Index	Receptor ID	Hazard Index	Receptor ID	Hazard Index
Point of Maximum Impact	1,546	4.22E-07	1546	0.002	2,071	0.043	1546	0.001
Maximum Exposed Individual Resident	1939	8.00E-08	1943	0.002	5	0.035	N/A	N/A
Maximum Exposed Individual Worker	428	1.46E-08	428	0.002	2,055	0.042	428	0.001
Significance Threshold		1.0E-5		1.0		1.0		1.0
Significant (Yes/No)		No		No		No		No

Table 3-13 Maximum Impact Receptor Locations

Receptor ID	WGS84 - Zone 11		Relative Location
	Easting (M)	Northing (M)	
1546	636303.4	3630211.5	Northwest on site boundary
1939	637003.4	3629111.5	South 1,800 feet of site boundary
428	636268.4	3630227.1	Northwest 120 feet from site boundary
1943	636903.4	3629211.5	South 1500 feet from site boundary
2071	635803.4	3629911.5	West 1700 feet 'of site boundary
5	635911.9	3630080.7	West 1,300 feet of site boundary
2055	635903.4	3629911.5	West 1,300 feet of site boundary

The HRA results demonstrate that operational health risk impacts are below Tier 1 ICAPCD risk thresholds and no further mitigation is necessary to address these impacts. A finding of air quality impacts based on the criteria outlined in the ICAPCD CEQA Guidelines is less than significant.

d. Discussion of Checklist Responses

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒

The Project is located in a region of the SSAB which is designated as non-attainment for ozone by federal and state standards; PM_{10} by state standards; and $PM_{2.5}$ by federal standards.

The ICAPCD developed a State Implementation Plan (SIP) in accordance with the Federal Clean Air Act which demonstrated that Imperial County attained the 2008 8-Hr Ozone Standard "but for" emissions from Mexico. This is also known as a "179B demonstration." The CAA requires SIPs for non-attainment areas to require reasonably available control technology (RACT) that are economically and technologically feasible. ICAPCD adopted the 2018 SIP for the 24-Hour PM_{10} Nonattainment Area to demonstrate that Imperial County has attained and will maintain the 24-hour PM_{10} standard out to 2030 and addresses all requirements under the federal Clean Air Act. ICAPCD adopted the 2018 SIP for the Annual $PM_{2.5}$ Nonattainment Area and the 2013 SIP for the 2006 24-Hour $PM_{2.5}$ Moderate Nonattainment Area to show that the Imperial County $PM_{2.5}$ nonattainment area would be in attainment "but for" emissions from the Mexicali Metropolitan area. The construction of new emission sources such as those proposed for the Project that are in compliance with NSR and applicable local, state, and federal air quality regulations would be in conformance with the SIPs.

The Project will have no impact on the implementation of the ICAPCD Air Quality Plan.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐

CEQA Guidelines Section 15065(a)(3) states that "cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. The Project region is currently in non-attainment for ozone by federal and state standards; PM_{10} by state standards; and $PM_{2.5}$ by federal standards. Ozone is formed when volatile organic compounds (VOCs) and nitrogen oxides (NOx) react with heat and sunlight. The analysis presented in the Comprehensive Air Quality and GHG Technical Report in Appendix B demonstrates that net criteria pollutant emissions for VOCs, NOx, PM_{10}, and $PM_{2.5}$ from the Project would be below the ICAPCD significance thresholds during construction and operations, indicating that the Project would not result in a cumulatively considerable net increase of criteria pollutants currently in non-attainment by federal or state standards.

The analysis also demonstrates that when concentrations of other criteria pollutants attributed to the Project are included with local background ambient concentrations, the net impact will not lead to a violation of federal or state ambient air quality standards. The full Project Air Quality Impact Analysis results are provided in the Comprehensive Air Quality and GHG Technical Report in Appendix B. Considering the above, the Project would incur a less than significant impact.

c) Expose sensitive receptors to substantial pollutant concentrations? ☐ ☐ ☒ ☐

Sensitive receptors are individuals considered to be at a heightened risk of negative health outcomes due to exposure to air pollution. Sensitive receptors include residences such as private homes, condominiums, apartments, and living quarters; schools; preschools; daycare centers; health care facilities and long-term care hospitals; prisons; and dormitories or similar live-in housing.

ICAPCD has established significance thresholds for determining health impacts from construction operations. Those thresholds are based upon pounds per day of criteria pollutants, including particulate matter emissions. Based upon the CalEEMod emissions inventory included in Appendix B, it is anticipated that Project construction emissions will fall below those thresholds.

For Project operations, a detailed health risk assessment was performed to assess the health risk. The following table is a summary of the maximum increase in cancer risk as well as acute and chronic risk factors for the Project as well as the significance thresholds established by ICAPCD. As shown in the Table 3-10, the risk from the Project does not exceed ten in 1-million people for any of the indices measured ($1x10^{-5}$) and therefore falls well below the threshold of significance. The Comprehensive Air Quality Analysis is provided in Appendix B. The point of maximum impact (PMI), maximally exposed individual resident (MEIR), and maximally exposed individual worker (MEIW) anticipated from Project operations are outlined in Table 3-12 and the receptor coordinates for that location are provided in Table 3-13. The level of exposure at the PMI, MEIR, and MEIW do not exceed significance thresholds would warrant further analysis. The Air Quality Analysis identified area sensitive receptors in Table 3-4, and the maximum exposure for all area sensitive receptors are well below significance thresholds.

Table 3-12 summarizes the results of the HRA and demonstrates that local risks and hazards from operational activities are estimated to be below the cancer and hazard index risk thresholds at the point of maximum impact, maximum exposed individual (MEI) at an existing residential receptor, and MEI at an existing occupational worker receptor.

The Project criteria pollutant emissions will not cause or contribute to an exceedance of State or Federal ambient air quality standards as discussed above and offsite impacts from toxic emissions are well under screening thresholds based on results from the HRA at the maximum off-property receptors, as well as all sensitive, residential, and commercial receptors. Considering the above, the Project would incur a less than significant impact.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? ☐ ☐ ☒ ☐

The ECGS Unit 4 Repowering Project proposes to decommission the existing natural gas fired boiler (Boiler 4) and replace it with six reciprocating internal combustion engines. The characteristics of exhaust from the Project relative to odorous compounds will be similar to that of Unit to 2, 3 and 4. No additional emissions or odors over and above the current operations are expected with this Project.

During demolition and construction, exhaust from equipment (trucks, earthmoving equipment) may produce odors typically resulting from dust and heavy equipment. Odors produced during construction generally consist of unburned hydrocarbons from tailpipes of construction equipment. Construction emission odors typically disperse rapidly and do not affect substantial numbers of people due to the localized area affected. Therefore, odors adversely affecting a substantial number of people is considered less than significant.

IV. BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

Under the California Endangered Species Act, The California Department of Fish and Wildlife designates plant and animal species as threatened or endangered. Similarly, the United States Fish and Wildlife Service (USFWS) designates species as threatened or endangered under the Federal Endangered Species Act. Plant and animal species may also be afforded special protection under regional and local planning documents. All special-status species, protected under federal, state and local ordinances with potential to occur and be impacted by the Proposed Project must be analyzed, under CEQA.

A search of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database and the USFWS Information for Planning and Consultation (IPaC) (CDFW 2024, USFWS 2024a) was conducted in November 2024 for the Project work area and a 5-mile buffer. In addition to review of publicly available resources, a review of past biological studies performed at the ECGS was undertaken. Results from the 2023 *Biological Technical Report* developed by ECORP Consulting, Inc were reviewed and incorporated into this updated analysis (ECORP 2023). The combined review of online sources and focused, site-specific studies indicate there is some potential for five (5) sensitive plant species and fourteen (14) sensitive animal species to occur in the Project work area. Table 4-1 presents a list of the species with historic potential to occur and a determination of each species' current potential to occur based upon known life-history requirements and best professional judgement.

Table 4-1. Species with Potential to Occur in the Project Site

Scientific Name	Common Name	Protection Status[1] and Habitat	Potential to Occur in the Project Area
Plants			
Amaranthus watsonii	Walton's amaranth	**4.3.** Occurs in Mojavean desert scrub and Sonoran desert scrub (20-1700 meters).	**Low**. Species and habitat not identified during 2023 surveys.

Astragalus sabulonum	Gravel milk-vetch	**2B.2.** Occurs in Desert dunes, Mojavean desert scrub, and Sonoran desert scrub (-60 to 930 meters).	**Low**. Species and habitat not identified during 2023 surveys.
Euphorbia abramsiana	Abram's spurge	**2B.2.** Occurs in Mojavean desert scrub, and Sonoran desert scrub (-5 to 1310 meters).	**Low**. Species and habitat not identified during 2023 surveys.
Johnstonella costata	ribbed cryptantha	**4.3.** Occurs in Desert dunes, Mojavean desert scrub, and Sonoran desert scrub (-60 to 500 meters).	**Low**. Species and habitat not identified during 2023 surveys.
Pholisma sonorae	sand food	**1B.2.** A perennial parasitic herb that occurs in Desert dunes, and Sonoran desert scrub (sandy) (0 to 200 meters).	**Low**. Species and habitat not identified during 2023 surveys.
Animals			
Athene cunicularia	burrowing owl	**BCC, SC.** Habitat includes prairies, deserts, grasslands and agricultural fields, with ample available ground squirrel burrows.	**Present**. Past surveys on IID property identified multiple individuals.
Charadrius montanus	mountain plover	**BCC, SSC.** Winter range in grasslands of Imperial Valley in areas of short-grass prairie that are flat and nearly devoid of vegetation.	**Low**. Species not observed during surveys but limited suitable habitat is present.
Eumops perotis ssp. *californicus*	Western mastiff bat	**SSC.** Habitat includes desert scrub, grasslands, chaparral, and roosts in cliff faces, high buildings, and trees. Feeds on insects in flight.	**Moderate**. Suitable habitat and potential building roost sites available at the site.
Lasiurus xanthinus	western yellow bat	**SSC.** Habitat includes valley foothill riparian, desert riparian, desert wash and palm oasis. Roosts in trees and feeds on flying insects.	**No Potential to occur.** No suitable habitat at the site.
Melanerpes uropygialis	Gila woodpecker	**SE.** Habitat includes nearly treeless desert habitat with saguaro cactus, their preferred nesting habitat.	**No Potential to occur**. No suitable habitat at the site.
Nyctinomops femorosaccus	pocketed free-tailed bat	**SSC.** Habitat includes desert areas, in the southwestern U.S. and Mexico. Species roosts in cliff crevices, rocky outcrops, as well as in buildings and under roof tiles and feeds on flying insects.	**Low**. Natural examples of preferred habitat is not present in project area.
Nyctinomops macrotis	big free-tailed bat	**SSC.** Rare in California. Species prefers rugged, rocky terrain. Roosts in caves, rocky outcrops, buildings and holes in trees and feeds primarily on large moths.	**Low**. Natural examples of preferred habitat is not present in project area.
Perognathus longimembris bangsi	Palm Springs pocket mouse	**SSC.** Habitat includes creosote scrub, desert scrub, and grasslands occurring on loosely packed or sandy soil with sparse to moderately dense vegetation.	**Low**. Outside of known species range.
Phrynosoma mcallii	flat-tailed horned lizard	**SSC.** Habitat is restricted to fine sand and sparse vegetation in desert washes and desert flats. Species burrow in fine sand and eat ants.	**Low**. Natural examples of preferred habitat is not present in project area.
Pyrocephalus rubinus	vermilion flycatcher	**SSC.** Project area is within historic breeding range, but species is now considered "rare" in Imperial Valley (CDFW). During breeding season, species occupies arid scrub, farmlands, savanna, agricultural areas, and riparian woodland, often associated with surface water.	**Low**. Examples of preferred habitat are not present in project area.
Rallus obsoletus yumanensis	Yuma Ridgway's rail	**FE, SE, FP.** Habitat includes stands of cattail and bulrush. Species eats crayfish, freshwater clams, and other invertebrates.	**Low**. Examples of preferred habitat are not present in project area.
Sigmodon hispidus	Yuma hispid cotton rat	**SSC.** Habitat includes grassy fields and overgrown roadsides, fencerows adjacent	**Low**. Examples of preferred habitat are not

eremicus		to agricultural fields, providing dense vegetative cover.	present in project area.
Taxidea taxus	American badger	**SSC.** Preferred habitat includes drier open stages of shrub, forest and herbaceous habitats with friable soils, where badgers dig burrows. Prey includes rodents, reptiles, insects, earthworms, eggs, birds, and carrion.	**Low**. Examples of preferred habitat are not present in project area.
Uma notata	Colorado Desert fringe-toed lizard	**SSC.** Habitat is desert areas with fine, loose, wind-blown sand dunes, dry lakebeds, sandy beaches or riverbanks, desert washes, and sparse desert scrub.	**Low**. Natural examples of preferred habitat is not present in project area.

[1] Protection Status:

Federal Listing Status

FE – federally endangered; **FT** – federally threatened; **FC** – federal candidate; **BCC** – USFWS Bird of Conservation Concern

State Listing Status (California)

SE – state endangered; **ST** – state threatened; **SC** – state candidate for listing; FP – Fully Protected; **SSC** – CDFW Species of Special Concern

California Rare Plant Rank

1B.1 - Plants Rare, Threatened, or Endangered in California and Elsewhere. Seriously threatened in California (over 80 percent of occurrences threatened / high degree and immediacy of threat).
1B.2 - Plants Rare, Threatened and Endangered in California and Elsewhere. Moderately threatened in California (20-80 percent occurrences threatened/moderate degree and immediacy of threat)
2B.2 - Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere. Moderately threatened in California (20-80 percent occurrences threatened/moderate degree and immediacy of threat).
4.3 - Plants of limited distribution; a watch list. Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Survey results from 2023 indicated that the IID property contains the following generalized vegetation communities: disturbed big saltbush scrub, tamarisk thicket, and disturbed land, all of which were characterized by a high level of invasive and weedy plant species (ECORP 2003). The survey did not identify suitable habitat for any of special status plant species with historic potential to occur in the Project area, and further analysis of the site indicates habitat has not improved for these species since the surveys were performed. Due to the low likelihood of occurrence, the Project is not anticipated to impact sensitive plant species during construction or operations.

Of the special status animal species identified and listed in Table 4-1, only one species, burrowing owl (BUOW), is known to occur within the Project work area. Surveys performed by the project proponent between 1992 and 1994 identified multiple individuals and active burrows (CDFW 2024). The species faces threats across its range that include habitat loss from urban and suburban development, ground squirrel population decline, changes in agricultural practices, pesticide poisoning and predation (CDFW 2024). BUOW does not require large, contiguous stretches of habitat, so small areas that provide suitable conditions (i.e. arid land with sparse vegetation, or urban environments) have the possibility to support this species (USFWS 2024a). Although surveys in 2023 did not identify any individuals and the Project site supports limited vegetation and pray base to support BUOW individuals, there is adjacent suitable habitat that can support the species and the project has the potential to directly impact the species through noise disturbance and large equipment activities during construction as well as indirect impacts such as dust, noise and prey disruption. With close adherence to the best management practices presented to avoid on-site and offsite impacts to soil and water resources and implementation of **Mitigation Measure BIO-1** below, implementation of the Project would have a less than significant impact on BUOW and its habitat.

One additional special status animal species, western mastiff bat, has moderate potential to occur in the Project area as the site contains potentially suitable roosting habitat for the species in existing buildings and structures. Threats to the species include activities that disturb roosting habitat,

existing maternity colonies, and the species' insect prey base. Construction of the project includes the removal of some structures that may provide roosting habitat for western mastiff bat which, if occupied, could cause direct impacts to the species through mortality of adults or young. Project construction and operation could also have indirect impacts on the species by increasing human activity in the project area from current condition, resulting in increased noise levels, invasive species, and human activity which could result in loss of nesting, roosting and foraging habitat. Implementation of **Mitigation Measure BIO-2** is proposed to avoid and minimize potential direct and indirect impacts to western mastiff bat by identifying any suitable bat habitat in the Project disturbance footprint in advance of construction and implementing appropriate bat protection measures. With implementation of **Mitigation Measure BIO-2,** potential significant impacts to western mastiff bat would be reduced to less than significant.

Migratory birds, included raptors and passerine species, are protected under the federal Migratory Bird Treaty Act and entities are prohibited from harming or harassing migratory birds, particularly while they are nesting. Foraging habitat for several raptor species and nesting habitat for numerous passerine species is present in the Project work area. Direct impacts to nesting avian species include injury, mortality, loss of young, and nest failure; and indirect impacts include loss of foraging and nesting habitat, increase in noise and human activities, and potential introduction of invasive/nonnative species. Project construction activities including grading and clearing the site for building construction as well as loud noises associated with large machinery construction have the potential to cause direct and indirect significant impacts to migratory birds, through nest abandonment and disturbance of foraging habitat. implementation of **Mitigation Measure BIO-3** (below), would reduce potential impacts to migratory birds to less than significant through identification and subsequent avoidance of nesting migratory birds in the project disturbance footprint.

Mitigation Measure BIO-1: Pre-Construction Surveys for Burrowing Owl. Pre-construction surveys for burrowing owl will be conducted within the Project Area and adjacent areas prior to the start of ground- disturbing activities. The surveys will follow the methods described in the CDFW's Staff Report on Burrowing Owl Mitigation (CDFG 2012). Two surveys will be conducted, with the first survey being conducted between 30 and 14 days before initial ground disturbance (grading, grubbing, and construction), and the second survey being conducted no more than 24 hours prior to initial ground disturbance. If burrowing owls and/or suitable burrowing owl burrows with sign (e.g., whitewash, pellets, feathers, prey remains) are identified on the Project Work Area during the survey and impacts to those features are unavoidable, consultation with the CDFW will be initiated and the methods described in the CDFW's Staff Report on Burrowing Owl Mitigation for avoidance and/or passive relocation will be followed.

Mitigation Measures BIO-2: Bat Management and Habitat Assessment. A qualified biologist will conduct a bat habitat assessment for suitable bat roosting habitat prior to any construction activities. The habitat assessment will be conducted at least one year prior to the initiation of construction activities, if feasible. If no suitable roosting habitat is identified, no further measures are necessary. If suitable roosting habitat and/or signs of bat use are identified during the assessment, the roosting habitat will be avoided to the extent possible. If the habitat assessment surveys reveal potential bat roosting habitat within the project, a Bat Management Plan that will include specific avoidance and minimization measures to reduce impacts to roosting bats shall be prepared and consultation with CDFW initiated prior to the commencement of bat exclusion activities should they occur. The project-specific Bat Management Plan may include any of the following as necessary and appropriate to the findings of the habitat assessment: emergence and/or pre-construction surveys for roosting bats including acoustic monitoring, roost removal

timing and methodology, no-disturbance or temporal buffers, passive exclusion of bats, and/or species-specific replacement structures.

Mitigation Measure BIO-3: Pre-Construction Nesting Bird Survey. If construction or other project activities are scheduled to occur during the bird breeding season (February 1 through August 31 for raptors and March 15 through August 31 for the majority of passerine migratory bird species), a pre-construction nesting-bird survey will be conducted by a qualified avian biologist to ensure that active bird nest will not be disturbed or destroyed. The survey will be completed no more than three days prior to initial ground disturbance. The nesting-bird survey will include the Project Area and adjacent areas where project activities have the potential to affect active nests, either directly or indirectly due to construction activity or noise. If an active nest is identified, the biologist will establish an appropriately sized construction-avoidance buffer around the nest using flagging or staking. Construction activities will not occur within a construction-avoidance buffer area until the nest is deemed inactive by a qualified biologist.

Implementation of **Mitigation Measures BIO-1** through **BIO-3** will avoid and/or minimize the potential significant impacts from construction and implementation of the Project on special-status species with potential to occur onsite, which would reduce impacts to special status plants and wildlife to less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

☐ ☐ ☐ ☒

No sensitive vegetation or riparian communities intersect with Project work areas. The nearest riparian habitat can be found approximately 800 feet east of the Project work area. This habitat would not be impacted by Project work activities. Implementation of the Project would have no substantial adverse effect on any riparian habitat or other sensitive natural community identified by local, regional, or state agencies. There would be no impacts.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

☐ ☐ ☐ ☒

There are no state or federal wetlands that intersect with the Project area. Managed irrigation water ponds can be found in close proximity to the Project site; however, these manmade ponds are hydrologically isolated from any traditional navigable waters and are fenced to prevent encroachment. The closest wetland, mapped as a Riverine feature by the National Wetland Inventory (NWI, USFWS 2024b), is approximately 800 feet east of the Project work area. There would be no impacts to federal wetlands or waters due to Project implementation.

d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

☐ ☐ ☐ ☒

The Project will have no impact on migratory fish or wildlife species, as no migratory species were determined to occur within the Project work area. The Project site has no suitable habitat that would

support nesting for avian species. The Project area has no migratory wildlife corridors associated with fish or other aquatic species. Project implementation would not impede the use of known native wildlife nursey sites. There would be no impacts.

e) Conflict with any local policies or ordinance protecting biological resource, such as a tree preservation policy or ordinance? ☐ ☐ ☐ ☒

Imperial County's Wild Flower and Tree ordinance and the City of El Centro's vegetation ordinance (El Centro 2024) requires applicants to obtain a permit for the removal of certain species of vegetation; however, the Project will not require vegetation trimming or removal, thus there would be no impacts to any local policies or ordinances protecting biological resources.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? ☐ ☐ ☐ ☒

The Project is located within the Desert Renewable Energy Conservation Plan (DRECP) and the IID Natural Community Conservation Plan (NCCP) and Habitat Conservation Plan (HCP). Both conservation plans are in the planning stages and therefore would not apply to the Project. Thus, there would be no impacts.

V. CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒

A cultural resources records search was requested from the California Historical Resources Information System (CHRIS), South Coastal Information Center (SCIC), at San Diego State University, on August 12, 2024. The SCIC provided results of the records search to Montrose on September 12, 2024. The purpose of the records search was to identify all known historical and archaeological resources within a ¼-mile radius of the Project area, as well as any previously conducted cultural resources studies. The results of the records search indicate that eight cultural resource studies have been previously conducted within a ¼-mile radius of the Project area. None of the previous cultural resource studies have encompassed the Project area. Five previously recorded historic-era cultural resources have been identified within a ¼-mile radius of the Project area, including one transmission line, one road, one canal, one site containing concrete foundations, and one isolated artifact.[5] No previously recorded cultural resources have been identified within the Project area.

The ECGS was initially constructed in the late 1940s. Unit 4 was added to the ECGS in 1968, and the facility has undergone modifications, upgrades, and improvements throughout the facility's life

[5] Confidential search results are not included but can be provided to authorized entities upon request.

span. Other units within the ECGS facility have either been retired or repowered during the modern era. Based on the results of the records search and the Project location, no historical resources occur within the Project area, and therefore, no impacts would occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? ☐ ☒ ☐ ☐

The Project site is within the boundaries of the existing ECGS. The entire ECGS site has been previously disturbed during initial construction of the facility and during subsequent improvements and upgrades that have occurred throughout the facility's operating life. As a result of the records search described in item V. a), no archaeological resources are located within the Project area. Excavation for the Project is not expected to exceed 10 feet below ground. Given the previous level of ground disturbance within the ECGS, the potential to encounter previously unrecorded archaeological resources during construction is considered to be low but nonetheless possible. In order to reduce potential impacts to archeological resources to less than significant, the following mitigation measure would be applied during construction.

The implementation of the **Mitigation Measure CR-1** would ensure that the Project would treat eligible archaeological resources in a manner that would reduce impacts to archaeological resources to less than significant with mitigation.

Mitigation Measure CR-1: Immediately Halt Construction If Cultural Resources Are Discovered, Evaluate All Identified Cultural Resources for Eligibility for Inclusion in the NRHP/CRHR, and Implement Appropriate Mitigation Measures for Eligible Resources.

If any cultural resources, such as structural features, unusual amounts of bone or shell, flaked or ground stone artifacts, historic-era artifacts, human remains, or architectural remains, are encountered during any project construction activities, work shall be suspended immediately at the location of the find and within a radius of at least 50 feet and the DBH will be contacted.

All cultural resources accidentally uncovered during construction within the Project site will be evaluated for eligibility for inclusion in the CRHR. Resource evaluations will be conducted by individuals who meet the U.S. Secretary of the Interior's professional standards in archaeology. If any of the resources meet the eligibility criteria identified in Pub. Res. Code Section 5024.1 or Pub. Res. Code Section 21083.2(g), mitigation measures will be developed and implemented in accordance with CEQA Guidelines Section 15126.4(b) before construction resumes.

For resources eligible for listing in the NRHP/CRHR that would be rendered ineligible by the effects of project construction, additional mitigation measures will be implemented. Mitigation measures for archaeological resources may include (but are not limited to) avoidance; incorporation of sites within parks, greenspace, or other open space; capping the site; deeding the site into a permanent conservation easement; or data recovery excavation. Mitigation measures for archaeological resources will be developed in consultation with responsible agencies and, as appropriate, interested parties such as Native American tribes. Native American consultation is required if an archaeological site is determined to be a Tribal Cultural Resource. Implementation of the approved mitigation will be required before resuming any construction activities with potential to affect identified eligible resources at the site.

c) Disturb any human remains, including those interred outside of dedicated cemeteries? ☐ ☒ ☐ ☐

The Project site is not within or near a formal cemetery and is not known to be located on a burial ground. No archaeological sites that would indicate the potential for previously unencountered and buried human remains have been identified within the vicinity of the Project. As noted in items V. b), the Project site is disturbed from past activities and current operations. The Project would involve excavations to a depth of 10 feet. In the event that human remains are discovered, the Imperial County Medical Examiner (per Section 7050.5 of the Health and Safety Code) shall be notified per the onsite construction manager. In addition, Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.

Although the Project site has been previously disturbed by development, it is possible that human remains could be discovered during excavation activities. Impacts on accidentally discovered human remains would be considered a significant impact. Should any such remains be discovered during construction, implementation of **Mitigation Measure CR-2** would be required. Implementation of **Mitigation Measure CR-2** and compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code 5097.98 would reduce potential impacts on human remains to a level that is less than significant with mitigation incorporated.

Mitigation Measure CR-2: Immediately Halt Construction if Human Remains Are Discovered and Implement Applicable Provisions of the California Health and Safety Code.

If human remains are accidentally discovered during project construction activities, the requirements of California Health and Human Safety Code Section 7050.5 will be followed. Potentially damaging excavation will halt in the vicinity of the remains, with a minimum radius of 100 feet, and the County Coroner will be notified. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery (California Health and Safety Code Section 7050.5[b]). If the Coroner determines that the remains are those of a Native American, they must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]). Pursuant to the provisions of Pub. Res. Code Section 5097.98, the NAHC will identify a Most Likely Descendent (MLD). The MLD designated by the NAHC will have at least 48 hours to inspect the site, once access is granted, and propose treatment and disposition of the remains and any associated grave goods.

VI. ENERGY

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	☐	☐	☒	☐

As is typical of any construction, the Project would temporarily consume energy for the operation of construction equipment and vehicles. During construction, standard methods of excavation and concrete pouring are planned. Construction activities do not include methods of construction which would result in inefficient or unnecessary use of energy resources. The Project is designed to meet requirements specified in the California Code of Regulations (Title 24, Part 6 [Energy Code] and Part 11 [CALGreen]).

During operations, the Project proposes the use of RICE technology for energy generation. The proposed units operate with a net heat rate of 8,252 BTU/MW-hr. Boiler 4 was designed to have a significantly higher net heat rate of 9,607 BTU/MW-hr, and a guaranteed rate 10,305 BTU/MW-hr, based the manufacturer heat rate specification sheet. In practice, Boiler 4 performs at a net heat rate of 10,074 BTU/MW-hr, based upon fuel purchase and power generation data during the last year. The heat rate for the proposed engines is also equivalent to, or better than, that of typical simple cycle gas turbines that are also used in peaking operations and will allow greater operating variability while also maintaining fuel consumption efficiency. The proposed technology is also less water intensive than the current Unit 4 steam boiler and cooling tower. Water efficiency, results in reduced energy consumption associated with water distribution and cooling tower operation.

Thus, energy use associated with construction and operation of the Project is not considered wasteful, inefficient, or unnecessary use of energy resources. Impacts would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	☐	☐	☐	☒

Several levels of government have implemented regulatory programs in response to reducing greenhouse gas emissions (GHG) emissions, which consequently serve to increase energy efficiency. State agencies, including California Air Resources Board (CARB), CEC, California Public Utilities Commission (CPUC), California Department of Resources Recycling and Recovery (CalRecycle), California Department of Transportation (Caltrans), and the Department of Water Resources (DWR) have developed regulatory and incentive programs that promote energy efficiency. The Project would comply with the above, as applicable, and appropriate.

The County of Imperial prepared a Conservation and Open Space Element as part of its General Plan (Imperial County 2016) that provides objectives in innovating renewable energy systems within the County. The City of El Centro General Plan, Conservation/Open Space Element also identifies energy conservation as a goal. The Project would not conflict with or obstruct these plans pertaining to energy efficiency since its energy requirements would be substantially similar to current conditions.

Peaking generation systems such as the Project are a critical component of the transition to renewable energy. In IID's case, they allow for the removal of Boiler 4 from IID power portfolio. They also will provide greater operating flexibility with minimal emissions to ensure reliability as the portfolio becomes more dependent upon renewable sources that are subject to diurnal operating cycles. IID recently updated its Integrated Resource Plan, which is a long-term strategy for providing reliable energy to its ratepayers. The plan incorporates renewable energy in its strategy to achieve a 100% renewable portfolio by 2045. The plan also recognizes the ongoing role of peaking power systems during the interim period of the transition. The integrated resource plan more specifically provides for the construction of the Project.

In conclusion, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. No impact would occur.

VII. GEOLOGY AND SOILS

The discussion below is based in part on the Geotechnical Report and subsequent addendums prepared for ECGS Unit 3 Repower at the ECGS facility by Landmark Consultants (2010), attached to this IS as Appendix C. The Geotechnical Report contains several recommendations designed to meet the criteria set forth in the California Building Code (CBC), which is adopted into the El Centro Municipal Code (ECMC) as Section 7-36. Accordingly, these recommendations are required by the CBC and are incorporated as Project design features that would be included as conditions of approval. The CBC has been updated since the preparation of the 2010 report; recommendations, such as design for maximum considered earthquake, contained within the report would be modified as warranted (and as required by the ECMC Section 7-36) to meet compliance with the most recent version of the CBC. Please refer to Appendix C for the recommendations.

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to	☐	☐	☐	☒

In 1972, the California legislature passed the Alquist-Priolo Earthquake Zoning Act (Act) to help identify areas subject to severe ground shaking. The purpose of this Act is to prohibit the placement of most structures for human occupancy across the traces of active faults; thereby mitigating the hazard of fault ruptures.

A fault is classified as active and categorized as within an Alquist Priolo Earthquake Fault Hazard Zone, if movement has occurred within the past 11,000 years. Where such zones are designated, no buildings or structures may be constructed on the trace of the fault. The General Plan Safety Element indicates that there are no known fault zones or seismic zones within the planning area

boundaries (City 2004). Therefore, no impact would occur.

ii) Strong Seismic ground shaking? ☐ ☐ ☒ ☐

Southern California is a seismically active region and the whole of Imperial Valley can be subject to moderate to strong ground motion from earthquakes in the region. The Project would comply with the seismic design parameters outlined in the CBC, which provide requirements for earthquake safety based on factors such as occupancy type, the types of soils onsite, and the probable strength of ground motion. Compliance with the CBC would include the incorporation of: (1) seismic safety features to minimize the potential for significant effects as a result of earthquakes; (2) proper building footings and foundations; and (3) construction of the building structure so that it would withstand the effects of strong ground shaking. CBC seismic safety measures would be incorporated into the Project. Adherence with construction and building safety standards would be required (as encoded in ECMC Section 7-36) which would reduce potential impacts associated with seismic ground shaking at the Project site. Impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction? ☐ ☐ ☐ ☒

Liquefaction is a phenomenon where earthquake-induced ground vibrations increase the pore pressure in saturated, granular soils until it is equal to the confining, overburden pressure. When this occurs, the soil can completely lose its shear strength and enter a liquefied state. The possibility of liquefaction is dependent upon grain size, relative density, confining pressure, saturation of the soils, and intensity and duration of ground shaking. For liquefaction to occur, four criteria must be met: underlying loose coarse-grained (sandy) soils, soils must be cohesionless, groundwater at depth of less than approximately 50 feet, and a potential for seismic shaking from nearby large-magnitude earthquake.

Landmark's 2010 investigation included the advancement of exploratory borings within the ECGS facility. Tests conducted on these borings encountered groundwater at a depth of 5.7 feet below ground surface and determined that the Project site is underlain predominately by deposits of cohesive clay soils that have a low susceptibility to liquefaction. Overall, the borings indicated that the four criteria were not met. No impact would occur.

iv) Landslides? ☐ ☐ ☐ ☒

Hazards related to landslides are unlikely due to the regional planar topography. No ancient landslides are shown on geologic maps of the region and no indications of landslides were observed by Landmark staff during a site investigation. No impact would occur.

b) Result in substantial soil erosion or the loss of topsoil? ☐ ☐ ☒ ☐

The Project would include the construction of new infrastructure in an area that has exposed soil. Construction of the Project would involve a variety of heavy equipment associated with intensive earthwork, structural, and paving phases. Soil exposed by construction activities, such as excavation, could be subject to erosion if exposed to heavy rain, winds, or other storm events. The Project applicant would be required to submit a Notice of Intent (NOI) to the Colorado River Water Quality Control Board (CRWQCB) for the preparation a Storm Water Pollution Prevention Plan (SWPPP). A Stormwater Pollution Prevention Plan (SWPPP) demonstrates how water quality during, and post construction would be maintained in accordance with mandated objectives. Often this is achieved by employing Best Management Practices (BMPs). Many BMPs designed to protect water quality also serve to reduce soil erosion and loss of topsoil.

Specific BMPs may include the following:

- Preservation of existing vegetation within staging/parking areas where feasible.
- Covering stockpiled, excavated, and/or fill materials to reduce potential off-site sediment transport.
- Use of erosion control devices, such as straw wattles, mulch, mats, and/or geotextiles.
- Use of sediment controls to protect the site perimeter and prevent off-site sediment transport, including measures such as silt fencing, fiber rolls, gravel bags, temporary sediment basins, street sweeping, stabilized construction access points and sediment stockpiles, and use of properly fitted covers for sediment transport vehicles.
- Compliance with local dust control measures.
- Daily backfill, compaction, and/or covering of excavated pipeline trenches to minimize erosion potential.
- Paving of disturbed roadway areas as soon as feasible after completion of trenching.
- Regular inspection and maintenance of all erosion control and sediment catchment facilities to ensure proper function and effectiveness.

Further, construction would be subject to compliance with the ECMC grading regulations that address erosion control. Specifically, ECMC Article XIX, Section 7-124 Erosion Control Plan, specifies that plans shall include measures for all surfaces exposed or expected to be exposed during grading activities. Further temporary and permanent structural and nonstructural erosion and sediment control BMPs shall be designed to meet the City's minimum stormwater management requirements. Once operational, the Project would include a combination of impermeable surfaces and landscaped areas, eliminating large areas of exposed soils that may be subject to erosion and sedimentation. Impacts would be less than significant.

c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse? ☐ ☐ ☒ ☐

Please see items VII., a), iii) and a), iv).

Ground subsidence is the gradual settling or sinking of the ground surface with little or no horizontal movement. Most ground subsidence is induced by humans and is most associated with the extraction of fluids (water and/or petroleum) from subsurface sediments. Subsidence can also occur when dry collapsible soils become saturated. Less commonly, ground subsidence can occur as a response to natural forces such as earthquake movements. According to the California Department of Water Resources (DWR) online interactive map, the site has not historically experienced subsidence (DWR 2024).

The Geotechnical Report includes recommendations that have been incorporated into the Project as design features that would be adopted as conditions of approval. Mandatory compliance with applicable seismic-safety development requirements would minimize potential effects related to subsidence or unstable geologic units or soil. Impacts would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? ☐ ☐ ☒ ☐

Expansive (or shrink-swell) behavior in soils is attributable to the water-holding capacity of clay minerals and can adversely affect the integrity of facilities such as pavement, foundations, or underground utilities. According to the Geotechnical Report, clay soils of high to very high

expansion predominate the Project site (Landmark 2010). The Project would be conditioned to adhere to the recommendations of the Geotechnical Report, and as required by the ECMC the most recent version of the CBC, which includes design parameters for expansive soils. The required compliance with the CBC and ECMC would minimize impacts to less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? ☐ ☐ ☐ ☒

The Project does not include septic tanks or alternative wastewater disposal systems. No impact would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ☐ ☐ ☒ ☐

As shown on the Geologic Map of the Plaster City & Brawley 15 Minute Quadrangles (Dibblee and Minch 2008), the Project area is underlain by Cahuilla beds (Qc). Native, undisturbed sediments associated with the Cahuilla beds (Qc) consist of claystones, sands, and gravels deposited in former Lake Cahuilla, and are considered to have high sensitivity for paleontological resources. Ground disturbance for the Project will occur within a heavily disturbed industrial area, and within the footprint of the previously developed ECGS facility. As such, excavation for the Project has low potential to impact native, undisturbed sediments and paleontological resources. In the event that paleontological resources are encountered during excavation, construction personnel shall be instructed to immediately suspend all activity in the immediate vicinity of the find. A qualified paleontologist shall be retained to evaluate the resource, and if necessary, develop a treatment plan to ensure that no significant impacts to paleontological resources occur. Impacts would be less than significant.

VIII. GREENHOUSE GAS EMISSIONS

Global warming is the observed increase in the average temperature of the Earth's surface. The effects of increasing greenhouse concentration in the atmosphere may contribute to global warming. The major greenhouse gases (GHGs) are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). This section describes and evaluates the potential GHG impacts from the Project. In assessing GHG impacts, the following sources were considered: emissions from equipment used during construction-related activities, operational-related emissions generated from electricity and water use, emissions from motor vehicles generated by trips to and from the Project site, and emissions generated from the power generating equipment and supporting equipment. Table 8-1 summarizes the Project GHG emissions and indicates that the net increase of GHG emissions from the Project do not exceed the applicable carbon dioxide equivalent (CO_2e) significance thresholds. Imperial Irrigation District is required to comply with the state Cap-and-Trade Offset Program by reporting CO_2e emissions from the El Centro Generating Station and acquiring allowances and offset credits consistent with the Program; net annual GHG emissions from the Project include all GHG emissions not subject to the state Cap-and-Trade Offset Program. This section incorporates information from the GHG emissions calculations contained in the Comprehensive Air Quality and Greenhouse Gas Technical Report provided in Appendix B.

Table 8-1. Project GHG Emissions

Source	Daily Max. CO_2e Emissions (lbs/day)	Annual CO_2e Emissions (short tons/yr)
Annualized Construction Emissions[a]	181	33
Facility Occupancy	3,225	534
Six New Natural Gas-Fired Engines and One Diesel-Fired Black Start Engine	620,823	249,784
Total Operational Emissions	624,229	250,318
Less: Emissions from Boiler 4	214,766	86,410
Less: Additional State Cap-and-Trade Offset Obligations	N/A	249,784
Net GHG Emission Increase	406,058	567[b]
Significance Threshold	538,000	100,000
Significant (Yes/No)	No	No

Notes:
a) Construction emissions are annualized based on maximum annual emissions and a 30-year exposure period.
b) Significance for annual emissions is determined by all GHG emissions not subject to the state Cap-and-Trade Offset Program under Title 17, CCR Sections 95801-96002.

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

ICAPCD has not established quantified CEQA significance thresholds for greenhouse gas (GHG) emissions during construction and operational activities. ICAPCD staff have indicated that the Mojave Desert AQMD (MDAQMD) CEQA Guidelines can be used to quantifiably analyze GHG emissions due to the comparable meteorological conditions of the MDAQMD jurisdiction.

IID is subject to and will comply with the state Cap-and-Trade Offset Program by reporting CO_2e emissions from the El Centro Generating Station and acquiring allowances and offset credits consistent with the Program. The Cap-and-Trade Regulation establishes a declining limit on major sources of GHG emissions throughout California, and it creates a powerful economic incentive for significant investment in cleaner, more efficient technologies. The Program applies to emissions that cover approximately 80 percent of the State's GHG emissions. CARB creates allowances equal to the total amount of permissible emissions (i.e., the "cap"). One allowance equals one metric ton of carbon dioxide equivalent emissions (using the 100-year global warming potential). Each year, fewer allowances are created and the annual cap declines. An increasing annual auction reserve (or floor) price for allowances and the reduction in annual allowances creates a

steady and sustained carbon price signal to prompt action to reduce GHG emissions. All covered entities in the Cap-and-Trade Program are still subject to existing air quality permit limits for criteria and toxic air pollutants. Imperial Irrigation District is required to comply with the state Cap-and-Trade Offset Program by reporting CO2e emissions from the El Centro Generating Station and acquiring allowances and offset credits consistent with the Program. Net annual GHG emissions from the Project include all GHG emissions not subject to the state Cap-and-Trade Offset Program. As shown in Table 8-1, the net increase of GHG emissions from the Project do not exceed the daily or annual CO_2e significance thresholds, indicating less than significant impacts. Additional details can be found in Appendix B.

b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

The ECGS facility currently reports annual greenhouse gas emissions pursuant to 40 CFR Part 98 and ongoing compliance is expected. The Project and facility are subject to the State Cap-and-Trade Offset Program which establishes a declining limit on major sources of GHG emissions throughout California, and it creates a powerful economic incentive for significant investment in cleaner, more efficient technologies. As discussed in the Energy section of this document, the new engines provide greater fuel efficiency than Boiler 4 and serves a critical role in support of IID's strategy of maximizing its renewable energy portfolio by ensuring cost effective and reliable energy to counter the diurnal operating cycles of IID's renewable generating assets. The Project will comply with applicable federal and state reporting programs and the state Cap and Trade Program, and net GHG emissions will not exceed significance thresholds; therefore, the Project will have no impact by not conflicting with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Create a significant hazard to the public through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

Materials and waste are generally considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode, or generate vapors when mixed with water (reactivity). The term "hazardous material" is defined in the State Health and Safety Code (Chapter 6.95, Section 25501[o]) as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment. Hazardous waste is defined as any hazardous material that is abandoned, discarded, or recycled, as defined in the State Health and Safety Code (Chapter 6.95, Section 25125). The transportation, use, and disposal of hazardous materials, as well as the potential releases of hazardous materials to the environment, are closely regulated through many state and federal laws.

Construction that would be reasonably foreseeable with implementation of the Project would require the transport, use, and disposal of materials that are typically associated with construction activities, such as diesel fuels, hydraulic liquids, oils, solvents, and paints. This transport, use, and disposal of hazardous materials is regulated by federal, state, and local agencies and regulations, such as the U.S. Environmental Protection Agency's (USEPA's) Resource Conservation and Recovery Act of 1976, the U.S. Department of Transportation's Hazardous Materials Regulations, and local regulations.

Facility operations for the Project will include the transport, use and disposal of hazardous materials that are similar or identical to current operations hazardous materials. This transport, use, and disposal of hazardous materials is regulated by federal, state, and local agencies and regulations, such as the U.S. Environmental Protection Agency's (USEPA's) Resource Conservation and Recovery Act of 1976, the U.S. Department of Transportation's Hazardous Materials Regulations, and local regulations.

The emission control system that is required as BACT for the Project requires the injection of ammonia into the catalyst system to reduce NO_X emissions. IID will store and manage ammonia in one of two ways. The first option would be to use anhydrous ammonia. The facility currently uses anhydrous ammonia to control emissions in Turbines 2 and 3 and has in place practices that are proven to be effective in managing the risk of releases into the atmosphere. The ammonia management system is regulated through the CalEPA Accidental Release Prevention program and implemented by the local CUPA. The addition of an anhydrous ammonia system for the Project would be subject to the same regulations and management systems that are in place today for the facility. Alternatively, the Project may incorporate aqueous ammonia. The aqueous ammonia storage system will be built with secondary containment and will be managed under a spill prevention counter control plan pursuant to USEPA and California requirements as implemented by the local CUPA.

The black start engine will consume diesel fuel that will be stored at the facility. Such tanks are typically double-walled containers that are bult into the generator set. The onsite diesel storage attributed to the Project is similar to the systems that are in place for existing diesel-fueled equipment and will be incorporated into the facilities existing Hazardous Materials Business Plan and Spill Prevention, Control and Countermeasure plans that are enforced by the local CUPA.

In addition, implementation of the Project would require conformance with the National Pollution Discharge Elimination System (NPDES) Construction General Permit, as described in Section VII, *Geology and Soils*. Specifically, this would entail implementation of a SWPPP to address the use of hazardous materials and the potential discharge of contaminants including construction-related hazardous wastes through the installation of appropriate BMPs. While specific BMPs would be determined during the SWPPP process, the suite of BMPs would include standard industry measures and guidelines contained in the NPDES Construction Permit text and Stormwater Best Management Practices Construction Handbook (CASQA 2024). Impacts would be less than significant.

b) 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? ☐ ☐ ☒ ☐

During Project construction, the use of construction equipment would require fuels, oil, sealants, and other hazardous materials related to construction. As with most construction, there is the possibility of accidental release of a hazardous substance during typical construction activities.

However, as discussed above under items VII., b) and X., a), a SWPPP would be prepared and implemented, in compliance with the requirements of the CRWQCB. The SWPPP would identify BMPs for hazardous materials handling and controlling runoff discharged from the site during Project construction. Additionally, the transport and use of such hazardous materials would cease following construction. Considering the above, there would be a less than significant impact.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? ☐ ☐ ☒ ☐

The nearest school is the Booker T. Washington Elementary School, located approximately one mile southwest of the Project site. The Project would employ the BMPs as discussed above, having a less than significant impact.

d) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ☐ ☐ ☐ ☒

Government Code 65962.5 requires that the Department of Toxic Substances Control (DTSC), the Department of Health Services (DHS), the State Water Resources Control Board (SWRCB), and any local enforcement agency, as designated by Section 18051, Title 14 of the California Code of Regulations, identify and update annually a list of sites that have been reported to have certain types of contamination. The DTSC EnviroStor database, California Environmental Protection Agency (CALEPA) Cortese List, and the SWRCB Geo Tracker databases were consulted to determine if the Project site or surrounding nearby properties are on a list compiled pursuant to Government Code 65962.5 (DTSC 2024; SWRCB 2024). No sites were recorded onsite or within a 2,000-foot radius from the center of the Project site (covering the site and adjacent properties). No impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? ☐ ☐ ☐ ☒

The Imperial County Airport is located approximately four miles northwest of the Project site and is outside of the planning boundaries for the airport compatibility zones (County 2024). No impact would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ☐ ☐ ☒ ☐

The Project could impact emergency access during construction as heavy construction vehicles could interfere with emergency response to the site or emergency evacuation procedures in the event of an emergency (e.g., vehicles traveling behind the slow-moving truck). However, such trips would be brief and infrequent. Additionally, although traffic may temporarily need to be directed around the construction, the Project construction would not require road closures. Public roadways would remain open for standard traffic and emergency response vehicles for the duration of construction. As required by the City, the procedures to reduce construction-related impacts and

maintain traffic flow on City streets that are included in the standard Project conditions of approval would require that emergency access be maintained during construction.

Post construction, the Project would operate similar to present conditions, there would be no additional traffic or any changes to the circulation network.

In relation to an emergency response plan, the City participates in the County's Multi-Jurisdictional Hazard Mitigation Plan. These are plans that are implemented on a regional level and outline the jurisdictional concerns, resources, and action items to ensure community-wide safety from both natural and manufactured threats. Additionally, the City also participates in the County's Emergency Operations Plan to respond to situations associated with natural disasters, technological incidents, and national security emergencies. These plans are programmatic and administered at a city and regional level. There are no components of the Project that would disrupt the effective implementation of these plans. At a project level, the Project would adhere to the required municipal codes, including those that have been adopted to enact the CBC and the California Fire Code to maintain adequate emergency access and response. The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

The Project site is not within a California Department of Forestry and Fire Protection (CAL FIRE 2024) fire hazard severity zone. The City is in the local responsibility area and as identified in the Imperial County Multi-Jurisdictional Hazard Mitigation Plan Update, the City is in a low-risk fire hazard severity zone (County 2021). Thus, wildfire is not a risk at the Project site. Moreover, the Project is an upgrade to an existing facility and would not introduce additional people to the area. No impact would occur.

X. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐

Construction related pollutants could include loose soils, liquid and solid construction materials and wastes, and accidental spills of concrete, fuels, and other materials. Several measures to protect water quality and limit discharges are directed and implemented, through both the preparation of various plans and adherence to established programs. As discussed below, the Project will be required to demonstrate compliance with such plans and programs.

Imperial County is within the jurisdiction of the Colorado River Regional Water Quality Control Board (CRWQCB) which is tasked with protecting the region's water quality objectives that meet the standards set forth in the Section 303 of the federal Clean Water Act (CWA) as well as the

state's Porter-Cologne Water Quality Act. The CRWQCB designates beneficial uses of surface water and groundwater, sets qualitative and quantitative water quality objectives that must be met to protect designated beneficial uses, and develops implementation programs to protect the regional water resources through its Water Quality Control Plan for the Colorado River Basin (the Basin Plan).

Additionally, the NPDES program regulates point source and non-point source pollutant discharges to surface waters. Municipalities are required to obtain permits for the water pollution generated by stormwater in their jurisdictions. These permits are known as municipal separate storm sewer system (MS4) permits. Because the Project's stormwater runoff would be discharged into the local municipal storm drain system, the Project is required to demonstrate that it would be consistent with the standards established in the MS4 permit as encoded in Chapter 22.707 of the ECMC, Reduction of Pollutants in Stormwater.

The Project would adhere to the NPDES Construction General Permit during construction, which includes BMPs that serve to protect groundwater quality. A SWPPP would also be prepared in compliance with the Construction General Permit, which would identify erosion control and sediment control BMPs, such as desilting basins or other temporary drainage or control measures, or both, as may be necessary to control construction-related pollutants. The SWPPP will be required to be approved prior to the issuance of a grading permit.

Based on the analysis above, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Impacts would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? ☐ ☐ ☐ ☒

The Project does not involve the use of groundwater. Surface water from the Colorado River via the Dogwood Canal provides water for cooling and other station operations. Further, the Project is within the footprint of the existing facility and would not increase impermeable surfaces decreasing groundwater infiltration. According to the Initial Study prepared for the General Plan Update, groundwater quality is poor in the Imperial Valley and little use is made of the existing groundwater resource (City 2021). Therefore, the Project would not substantially decrease groundwater supplies or interfered with groundwater recharge. No impact would occur.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces in a manner which would:

i) Result in a substantial erosion or siltation on- or off-site. ☐ ☐ ☒ ☐

The Project site is fully developed as the ECGS. Once operational, it would be returned to its existing state. The Project replaces existing facilities and does not significantly increase the size of impervious surfaces and does not alter the existing drainage pattern of the site or area. The Project site is currently in a developed area with impervious surface. Potential for erosion would be limited to exposed soils during construction. This would be minimal and Best Management Practices would be employed including watering of exposed soil. No streams or rivers are adjacent to the site that could be subject to siltation. No streams or rivers would have altered courses. Impacts would be

less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; ☐ ☐ ☒ ☐

Consistent with the above, overall, the Project replaces existing facilities and does not significantly increase the size of impervious surfaces and does not alter the existing drainage pattern of the site or area. The existing drainage system is adequate to serve the site. Impacts would be less than significant.

iii) Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? ☐ ☐ ☒ ☐

The Project would not generate substantial amounts of runoff as described in item ii), above. The Project is located within the boundaries of the existing ECGS facility and City of El Centro right-of-way. The Project includes on-site impoundment to handle discharge water from Project operations thereby avoiding new sources of potential runoff. Storm runoff volumes will not substantially increase or be altered. Thus, it will not substantially alter the existing drainage pattern of the site, substantially increase the rate of runoff, or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems.

Impacts would be less than significant.

iv) Impede or redirect flows? ☐ ☐ ☒ ☐

Consistent with the above, overall, the Project replaces existing facilities and does not alter the existing drainage – thus, not impeding or redirecting and flows. The existing drainage system is adequate to serve the site. Impacts would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? ☐ ☐ ☐ ☒

According to the Federal Emergency Management Agency (FEMA) Flood Map (06025C1725C), the Project site is in Zone X, area of minimal flood hazard (FEMA 2008). According to the Imperial County Multi-Jurisdictional Hazard Mitigation Plan Update, the City of El Centro is at low risk of flooding from natural disaster. Tsunamis and seiches are associated with large bodies of water (either open or enclosed respectively); the nearest body of water is the Salton Sea 22 miles north of the Project. The Salton Sea is both too distant and not capable of seiche conditions. Therefore, there is no risk of a release of pollutants due to inundation. No impact would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? ☐ ☐ ☐ ☒

The Project site is not in an adjudicated basin that is subject to a sustainable groundwater management plan. Further, the Project would not require the use of groundwater; surface water from the Dogwood Canal would be used for cooling.

As discussed in response X., a), the Project would be required to prepare and implement a SWPPP. The SWPPP would outline the how stormwater would be managed and the responsible parties during construction activities. The SWPPP would include site design and source control BMPs to ensure stormwater runoff and impervious areas are minimized.

The Project would not decrease the quality or increase the quantity or rate of runoff discharging from the Project site compared to existing conditions.

With compliance to local, state, and federal water quality and groundwater requirements, as applicable, the Project would not conflict with a water quality control plan or sustainable groundwater management plan. No impact would occur.

XI. LAND USE AND PLANNING

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒

The physical division of an established community typically refers to the construction of a linear feature, such as an interstate highway or railroad, or removal of a means of access, such as a local road or bridge that would impact mobility within an existing community or between a community and outlying area. No new major supporting infrastructure facilities would need to be constructed and/or extended to the Project site that could result in a physical disruption to an established land use or the local pattern of development. Further the Project is on IID property that does not provide through access to adjacent areas. No impact would occur.

b) Conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

The Project would decommission the existing Boiler 4 and replace it with RICEs within the boundaries of the existing ECGS facility. The City of El Centro designates the Project site as "Public" in the General Plan. The "Public" General Plan designation applies to parcels under public or quasi-public ownership, such as those owned by IID. Further, these parcels may be designated for the production and transmission of electrical, gas, geothermal, or other forms of energy. The City of El Centro zones the site "Limited Use". Title 29 of the El Centro Municipal Code similarly states that the typical application of the Limited Use zoning designation is in part for the production and transmission of energy. The Project is consistent with the existing land use designation and zoning. No impact would occur.

XII. MINERAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

Mineral resources are commonly defined as a concentration or occurrence of natural, solid, inorganic, or fossilized organic material in or on the earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. Mineral resources can be categorized into three classes: fuel, metallic, and non-metallic. Fuel resources comprise coal, oil, and natural gas. Metals include such resources as gold, silver, iron, and copper. Lastly, non-metal resources include industrial minerals and construction aggregate. Industrial minerals include boron compounds, rare-earth elements, clays, limestone, gypsum, salt, and dimension stone. Construction aggregate includes sand and gravel, and crushed stone.

The Surface Mining and Reclamation Act of 1975 (SMARA) is the primary regulator of surface mining in the State. The act requires the State geologist (California Geological Survey) to identify all mineral deposits in the State and to classify them based on their significance. SMARA defines a mineral deposit as a naturally occurring concentration of minerals in amounts or arrangement that under certain conditions may constitute a mineral resource. The concentration may be of value for its chemical or physical characteristics. The classification of these mineral resources is a joint effort of the State and local governments. It is based on geologic factors and requires that the State Geologist classify the mineral resources area as one of the four Mineral Resource Zones (MRZs), Scientific Resource Zones (SZs), or Identified Resource Areas (IRAs), described below:

- MRZ-1: A Mineral Resource Zone where adequate information indicates that no significant mineral deposits are present or likely to be present.
- MRZ-2: A Mineral Resource Zone where adequate information indicates that significant mineral deposits are present, or a likelihood of their presence and development should be controlled.
- MRZ-3: A Mineral Resource Zone where mineral resource significance is undetermined.
- MRZ-4: A Mineral Resource Zone where there is insufficient data to assign any other MRZ designation.
- SZ Areas: Containing unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance shall be classified in this zone.
- IRA Areas: County or State Division of Mines and Geology Identified Areas where adequate production and information indicate that significant minerals are present.

No mineral resources that would be of value to the region or residents of the state have been identified within the City of El Centro. In addition, the Project site is not within a mineral resource zone as designated by the California Department of Conservation's Division of Mine Reclamation,

Mineral land classification map. The Project is within an urban area and is not identified in the El Centro General Plan Conservation and Open Space Element (2004) as having any known mineral resource value or as being located within any mineral resource recovery site. No impact would occur.

b) Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Please refer to the response to item XII b) above. No impact would occur.

XIII. NOISE

Would the project result in:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐

Construction Noise

At a distance of 0.5-miles from the nearest residence the point source noise attenuation from construction activities is a reduction or 35 dBA. This would result in an anticipated worst case eight-hour average combined noise level well below 75 dBA at the property line. Given this, the noise levels will comply with the City of El Centro and County of Imperial's 75 dBA standard at all Project property lines and impacts are anticipated to be less than significant with various Project features incorporated. The building is being designed to reduce and manage noise from operations. Design features include those as described in Appendix D, Table 6-1.

Operational Noise

Based on the empirical data and the distances to the property lines the unshielded noise levels from the proposed equipment were found to be below the City and County's most restrictive nighttime property line standard of 45 dBA. Impacts are anticipated to be less than significant with implementation of the mitigation measures as identified. in Table 6-1 of Appendix D, *Noise Assessment*. Please see Appendix D, *Noise Assessment* for additional information. Impacts would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

The City of El Centro and County of Imperial has not yet adopted vibration criteria. The United States Department of Transportation Federal Transit Administration (FTA) provides criteria for acceptable levels of groundborne vibration for various types of special buildings that are sensitive to vibration. For purposes of identifying potential Project-related vibration impacts, the FTA criteria were used.

There are no vibration-sensitive uses located adjacent to the proposed construction. The nearest offsite uses are residential and located over 0.5-miles from any construction activities. Project construction activities would not result in vibration induced structural damage or vibration induced annoyance to adjacent land uses. Therefore, vibration impacts would be less than significant.

Please see Appendix D, *Noise Assessment* for additional information.

c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

There are no private air strips within the vicinity of the Project site. The Imperial County Airport is located approximately four miles northwest of the Project site and is outside of the planning boundaries for the airport compatibility zones (County 2024). No impact would occur.

XIV. POPULATION AND HOUSING

Would the project:

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒

Growth inducing impacts are caused by those characteristics of a project that foster or encourage population and/or economic growth, such as new housing (direct) or creation of a new job center or the expansion of infrastructure to increase capacity (indirect). The Project includes the replacement of the existing unit at Boiler 4 with six reciprocating internal combustion engines (RICE). The proposed improvements are needed to maintain service adequately and efficiently as planned to the service area. The Project maintains existing service levels and would not induce growth. No impact would occur.

b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

There is no housing onsite, and the Project site is not designated for housing. As such, the Project would not displace substantial numbers of existing housing or people requiring construction of replacement housing elsewhere. No impact would occur.

XV. PUBLIC SERVICES

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i) Fire Protection?	☐	☐	☒	☐

Fire protection may be required in the event of an accident, but such requirements would be short term and would not require increases in the level of public service offered. Post construction, the Project would resume to operating like existing conditions and would not require additional fire protection service. Therefore, the Project would not increase the need for new fire department staff or new facilities. Impacts would be less than significant.

ii) Police Protection? ☐ ☐ ☒ ☐

Like fire protection, during construction police protection may be required in the event of an accident, but such requirements would be short-term and would not require increases in the level of public services offered. Operationally, the Project conditions would be like existing and thus, there would be no need for additional services. Therefore, the Project would not increase the need for new police department staff or new facilities. Impacts would be less than significant.

iii) Schools? ☐ ☐ ☐ ☒

The Project would place no demand on school services because it would not include the construction of facilities that require such services (i.e., residences) and would not involve the introduction of a temporary or permanent population into the area. No impact would occur.

iv) Parks? ☐ ☐ ☐ ☒

The Project would place no demand on parks because it would not involve the construction of facilities that require such services (i.e., residences) and would not involve the introduction of a temporary or permanent population into the area. No impact would occur.

v) Other Public Facilities? ☐ ☐ ☐ ☒

The Project would not involve the introduction of a temporary or permanent population into this area. Accordingly, the Project would not result in impacts to other public facilities. No impact would occur.

XVI. RECREATION

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project increase the use of the existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

The Project would not generate new residents or employees that would be permanently stationed at the site who would require parks or other recreational facilities. No impact would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment?	☐	☐	☐	☒

The Project would not include recreational facilities or require the construction or expansion of recreational facilities. No impact would occur.

XVII. TRANSPORTATION

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	☐	☐	☐	☒

Project improvements are wholly contained on the Project site. The Project would not alter the physical configuration or operational characteristics at its existing access points to the existing, adjacent roadways. There would be no conflict with any program, policy, ordinance, or plan. No impact would occur.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	☐	☐	☒	☐

The scope of the Project is to replace and upgrade existing facilities and operations. Vehicle trips generated by the upgraded facility during Project operations would not increase with its implementation. Thus, there would be no increase in vehicle miles traveled (VMT) or rate of VMT per employee over the baseline condition.

If, by a conservative approach, it is assumed the Project would generate additional trips, the volume would be far less than 110 trips per day. Per the Governor's Office of Planning Research's

Technical Advisory on Evaluating Transportation Impacts in CEQA[6], projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact. The Project would cause a less than significant impact.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? ☐ ☐ ☐ ☒

The Project does not include any changes to the transportation network. The Project would not create or increase hazards due to a geometric design feature and would not alter the geometrics of any public roadway. The Project would not introduce incompatible uses creating hazards. No impact would occur.

d) Result in inadequate emergency access? ☐ ☐ ☒ ☐

Please see response to IX, f). The Project site would continue to be accessed via a gated entrance off of Villa Avenue and there are no proposed alterations to the site's circulation. During construction there is the potential for slow moving trucks, however delays would be brief and infrequent and emergency access would be required to be maintained per the City's Fire Code. Construction equipment and materials would be staged onsite and lane closures on public right of ways are not anticipated. The Project would cause a less than significant impact.

XVIII. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place or object with cultural value to a California Native American tribe, and that is:	☐	☐	☐	☒

The Project is the demolition of existing structures on the property and located within the boundaries of the existing facility. All of these areas have been previously disturbed in association with construction of the existing facility.

The Project is not in a culturally sensitive area as shown on Figure 6 "Imperial County Known Areas of Native American Cultural Sensitivity" of the Conservation and Open Space Element (Imperial County 2016). Therefore, no impact would occur regarding a tribal cultural resource.

Tribal Consultation was performed as required under AB 52. Section 2, II. Environmental Checklist, 13. summarizes input received regarding Tribal Consultation.

i) Listed or eligible for listing in the California Register ☐ ☐ ☐ ☒

[6] https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

of Historical Resources, or in a local register of historical resources as define in Public Resources Code Section 5020.1(k), or

The existing structures to be demolished are not considered eligible for listing in the California Register of Historical Resources. No impact would occur.

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth is subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe. ☐ ☐ ☐ ☒

Refer to item "a", above.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒

The Project would not require the need for wastewater treatment, storm drain, or telecommunication facilities. Stormwater runoff would continue to be handled via existing, onsite infrastructure. New underground natural gas supply lines would be extended from the boiler building southward to the new engines – all within the Project site. Power generated by the new units will be transmitted to the grid by way of the existing El Centro Switching Station. The Project would not require new or relocated water supply infrastructure. No impact would occur.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? ☐ ☐ ☐ ☒

Colorado River water via the Dogwood Canal is utilized to provide water for current cooling and other operations. The Project would operate in a similar fashion and simply be in place of current operations. Additionally, the proposed technology is less water intensive in demand than many available alternative technologies. No impact would occur.

c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? ☐ ☐ ☐ ☒

The Project would not generate municipal wastewater and would not connect to any municipal wastewater system. No impact would occur.

d) Generate solid waste more than state or local standards, or more than the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? ☐ ☐ ☒ ☐

The Project would generate waste during construction. The Project would not require the services of a landfill where the Project would impact its capacity. All construction-related waste would be properly disposed of or recycled (tank shells would be scrapped and recycled)., at an approved facility in compliance with the requirements of the facility to which the construction-related waste is hauled. Construction-related activities would comply with all federal, state, and local management and reduction statutes and regulations related to solid waste. Impacts would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? ☐ ☐ ☐ ☒

The Project would comply with the City's solid waste reduction programs, which are designed to comply with federal, state, and local statutes and regulations related to solid waste. These statutes and regulations include the California Integrated Solid Waste Management Act, the California Beverage Container Recycling and Litter Reduction Act, and the City's solid waste disposal policies and practices. The Integrated Solid Waste Management Act requires that jurisdictions maintain a 50 percent or better diversion rate for solid waste. No impact would occur.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, *would the project:*

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

According to CAL FIRE's Fire Hazard Severity Zone Viewer, the Project site is not located in a very high fire hazard area (CAL FIRE 2024). During construction of the Project, heavy construction vehicles could interfere with emergency response to the site or emergency evacuation procedures in the event of an emergency (e.g., vehicles traveling behind the slow-moving truck). However, such trips would be brief and infrequent. Although traffic would temporarily need to be directed around the construction when making utility tie-ins, the Project construction would not require road

closures. Public roadways would remain open for standard traffic and emergency response vehicles for the duration of construction. During Project operation, roadways and intersections in the area surrounding the Project site would continue to operate at unchanged levels. Impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? ☐ ☐ ☐ ☒

According to CAL FIRE's Fire Hazard Severity Zone Viewer, the Project site is not located in a very high fire hazard area (CAL FIRE 2024). The Project site is level and void of slopes. The surrounding area is highly developed and does not support the common characteristics identified as a wildfire risk, such as difficult terrain, inadequate access, and unmaintained vegetation. As discussed in item IX, g), the City is classified as having a very low wildfire severity risk (County 2021). The Project would adhere to the California Fire Code, and the City of El Centro Fire Code. It would not exacerbate wildfire risks. No impact would occur.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? ☐ ☐ ☐ ☒

According to CAL FIRE's Fire Hazard Severity Zone Viewer, the Project site is not located in a very high fire hazard area (CAL FIRE 2024). Please refer to item XX, b). The Project is in a developed area. The Project does not involve the installation of fuel breaks, emergency water sources, or power lines. The Project would not involve the extension or upgrades of existing utilities, such as water, electric, and gas to accommodate the new facilities. Therefore, such utility improvements would not exacerbate fire risk or result in temporary or ongoing impacts to the environment. No impact would occur.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? ☐ ☐ ☐ ☒

According to CAL FIRE's Fire Hazard Severity Zone Viewer, the Project site is not located in a very high fire hazard area (CAL FIRE 2024). Please refer to items VII, a) through VII, d) and item XX, b). The Project is in a developed area. The Project would not exacerbate wildfire risks due to slope, prevailing winds, and other factors, and would not expose people to significant levels of pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The Project would not result in people and structures experiencing significant risks such as downslope or downstream flooding or landslides, because of runoff, post-fire slope instability, or drainage changes. No impact would occur.

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino,(1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors, (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656. Revised 2009- CEQA, Revised 2011- ICPDS, Revised 2016 – ICPDS, Revised 2017 – ICPDS.

SECTION 3

III. MANDATORY FINDINGS OF SIGNIFICANCE

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐

The Project site is currently developed as a power generation facility in an urban area and does not contain or support any listed, protected, sensitive habitat or special status species. The Project would not affect any known archaeological, tribal cultural, or paleontological resources. With required compliance with the County's policies and regulatory codes for discovery of archaeological or tribal cultural resources the Project would not eliminate important examples of the major periods of California history or prehistory. A less than significant impact would occur.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☐	☒

State CEQA Guidelines Section 15130 requires a discussion of the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable," meaning that the project's incremental effects are considerable when viewed in connection with the effects of past, current, and probable future projects. This Initial Study did not identify any recent, current, or probable future projects within the cumulative Project area:

The Project would have no cumulatively considerable impacts.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

The Project would not consist of any uses or activities that would negatively affect any persons, either directly or indirectly, in its vicinity. In addition, all resource topics associated with the Project have been analyzed in accordance with CEQA and found to pose no impact or less-than-significant impact. A less than significant impact would occur.

IV. PERSONS AND ORGANIZATIONS CONSULTED

This section identifies those people who prepared or contributed to preparation of this document. This section is prepared in accordance with Section 15129 of the CEQA Guidelines.

A. IMPERIAL IRRIGATION DISTRICT

Donald Vargas, Compliance Administrator II

Jose Perez, Project Manager, Senior

Wayne A. Lane, II, Superintendent, General, Generation Engineering & Operations

B. AGENCIES/ORGANIZATIONS

Imperial County Air Pollution Control District

C. ENGINEERING AND TECHNICAL STUDIES

Wartsila – Civil Engineering

Parametrix – Visual Renderings

Geotechnics, Incorporated - Geotechnical Report

Ldn Consulting, Inc. - Noise Analysis

V. REFERENCES

California Department of Conservation, California Geological Survey. CGS Information Warehouse: Mineral Land Classification. Accessed August 2024. https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc

California Department of Conservation [CDOC]. Division of Land Resource Protection, Farmland Mapping and Monitoring Program. CDOC 2022a. https://maps.conservation.ca.gov/DLRP/CIFF/ Accessed September 2024.

California Department of General Services (DGS). California Building Standards Code (California Code of Regulations, Title 24) California Building Code. CBC 2022a. https://www.dgs.ca.gov/BSC/Codes, Accessed September 2024.

California Department of Conservation 2022b. California Williamson Act Enrollment. CDOC 2022b. https://www.arcgis.com/apps/mapviewer/index.html?url=https://gis.conservation.ca.gov/server/rest/services/DLRP/California_Williamson_Act_Enrollment_2022/MapServer&source=sd . Accessed September 2024.

California Department of Forestry and Fire Protection. CAL FIRE 2024. Fire Hazard Severity Zone Viewer. Available at: https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/ Accessed December 2024

California Department of Fish and Wildlife (CDFW). 2024. California Natural Diversity Database (CNDDB) Biogeographic Data Branch. Sacramento, California. https://apps.wildlife.ca.gov/bios6/?tool=cnddbqv. Accessed July 2024.

California Environmental Protection Agency (CALEPA). 2024. Cortese List Data Resources. Cortese List Data Resources | CalEPA. Accessed August 2024.

California State Water Board. 2024. GeoTracker Site Search. Accessed August 2024. https://geotracker.waterboards.ca.gov/map/.

California Department of Transportation (Caltrans) 2024. California State Scenic Highway System Map. Accessed September 2024. https://www.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa

California Department of Water Resources (DWR) 2024. Accessed August 2024. https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#landsub

California Stormwater Quality Association (CASQA). 2024. Best Management Practices Construction Handbook (CASQA 2024). https://www.casqa.org/resources/bmp-handbooks/construction-bmp-handbook

City of El Centro. El Centro, City of, *General Plan*, February 2004. https://cityofelcentro.org/communitydevelopment/planning-documents/

City of El Centro. El Centro, City of, Municipal Code, Accessed December 2024. https://library.municode.com/ca/el_centro/codes/code_of_ordinances?nodeId=CH26VE

Department of Toxic Substance Control (DTSC). 2024. EnviroStor database. Accessed August 2024.https://www.envirostor.dtsc.ca.gov/public/search.asp?page=3&cmd=search&business_name=&main_street_name=&city=&zip=&county=&status=ACT%2CBKLG%2CCOM&branch=&site_type=CSI

TES%2CFUDS&npl=&funding=&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTE

Dibblee, T.W., and J.A. Minch. 2008. Geologic Map of the Plaster City & Brawley 15 Minute Quadrangles, Imperial County, California. Dibblee Geological Foundation, Map DF-406. Accessed August 2024. Electronic document available at https://ngmdb.usgs.gov/Prodesc/proddesc_86840.htm

ECORP Consulting, Inc. 2003. Biological Technical Report for the El Centro Generating Station Wastewater Mitigation Project. Imperial County, California. Prepared for the Imperial Irrigation District. June.

Federal Emergency Management Agency (FEMA). 2008. FEMA Flood Map Service Center: Search by Address. Available at: https://msc.fema.gov/arcgis/rest/directories/arcgisjobs/nfhl_print/mscprintb_gpserver/je5844c9ac1e945889e75e88ce3724a05/scratch/FIRMETTE_7491c652-033c-4a4d-aec1-7690ab9f16bc.pdf

Governor's Office of Planning and Research (Office of Land Use and Climate Innovation [LCI]) OPR 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Available: https://lci.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed November 2024.

Imperial County. 2024. *Code of Ordinances*. August. Accessed August 2024. https://library.municode.com/ca/imperial_county/codes/code_of_ordinances?nodeId=TIT12STSIPUPL_CH12.48WIFLTR_12.48.010PIDECETRFL.

Imperial County Airport Land Use Compatibility Map. 2024. Accessed August 2024. https://icpds.maps.arcgis.com/apps/webappviewer/index.html?id=46f7796b2dfb4a6db5311d7892f0b411

Imperial County. Imperial County Multi-Jurisdictional Hazard Mitigation Plan Update. 2021. Imperial-County-MHMP-2021-Plan-Update-2021_01_11.pdf

Imperial County Air Pollution Control District. 2023. Title V permit No. Accessed August 2024. https://apcd.imperialcounty.org/wp-content/uploads/2023/03/IIDTVREV-2023-Draft-March-1-2023-WebVersion.pdf

Imperial County. *General Plan, Conservation and Open Space Element*. 2016. Accesssed October 2024. https://www.icpds.com/planning/land-use-documents/general-plan

Imperial Irrigation District. *2024 Integrated Resource Plan*, 2024. Accesssed October 2024. https://www.iid.com/power/renewable-energy/integrated-resource-plan

South Coast Air Quality Management District. 2019. Accessed August 2024. www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1110-2.pdf

U.S. Census Bureau. 2024. Total Population in El Centro city, California. Accessed August 2024. https://data.census.gov/profile/El_Centro_city,_California?g=160XX00US0621782

U.S. Fish and Wildlife Service (USFWS). 2024a. *Burrowing Owl*. Accessed August 2024. https://fws.gov/species/burrowing-owl-athene-cunicularia

USFWS. 2024b. National Wetlands Inventory. U.S. Fish & Wildlife Service. Accessed August 2024. https://data.nal.usda.gov/dataset/national-wetlands-inventory.