site, a context generally considered unsuitable for human burial. Therefore, it is unlikely that the proposed Project would disturb any human remains. Implementation of mitigation measure CR-1 would address the procedures to be followed in the unlikely event that human remains are discovered during the earth moving activities.

Avoidance, Minimization and/or Mitigation Measures

Mitigation Measure CR-1: Archeological Monitoring and Unanticipated Discovery Treatment Plan – Prior to issuance of a grading permit an Archeological Monitoring and Unanticipated Discovery Treatment Plan shall be submitted to the City Community Development Department for review and approval. The plan shall be prepared by a City approved archaeologist. The qualified archeologist shall coordinate with the Native American monitors during the preparation of the plan. The plan shall outline areas that will be designated Environmentally Sensitive Areas, if needed. Significant or unevaluated archaeological resources that are being avoided and are within 50 feet of the construction zone shall be designated as Environmentally Sensitive Areas. The resources shall be delineated with exclusion markers to ensure avoidance.

The plans shall specify the monitoring procedures, the field and laboratory methods that would be used for treatment of unanticipated discoveries, and the requirements for Native American participation in the monitoring and treatment activities. Procedures outlined shall include stop-work and protective measures, notification protocols, procedures for significance assessments, and appropriate treatment measures. The plan shall state avoidance or preservation in place is the preferred manner of mitigating impacts to historical resources, unique archaeological resources, and contributors to the significance of the tribal cultural landscape but shall provide procedures to follow should avoidance be infeasible in light of factors such as the nature of the find, project design, costs, and other considerations.

The plan shall outline the protocols and procedures to be followed if human remains and associated funerary objects or grave goods are uncovered.

Mitigation Measure CR-2: Archaeological Monitoring – An archaeologist, approved by the City of Seal Beach, shall be present at the site during all ground disturbance activities.

3.4.6 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?	☐	☐	☒	☐
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

The proposed solar PV project would use energy for both construction and operations. The main energy use for construction would be diesel fuel for construction equipment. The energy used for operation would be fuel for workers commuting to the site and for operation of a lawn mower. The 1.5 MW Solar PV Electrical System, which would interconnect with the Hellman Property's electrical infrastructure and operate in parallel with the utility grid to provide sustainable clean electrical energy in support of the

various Hellman Property facilities operations. Any excess power generated would be sold back to the SCE grid.

For all of California, the utility-scale solar (PV) capacity factor is about 28% (USEIA. 2019). For a facility in Seal Beach, it would be expected that the solar (PV) capacity factor would be lower due to the proximity to the coast and the influence of fog. The Applicant has estimated an annual solar capacity factor of 20% which means the project would generate about 2,630 MW-hrs of electricity per year.

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (Less than Significant Impact)

Construction

All the offroad construction equipment would use diesel fuel. The on road vehicles would use a combination of diesel fuel and gasoline. Table 3-6 provides a breakdown of the total estimated fuel use for construction.

Implementation of mitigation measure AQ-1 that requires maintaining equipment engines in proper tune, use of Tier 4 engines, and enforcing a 5-minute idling limits would serve to reduce energy use from construction.

Table 3-6 Estimated Construction Equipment Fuel Use (gals)

Equipment Group	Diesel	Gasoline	Total
Onsite Construction Equipment	3,277	0	3,277
On Road Construction Vehicles	1,046	679	1,725
Total	4,323	679	5,002

See Appendix C for fuel use calculations.

Operation

The solar array would require minimal maintenance, including panel washing, vegetation removal, and periodic maintenance work. It is estimated that about eight trips per year would be needed for operational activities, with an estimated fuel use of about 27 gallons of gasoline per year. The facility would be monitored by existing personnel at the Hellman Ranch Facility.

The solar PV facility would generate about 2,630 MW-hrs of electricity per year. Operational activities would not require excessive or wasteful use of energy that could lead to potentially significant environmental impacts. Consumption of energy during operation would be far less than the amount of renewable energy generated by the solar facility. The operational impact would be less than significant because energy use during operation would be minimal.

Given all these facts, the proposed Project's impacts on consumption of energy resources would be less than significant.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (No Impact)

Renewables Portfolio Standard (RPS) Program – California's RPS program was established in 2002 by Senate Bill (SB) 1078 with the initial requirement that 20% of electricity retail sales must be served by renewable resources by 2017. The program was accelerated in 2015 with SB 350 which mandated a 50% RPS by 2030. SB 350 includes interim annual RPS targets with three-year compliance periods and requires 65% of RPS procurement to be derived from long-term contracts of 10 or more years. In 2018, SB 100 was signed into law, which again increases the RPS to 60% by 2030 and requires all the state's electricity to

come from carbon-free resources by 2045. The Project would comply with the State's goal of increasing the use of renewable energy. Therefore, no impact would occur.

California Energy Efficiency Strategic Plan – On Sept. 18, 2008, the CPUC adopted California's first Long Term Energy Efficiency Strategic Plan, presenting a single roadmap to achieve maximum energy savings across all major groups and sectors in California. The Strategic Plan was subsequently updated in January 2011. The proposed solar PV project would be consistent with the goals established for industrial sector. Therefore, no impact would occur.

City of Seal Beach General Plan – The City of Seal Beach's General Plan includes energy conservation opportunities and techniques, aimed at reducing building energy use (City of Seal Beach, 2003). The project would install no buildings and therefore, energy conservation items in the General Plan would not apply to the Solar PV project.

3.4.7 Geology/Soils

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 Division of Mines and Geology Special Publication 42.				
	ii) Strong seismic ground shaking?	☐	☐	☒	☐
	iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
	iv) Landslides?	☐	☐	☐	☒
b)	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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 landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐