

0.1 EXECUTIVE SUMMARY

0.1.1 PROJECT OVERVIEW

The Draft Environmental Impact Report (EIR) has been prepared in compliance with the California Environmental Quality Act (CEQA) Public Resources Code Section 21000 et seq., the CEQA Guidelines (Section 15000 et seq.) as promulgated by the California Resources Agency and the Governor's Office of Planning and Research. The purpose of this environmental document is to assess the potential environmental effects associated with the Mount Signal Solar Farm 1 and Calexico Solar Farm 1 and 2 Projects and to propose mitigation measures, where required, to reduce significant impacts.

The proposed projects would consist of two primary components: (1) the combined construction and operation of expansive photovoltaic (PV) solar energy facilities and supporting uses; and (2) the construction and operation of off-site electrical transmission infrastructure and associated interconnections on private land and BLM land. The primary components within the solar farms would be solar arrays, electrical substation facilities, and other O&M facilities. Also, a major component of the projects would be reclamation of the project study area to agricultural use in 40 years.

The proposed projects consist of five separate Conditional Use Permit (CUP) applications for the following properties:

- Mount Signal Solar Farm 1 (MSSF1)
- Calexico Solar Farm 1 Phase A (CSF1(A))
- Calexico Solar Farm 1 Phase B (CSF1(B))
- Calexico Solar Farm 2 Phase A (CSF2(A))
- Calexico Solar Farm 2 Phase B (CSF2(B))

The project sites encompass a total of 4,228 acres of land located in the southern portion of Imperial County. The projects would also involve the connection of transmission facilities that would traverse the project area generally east to west, and would connect into approved transmission facilities associated with the Imperial Solar Energy Center South project. The project involves the construction of new transmission facilities that would extend from the approved Imperial Solar West transmission lines, extending north approximately five miles to the Imperial Valley Substation. These lands are subject to administration by the BLM. Figure 3.0-3 in Section 3.0, Project Description, provides an overview of the major project components.

0.1.2 PURPOSE OF A DRAFT EIR

The purpose of an EIR is to analyze the potential environmental impacts associated with a project. CEQA (Section 15002) states that the purpose of CEQA is to: (1) inform the public and governmental decision makers of the potential, significant environmental impacts of a project; (2) identify the ways that environmental damage can be avoided or significantly reduced; (3) prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and (4) disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

0.1.3 ELIMINATED FROM FURTHER REVIEW IN NOTICE OF PREPARATION

The Initial Study and Notice of Preparation (IS and NOP) completed by the County (Appendix A) determined that environmental effects to Minerals and Population/Housing would not be potentially significant. Therefore, these impacts are not addressed in this Draft EIR; however, the rationale for eliminating these issues is briefly discussed below:

Minerals

The project sites and OTF are not used for mineral resource production and the projects do not propose any mineral extraction. According to the Conservation and Open Space Element of the County of Imperial General Plan, no known mineral resources occur within the project sites or OTF corridors nor do the project sites contain mapped mineral resources. As such, the proposed projects would not adversely affect the availability of any known mineral resources within the project sites.

Population/Housing

The proposed projects have been used for and are currently being used for agricultural production. Development of housing is not proposed as part of the proposed projects. The combined projects would be staffed with up to 30 full-time employees *up to 6 for each site) to maintain the facility seven days a week during normal daylight hours. The facilities will operate seven days per week, generating electricity during normal daylight hours when the solar energy is available. To ensure optimal PV output, the solar panels will be maintained 24-hours a day/seven days a week. The proposed projects would not result in a substantial population growth, as the number of employees required to operate and maintain the facility is minimal.

0.1.4 SUMMARY OF SIGNIFICANT IMPACTS AND MITIGATION MEASURES THAT REDUCE OR AVOID THE SIGNIFICANT IMPACTS

Table 0-1 summarizes existing environmental impacts, mitigation measures, and level of significance after mitigation associated with the project. The main comments submitted on the NOP during the public review and comment period are summarized in Table 1.0-1 in Section 1.0 of this Draft EIR. Detailed analyses of these topics are included within each corresponding section contained within this document.

Based on the analysis presented in the NOP and the information provided in the comments to the NOP, the following environmental topics are analyzed in this Draft EIR.

- Aesthetics
- Agriculture
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Noise
- Public Services
- Recreation
- Transportation/Traffic
- Utilities/Service Systems

0.1.5 AREAS OF CONTROVERSY

Areas of Concern

Section 15123(b)(2) of the CEQA Guidelines requires that an EIR identify areas of controversy known to the Lead Agency, including issues raised by other agencies and the public. The main comments submitted on the NOP during the public review and comment period are summarized in Table 1.0-1 in Section 1.0 of this DEIR. Detailed analyses of these topics are included within each corresponding section contained within this document.

Table 0-1. SUMMARY OF PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
<i>Aesthetics</i>			
CSF2(A) would produce new glint and/or glare impacts in addition to direct sunlight at these times, these effects could result in a significant impact to airport operations.	Potentially Significant	<p>The following mitigation measure is required for CSF2(A). No mitigation is required for CSF1(A), CSF1(B), CSF2(B), OTF-Private, and OTF-BLM.</p> <p>4.1-4 Coordinate Final Design Plans for CSF2(A) with Imperial County Airport Land Use Commission (ALUC) to Minimize Glare and Glint Effects on Airport Operations. The project applicant shall coordinate the final design of CSF2(A) with the Imperial County ALUC to ensure that glare and glint effects from the proposed solar arrays are minimized to the maximum extent practical. The project applicant shall incorporate design recommendations prescribed by the ALUC for CSF2(A), including the use of tracker mounting systems as opposed to fixed-tilt systems. To ensure that recommendations are integrated into the final design plans for CSF2(A), Imperial County shall coordinate the final design plans for CSF2(A) with the ALUC prior to final approval.</p>	Less than Significant
<i>Agriculture</i>			
Implementation of the projects would result in the conversion of economically viable Important Farmland, including prime farmland and farmland of statewide importance, to non-agricultural uses.	Potentially Significant	<p>The following mitigation measures are required for MSSF1, CSF1(A), CSF1(B), and CSF2(B). No mitigation is required for OTF-Private and OTF-BLM Lands</p> <p>4.2-1a Minimize Impacts to Important Farmlands (Prime Farmland). The applicant shall mitigate for short- and long-term impacts to Prime Farmland and Farmland of Statewide Importance through the implementation of one of the three optional mitigation requirements as prescribed in the County's MOU regarding solar generation projects on agricultural lands.</p> <p>Option 1: The applicant shall provide agricultural conservation easements on a "2 to 1" basis on land of equal size, of equal farmland quality, and outside the path of development. The conservation easement shall meet DOC standards and shall be recorded prior to issuance of any grading or building permits.</p> <p>Option 2: The applicant shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20% of the fair market value per acre for the total based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County.</p> <p>Option 3: The applicant shall revise applicable CUP applications and associated site plans to avoid Prime Farmland.</p> <p>4.2-1b Prepare an Important Farmland Restoration Plan (Prime Farmland). The applicant shall submit to Imperial County a site-specific restoration plan capable of restoring on-site soils back to current agricultural conditions prior to the issuance of grading or</p>	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>building permits. The restoration plan shall include a site restoration cost estimate prepared by a California-licensed general contractor or civil engineer. The applicant shall provide financial assurances/bonding in the amount equal to the site restoration cost estimate to return the land back to its agricultural conditions after the solar facility ceases operations and closes.</p> <p>The following mitigation measure is required for CSF2(A).</p> <p>4.2-1c Minimize Impacts to Important Farmlands (Non-Prime Farmland). The applicant shall mitigate for short- and long-term impacts to Farmland of Statewide Importance through the implementation of one of the three optional mitigation requirements as prescribed in the County's MOU regarding solar generation projects on agricultural lands.</p> <p><i>Option 1:</i> The applicant shall provide agricultural conservation easements on a "1 to 1" basis on land of equal size, of equal farmland quality, and outside the path of development. The conservation easement shall meet Department of Conservation standards and shall be recorded prior to issuance of any grading or building permits.</p> <p><i>Option 2:</i> The applicant shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20% of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County.</p> <p><i>Option 3:</i> The applicant shall submit to Imperial County a site-specific restoration plan capable of restoring on-site soils back to current agricultural conditions prior to the issuance of grading or building permits. The restoration plan shall include a site restoration cost estimate prepared by a California-licensed general contractor or civil engineer. The applicant shall provide financial assurances/bonding in the amount equal to the site restoration cost estimate to return the land back to its agricultural conditions after the solar facility ceases operations and closes.</p>	
The projects could conflict with the existing agricultural zoning for the study area or with the provisions of an existing Williamson Act contract	Potentially Significant	<p>The following mitigation measure is required for CSF1(A), CSF1(B), CSF2(A), and CSF2(B). No mitigation is required for MSSF1 and OTF on private and BLM lands.</p> <p>4.2-2a Minimize Economic Impacts to Imperial Valley Agriculture. If cancellation of one or more Williamson Act Contracts is required, the applicant shall minimize the revenues lost to the County as a result of the change to non-agricultural use through the implementation of one of the following options:</p> <p><i>Option 1:</i> Compensate for lost agricultural revenues through the implementation of the following:</p>	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • If the applicant receives an exclusion from applicable sales and use tax payable to the County of Imperial under Senate Bill 71, State Public Resources Code (Section 26003) and the California Alternative Energy and Advanced Transportation Financing Authority CAETFA), the applicant shall pay to the County and Local Transportation authority an amount equal to the sales tax (currently at 1.5%) which would have been received if the applicant had not obtained such an exclusion. • The applicant shall return the one-cent local sales and use tax to the County of Imperial to the extent permissible by law. To accomplish this, the applicant shall either cause its construction contractor to treat the project in accordance with California Regulations 1521(C)(13)(B) and 1826(b) for sales and use tax purposes or form a "Buying company" as defined in the Californian Board of Equalization Regulation 1699(h). Alternatively, the applicant can adopt an alternate methodology to accomplish this goal if such methodology is approved by the County Executive Officer prior to the issues of grading or building permits. • The applicant shall include the switchyard, electrical interconnection facility, and associated components as "solar components" subject to assessment and taxation under California Revenue and Taxation code Section 73 (AB 1451). <p><i>Option 2:</i> The applicant shall revise the site plan for CSF1(A), CSF1(B), CSF2(A), and CSF2(B) to remove all Williamson Act contracted lands.</p> <p>4.2.2b Prepare an Important Farmland Restoration Plan (Williamson Act Lands). Implement Mitigation Measure 4.2-1b for all lands included within PP, CSF1(A), CSF1(B), CSF2(A), and CSF2(B) and under the provisions of an existing Williamson Act contract.</p>	
<p>The projects could impair the agricultural productivity of the project study area or use of neighboring areas for agricultural use.</p>	<p>Potentially Significant</p>	<p>The following mitigation measure is required for MSSF1, CSF1(A), CSF1(B), CSF2(A), and CSF2(B). No mitigation would be required for the OTF-Private or OTF-BLM Lands.</p> <p>4.2-4 Prepare Comprehensive Soil Resource Extraction, Maintenance and Reintroduction Plan. The Restoration Plan for the project shall be modified to incorporate elements of a comprehensive soil resource extraction, maintenance and reintroduction plan. The ultimate goal of the plan will be to ensure the future productivity of the soil resource and its availability for future agricultural cultivation in compliance with the performance standards for prime agricultural land restoration, Title 14 of the California Code of Regulations, Section 3707 and 3711. At a minimum, the plan shall consist of the following elements:</p> <p>a. <i>Existing Conditions.</i> This element of the plan shall identify the existing soil fertility in terms of pertinent soil physical,</p>	<p>Less than Significant</p>

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>chemical, and biological attributes. It will identify the soil attributes that are most able to be maintained during the 30-year life of the project and will be used as the baseline, with which to compare the soil resource following restoration and better enable rehabilitation of the mining site.</p> <p>b. Soil Harvesting and Transport. This element will identify appropriate soil harvesting and transport methods to limit the compaction of the soil resource, maintain the existing soil profile, and to the extent feasible during transport, ensure the viability of existing soil biota.</p> <p>c. Soil Stockpile Maintenance and Monitoring. This element of the plan will outline performance standards and monitoring procedures for the soil stockpiles over the 30-year life of the project. In general, this element will identify suitable vegetative species (e.g., legumes) to be planted on the soil stockpiles, monitoring protocols for any periodic analytical analysis determined necessary, and procedures for conducting periodic soil microbiology cultures. This element will also identify watering requirements for the stockpiles and protocols for pest and invasive species control.</p> <p>d. Restoration Activities. Following the completion of mining activities, site restoration shall consist of preparing the site for agriculture. Soil tests and climatic studies of the reclaimed sites shall be systematically performed to ensure that soil compactability is suitable for a production level present prior to project implementation. An evaluation of deep ripping prior to the reintroduction of topsoil should be conducted to determine if such procedures would help to alleviate anticipated drainage limitations. In addition, the applicant shall minimize application of nitrogen and phosphorus fertilizers due to the proximity of (shallow) groundwater. A complete agronomic evaluation shall be conducted prior to plantings to establish rates of fertilizer and herbicide applications.</p>	
Air Quality			
Construction related ROG, NO _x , PM ₁₀ and CO emissions	Potentially Significant	<p>The following mitigation measures are required for , MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private, and OTF-BLM Lands.</p> <p>4.3-2a Construction equipment shall be equipped with an engine designation of EPA Tier 2 or better (Tier 2+). A list of the construction equipment and the associated EPA Tier shall be submitted to the County Planning and Development Services Department prior to the issuance of a grading permit to verify implementation of this measure.</p> <p>4.3-2b Pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII-Fugitive Dust Control Measures. These mitigation measures listed below shall be implemented prior to and during construction. The County Department of Public Works will verify implementation and compliance with these measures.</p>	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>ICAPCD Standard Measures for Fugitive Dust (PM₁₀) Control</p> <ul style="list-style-type: none"> • All disturbed areas, including bulk material storage which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps or other suitable material such as vegetative ground cover. • All on-site and off-site unpaved roads will be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering. • All unpaved traffic areas one (1) acre or more with 75 or more average vehicle trips per day shall be effectively stabilized and visible emission shall be limited to no greater than 20% opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering. • The transport of bulk materials shall be completely covered unless six inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks shall be cleaned and/or washed at delivery site after removal of bulk material. • All Track-Out or Carry-Out shall be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area. • Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers or by sheltering or enclosing the operation and transfer line. • The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering. <p>ICAPCD Standard Measures for Construction Combustion Equipment</p> <ul style="list-style-type: none"> • Use alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel powered equipment. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum. • Limit, to the extent feasible, the hours of operation of heavy duty equipment and/or the amount of equipment in use. 	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). • Construction equipment operating on-site should be equipped with two to four degree engine timing retard or precombustion chamber engines. • Construction equipment used for the project should utilize EPA Tier 2 or better engine technology. • Keep vehicles well maintained to prevent leaks and minimize emissions, and encourage employees to do the same. <p>ICAPCD “Discretionary” Measures for Fugitive Dust (PM₁₀) Control</p> <ul style="list-style-type: none"> • Water exposed soil with adequate frequency for continued moist soil, including a minimum of three wettings per day during grading activities. • Replace ground cover in disturbed areas as quickly as possible. • Install automatic sprinkler system on all soil piles. • Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site. • Implement the trip reduction plan to achieve a 1.5 average vehicle ridership (AVR) for construction employees. • Implement a shuttle service to and from retail services and food establishments during lunch hours. <p>Standard Mitigation Measures for Construction Combustion Equipment</p> <ul style="list-style-type: none"> • Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel powered equipment. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum. • Limit, to the extent feasible, the hours of operation of heavy duty equipment and/or the amount of equipment in use • Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set) <p>To help provide a greater degree of reduction of PM emissions from construction combustion equipment the ICAPCD recommends the following enhanced measures.</p>	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p align="center">Enhanced Mitigation Measures for Construction Equipment</p> <ul style="list-style-type: none"> • Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways • Implement activity management (e.g. rescheduling activities to reduce short-term impacts) <p>Implementation of the above-listed fugitive dust control measures was assumed to control PM₁₀ emissions by 85 percent.</p>	
Vehicular Emissions (NO _x and PM ₁₀)	Potentially Significant	<p>The following mitigation measures are required for MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private, and OTF-BLM Lands.</p> <p>4.3-2c Pursuant to ICAPCD Policy Number 5, prior to construction activities, the applicant shall pay an in-lieu impact fee as determined by ICAPCD using the formula provided in ICAPCD Policy Number 5 to reduce PM10 and NOx emissions. The applicable fee in Policy Number 5 is derived from utilizing the last three year Carl Moyer grant program average cost effectiveness for Imperial County multiplied by the amount of tons needed to be offset. Detailed emission calculations shall be provided to the ICAPCD upon selection of the construction contractor, such that an accurate estimate of fees to be paid can be made prior to commencement of construction.</p>	Less than Significant
Biological Resources			
OTF-BLM Land impacts to sensitive vegetation communities	Potentially Significant	<p>No mitigation measures are required for vegetation communities for MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), and OTF- Private Land. The following mitigation measure is required for OTF-BLM Land:</p> <p>4.4-1a Mitigation for the permanent and temporary impacts to creosote bush-white burr sage scrub, and desert wash shall be accomplished through the provision of required mitigation acres. Table 4.4-7 identifies the mitigation ratio/requirement and required mitigation for each vegetation community.</p>	Less than Significant
OTF-BLM Land impacts to Flat-tailed Horned Lizard	Potentially Significant	<p>No mitigation measures are required for impacts to FTHL for MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), and OTF- Private Land. The following mitigation is required for OTF-BLM Land:</p> <p>4.4-1b In accordance with the Flat-tailed Horned Lizard Rangewide Management Strategy, mitigation for the OTF within BLM Land would be required for impacts to FTHL habitat as identified in Table 4.4-8.</p> <p>4.4-1c FTHL Construction Mitigation Measures. In accordance with the FTHL Rangewide Management Strategy (ICC 2003), the measures proposed below are designed to avoid, minimize, and/or compensate for potential direct and indirect effects construction of the proposed projects may have on FTHL. The following shall be implemented, when conducting construction activities on the transmission line:</p> <ol style="list-style-type: none"> 1. Prior to ground-disturbing activities, an individual shall be designated and approved by the USFWS and BLM as 	Less than Significant

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		<p>a Designated Biologist (i.e., field contact representative). A Designated Biologist will be designated for the period during which on-going construction and post-construction monitoring and reporting by an approved biologist is required, such as annual reporting on habitat restoration.</p> <p>Each successive Designated Biologist will be approved by the BLM's Authorized Officer (i.e., BLM field manager, El Centro). The Designated Biologist will have the authority to ensure compliance with the conservation measures for the FTHL and will be the primary agency contact for the implementation of these measures.</p> <p>The Designated Biologist will have the authority and responsibility to halt activities that are in violation of the conservation measures. A detailed list of responsibilities for the Designated Biologist is summarized below. To avoid and minimize impacts to biological resources, the Designated Biologist and/or Biological Monitor(s) shall:</p> <ul style="list-style-type: none"> • Notify BLM's Authorizing Officer and the USFWS at least 14 calendar days before initiating ground-disturbing activities. • Immediately notify BLM's Authorized Officer and the USFWS in writing, if the project applicant is not in compliance with any conservation measures, including but not limited to any actual or anticipated failure to implement conservation measures within the time periods specified. • Conduct compliance inspections at a minimum of once per month during ongoing construction after clearing, grubbing, and grading are completed, and submit a monthly compliance report to BLM's Authorized Officer until construction is complete. <p>2. The boundaries of all areas to be disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging prior to construction activities. Spoils shall be stockpiled in disturbed areas lacking native vegetation or where habitat quality is poor. To the extent possible, disturbance of shrubs and surface soils due to stockpiling shall be minimized. All disturbances, vehicles, and equipment shall be confined to the flagged areas. To the extent possible, surface disturbance shall be timed to minimize mortality to FTHL.</p> <p>3. Approved Biological Monitor(s) shall assist the Designated Biologist in conducting pre-construction surveys and monitoring mobilization, ground disturbance, grading, construction, operation, closure, and restoration activities. The Biological Monitor(s) will have experience conducting FTHL field monitoring, have sufficient education and field experience to understand</p>	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>FTHL biology, be able to identify FTHL scat, and be able to identify and follow FTHL tracks. The Designated Biologist shall submit a resume, at least three references, and contact information of the proposed Biological Monitors to the BLM, CDFG, and USFWS for approval. To avoid and minimize impacts to biological resources, the Biological Monitors shall assist the Designated Biologist with the following:</p> <ul style="list-style-type: none"> • Be present during construction (e.g., grubbing, grading, tower installation, wire stringing) activities that take place in FTHL habitat to avoid or minimize take of FTHL. Activities include, but are not limited to, ensuring compliance with all impact avoidance and minimization measures, monitoring for FTHLs and removing lizards from harm's way, and checking avoidance areas (e.g., washes) to ensure that signs, and stakes are intact and that human activities are restricted in these avoidance zones. • At the end of each work day, inspect all potential wildlife pitfalls (trenches, bores and other excavations) for wildlife and then backfill. If backfilling is not feasible, all trenches, bores, and other excavations will be contoured at a 3:1 slope at the ends to provide wildlife escape ramps, or completely and securely covered to prevent wildlife access. • During construction, examine areas of active surface disturbance periodically, at least hourly, when surface temperatures exceed 29°Celsius (C; 85°F) for the presence of FTHL. <p>4. Prior to project initiation, a Worker Environmental Awareness Program (WEAP) shall be developed and implemented, and shall be available in both English and Spanish. Wallet-sized cards summarizing this information shall be provided to all construction, operation, and maintenance personnel. The education program shall include the following aspects:</p> <ul style="list-style-type: none"> • Biology and status of the FTHL; • Protection measures designed to reduce potential impacts to the species, function of flagging designating authorized work areas; • Reporting procedures to be used if a FTHL is encountered in the field; and, • Driving procedures and techniques, for commuting, and driving on, to the project site, to reduce mortality of FTHL on roads. <p>5. FTHLs shall be removed from harm's way during all construction activities, per conservation measure #6</p>	

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		<p>below. FTHL removal shall be conducted by two or more Biological Monitors when construction activities are being conducted in suitable FTHL habitat. To the extent feasible, methods to find FTHLs will be designed to achieve a maximal capture rate and shall include, but not be limited to using strip transects, tracking, and raking around shrubs. During construction, the minimum survey effort will be 30 minutes per 0.40 hectare (30 minutes per 1 acre).</p> <p>6. Persons that handle FTHL shall first obtain all necessary permits and authorization from the CDFG. If the species is federally listed, only persons authorized by both CDFG and the USFWS shall handle FTHLs. FTHL removal surveys shall also include:</p> <ul style="list-style-type: none"> • A Horned Lizard Observation Data Sheet and a Project Reporting Form, per Appendix 8 of the RMS, shall be completed. • During construction, quarterly reports describing FTHL removal activity, per the reporting requirements described in Conservation Measure #1 above, shall be submitted to the USFWS, BLM, and CDFG. <p>The removal of FTHLs out of harm's way shall include relocation to nearby suitable habitat in low-impact (e.g., away from roads and solar panels) areas of the Yuha MA. Relocated FTHLs shall be placed in the shade of a large shrub in undisturbed habitat. If surface temperatures in the sun are less than 24°C (75°F) or exceed 38°C (100°F), the Designated Biologist or Biological Monitor, if authorized, shall hold the FTHL for later release. Initially, captured FTHLs shall be held in a cloth bag, cooler, or other appropriate clean, dry container from which the lizard cannot escape. Lizards shall be held at temperatures between 75°F and 90°F and shall not be exposed to direct sunlight. Release shall occur as soon as possible after capture and during daylight hours. The Designated Biologist or Biological Monitor shall be allowed some judgment and discretion when relocating lizards to maximize survival of FTHLs found in the project area.</p> <p>7. To the maximum extent practicable, grading in FTHL habitat will be conducted during the active season, which is defined as March 1 through September 30, or when ground temperatures are between 24°C (75°F) and 38°C (100°F). If grading cannot be conducted during this time, any FTHLs found will be removed to low-impact areas (see above) where suitable burrowing habitat exists, (e.g., sandy substrates and shrub cover).</p> <p>Temporarily disturbed areas associated with transmission line construction and staging areas shall be revegetated according to a Habitat Restoration Plan</p>	

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		<p>(HRP) approved by the BLM, CEC, CDFG, and USFWS. The HRP must be approved in writing by the aforementioned agencies prior to the initiation of any vegetation disturbing activities. Restoration involves recontouring the land, replacing the topsoil (if it was collected), planting seed and/or container stock, and maintaining (e.g., weeding, replacement planting, supplemental watering) and monitoring the restored area for a period of 5 years (or less if the restoration meets all success criteria). Components of the HRP will include:</p> <ul style="list-style-type: none"> • The incorporation of any BLM revegetation/restoration guidance measures. These measures generally include alleviating soil compaction, returning the surface to its original contour, pitting or imprinting the surface to allow small areas where seeds and rain water can be captured, planting seedlings that have acquired the necessary root mass to survive without watering, planting seedlings in the spring with herbivory cages, broadcasting locally collected seed immediately prior to the rainy season, and covering the seeds with mulch. <p>4.4-1d O&M Mitigation Measures. To reduce the potential impacts to FTHL during O&M, the following shall be implemented when conducting O&M activities along the transmission line:</p> <ol style="list-style-type: none"> 1. No later than January 31 of every year that the Project remains in operation, the Designated Biologist shall provide the BLM's Authorized Officer, USFWS, CDFG, and the FTHL ICC an annual FTHL Status Report, which shall include, at a minimum: <ul style="list-style-type: none"> • A general description of the status of the project site; • A copy of the table in the project biological monitoring report with notes showing the current implementation status of each conservation measure; • An assessment of the effectiveness of each completed or partially completed measure in avoiding and minimizing project impacts; • A completed project reporting form from the Flat-tailed Horned Lizard RMS (ICC 2003); • A summary of information regarding any FTHL mortality in conjunction with the project's Wildlife Mortality Reporting Program; and • Recommendations on how conservation measures might be changed to more effectively avoid, minimize, and offset future project impacts on the FTHL. 	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>2. The Designated Biologist or Biological Monitor(s) shall evaluate and implement the best measures to reduce FTHL mortality along access roads, particularly during the FTHL active season (March 1 through September 30). These measures shall include:</p> <ul style="list-style-type: none"> • A speed limit of 15 miles per hour when driving transmission line access roads. All vehicles required for O&M along the transmission line within suitable FTHL habitat must remain on the designated access/maintenance roads. • O&M activities including weed abatement, or any other O&M activity that may result in ground disturbance will be conducted outside of the FTHL active season whenever feasible. • If any O&M activities must be conducted during the FTHL active season that may result in ground disturbance, such as weed abatement or vehicles requiring access outside of a designated access road, a Biological Monitor shall be present during activities to ensure that no FTHLs are impacted. <p>Implementation of these measures would be based on FTHL activity levels, the best professional judgment of the Designated Biologist, and site-specific road utilization. FTHL found on access roads, if monitoring is required, will be relocated (see Mitigation Measure 4.4-1d).</p>	
All projects impacts to burrowing owl	Potentially Significant	<p>The following mitigation measures are required for MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private, OTF-BLM Land.</p> <p>4.4-1e Burrowing owls have been observed in the active agricultural fields within the project study area. The following measures will avoid, minimize, or mitigate potential impact to burrowing owl during construction activities:</p> <ol style="list-style-type: none"> 1. Initial grading of the agricultural fields project footprint should take place between September 1 and January 31 to avoid impacts to any breeding burrowing owls. 2. During non-nesting season (September through January) a distance of 160 feet shall be maintained between active burrows and construction activities. A qualified biologist may also employ the technique of sheltering in place (using hay bales to shelter the burrow from construction activities). If this technique is employed, the sheltered area shall be monitored weekly by a qualified biologist. 3. If construction is to begin during the breeding season, the following measures (Measure 4 below) shall be implemented prior to February 1 to discourage the nesting of the burrowing owls within the area of impact. As construction continues, any area where owls are sighted shall be subject to frequent surveys by the qualified biologist for burrows before the breeding season begins, 	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>so that owls can be properly relocated before nesting occurs.</p> <ol style="list-style-type: none"> 4. Within 30 days prior to initiation of construction, pre-construction clearance surveys for this species shall be conducted by qualified and agency-approved biologists to determine the presence or absence of this species within the construction area. This is necessary, as burrowing owls may not use the same burrow every year; therefore, numbers and locations of burrowing owl burrows at the time of construction may differ from the data collected during previous focused surveys. The proposed construction areas shall be clearly demarcated in the field by the project engineers and biologist prior to the commencement of the pre-construction clearance survey. The surveys shall follow the protocols provided in the <i>Burrowing Owl Survey Protocol and Mitigation Guidelines</i>. 5. If active burrows are present within the project footprint, the following mitigation measures shall be implemented. Passive relocation methods are to be used by the biological monitors to move the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season in accordance with the guidelines found in the Imperial Irrigation District Artificial Burrow Installation Manual. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow, but will exclude any animals from re-entering the burrow. A period of at least one week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. The burrows shall then be excavated and filled in to prevent their reuse. The destruction of the active burrows on-site requires construction of new burrows at a mitigation ratio of 2:1 at least 50 meters from the impacted area and must be constructed as part of the above-described relocation efforts. The construction of new burrows will take place within open areas in the solar fields such as detention basins. 6. As the project construction schedule and details are finalized, an approved biologist shall prepare a Burrowing Owl Mitigation and Monitoring Plan that will detail the approved, site-specific methodology proposed to minimize and mitigate impacts to this species. Passive relocation, destruction of burrows, construction of artificial burrows, and Forage Habitat Plan shall only be completed upon prior approval by and in cooperation with the CDFG. <p>4.4-1f The project applicant shall compensate for impacts to burrowing owl habitat through the following measures:</p>	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>1. CDFG's mitigation guidelines for burrowing owl (1995) require a minimum of 6.5 acres of foraging habitat per pair or unpaired resident bird to be acquired and protected to offset the loss of foraging and burrow habitat on the project sites. As discussed in Section 4.1.2.2.1, impact to habitat surrounding the 11 active burrows within the limits of grading is estimated at up to 71.5 acres, based on a calculation of 6.5 acres of foraging habitat per active burrow. This includes 6.5 acres for the MSSF1 project (one active burrow), 13 acres for the two active burrows on the CSF1(A) project, 19.5 acres for the three active burrows on CSF2(A), and 32.5 acres for the five active burrows on the CSF2(B) project.</p> <p>In order to mitigate for this acreage and provide foraging habitat for burrowing owls, the project applicant(s) shall landscape small pockets of land along the perimeter of the solar fields, and/or within the solar fields themselves, with saltgrass or other native vegetation that will provide suitable foraging habitat for burrowing owls. Although the site plans show almost 100 percent coverage of solar panels, it is anticipated that due to the nature of solar panel configuration, there will be spaces at various locations, such as between the edges of the agricultural fields (i.e., outside of IID easements) and the solar field perimeter fencing. A minimum of 71.2 acres of these open areas shall be set aside for burrowing owl habitat and burrow relocation for the lifespan of the solar projects. Due to County of Imperial requirements that the solar fields be returned to active agriculture after the life of the solar projects, the land cannot be set aside in perpetuity; however, it is assumed that if the land is returned to active agricultural crops, it will continue to provide habitat for burrowing owl. If the vegetation that is planted does not succeed or planting is not feasible, the 71.5 acres of foraging habitat shall be mitigated through off-site preservation or in-lieu fee and must be approved by CDFG.</p>	
<p>All projects impacts to mountain plover, long billed curlew, short billed dowitcher, horned lark, loggerhead shrike.</p>	<p>Potentially Significant</p>	<p>The following mitigation measures are required for MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private and OTF-BLM Land:</p> <p>4.4-1g Temporary Construction Suspension. Alfalfa fields were found on and in the vicinity of the project study area. Alfalfa fields could attract mountain plover, long billed curlew, short billed dowitcher, or horned lark. If these species are observed foraging within the project study area, or in adjacent agricultural fields, construction shall cease until they disperse. Additionally, in order to reduce impacts to the Mountain Plover, Long Billed Curlew, Short Billed Dowitcher, Horned Lark, and Loggerhead Shrike, an Aviation Bat Protection Plan (ABPP) shall be prepared following USFWS guidelines and subsequently implemented by the project applicant. The requirements of the ABPP are described in Mitigation Measure 4.4-1h.</p>	<p>Less than Significant</p>

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
<p>All projects impacts to migratory and other sensitive non-migratory bird species:</p>	<p>Potentially Significant</p>	<p>The following mitigation measures are required for MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private and OTF-BLM Land to offset impacts to migratory and other sensitive non-migratory bird species:</p> <p>4.4-1h Construction and O&M Mitigation Measures. In order to reduce the potential indirect impact to migratory birds, bats and raptors, an ABPP shall be prepared following the USFWS's guidelines and implemented by the project applicant. This ABPP shall outline conservation measures for construction and O&M activities that might reduce potential impacts to bird populations and shall be developed by the project applicant in conjunction with and input from the USFWS.</p> <p>Construction conservation measures to be incorporated into the ABPP include:</p> <ol style="list-style-type: none"> 1. Minimizing disturbance to vegetation to the maximum extent practicable. 2. Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, an approved biologist shall conduct a pre-construction clearance survey for nesting birds in suitable nesting habitat that occurs within the proposed area of impact. Pre-construction nesting surveys will identify any active migratory birds (and other sensitive non-migratory birds) nests. Direct impact to any active migratory bird nest should be avoided. 3. Minimize wildfire potential. 4. Minimize activities that attract prey and predators. 5. Control of non-native plants <p>O&M conservation measures to be incorporated into the ABPP include:</p> <ol style="list-style-type: none"> 1. Incorporate APLIC guidelines for overhead utilities as appropriate to minimize avian collisions with transmission facilities (APLIC 2006). 2. Minimize noise. 3. Minimize use of outdoor lighting. 4. Implement post—construction avian monitoring that will incorporate of the Wildlife Mortality Reporting Program. <p>4.4-1i Raptors and active raptor nests are protected under CFGC 3503.5, 3503, 3513. In order to prevent direct and indirect noise impact to nesting raptors such as red-tailed hawk, the following measures shall be implemented:</p> <ol style="list-style-type: none"> 1. Initial grading and construction within the project study area should take place outside the raptors' breeding season of February 1 to July 15. 	<p>Less than Significant</p>

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>2. If construction occurs between February 1 and July 15, an approved biologist shall conduct a pre-construction clearance survey for nesting raptors in suitable nesting habitat (e.g., tall trees or transmission towers) that occurs within 500 feet of the survey area. If any active raptor nest is located, the nest area will be flagged, and a 500-foot buffer zone delineated, flagged, or otherwise marked. No work activity may occur within this buffer area, until an approved biologist determines that the fledglings are independent of the nest.</p>	
OTF-BLM Land impacts to riparian habitat	Potentially Significant	<p>No mitigation measures are required for MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), and OTF- Private Land. The following mitigation measure is required for OTF-BLM Land:</p> <p>4.4-3a Mitigation for the permanent and temporary impacts to CDFG riparian habitat shall be accomplished through required mitigation acres. Table 4.4-9 identifies the mitigation ratio/requirement and required mitigation for impacts to CDFG riparian habitat.</p>	Less than Significant
OTF-BLM Land impacts to local conservation plans	Potentially Significant	<p>No mitigation measures are required for MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), and OTF- Private Land. The following mitigation measure is required for OTF-BLM Land:</p> <p>4.4-4 To minimize the introduction and spread of weed species, a Weed Management and Habitat Restoration Plan will be developed and implemented. This management plan for temporary disturbance construction sites will have the following objectives:</p> <ul style="list-style-type: none"> • Weed identification and risk assessment: identifying the presence, location, and abundance of weed species in the project areas, both existing conditions and conditions over time. • Weed suppression: reducing or maintaining current infestation densities. The weeds present are widely distributed, higher density weeds for which eradication is not feasible. No weed control is being administered on adjacent properties and therefore there is a strong possibility that the transmission line area will be continuously re-infested. <p>Weed containment: preventing infestation expansion or spread as a result of this project.</p> <p>The <i>Weed Management and Habitat Restoration Plan</i> will include a discussion of specific weeds identified on-site that will be targeted for eradication or control as well as a variety of measures that will be undertaken to prevent the introduction and spread of new weed species as a result of the project.</p> <p>General measures to prevent the spread of weeds include:</p> <ul style="list-style-type: none"> • Limiting disturbance areas during construction to the minimal required to perform work and limiting ingress and egress to defined routes. 	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • Maintaining vehicle wash and inspection stations, and closely monitoring the types of materials brought onto the site to minimize the potential for weed introduction • Use of certified weed free mulch, straw wattles, hay bales and seed mixes. • Reestablishing native vegetation as quickly as practicable on disturbed sites as the most effective long-term strategy to avoid weed invasions. • Monitoring and rapid implementation of control measures to ensure early detection and eradication for weed invasions. <p>Weed control methods that may be used included both physical and chemical control. Physical control methods include manual hand pulling of weeds, or the use of hand and power tools to uproot, girdle, or cut plants. Herbicide applications are a widely used, effective control method for removing infestations of invasive weed species. However, inadvertent application of herbicide to adjacent native plants must be avoided, which can often be challenging when weeds are interspersed with native cover. Before applying herbicide, contractors will be required to obtain any required permits from state and local authorities. Only a State of California and federally certified contractor will be permitted to perform herbicide applications. All herbicides will be applied in accordance with applicable laws, regulations, and permit stipulations. Only herbicides and adjuvants approved by the State of California and federal agency for use on public lands will be used within or adjacent to the project site. The PEIS lists 10 herbicides acceptable for use on BLM lands (USDI 2007). Guidelines for the use of chemical control of vegetation on BLM lands are presented in the Chemical Pest Control Manual (BLM n.d.). These guidelines require submittal of a pesticide use proposal and pesticide application records for the use of herbicides on BLM lands.</p>	
Cultural Resources			
The proposed projects could cause a substantial adverse change in the significance of an archaeological resource.	Potentially Significant	<p>The following mitigation measures apply to OTF within BLM Land:</p> <p>4.5-2a For those sites subject to the preliminary surveys and which would be directly impacted due to the construction of access roads, towers, pull sites, or solar fields, a formal testing and evaluation program is required. The evaluation program for such sites shall document the presence or absence of subsurface deposits and the specific research potential for each site. In addition, the evaluation program shall be consistent with the <i>Secretary of Interior Standards for the Treatment of Historic Properties and the Secretary of Interior Standards and Guidelines for Archaeology and Historic Preservation</i>. Should these sites be determined eligible for listing on the NRHP, CRHR, and/or local register, best management practices consistent with the <i>Secretary of Interior Standards for the Treatment of Historic Properties and the Secretary of Interior Standards and Guidelines</i></p>	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p><i>for Archaeology and Historic Preservation</i> shall be required including:</p> <p>a) Preservation in Place:</p> <ol style="list-style-type: none"> (1) Avoidance of the resource through project redesign in a manner that is technically possible, operationally possible, does not cause a new significant environmental impact or increase the severity of a significant environmental impact, and does not cause the loss or more than 1 MW of production. (2) Covering the archaeological sites with a layer of chemically stable soil before constructing facilities on site so long as covering can be done in a manner that is technically possible, does not cause a new significant environmental impact or increase the severity of a significant environmental impact, and does not cause the loss or more than 1 MW of production. <p>b) Minimizing impacts by limiting the degree of impacts or reducing the impact through best management practices identified in a data recovery, excavation and/or construction monitoring plan. The content of this plan must be consistent with the Secretary of Interior's Standards for the Treatment of Historic Properties and Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation and include a description of areas to be monitored during construction, a discovery plan that will address unanticipated cultural resources, and provisions for the education of construction workers.</p> <p>4.5-2b There are additional sites which may be impacted due to their proximity to construction areas. Because these sites are located near areas being impacted by project construction, temporary fencing around their perimeters will be required to ensure that project impacts remain within the proposed impact area and that cultural resources are avoided by project personnel. In addition, grading within the construction area shall be performed in a manner that incorporates sheet flow and water runoff diversion techniques to prevent surface water from damaging off-site cultural sites.</p> <p>The following mitigation measures apply to MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), and OTF within Private Land and BLM Land:</p> <p>4.5-2c Pursuant to CEQA Guidelines § 15064.5(f), in the event that unknown historic or unique archaeological resources are encountered during construction or operational repairs, archaeological monitors will be authorized to temporarily divert construction work within 100 feet of the area of discovery until the significance and the appropriate mitigation measures are</p>	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>determined by a Registered Professional Archaeologist familiar with the resources of the region.</p> <p>Applicant shall notify the County within 24 hours. Applicant shall provide contingency funding sufficient to allow for implementation of avoidance measures or appropriate mitigation.</p> <p>4.5-2d In the event of the discovery of historical and archaeological materials, the contractor shall immediately In the event of the discovery of historical or archaeological materials, the contractor shall immediately cease all work activities in the area (within approximately 100 feet) of the discovery. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (“midden”) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. After cessation of excavation, the contractor shall immediately contact the Imperial County Department of Planning and Development Services. The contractor shall not resume work until authorization is received from the County.</p> <p>In the event of an unanticipated discovery of archaeological materials during construction, the applicant shall retain the services of a qualified professional archaeologist, meeting the Secretary of the Interior's Standards for a Qualified Archaeologist, to evaluate the significance of the materials prior to resuming any construction-related activities in the vicinity of the find. If the qualified archaeologist determines that the discovery constitutes a significant resource under CEQA and it cannot be avoided, the applicant shall implement an archaeological data recovery program.</p>	
<p>The proposed OTF-BLM Lands could directly or indirectly destroy a unique paleontological resource or site or unique geological feature.</p>	<p>Potentially Significant</p>	<p>The following mitigation measures apply to the OTF within BLM Land:</p> <p>4.5-3a Prior to grading or any ground disturbance, a paleontological field survey shall be conducted for the OTF portion of the project located within BLM lands. The paleontological field survey and subsequent monitoring activities shall be in accordance with the BLM's "Guidelines for Assessment and Mitigation of Potential Impacts to Paleontological Resources."</p> <p>A. Definition of Field Surveys. Field Surveys are pedestrian surveys to be performed in areas where significant fossils can be expected to occur within the boundary and immediate vicinity of the anticipated disturbance, or where the probability of encountering significant fossils is unknown.</p> <p>1. Field surveys are performed prior to any surface disturbing activities. Before conducting field</p>	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>surveys, the project location shall be as final as possible and any staking of the location shall be complete.</p> <p>2. Surveys are conducted by a BLM-permitted consulting paleontologist hired by the project proponent.</p> <p>(A) Surveys shall be performed by a consulting paleontologist holding a valid BLM Paleontological Resources Use Permit. Submission of reports may be done directly by the paleontologist to the BLM. The project proponent is also responsible for all costs associated with the survey, including the consulting paleontologist's fees and charges, all survey costs, fossil preparation to the basic identification stage, analyses, reports, and curation costs directly related to mitigation of the project's anticipated impacts. Any required monitoring and mitigation costs are also the responsibility of the project proponent. These costs are to be negotiated between the project proponent and the consulting paleontologist prior to beginning any data gathering, analysis, or field work, and these negotiations do not require BLM involvement or approval. Any new, additional, or modified curation agreements between the paleontologist and the official repository must be in place prior to starting field work.</p> <p>(B) Authorization for an activity to proceed cannot be given by a consulting paleontologist. Performance of the survey, either by a consulting paleontologist or BLM staff, or submission of the report DOES NOT constitute approval for the activity to proceed. The BLM must review the report, including adequacy of the field methods and findings. The Authorized Officer must approve the findings and determine the need for monitoring prior to approval to proceed.</p> <p>B. Conducting Field Surveys. Field surveys must be performed by the Principal Investigator or an approved Field Agent or Field Monitor (as defined in the following section) as authorized under a Paleontological Resource Use Permit. Field surveys and collections performed as a mitigation measure are not intended to be scientific research studies, but are meant to identify, avoid, or recover paleontological resources to prevent damage or</p>	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>destruction from project activities. However, proper scientific techniques and procedures must be utilized during all mitigation efforts. Safety should be an important consideration; therefore, surveys should not be attempted on cliff faces, in open, non-reinforced trenches deeper than five feet, or other unsafe areas.</p> <ol style="list-style-type: none"> 1. The scope of the survey is dependent upon the scale of the project. Small projects are defined as less than 10 acres, or, if linear, less than five miles; large projects exceed those dimensions. 2. At the start of field work, the consulting paleontologist (paleontologist) must contact the Paleontology Coordinator in each affected Field Office who may require a visit to that office. After an initial visit each year, the paleontologist may contact the Field Office by telephone or email prior to subsequent field trips, at the discretion of the Field Office. Information about the survey schedule, additional personnel, emergency field contact information, and any other pertinent data shall be provided to the Paleontology Coordinator. The Field Office will inform the paleontologist of any conditions that may impact the survey, such as fire danger or restrictions, drought restrictions, wildlife timing restrictions, management restrictions, road restrictions or construction, and any other relevant information. 3. During the field survey, the paleontologist surveys, locates, and documents all paleontological resources within 200 feet of the proposed project location or corridor, or less distance upon approval. <ol style="list-style-type: none"> (A) Where significant paleontological resources are at risk, data collection alone does not constitute mitigation of damage. All significant fossils that may be damaged or destroyed during project activities must be collected, along with all relevant contextual and locational data. Specimens must be collected during the survey or prior to commencement of any surface-disturbing activities. (B) In many cases, isolated gar scales, chelonid (turtle) carapace or plastron fragments, crocodile and fish teeth, and unidentifiable bone fragments do not need to be collected. The location must be recorded and a description of the 	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>fossil material noted in the field notes and on a BLM Locality Form as part of the report. The context of these types of fossils should be considered, as they may represent rare occurrences or unusual faunal associations, and thus may be scientifically important and must be documented and voucher specimens collected where appropriate.</p> <p>(C) Occurrences of plant or invertebrate fossils should be recorded and representative examples or voucher specimens collected where appropriate. Additional mitigation measures may be appropriate in some cases for these types of localities.</p> <p>(D) If a large specimen or a concentration of significant fossils is located during the field survey, the available time and/or personnel may not allow for full recovery during the survey. The specimen(s) and locality(ies) should be stabilized as needed, and a determination made as to whether avoidance is necessary or whether full recovery of the specimen is required at a later time prior to disturbance activities. The Authorized Officer and project proponent must be notified, the mitigation alternatives discussed including funding for recovery, and a decision reached as soon as possible. If avoidance or later recovery is selected for mitigation, the find should be stabilized, buried if needed to protect the fossils and context, and appropriate measures implemented to reduce adverse effects from natural or human causes.</p> <p>4. During the survey, locations or areas that exhibit a lithology suggesting a high probability of subsurface fossil material must be recorded, and a recommendation for the need for on-site monitoring, spot-checking, or testing shall be made in the report. This may include areas where no fossil material was found on the surface during the survey. The recommendation should consider the size and type of planned disturbance, such as the depth of a trenching operation or the acreage of surface disturbance.</p> <p>5. Surveys must be performed only during times when the ground is visible. Biological timing</p>	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>restrictions, such as critical nesting or birthing times, may confine or delay field activities.</p> <p>C. Report of Survey Findings. After completion of the field survey, the paleontologist must file a written report with the BLM and the designated repository. This report must summarize the results of the survey as well as appropriate geological and paleontological background information as described below. It should also include any recommendations for on-site monitoring or other mitigation. For small projects (less than 10 acres), the report must be filed within 30 days after completion of the survey unless specific approval for a different time frame has been received from the BLM. The time frame for submission of the report for large projects should be negotiated during project scoping. On a case-by-case basis, approval to begin project activities may be granted for those portions of the project area noted to be less paleontologically sensitive prior to final approval of the report.</p> <ol style="list-style-type: none"> 1. Reports of the general findings and the background information must be submitted to the BLM project manager or Authorized Officer (if appropriate), the Paleontology Lead or Regional Paleontologist, and each affected Field Office. Reports must include the information and details as specified on page 9 of Attachment 1 of the BLM's "Guidelines for Assessment and Mitigation of Potential Impacts to Paleontological Resources", as applicable. 2. Exact locations of fossil localities contained in these reports are considered sensitive and must not be included in any public document. The BLM locality form (8270-3) or equivalent, 1:24000 scale map showing the localities, and any other information containing specific fossil locations may be bound separately or placed in a separate section to allow for preservation of confidential locality data. A copy of this confidential section must be submitted to the Paleontology Lead (in some cases, two copies may be required). A copy for each affected Field Office may be required. Another copy must be submitted to the official repository with the collected materials. 3. BLM GPS recording and data standards must be used to report paleontological locality data. Existing USGS topographic maps are often based on the NAD27 standard, so locality data calculated from a map base must be converted before submission. Data must be recorded and reported with a mean error of +/- 12.5 meters or less, at a 95 percent confidence level. For small 	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>localities, data should be reported as point data. Larger polygonal localities should be reported using coordinates of a centroid and a description of the approximate size, or the key coordinate points of a bounding polygon. Linear features, such as roads or surveyed project boundaries, must be reported as line data. The 1:24000 scale map(s) accompanying the locality forms should graphically illustrate the locality, either as a point or an outline of the locality as appropriate, and be clearly labeled with the locality or field number.</p> <p>D. Report Approval. The Authorized Officer will analyze the Survey Report for adequacy within 30 working days of receipt. Notification accepting the report, or explaining any identified deficiencies, will be sent to the consulting paleontologist and the project proponent with a copy placed in the project file. Any deficiencies must be corrected as soon as possible, usually initiated within five working days, and the report must be resubmitted for approval. Any resubmissions must be prompt, but consideration will be made for the amount of time needed for major corrections. Deficiencies directly affecting the survey, such as inadequate survey procedures or incomplete data, must be corrected before granting approval for the project to proceed. Deficiencies not directly affecting the survey, such as curation issues, will not prevent approval of the project, but must be corrected as soon as possible.</p> <p>Determination of Further Mitigation Requirements. Based on the field survey, the need for additional mitigation to protect paleontological resources shall be determined. The Authorized Officer, in consultation with Regional Paleontologist or the Paleontology Lead, shall analyze the Survey Report for survey findings and any mitigation recommendations. If no further mitigation is needed, the Authorized Officer will promptly notify the project proponent that there are no additional paleontological surveys or mitigation measures required, and the project may proceed pending any other approvals. The project file must be documented indicating acceptance of the survey report and identifying any additional mitigation requirements. If it is determined that additional mitigation efforts are needed to protect or preserve the paleontological resources, the project proponent will be notified as soon as possible. The Authorized Officer and/or the Paleontology Lead usually develop and approve the mitigation procedures or recommend a project be redesigned in consultation with the project proponent. Factors such as locality or specimen significance, economics, safety, and project urgency will be considered when developing mitigation measures. Additional mitigation measures shall be developed and</p>	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>implemented as timely as possible so as not to delay project actions.</p> <p>A. Relocation. The preferred mitigation technique is to change the project location based on the results of the field survey. Relocation, however, may necessitate a field survey of the new area, as well as resurveys by other resource specialists. Anticipation of this contingency prior to or during the original survey may allow for survey of an expanded area at the same time.</p> <p>If relocation will eliminate impacts and is acceptable to all parties, then a report to the file, including a map showing the original and revised locations, must be completed documenting the change. Approval for the project to proceed in the revised location may then be granted by the Authorized Officer to the project proponent. When avoidance is not possible, appropriate mitigation may include excavation or collection (data recovery), stabilization, monitoring, protective barriers and signs, or other physical and administrative protection measures.</p> <p>B. Deferred Fossil Collection. In some cases, fossil material may have been identified, but not completely collected during the initial field survey, such as a partial dinosaur or other large fossil assemblage. It may be possible to complete the recovery of this material and all related data prior to beginning construction activities, and thus mitigate the adverse impact. This may require a shift in the project schedule and must be coordinated with the project proponent.</p> <p>Approval by the Authorized Officer for the project to proceed will only be granted when recovery of the fossil material and field data is completed. A report to the file and the project proponent documenting the recovery and indicating that no further mitigation is required must be completed, and the report signed by the Authorized Officer. If the discovery cannot be fully collected within the available time frame, it may have to be avoided by relocating or redesigning the project.</p> <p>4.5-3b Based on the field survey and reporting results identified in Mitigation Measure 4.5-3a Monitoring Plan shall be developed and implemented (if required).</p> <p>A monitoring plan can be developed by a qualified paleontologist hired by the proponent who holds a current California BLM Paleontology Use Permit. The plan must be appropriately scaled to the size and complexity of the anticipated monitoring. If developed by a third party, the appropriate Paleontology Lead or Regional Paleontologist shall review the plan for sufficiency prior to acceptance. Monitoring of the project may proceed when the monitoring plan is approved by the Authorized Officer. A monitoring plan indicates the</p>	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>treatments recommended for the area of the proposed disturbance and must minimally address the following:</p> <ol style="list-style-type: none"> 1. The recommended approach to additional specimen collection, such as total or partial recovery or sampling; and, 2. The specific locations and intensity of monitoring or sampling recommended for each geologic unit, stratigraphic layer, or area impacted. <p>Monitoring intensity is determined based on the analysis of existing data and/or field surveys and any previous monitoring efforts.</p> <p>Types of Monitoring. There are two types of monitoring: 1) on-site, performed during ongoing operations, and 2) spot-checks, performed during or after disturbance, or at key times during the progress of the project.</p> <ol style="list-style-type: none"> 1. On-site monitoring – In areas with a high probability for buried fossils, the presence of a monitor at the site of disturbance at all times that disturbance is occurring may be warranted. The need for a full-time monitor is based on the findings of the survey, the local geology, and the proposed actions. Efforts will be made to complete fossil recovery with minimal work stoppage. However, in some cases, an extended period of work stoppage may be required, so coordination with the project proponent or representative is important. Prior to beginning the monitoring work, the monitor, company supervisor, and machinery operators shall agree on procedures for brief work stoppages to allow for examination of finds. It is critical that safety be of utmost concern because of the presence of heavy machinery and open trenches. <p>The monitor must assess any finds, collect loose fossil material and related data, and take appropriate steps to mitigate any current or potential damage. Consideration of the size of the expected fossils must also be considered; for example, microfossils may not be visible during excavation activities. It may be appropriate to collect samples of matrix for later recovery of microvertebrate fossils or other analyses. Activities planned to occur during night time should be assessed relative to the potential to uncover significant fossils. Fossils may not be visible at night in trenching or grading operations, so construction activities may need to be suspended during night time in sensitive areas.</p> <ol style="list-style-type: none"> 2. Spot-checking – In areas with a moderate to high probability for unknown fossil material, it may be more appropriate to check only at key times rather than maintain continuous monitoring of operations. Key times for scheduling spot-checking are when the fossil-bearing bedrock is exposed to view or prior to placing spoil material 	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>back into the excavation. Examples of these key times may be when a pipeline trenching operation is complete but before pipe is placed and the trench backfilled or prior to redistribution of topsoil. Spot-checking requires close coordination with the project proponent and the paleontologist, and usually requires the paleontologist to be available on short notice. In some instances, it may be advantageous to allow rain and/or wind to erode away loose matrix and concentrate fossil material to increase visibility. The paleontologist will coordinate with the project proponent to allow sufficient time for this action to occur, as appropriate to conditions, expected fossil material, and construction schedules.</p> <p>The paleontologist should report potentially fossiliferous areas in the final report to allow for future assessment of sites, even if no fossils were located during the project monitoring.</p> <p>Types of Field Personnel. It may be necessary to employ a number of paleontology field personnel simultaneously. There may be a lack of fully qualified paleontologists to perform all the necessary monitoring during the scheduled times of construction. Use of additional personnel for field work is permissible, but Field Agents and Field Monitors (described below) must be requested by the Permittee and authorized by the BLM prior to field work.</p> <ol style="list-style-type: none"> 1. Principal Investigator – The person listed as Permittee (Permit item 1a) on the Paleontological Resources Use Permit is the Principal Investigator (PI) and is responsible for all actions under the permit, for meeting all permit terms and conditions, and for the performance of all other personnel. This person is also the contact person for the project proponent and the BLM. 2. Field Agent – Other qualified paleontologists may perform field work independently of the PI under the conditions of this permit. Résumés must be submitted to BLM and must demonstrate qualifications equivalent to those of Permittees. Field Agents must be listed on the permit under “Name(s) of individual(s) responsible for planning, supervising, and carrying out fieldwork” (Permit item 8) or authorized in a separate letter from BLM. They must follow all the permit terms and conditions applicable to field work and must carry a copy of the permit, included terms and conditions, and separate authorizing letter (if used) while in the field. Field work results must be reported to the PI, who will then submit required reports. 3. Field Monitor – Field Monitors may be utilized for supplemental on-site monitoring of surface-disturbing activities when the PI or a Field Agent is performing 	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>field work elsewhere. Field Monitors must have sufficient field experience to demonstrate acceptable knowledge of fossil identification, collection methods, and paleontological techniques. The PI must supply a summary of each person's experience to the BLM prior to field work. Field Monitors must be approved by the BLM prior to performing field work and must carry a copy of the permit while in the field. The PI or Field Agent must be in communication with the Field Monitor using a portable communication device, such as a cell phone or two-way radio, and are required to be near enough to the Field Monitor to allow for prompt examination of all fossil discoveries (no more than two hours away) by the PI or Field Agent.</p> <p>4. Field Assistant – Additional personnel not meeting the previously cited experience or knowledge levels may be utilized during field work, but must be under direct, on-site supervision of either the PI or a Field Agent as part of a supervised crew. Field assistants must have at least four to eight hours of training or experience received from a qualified paleontologist in identifying paleontological resources prior to performing field work or when first utilized in this capacity. A listing of all Field Assistants (including contact information) must be supplied prior to any field work. All discoveries made by a Field Assistant must be immediately reported to the PI or Field Agent on site. To ensure proper supervision, an appropriate ratio of Field Assistants per PI or Field Agent must be maintained. The complexity of the project, the area to be covered, and the experience of the assistants are some of the factors that should be considered in determining the proper ratio, but commonly five to seven assistants is the maximum number that can be supervised by one PI or Field Agent.</p> <p>Work Stoppage. If significant fossil material is discovered during construction activities, the PI, Field Agents, and Field Monitors have the authority to temporarily halt surface disturbing actions until an assessment of the find is completed and appropriate protection measures taken. Efforts will be made to complete fossil recovery with minimal work stoppage. However, in some cases, an extended period of work stoppage may be required. If the paleontological resource can be avoided, mitigated, or collected within approximately two hours, work may resume after approval from the PI or Field Agent, and the Authorized Officer must be notified as soon as possible of the discovery and any mitigation efforts that were undertaken. If the find cannot be mitigated within a reasonable time (two hours), the concurrence of the Authorized Officer or official representative for a longer work stoppage must be obtained.</p>	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>Work may not resume until approval is granted from both the PI or Agent and the Authorized Officer.</p> <p>4.5-3c Upon completion of all field work, including survey and monitoring, the PI must submit within 30 days, a written final report to the Authorized Officer, Paleontology Lead, and the designated repository. A copy of the report may be provided to the project proponent if required, but without the BLM Locality forms. Reports must include the details and information as specified on page 14 of Attachment 1 of the BLM's "Guidelines for Assessment and Mitigation of Potential Impacts to Paleontological Resources", as applicable.</p> <p>4.5-3d When the final report with the specimen inventory and the signed receipt of confirmation of museum deposition are accepted by the BLM, mitigation for paleontological resources related to the project will be considered completed. The project proponent will be notified in writing as soon as possible by the Authorized Officer after consulting with the Paleontology Lead or Regional Paleontologist and a copy of the notification placed in the project file.</p> <p>The responsibility of the project proponent ends when appropriate mitigation related directly to the project is completed and final approval is received from the Authorized Officer. Any additional field collection, quarrying, final specimen preparation, etc. will be considered to be research, and will be the responsibility of the consulting paleontologist or another approved party. The project proponent will not be held responsible for completion of any research project. However, the project proponent can choose to sponsor further research. A separate research permit will be required for additional research activities.</p> <p>4.5-3e Fossil specimens and related data collected from public lands during field surveys and mitigation remain the property of the Federal government. They must be placed in the approved repository(s) identified on the Paleontological Resource Use Permit held by the consulting paleontologist as soon as practical and receipt(s) of collections submitted to the BLM, but no later than 60 days after all field work is completed. Written approval from the Paleontology Lead or Regional Paleontologist is required if additional time is needed for transfer of all specimens and field data</p>	
OTF-BLM Lands- Impacts to human remains	Potentially significant	<p>The following mitigation measures apply to the OTF portion of the project located within BLM land as adopted by the County of Imperial and BLM, and contained in the Imperial Solar Energy Center South Final EIR/EA:</p> <p>4.5-4 If human remains are discovered, work will be halted in that area, and the procedures set forth in the CEQA Guidelines Sections 15064.5 (d) and (e), California PRC Section 5097.98 and State HSC Section 7050.5, and the Native American Graves Protection and Repatriation Act (NAGPRA) shall be followed, as applicable. These procedures require that in the event of accidental discovery of human remains, no further</p>	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		disturbance of the site can occur until the coroner and the Native American Heritage Commission are contacted and appropriate steps are taken to rebury the remains with appropriate dignity on the property in a location not subject to further subsurface disturbance.	
Greenhouse Gas Emissions			
Construction of the projects would result in a temporary increase in GHG emissions.	Potentially significant	<p>The following mitigation measures are required for MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private, and OTF-BLM Lands:</p> <p>4.7-1a Diesel Equipment (Compression Ignition) Offset Strategies (</p> <ol style="list-style-type: none"> a. Use electricity from power poles rather than temporary diesel power generators. b. Construction equipment operating on-site should be equipped with two to four degree engine timing retard or precombustion chamber engines. c. Construction equipment used for the project should utilize EPA Tier 2 or better engine technology (requirement under Mitigation Measure 4.3-1 as described in Chapter 4.3 of this EIR). <p>4.7-1b Vehicular Trip (Spark Ignition) Offset Strategies</p> <ol style="list-style-type: none"> a. Encourage commute alternatives by informing construction employees and customers about transportation options for reaching your location (i.e., post transit schedules/routes). b. Help construction employees rideshare by posting commuter ride sign-up sheets, employee home zip code map, etc. c. When possible, arrange for a single construction vendor who makes deliveries for several items. d. Plan construction delivery routes to eliminate unnecessary trips. e. Keep construction vehicles well maintained to prevent leaks and minimize emissions, and encourage employees to do the same. 	Less than Significant
Geology and Soils			
Potential damage from seismic ground shaking and related secondary geologic hazards	Potentially significant	<p>The following mitigation measure is required for MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), and OTF.</p> <p>4.6-1 Prepare Geotechnical Report(s) for the Projects and Implement Required Measures. Facility design for all project components shall comply with the site-specific design recommendations as provided by a licensed geotechnical or civil engineer to be retained by the project applicant. The final geotechnical and/or civil engineering report shall address and make recommendations on the following:</p> <ul style="list-style-type: none"> • Site preparation; • Soil bearing capacity; • Appropriate sources and types of fill; • Potential need for soil amendments; • Road, pavement, and parking areas; • Structural foundations, including retaining-wall design; • Grading practices; 	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • Soil corrosion of concrete and steel; • Erosion/winterization; • Seismic ground shaking; • Liquefaction; and • Expansive/unstable soils. <p>In addition to the recommendations for the conditions listed above, the geotechnical investigation shall include subsurface testing of soil and groundwater conditions, and shall determine appropriate foundation designs that are consistent with the version of the CBC that is applicable at the time building and grading permits are applied for. All recommendations contained in the final geotechnical engineering report shall be implemented by the project applicant.</p>	
Potential risk of ground failure due to expansive or corrosive soils	Potentially Significant	<p>The following mitigation measure is required for CSF1(A), CSF1(B), CSF2(A), CSF2(B), and OTF:</p> <p>4.6-4 Implement Corrosion Protection Measures. As determined appropriate by a licensed geotechnical or civil engineer, the Applicant shall ensure that all underground metallic fittings, appurtenances, and piping include a cathodic protection system to protect these facilities from corrosion.</p>	Less than Significant
The on-site wastewater treatment system could violate water quality standards, waste discharge requirements, or otherwise degrade surface and groundwater quality.	Potentially Significant	<p>The following mitigation measure is required for CSF1(A), CSF1(B), CSF2(A), and CSF2(B):</p> <p>4.6-5 Demonstrate Compliance with On-site Wastewater Treatment and Disposal Requirements. The project's wastewater treatment and disposal system(s) shall demonstrate compliance with the Imperial County performance standards as outlined in Title 9, Division 10, Chapters 4 and 12 of the Imperial County Code. Prior to construction, and again prior to operation, the applicant will obtain all necessary permits and/or approvals from the Imperial County Public Works Department. The project applicant shall demonstrate that the system adequately meets County requirements, which have been designed to protect beneficial uses and ensure that applicable water quality standards are not violated. This shall include documentation that the system will not conflict with the Regional Water Quality Control Board's (RWQCB) Anti-Degradation Policy.</p>	Less than Significant
Hazards and Hazardous Materials			
Hydrocarbon stains throughout surface soils at CSF 2(A)	Potentially Significant	<p>The following mitigation measure is required for CSF2(A):</p> <p>4.8-1 Prepare Phase II Environmental Site Assessment. Prior to the issuance of any grading permits, a Phase II Environmental Site Assessment (ESA) will need to be conducted to determine the extent of hydrocarbon contamination located at the farm shop within the boundaries of the project study area (CSF2A). A Phase II ESA will provide a chemical analysis of hydrocarbon soil contamination and thus, assist in assessing the extent of contamination. Upon the identification of the extent of hydrocarbon contamination, if required by the Phase II ESA investigation, remediation shall occur in accordance with all applicable federal, state, and local regulations.</p>	Less than significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
MSSF1 and CSF2 (B) - Hazards associated with the potential exposure of the wells or alteration of the abandonment plugs	Potentially Significant	<p>The following mitigation measure is required for MSSF1 and CSF2(B):</p> <p>4.8-2 Well Abandonment. Prior to issuance of a grading permit, the applicant(s) shall submit evidence demonstrating that the locations of all known wells on-site have been reviewed by the DOGGR and that all well abandonment requirements, including gas leakage testing, have been completed according to DOGGR specifications, including construction Project Site Review and Well Abandonment Procedures.</p>	Less than Significant
CFS2(A) and OTF-Private are located adjacent to an airport land use planning area	Potentially Significant	<p>The following mitigation measure is required for CSF2(A) and OTF-Private:</p> <p>4.10-2b Coordinate with Imperial County ALUC and Incorporate Design Recommendations. The project applicant shall coordinate with the Imperial County ALUC and, if required FAA, to incorporate site-specific recommendations for the site plan for CSF2(A) in relation to facilities proposed within 200-feet of Hammers Road.</p>	Less than significant
Hydrology and Water Quality			
Construction of the projects could generate discharges to surface water resources that could potentially violate water quality standards or waste discharge requirements.	Potentially Significant	<p>The following mitigation measure is required for MSSF, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private, and OTF-BLM Lands.</p> <p>4.9-1a Acquire Appropriate Clean Water Act Regulatory Permits, Prepare SWPPP, and Implement BMPs Prior to Construction and Site Restoration. The project applicant or its contractor shall prepare a SWPPP specific to the projects and be responsible for securing coverage under SWRCB's NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall identify specific actions and BMPs relating to the prevention of stormwater pollution from project-related construction sources by identifying a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The SWPPP shall reflect localized surface hydrological conditions and shall be reviewed and approved by the project applicant prior to commencement of work and shall be made conditions of the contract with the contractor selected to build the projects. The SWPPP(s) shall incorporate control measures in the following categories:</p> <ul style="list-style-type: none"> • Soil stabilization and erosion control practices (e.g., hydroseeding, erosion control blankets, mulching); • Dewatering and/or flow diversion practices, if required (see Mitigation Measure 4.9-1b); • Sediment control practices (temporary sediment basins, fiber rolls); • Temporary and post-construction on- and off-site runoff controls; • Special considerations and BMPs for water crossings, wetlands, drainages, and vernal pools; • Monitoring protocols for discharge(s) and receiving waters, with emphasis placed on the following water 	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>quality objectives: dissolved oxygen, floating material, oil and grease, pH, and turbidity;</p> <ul style="list-style-type: none"> • Waste management, handling, and disposal control practices; • Corrective action and spill contingency measures; • Agency and responsible party contact information; and • Training procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP. <p>The SWPPP shall be prepared by a qualified SWPPP practitioner with BMPs selected to achieve maximum pollutant removal and that represent the best available technology that is economically achievable. Emphasis for BMPs shall be placed on controlling discharges of oxygen-depleting substances, floating material, oil and grease, acidic or caustic substances or compounds, and turbidity. Given that Imperial Valley Drains would accept runoff from the study area and are listed as impaired for sediment, the SWPPP shall include BMPs sufficient for Risk Level 2 projects. Best Management Practices for soil stabilization and erosion control practices and sediment control practices will also be required. Performance and effectiveness of these BMPs shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required to determine adequacy of the measure.</p> <p>4.9-1b Properly Dispose of Construction Dewatering in Accordance with the Colorado River Basin Regional Water Quality Control Board. If required, all construction dewatering shall be discharged to an approved land disposal area or drainage facility in accordance with Colorado River Basin RWCQB requirements. The project applicant or its construction contractor shall provide the Colorado River Basin RWQCB with the location, type of discharge, and methods of treatment and monitoring for all groundwater dewatering discharges. Emphasis shall be placed on those discharges that would occur directly or in proximity to surface water bodies and drainage facilities.</p>	
<p>The projects have the potential to result in both direct and indirect water quality impacts</p>	<p>Potentially Significant</p>	<p>The following mitigation measure is required for MSSF, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private, and OTF-BLM Lands.</p> <p>4.9-2 Incorporate Post-Construction Runoff BMPs into Project Drainage Plan and Maximize Opportunities for Low Impact Development. The project Drainage Plan shall adhere to County and IID guidelines to treat, control, and manage the on- and off-site discharge of stormwater to existing drainage systems. Low Impact Development opportunities, including but not limited to infiltration trenches or bioswales, will be investigated and integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-</p>	<p>Less than Significant</p>

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>term drainage solutions to ensure the proper sequencing of drainage facilities and treatment of runoff generated from project impervious surfaces prior to off-site discharge.</p> <p>The project applicant shall ensure the provision of sufficient outlet protection through the use of energy dissipaters, vegetated rip-rap, soil protection, and/or other appropriate BMPs to slow runoff velocities and prevent erosion at discharge locations for the O&M facilities, access roads, electrical distribution and substation facilities, and solar array locations. A long-term maintenance plan shall be developed and implemented to support the functionality of drainage control devices. The facility layout(s) shall also include sufficient container storage and on-site containment and pollution-control devices for drainage facilities to avoid the off-site release of water quality pollutants, including, but not limited to oil and grease, fertilizers, treatment chemicals, and sediment.</p>	
Result in the net increase in peak runoff could contribute to on-site flooding or flooding at downstream locations	Potentially Significant	<p>The following mitigation measure is required for MSSF, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private, and OTF-BLM Lands.</p> <p>4.9-4 Prepare Drainage Plan(s) for Structural Facilities. The project applicant shall prepare a site specific Drainage Plan for all project facilities and shall incorporate measures to maintain off-site runoff during peak conditions to pre-construction discharge levels. Design specifications for the detention, retention, and/or infiltration facilities shall provide sufficient temporary storage capacity to accommodate the 100-year, 24-hour storm event to pre-project conditions. Retention facilities shall empty within 72 hours and no sooner than 24 hours in order to provide mosquito abatement.</p>	Less than Significant
Land Use and Planning			
The CSF2(A) site location is located adjacent to the Calexico International Airport ALUCP with the eastern extent of Zone B2	Potentially Significant	<p>The following mitigation measure is required for CSF2(A) and OTF-Private. No mitigation is required for MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), and OTF-BLM Lands</p> <p>4.10.2b Coordinate with Imperial County ALUC and Incorporate Design Recommendations. The project applicant shall coordinate with the Imperial County ALUC and, if required FAA, to incorporate site-specific recommendations for the site plan for CSF2(A) in relation to facilities proposed within 200-feet of Hammers Road.</p>	Less than significant
Noise			
Temporary, Short-Term Exposure of Sensitive Receptors to Increased Equipment Noise from Project Construction.	Potentially Significant	<p>The following mitigation measures are required for MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private, and OTF-BLM Lands.</p> <p>4.11-1a Limit Construction Hours. Construction and decommissioning activities shall be limited to daylight hours between 7 AM and 7 PM Monday through Friday, and 9 AM and 5 PM on Saturday. No construction shall be allowed on Sundays or holidays.</p> <p>4.11-1b Minimize Noise from Construction Equipment and Staging. Construction equipment noise shall be minimized during project construction and decommissioning by muffling and shielding</p>	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools, where used. The project applicant's construction specifications shall also require that the contractor select staging areas as far as feasibly possible from sensitive receptors. All Contractor specifications shall include a requirement that equipment located within 2,500 feet of noise-sensitive receptors shall be equipped with noise reducing engine housings or other noise reducing technology such that noise levels are no more 85 dBA at 50 feet. If necessary the line of sight between the equipment and nearby sensitive receptors shall be blocked by portable acoustic barriers and/or shields to reduce noise levels.</p> <p>4.11-1c Maximize the Use of Noise Barriers. Construction and decommissioning contractors shall locate fixed construction equipment (such as compressors and generators) as far as possible from nearby residences. If feasible, noise barriers shall be used at the construction site and staging area. Temporary walls, stockpiles of excavated materials, or moveable sound barrier curtains would be appropriate in instances where construction noise would exceed 85 dBA and occur within less than 200 feet from a sensitive receptor. The final selection of noise barriers shall be subject to the project applicant's approval and shall provide a minimum 5 dBA reduction in construction noise levels, where noise levels would exceed 85 dBA without the barrier.</p> <p>4.11-1d Prohibit Non-Essential Noise Sources During Construction. No amplified sources (e.g., stereo "boom boxes") shall be used in the vicinity of residences during project construction or decommissioning.</p> <p>4.11-1e Provide a Mechanism for Filing Noise Complaints. The project applicant shall provide a mechanism for residents, businesses, and agencies to register complaints with the County if construction noise levels are overly intrusive or construction occurs outside the required hours.</p>	
Permanent Increase in Ambient Noise Levels.	Potentially Significant	<p>The following mitigation measure is required for CSF1(A) and OTF-Private. No mitigation measures are required for MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B) and OTF-BLM Lands.</p> <p>4.11-3 Implement Operational Noise Minimization Measures. The following mitigation measures shall be implemented for the design of the well, pump station(s), and storage tanks to ensure that operational noise levels at the property line do not exceed the County standards:</p> <ul style="list-style-type: none"> • Shielding and other specified measures as deemed appropriate and effective by the design engineer shall be incorporated into the design in order to comply with performance standards. • Pumps located underground shall be shielded from nearby sensitive receptors. 	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> Project equipment shall be outfitted and maintained with noise-reduction devices such as equipment closures, fan silencers, mufflers, acoustical louvers, noise barriers, and acoustical panels to minimize operational noise. Particularly noisy equipment shall be located as far away as feasibly possible from nearby sensitive receptors. The orientation of acoustical exits shall always be facing away from nearby sensitive receptors. Buildings and landscaping shall be incorporated, where possible, to absorb or redirect noise away from nearby sensitive receptors. 	
Public Services			
Implementation of the projects would not significantly impact public services.	Less than Significant	The proposed projects would not result in significant impacts to public services. No mitigation is required.	Less than Significant
Recreation			
Implementation of the projects would not significantly impact recreation facilities.	Less than Significant	The proposed projects would not result in significant impacts to recreational amenities. No mitigation is required.	Less than Significant
Traffic and Transportation			
Implementation of the projects would not significantly impact traffic and transportation.	Less than Significant	The proposed projects would not result in significant impacts to traffic and transportation. No mitigation is required.	Less than Significant
Utilities and Service Systems			
Implementation of the projects would not significantly impact utilities and services systems	Less than Significant	The proposed projects would not result in significant impacts to utilities and service systems. No mitigation is required.	Less than Significant

Statement of Overriding Considerations

CEQA Guidelines Section 15093 requires the Lead Agency to balance, as applicable, the economic, legal, social, and technological, or other benefits of the project against its unavoidable environmental risks when determining whether to approve the project. No significant and unmitigated impacts have been identified for the proposed projects and OTF.

Project Alternatives

The environmental analysis for the proposed projects evaluated the potential environmental impacts resulting from implementation of the proposed projects, as well as alternatives to the projects. The alternatives include: Alternative 1: No Project/No Development; Alternative 2, Reduced Acreage Alternative (Avoid Prime Farmland); Alternative 3: Reduced Acreage Alternative (Avoid Williamson Act Land); and Alternative 4: Reduced CSF2(A). A detailed discussion of the alternatives considered for this project is included in Section 8.0. Table 0-2 summarizes the impacts resulting from the proposed projects and the identified alternatives.

No Project/No Development

Implementation of the No Project/No Development Alternative would result in reduced impacts for all environmental issues areas as compared to the proposed projects for those issue areas where significant impacts have been identified. These specific reductions in impact are generally related to project-related construction. Likewise, this alternative would not realize the desirable benefits of reduced GHG emissions associated with renewable energy use that are otherwise associated with the proposed projects. Further, substantial reductions in water demands that would be realized under the projects would not occur under this alternative.

The No Project/No Development Alternative would not meet any of the objectives of the projects. Additionally, No Project/No Development Alternative would not help California meet its statutory and regulatory goal of increasing renewable power generation, including greenhouse gas reduction goals of Assembly Bill (AB) 832 (California Global Warming Solutions Act of 2006). Because this alternative does not meet any of the basic objectives of the proposed projects, the No Project/No Development Alternative is rejected.

Reduced Acreage Alternative (Avoid Prime Farmland)

Implementation of the Reduced Acreage Alternative (Avoid Prime Farmland) would result in reduced impacts for the following environmental issues areas as compared to the proposed projects: agriculture, air quality, biological resources, greenhouse gas emissions (construction phase only), and hydrology/water quality. The Reduced Acreage Alternative (Avoid Prime Farmland) would meet most of the basic objectives of the proposed projects and should remain under consideration.

Reduced Acreage Alternative (Avoid Williamson Act Land)

Implementation of the Reduced Acreage Alternative (Avoid Williamson Act Land) would result in reduced impacts for the following environmental issues areas as compared to the proposed projects: agriculture, air quality, biological resources, greenhouse gas emissions (construction phase only), and hydrology/water quality. The Reduced Acreage Alternative (Avoid Williamson Act Land) would meet most of the basic objectives of the proposed projects and should remain under consideration.

TABLE 0-2. COMPARISON OF PROPOSED PROJECT AND ALTERNATIVES

Environmental Issue Area	Proposed Project	Alternative 1 No Project/ No Development	Alternative 2 Reduced Acreage Alternative (Avoid Prime Farmland)	Alternative 3 Reduced Acreage Alternative (Avoid Williamson Act Land)	Alternative 4 Reduced CSF2(A)
Aesthetics	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Projects: Less impact	CEQA Significance: Less than significant Comparison to Projects: Similar impact	CEQA Significance: Less than significant Comparison to Projects: Similar impact	CEQA Significance: Less than significant Comparison to Projects: Less impact
Agriculture	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact
Air Quality	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact
Biological Resources	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact
Cultural Resources	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level of significance Comparison to Project: Similar impact	CEQA Significance: Mitigated to below a level of significance Comparison to Project: Similar impact	CEQA Significance: Mitigated to below a level of significance Comparison to Project: Similar impact

Environmental Issue Area	Proposed Project	Alternative 1 No Project/ No Development	Alternative 2 Reduced Acreage Alternative (Avoid Prime Farmland)	Alternative 3 Reduced Acreage Alternative (Avoid Williamson Act Land)	Alternative 4 Reduced CSF2(A)
Geology and Soils	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Similar impact
Greenhouse Gas Emissions	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact during construction. Would not achieve GHG emission reductions to the extent of the proposed project as less renewable energy would be produced	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact during construction. Would not achieve GHG emission reductions to the extent of the proposed project as less renewable energy would be produced	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact during construction. Would not achieve GHG emission reductions to the extent of the proposed project as less renewable energy would be produced
Hazards and Hazardous Materials	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact
Hydrology/ Water Quality	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact

Environmental Issue Area	Proposed Project	Alternative 1 No Project/ No Development	Alternative 2 Reduced Acreage Alternative (Avoid Prime Farmland)	Alternative 3 Reduced Acreage Alternative (Avoid Williamson Act Land)	Alternative 4 Reduced CSF2(A)
Land Use/Planning	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Less impact
Noise	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Project: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Project: Similar impact
Public Services	Less than Significant	CEQA Significance: No impact Comparison to Project: Less impact	CEQA Significance: Less than significant Comparison to Project: Similar Impact	CEQA Significance: Less than significant Comparison to Project: Similar Impact	CEQA Significance: Less than significant Comparison to Project: Similar Impact
Recreation	Less than Significant	CEQA Significance: No impact Comparison to Project: Less	CEQA Significance: Less than significant Comparison to Project: Similar Impact	CEQA Significance: Less than significant Comparison to Project: Similar Impact	CEQA Significance: Less than significant Comparison to Project: Similar Impact
Transportation/ Traffic	Less than significant	CEQA Significance: No impact Comparison to Project: Similar	CEQA Significance: Less than significant Comparison to Project: Similar Impact	CEQA Significance: Less than significant Comparison to Project: Similar Impact	CEQA Significance: Less than significant Comparison to Project: Similar Impact

Environmental Issue Area	Proposed Project	Alternative 1 No Project/ No Development	Alternative 2 Reduced Acreage Alternative (Avoid Prime Farmland)	Alternative 3 Reduced Acreage Alternative (Avoid Williamson Act Land)	Alternative 4 Reduced CSF2(A)
Utilities	Less than Significant	CEQA Significance: No impact Comparison to Project: Greater impact (water use)	CEQA Significance: Less than significant Comparison to Project: Similar Impact	CEQA Significance: Less than significant Comparison to Project: Similar Impact	CEQA Significance: Less than significant Comparison to Project: Similar Impact

Reduced CSF2(A)

Implementation of the CSF2(A) Alternative would result in reduced impacts for the following environmental issues areas as compared to the proposed projects: aesthetics, agriculture, air quality, biological resources, greenhouse gas emissions (construction phase only), hazards and hazardous materials, and hydrology/water quality. The CSF2(A) Alternative would meet most of the basic objectives of the proposed projects and should remain under consideration.

Environmentally Superior Alternative- No Project/No Development Alternative

Table 0-2 provides a qualitative comparison of the impacts for each alternative compared to the proposed projects. As noted in Table 0-2, the No Project/No Development Alternative would be considered the environmentally superior alternative, since it would eliminate all of the significant impacts identified for the project. However, CEQA Guidelines Section 15126.6(e)(2) states that “if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” The environmentally superior alternative would be Reduced CSF2(A) as it would reduce impacts aesthetics, agriculture, air quality, biological resources, greenhouse gas emissions (construction phase only), hazards and hazardous materials, and hydrology/water quality as compared to the proposed projects. The Reduced CSF2(A) Alternative would also continue to realize many of the desirable benefits that are attributable to the proposed projects in terms of providing a new source of renewable energy consistent with the goals of AB 32 and contributing to reductions in water demands within the Imperial Valley.

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