The soil analysis done as part of the Los Cerritos Southern Wetland Restoration Project, which is in the same area as the proposed Project, assumed an artificial fill depth of 5 feet (LCWA 2023).

The concrete pilings for the solar table supports would have a depth of 6 feet and a diameter of 1.5 feet. The equipment pad depths are 0.33 feet, and the powerline trenches will be 3 feet deep. Therefore, the ground disturbance for the project would occur likely in artificial fill, which has no paleontological potential. As such the only project activity that might have the potentially impact paleontological resources would be the concrete pile footings.

The holes for the pilings would likely be drilled with a backhoe that is equipped with an augur attachment. Each support structure would have one pile, so a total of 388 pilings would need to be installed. Installation of the pilings is expected to disturb only the surficial soils and not underlying soil units. This limited ground disturbance would not be expected to destroy any paleontological resources or unique geologic feature. Therefore, impacts would be less than significant.

3.4.8 Greenhouse Gas Emissions

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

This section of the document analyzes the impact the proposed Project would have on emissions that affect climate change around the world. Greenhouse Gas (GHG) emissions were analyzed as part of the CalEEMod air emission calculations. The CalEEMod output files are provided in Appendix E.

"Greenhouse gases" (so called because of their role in trapping heat near the surface of the earth) emitted by human activity are implicated in global climate change, commonly referred to as "global warming." The principal GHGs are carbon dioxide, methane, nitrous oxide, ozone, and water vapor. Fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately one-half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions.

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (Less than Significant Impact)

The construction and operational GHG emissions for the proposed project are provided in Table 3-7. Construction of the Solar PV facility is expected to take less than one year.

As specified by the SCAQMD, the construction GHG emissions were amortized over 30 years and added to the annual operating GHG emissions. As shown in Table 3-7 the GHG emissions from the proposed Solar PV Project would be negative and as such below the CEQA Threshold established by the SCAQMD for industrial projects.

Table 3-7 Project GHG Emissions (MT/yr.)

Project Phase	CO_2	CO_2e
Construction Phase		
Site Preparation	3.13	3.16
Support Pile Installation	16.67	17.03
Solar PV System, Equipment, and Conduit Installation	18.25	18.62
Testing and Commissioning	3.18	3.29
Total Construction Phase	***41.23***	***42.10***
Operational Phase		
Offsite Mobile Sources	0.16	0.16
Vegetation Mowing	0.01	0.01
Water Use	0.01	0.01
Electrical Power Generation	(413.16)	(413.16)
Amortized Construction Emissions	1.37	1.40
Total	***(411.61)***	***(411.58)***
SCAQMD CEQA Threshold		10,000
Exceed Threshold?		No

Operational emission estimates calculated using CalEEMod Version 2022.1.1.29.
Electrical Power generation GHG saving estimated based upon system capacity of 1.5 MW, an annual solar capacity factor of 20%, and an SCE GHG intensity factor of 346.20 lbs/Mw-hr, which is from CalEEMod for estimate year 2026.
See Appendix D for detailed calculations.

The purpose of the project is to generate renewable electrical energy, which would offset electrical power generated by Southern California Edison (SCE) and the onsite gas turbine generator. This would result in an overall reduction of GHG emissions from electrical generation. The estimated reduction in GHG emissions was based on the grid using the estimated SCE 2026 GHG intensity factor from CalEEMod. The amount of GHG reduction would reduce overtime as the SCE system obtains more of its electrical power from renewable sources. Therefore, GHG emissions impacts would be less than significant.

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (No Impact)

Climate Change Scoping Plan - In 2006, the Legislature passed the California Global Warming Solutions Act of 2006 [Assembly Bill 32 (AB 32)], which created a comprehensive, multi-year program to reduce greenhouse gas (GHG) emissions in California. AB 32 required the California Air Resources Board (CARB or Board) to develop a Scoping Plan that describes the approach California will take to reduce GHGs to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by the Board in 2008 and must be updated at least every five years. Since 2008, there have been two updates to the Scoping Plan. Each of the Scoping Plans has included a suite of policies to help the State achieve its GHG targets, in large part leveraging existing programs whose primary goal is to reduce harmful air pollution.

The equipment used during construction would have to comply with the applicable GHG reduction programs for mobile sources in accordance with the Climate Change Scoping Plan to achieve the State's GHG reduction targets. The contractor who owns the equipment and vehicles is required to provide verification of compliance to the California Air Resources Board or the U.S. Environmental Protection Agency under state and federal law. The Project would help to implement some of the Climate Change Scoping Plan strategies as it relates to the development and use of renewable energy sources. The Project

would not conflict with regulations adopted to achieve the goals of the Climate Scoping Plan. No impact would occur.

City of Seal Beach - The City of Seal Beach has not yet developed a Greenhouse Gas Reduction Plan or Climate Action Plan. The City of Seal Beach General Plan, adopted in December 2003, does not contain an air quality element or a Climate Action Plan. The applicable GHG planning document for the City is the AB-32 Climate Change Scoping Plan discussed above.

3.4.9 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 or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
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?	☐	☐	☐	☒
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Less than Significant Impact)

The project would not involve the routine transport, use, or disposal of hazardous materials. Operation of the Solar PV Project would not involve the use of hazardous materials.

Project construction would involve the use and transport of typical construction-related materials such as fuels, lubricants, adhesives, and solvents. Heavy equipment not permitted on public roads would be refueled on-site, but no overnight fuel storage or maintenance of heavy equipment would occur on the Project site. Any onsite refueling operations would be conducted at the staging area, which is a flat level dirt pad. Any spills during refueling would be small and contained within the staging area.