

0.1 EXECUTIVE SUMMARY

0.1.1 PROJECT OVERVIEW

This 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 Iris Cluster Solar Farm Project and to propose mitigation measures, where required, to reduce significant impacts.

The proposed solar farms project would consist of two primary components: (1) the combined construction and operation of an expansive photovoltaic (PV) and/or concentrated photovoltaic (CPV) solar energy facility and supporting uses; and (2) the construction and operation of off-site electrical transmission infrastructure and associated interconnections. The primary components within the solar farms will be solar arrays, electrical substation facilities, and other operations and maintenance (O&M) facilities. Also, a major component of these projects would be restoration of the project areas to agricultural use in up to 40 years.

Four separate Conditional Use Permit (CUP) applications have been filed by the project applicant for the properties identified below. Additionally, four variance applications have been filed with the County for these properties in order to exceed the currently allowed height limit for transmission towers within the applicable zones:

- Ferrell Solar Farm (FSF)
- Rockwood Solar Farm (RSF)
- Iris Solar Farm (ISF); and
- Lyons Solar Farm (LSF)

The combined acreage of the four proposed solar farm sites encompasses 1,4004,422 acres of land located in the southern portion of Imperial County. The interconnection for the proposed projects will occur at the 230 kV side of the San Diego Gas & Electric ("SDG&E") Imperial Valley (IV) Substation, located approximately 5 miles northwest of the project sites, via the existing Mount Signal Solar Farm substation and its shared 230 kV electrical transmission line. Power from the proposed projects may first be collected at one or more shared on-site substations via overhead and/or underground collector line(s).

Transmission and collector lines would extend along private lands, traversing the project area both west to east and north to south along major roads (e.g., Kubler Road, State Route [SR] 98, George Road, Corda Road, and Ferrell Road) and other local roadways. Figure 3.0-3 in Section 3.0, Project Description, provides an index of the major project components and the details of the projects are further described and depicted in Section 3.0.

0.1.2 PURPOSE OF AN 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

Based on the Initial Study and Notice of Preparation (IS/NOP) prepared for the proposed projects (Appendix A), Imperial County has determined that the proposed projects would not have the potential to cause significant adverse effects associated with the topics identified below. Therefore, these topics are not addressed in this EIR; however, the rationale for eliminating these topics is briefly discussed below.

Forestry Resources

The project sites are located on privately owned, undeveloped agricultural land. No portion of the project area (or the immediate vicinity) is zoned or designated as forest lands, timberlands, or Timberland Production. As such, the projects would not result in a conflict with existing zoning or cause rezoning. Therefore, implementation of the proposed projects would not impact forestry resources.

Mineral Resources

The project sites are not used for mineral resource production and the projects do not include any form of 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 area 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 area.

Recreation

The combined projects would be staffed with up to 24 full-time employees, which would not significantly increase the use or accelerate the deterioration of regional parks or other recreational facilities. The temporary increase of population during construction that might be caused by an influx of workers would be minimal and not cause a detectable increase in or impact on the use of parks. Additionally, the projects do not include or require the expansion of recreational facilities.

Population/Housing

The project sites have historically been used for, and are still currently being used for agricultural production. Development of housing is not proposed as part of the projects. The projects will be staffed with up to 24 full time employees 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 (or CPV) 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 facilities is minimal. A total of four residences are located within the project sites. These residences would not be relocated as part of the proposed project; therefore, no impact associated with displacement would result.

Public Services (Schools, Parks and Other Facilities)

The proposed projects do not include the development of residential land uses that would result in an increase in population or student generation. Construction of the proposed projects would not result in an increase in student population within any school district that would serve the project area. Therefore, the proposed projects would have no impact on Imperial County schools.

Operation of the proposed projects would require minimal full-time staff (for security, maintenance, etc.). Therefore, substantial permanent increases in population that would adversely affect local parks, libraries and other public facilities (such as post offices) are not expected. Therefore, no impacts are identified for these issue areas.

Utilities (Wastewater, Stormwater, and Solid Waste)

The proposed projects would generate a minimal volume of wastewater during construction. During construction activities, wastewater would be contained within portable toilet facilities and disposed of at an approved site. Operation of the proposed projects could include up to four O&M buildings. Wastewater generation would be minimal and would be treated via an on-site septic system associated with each of the O&M buildings. The proposed projects would not exceed wastewater treatment requirements of the Regional Water Quality Control Board (RWQCB). The projects do not require new storm drainage facilities because the proposed solar facilities would not generate a significant increase in the amount of runoff water during operations. Water from solar panel washing would continue to percolate through the ground, as a majority of the surfaces within the project study areas would remain pervious. Therefore the projects would not result in impacts with regards to wastewater or storm drainage facilities.

During construction of the project, solid waste would be generated. For example, the PV panels are typically shipped in boxes which then would require either recycling or disposal. During operation of the projects, waste generation will be minor. Solid waste will be disposed of using a locally-licensed waste hauling service, most likely Allied Waste. There are over 40 solid waste facilities listed in Imperial County in the CalRecycle database. Trash would likely be hauled to the Calexico Solid Waste Site located in Calexico or the CR&R Material Recovery Transfer Station located in El Centro. The Calexico Solid Waste site has approximately 1.1 million cubic yards of capacity (reporting date July 2009) and is estimated to remain in operation through 2077. The CR&R Material Recovery and Transfer station has a maximum permitted throughput of 99 tons/day. No closure date has been reported for this facility (<http://www.calrecycle.ca.gov/SWFacilities/Directory/13-AA-0109/Detail/>). Therefore, there is ample landfill capacity throughout the County to receive the minor amount of solid waste generated by project construction and operation. Additionally, conditions of the CUP for each project will contain provisions for recycling and diversion of construction waste per policies of the County.

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

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

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

Table 0-1 summarizes existing environmental impacts that were determined to be potentially significant, mitigation measures, and level of significance after mitigation associated with the project.

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

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Aesthetics			
<p>The project would create a new source of glint and glare, which is a significant impact to roadway travelers within proximity to the project sites.</p>	<p>Potentially Significant</p>	<p>The following mitigation measures are required for the Ferrell Solar Farm (FSF), Rockwood Solar Farm (RSF), Iris Solar Farm (ISF), Lyons Solar Farm (LSF):</p> <p>4.1-4 Installation of Fence Slats</p> <p>Based on final engineering and design, neutral colored security fence slats shall be installed in the following areas:</p> <ul style="list-style-type: none"> • Fixed Tilt – Fence slats shall be installed for all portions of the project study areas with fixed-tilt trackers installed that face a roadway to the south. • Double Axis Trackers – Fence slats shall be installed for all portions of the project study areas with double axis trackers installed that face a roadway to the east and/or west. 	<p>Less than Significant</p>
Agriculture			
<p>Conversion of Important Farmlands to Non-Agricultural Use</p>	<p>Potentially Significant</p>	<p>The following mitigation measures are required for the Ferrell Solar Farm (FSF), Rockwood Solar Farm (RSF), Iris Solar Farm (ISF), Lyons Solar Farm (LSF), and transmission line.</p> <p>4.2-1a Minimize Impacts to Important Farmlands. Prior to the issuance of a grading permit or building permit (whichever comes first) for the project, the mitigation of impacts to agricultural lands shall be accomplished as follows:</p> <p>A. Mitigation for Non Prime Farmland. The project applicant shall mitigate for short- and long-term impacts to Non-Prime Farmland 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: Provide Agricultural Conservation Easement(s). The project 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 DOC regulations and shall be recorded prior to issuance of any grading or building permits.</p> <p>Option 2: Pay Agricultural In-Lieu Mitigation Fee. The project applicant shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent 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 programs 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. The County Board of Supervisors will be contemplating adoption of a public benefit agreement for solar projects. The agreement language contains provisions for mitigation of temporary loss of agricultural land. Agreement to the public benefit agreement can satisfactorily mitigate temporary loss of land.</p>	<p>Less than Significant</p>

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>Option 3: Public Benefit Agreement. The project applicant and County may negotiate and enter into a public benefit agreement that includes an Agricultural Benefit Fee payment and which incorporates financial assurance/bonding guaranteeing site restoration as may be required elsewhere in the CUP.</p> <p>B. Mitigation for Prime Farmland. The project applicant shall mitigate for short- and long-term impacts to Prime Farmland 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: Provide Agricultural Conservation Easement(s). The project 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 regulations and shall be recorded prior to issuance of any grading or building permits.</p> <p>Option 2: Pay Agricultural In-Lieu Mitigation Fee. The project applicant shall pay an “Agricultural In-Lieu Mitigation Fee” in the amount of 30 percent 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 programs 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. The County Board of Supervisors will be contemplating adoption of a public benefit agreement for solar projects. The agreement language contains provisions for mitigation of temporary loss of agricultural land. Agreement to the public benefit agreement can satisfactorily mitigate temporary loss of land.</p> <p>Option 3: Public Benefit Agreement. The project applicant and County may negotiate and enter into a public benefit agreement that includes an Agricultural Benefit Fee payment and which incorporates financial assurance/bonding guaranteeing site restoration as may be required elsewhere in the CUP.</p> <p>4.2-1b Site Reclamation Restoration Plan. The project applicant shall adhere to the terms of the site reclamation restoration plan that has been submitted to Imperial County to return the property to its existing agricultural condition prior to the issuance of any building permits. The reclamation restoration plan includes a restoration cost estimate prepared by a California-licensed civil engineer and provisions that require that the land be restored to its condition prior to the permitted power plant development, which may be shown by growing a crop or other means to reasonable satisfaction of the Planning and Development Services Director and landowner. The project applicant shall provide financial assurance/ bonding in the amount equal to the restoration cost estimate to return the land to its existing agricultural condition prior to the issuance of any building permits.</p>	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Adversely Affect Agricultural Productivity	Potentially Significant	<p>The following mitigation measures are required for the FSF, RSF, ISF, LSF, and transmission line.</p> <p>4.2-2 Prior to the issuance of a grading permit or building permit (whichever occurs first), a Weed and Pest Control Plan shall be developed by the project applicant and approved by the County of Imperial Agricultural Commissioner. The plan shall provide the following:</p> <ol style="list-style-type: none"> 1. Monitoring, preventative, and management strategies for weed and pest control during construction activities at any portion of the project (e.g., transmission line); 2. Control and management of weeds and pests in areas temporarily disturbed during construction where native seed will aid in site revegetation as follows; <ul style="list-style-type: none"> • Monitor for all pests including insects, vertebrates, weeds, and pathogens. Promptly control or eradicate pests when found, or when notified by the Agricultural Commissioner’s office that a pest problem is present on the project site; • All treatments must be performed by a qualified applicator or a licensed pest control operator; • “Control” means to reduce the population of common pests below economically damaging levels, and includes attempts to exclude pests before infestation, and effective control methods after infestation. Effective control methods may include physical/mechanical removal, bio control, cultural control, or chemical treatments; • Notify the Agricultural Commissioner’s office immediately regarding any suspected exotic/invasive pest species such as A- and Q-rated pest species as defined by the California Department of Food Agriculture (CDFA). Eradication of exotic pests shall be done under the direction of the Agricultural Commissioner’s Office and/or CDFA; • Obey all pesticide use laws, regulations, and permit conditions; • Access shall be allowed by Agricultural Commissioner staff for routine visual and trap pest surveys, compliance inspections, eradication of exotic pests, and other official duties; • All project employees that handle pest control issues shall be appropriately trained and certified, and all required records shall be maintained and made available for inspection. All required permits shall be maintained current; • Records of pests found and controlled shall be maintained and available for review, or submitted to the Agricultural Commissioner’s office on a quarterly basis; 	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<ol style="list-style-type: none"> 3. A long-term strategy for weed and pest control and management during the operation of the proposed project. Such strategies may include, but are not limited to: <ol style="list-style-type: none"> a. Use of specific types of herbicides and pesticides on a scheduled basis. 4. Maintenance and management of project site conditions to reduce the potential for a significant increase in pest-related nuisance conditions on adjacent agricultural lands. 	
Air Quality			
Violate Any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation	Potentially Significant	<p>The following mitigation measures are required for the FSF, RSF, ISF and LSF, and transmission line. <u>Records sufficient to document compliance with mitigation measures shall be maintained on site at all times and available for ICAPCD inspection.</u></p> <p>Fugitive Dust</p> <p>4.3-2a Construction Equipment. Construction equipment shall be equipped with an engine designation of EPA Tier 2 or better (Tier 2+). A list of the construction equipment, <u>including all off-road equipment utilized at each of the projects by make, model, year, horsepower and expected/actual hours of use,</u> and the associated EPA Tier shall be submitted to the County Planning and Development Services Department and ICAPCD prior to the issuance of a grading permit. <u>The ICAPCD shall utilize this list to calculate air emissions to verify that equipment use does not exceed significance thresholds. The Planning and Development Services Department and ICAPCD shall to verify implementation of this measure.</u></p> <p>4.3-2b Fugitive Dust Control. Pursuant to ICAPCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII-Fugitive Dust Control Measures. <u>Whereas these Regulation VIII measures are mandatory and are not considered project environmental mitigation measures, the ICAPCD CEQA Handbook's required additional standard and enhanced</u> 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 as part of the grading permit review/approval process.</p> <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. 	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • All unpaved traffic areas one 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. • 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 projects 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. 	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • 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> <p>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%.</p> <p>4.3-2c Vehicular Emissions. Pursuant to ICAPCD Policy Number 5, prior to construction activities, the project 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 NO_x 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>	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>4.3-2d Dust Suppression. The project applicant shall employ a method of dust suppression (such as water or chemical stabilization) approved by ICAPCD. The project applicant shall apply chemical stabilization as directed by the product manufacturer to control dust between the panels as approved by ICAPCD, and other non-used areas (exceptions will be the paved entrance and parking area, operations and maintenance building, and Fire Department access/emergency entry/exit points as approved by Fire/OES Department).</p> <p>4.3-2e Dust Suppression Management Plan. Prior to the issuance of building permits, Prior to any earthmoving activity, the project applicant shall submit and obtain approval from for the ICAPCD and Imperial County Planning and Development Services Department (ICPDSD) a construction Dust Control Plan. <u>Prior to the issuance of a Certificate of Occupancy, the applicant shall submit and obtain approval from the ICAPCD and ICPDSD an Operations Dust Control Plan.</u></p> <p><u>ICAPCD Rule 310 Operational Fees apply to any project applying for a building permit. At the time that building permits are submitted for the proposed projects, the ICAPCD shall review the project to determine if Rule 310 fees are applicable to the proposed projects, review and approval an operational "Dust Suppression-Management Plan" for both construction and operations.</u> The project applicant shall pay an "Operational Fee" to the ICAPCD for the square footage of the operations and maintenance building and substation <u>as determined applicable by the ICAPCD pursuant to Rule 310.</u></p>	
Biological Resources			
Possible Habitat Modification - BUOW	Potentially Significant	<p>The following mitigation measures are required for the FSF, RSF, ISF, LSF, and transmission line.</p> <p>4.4-1a Burrowing Owl Mitigation. Burrowing owls have been observed in the active agricultural fields within the project sites. The following measures will avoid, minimize, or mitigate potential impacts to burrowing owl during construction activities:</p> <ol style="list-style-type: none"> 1. During non-breeding 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. 2. 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 project footprint. 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, so that owls can be properly relocated before nesting occurs. 	Less than Significant

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		<p>3. 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 project footprint. 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 project footprint 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>.</p> <p>4. 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 <i>Imperial Irrigation District Artificial Burrow Installation Manual</i>. 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.</p> <p>5. As the project construction schedule and details are finalized, an agency-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 a Forage Habitat Plan shall only be completed upon prior approval by and in cooperation with the CDFW. The Mitigation and Monitoring Plan shall include success criteria, remedial measures, and an annual report to CDFW and shall be funded by the project applicant to ensure long-term management and monitoring of the protected lands.</p> <p>4.4-1b Burrowing Owl Compensation. The project applicant shall compensate for impacts to burrowing owl habitat through the following measures:</p> <ol style="list-style-type: none"> 1. CDFW's mitigation guidelines for burrowing owl (1995) require the acquisition and protection of replacement foraging habitat per pair or 	

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		<p>unpaired resident bird to offset the loss of foraging and burrow habitat on the project sites.</p> <p>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 native vegetation that will provide suitable foraging habitat for burrowing owls, pursuant to a Mitigation and Monitoring Plan that is reviewed and approved by CDFW prior to the commencement of construction. 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 project footprints. Sufficient 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, it is assumed that when 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, sufficient areas cannot be provided onsite, or planting is not feasible, alternative mitigation shall be provided, which CDFW determines provides equivalently effective mitigation. Such alternative mitigation may include off-site preservation of the required amount of foraging habitat through a CDFW-approved conservation easement, or an in-lieu fee in an amount approved by CDFW that is sufficient to acquire such conservation easements, or some combination of the two.</p> <p>4.4-1c Worker Awareness Program. Prior to project initiation, a Worker Environmental Awareness Program (WEAP) shall be developed and implemented by a qualified biologist, 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 burrowing owl; • CDFW/USFWS regulations; • Protection measures designed to reduce potential impacts to the species, function of flagging designated authorized work areas; • Reporting procedures to be used if a burrowing owl (dead, alive, injured) is encountered in the field. <p>4.4-1d Speed Limit. The Designated Biologist or Biological Monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads.</p> <ul style="list-style-type: none"> • A speed limit of 15 miles per hour when driving access roads. All vehicles required for O&M must remain on designated access/maintenance roads. 	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Possible Habitat Modification - Mountain Plover, Long Billed Curlew, Short Billed Dowitcher, Loggerhead Shrike, and Horned Lark	Potentially Significant	<p>The following mitigation measures are required for the FSF, RSF, ISF, LSF, and transmission line.</p> <p>4.4-1e Temporary Construction Suspension. If a Designated Biological Monitor observes these species foraging within the project study areas, 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 Avian 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 4.4-1f.</p>	Less than Significant
Possible Habitat Modification - Migratory and Other Sensitive Non-Migratory Bird Species:	Potentially Significant	<p>The following mitigation measures are required for the FSF, RSF, ISF, LSF, and transmission line.</p> <p>4.4-1f Construction and O&M Mitigation Measures. In order to reduce the potential indirect impact to migratory birds, bats and raptors, an Avian Bat Protection Plan (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. 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 project footprint. 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. <p>Implement post-construction avian monitoring that will incorporate the Wildlife Mortality Reporting Program.</p>	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>4.4-1g Raptor and Active Raptor Nest Avoidance. 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 areas should take place outside the raptors' breeding season of February 1 to July 15. 2. If construction occurs between February 1 and July 15, a qualified 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 a qualified biologist determines that the fledglings are independent of the nest. 	
Cultural Resources			
Impact to Archaeological Resources	Significant	<p>The following mitigation measures are required for the FSF, RSF, ISF, LSF and transmission line.</p> <p>4.5-2a Worker Awareness Training. Workers conducting grading activities and their supervisors shall receive proper training prior to the commencement of grading from a qualified archaeologist regarding the potential for sensitive archaeological resources to be unearthed during these grading activities. The workers shall be directed to report any unusual specimens of bone, stone, ceramics or other archaeological artifacts observed during grading and/or other construction activities to their supervisor and to cease grading activities in the immediate vicinity of the discovery until the archaeological monitor is notified of the discovery by the Superintendent of the project site.</p> <p>4.5.2b Archaeological and Tribal Monitoring. Proper training of on-site personnel will be required and, if requested, certified observers (tribal monitors) will be on-site to insure proper avoidance and/or removal protocols are observed in the event that cultural resources are uncovered due to construction ground disturbance.</p> <p>4.5.2c Accidental Discovery of Unknown Archaeological Resources. 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 determined by a Registered Professional Archaeologist familiar with the resources of the region.</p> <p>4.5-2d Discovery of Archaeological Materials. In the event archaeological resources potentially eligible for the CRHR are encountered, surface disturbing work in the immediate vicinity of the discovery shall temporarily halt until appropriate treatment of the resource is determined by a qualified archaeologist in accordance with the</p>	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>provisions of CEQA Section 15064.5. The archaeological monitor shall have the authority to re-direct construction equipment in the event archaeological resources potentially eligible for the CRHR are encountered. If the qualified archaeologist determines that the discovery constitutes a significant resource under CEQA and it cannot be avoided, the project applicant shall implement an archaeological data recovery program.</p> <p>4.5-2e Cultural Resource Documentation and Treatment by Tribal Monitors. If a cultural resource artifact, feature, or other cultural item is observed on the project site by the Tribal Monitor(s), the Tribal Monitor(s) will be given a reasonable opportunity to document, remove, and/or otherwise provide for treatment of the resource. Except in the case of cultural items that fall within the scope of the Native American Grave Protection and Repatriation Act (NAGPRA), the discovery of any cultural resource within the project area by the Tribal Monitor(s) shall not be grounds for a “stop work” notice or otherwise interfere with the project’s continuation except as set forth in this paragraph.</p> <p>4.5-2f Project Applicant Shall Notify the County within 24 Hours. Upon discovery of archaeological resources or materials, and 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>	
Impacts to human remains	Less than significant	<p>The following mitigation measure is required for the FSF, RSF, ISF, LSF, and transmission line.</p> <p>4.5-4 Human Remains. In the event that any human remains or related resources are discovered on the project site, such resources shall be treated in accordance with federal, state, and local regulations and guidelines for disclosure, recovery, relocation, and preservation, as appropriate. All construction affecting the discovery site shall cease until, as required by CEQA Guidelines, Section 156064.5(e), the human remains are evaluated by the County Coroner for the nature of the remains and cause of death. All parties involved would ensure that any such remains are treated in a respectful manner and that all applicable federal, state, and local laws are followed.</p> <p>If human remains are found to be of Native American origin, or if associated grave goods or objects of cultural patrimony are discovered, the provisions of the NAGPRA would be followed, and the Native American Heritage Commission shall be asked to determine the descendants who are to be notified or, if unidentifiable, to establish the procedures for burial.</p>	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Geology and Soils			
Possible Risks to People and Structures Caused by Strong Seismic Ground Shaking	Potentially significant	<p>The following mitigation measure is required for the FSF, RSF, ISF, LSF, and transmission line.</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; • 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>	Less than Significant
Exposure to Potential Hazards from Problematic Soils	Potentially Significant	<p>The following mitigation measure is required for the FSF, RSF, ISF, LSF, and transmission line.</p> <p>4.6-4 Implement Corrosion Protection Measures. As determined appropriate by a licensed geotechnical or civil engineer, the project 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
On-site Wastewater Treatment and Disposal	Potentially Significant	<p>The following mitigation measure is required for the FSF, RSF, ISF, and LSF.</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 project applicant will obtain all necessary permits and/or approvals from the Imperial County Public Works</p>	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		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.	
Greenhouse Gas Emissions			
Generate Greenhouse Gas Emissions, Either Directly or Indirectly, that may have a Significant Impact on the Environment.	Less than Significant	<p>The following mitigation measures are required for the FSF, RSF, ISF, LSF, and transmission line.</p> <p>4.7-1a Diesel Equipment (Compression Ignition) Offset Strategies</p> <ul 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, Air Quality of this EIR). <p>4.7-1b Vehicular Trip (Spark Ignition) Offset Strategies</p> <ul 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 “ride share” by posting commuter ride sign-up sheets, employee home, zip code, map, etc. c. When possible, arrange for 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. 	Less than Significant
Hazards and Hazardous Materials			
Possible Risk to the Public or Environment through Release of Hazardous Materials	Potentially Significant	<p>The following mitigation measures are required for the FSF and ISF:</p> <p>4.8-2a Phase II Environmental Site Assessment. A Phase II ESA (drilling, sampling, and analytical program) shall be completed if the FSF substation is to be constructed in the area of the Kubler Shop. This ESA will assist to determine if the previous USTs are still onsite and if soil contamination exists.</p> <p>4.8-2b Hazardous Materials Discovery. All construction contractor(s) shall be instructed to immediately stop all subsurface construction activities in the event that petroleum is discovered, an odor is identified, or significantly stained soil is visible during construction. Contractors shall be instructed to follow all applicable regulations</p>	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>regarding discovery and response for hazardous materials encountered during the construction process.</p> <p>4.8-2c Lead and Asbestos. Prior to the demolition of any buildings, the contractor shall conduct testing to determine if lead and/or asbestos are present. Testing will help to identify the proper removal procedures to follow per state and local guidelines.</p> <p>4.8-2d Well Abandonment. Prior to issuance of a grading permit, the project applicant 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>	
Hydrology and Water Quality			
Violation of Water Quality Standards During Construction	Potentially Significant	<p>The following mitigation measure is required for the FSF, RSF, ISF, LSF, and transmission line.</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 and decommission 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, and drainages; • Monitoring protocols for discharge(s) and receiving waters, with emphasis placed on the following water quality objectives: dissolved oxygen, floating material, oil and grease, pH, and turbidity; • Waste management, handling, and disposal control practices; 	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • 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 project study areas and are listed as impaired for sediment, the SWPPP shall include BMPs sufficient for Risk Level 2 projects. BMPs 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 RWQCB 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>	
Violation of Water Quality Standards During Construction	Potentially Significant	<p>The following mitigation measure is required for the FSF, RSF, ISF, LSF, and transmission line.</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-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</p>	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		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.	
Alternation of Drainage Patterns and Off-site Flooding	Potentially Significant	<p>The following mitigation measure is required for the FSF, RSF, ISF, LSF, and transmission line.</p> <p>4.9-4 Prepare Drainage Plan(s) for Structural Facilities. The project applicant shall prepare a site specific Drainage Plan for all facilities constructed in conjunction with the projects that meets County Department of Public Works and IID requirements, where applicable. The Drainage Plan 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.</p>	Less than Significant
Land Use and Planning			
Implementation of the projects would not significantly impact land use and planning.	Less than Significant	The proposed projects would not result in significant impacts to land use and planning. No mitigation is required.	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 the FSF, RSF, ISF, LSF, and transmission line.</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 for those construction areas that are located within 2,500 feet of noise-sensitive receptors. 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 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</p>	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>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>	
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
Transportation and Traffic			
Implementation of the projects would not significantly impact transportation and traffic.	Less than Significant	The proposed projects would not result in significant impacts to transportation and traffic. No mitigation is required. However, as a condition of project approval, the applicant will be required to conduct pre-construction and post-construction roadway condition surveys to document the roadway conditions before and after project construction. The applicant would be responsible to roadway repair as determined appropriate based on these surveys and in mutual agreement with the County.	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

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 EIR. A primary issue associated with these solar farm projects, and other solar facility projects that are proposed in the County, is the conversion of agricultural lands, including Williamson Act Contracted lands, to the solar farm use and the corresponding land use compatibility and fiscal/economic impacts to the County. Through the course of the environmental review process for these projects, other areas of concern and issues to be resolved include potential impacts related to aesthetics, biological resources, aircraft hazards, and water supply.~~

Detailed analyses of these topics are included within each corresponding section contained within this document.

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; therefore, the County would not be required to adopted a Statement of Overriding Considerations pursuant to Section 15093 for this project.

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); Alternative 4: Alternative Location – Private Land; Alternative 5: Alternative Location – Desert Land; and, Alternative 6: No Utility-Scale Solar Development – Distributed Commercial and Industrial Rooftop Solar Only. A detailed discussion of the alternatives considered is included in Section 8.0. Table 0-2 summarizes the impacts resulting from the proposed projects and the identified alternatives.

Alternative 1: No Project/No Development Alternative

The CEQA Guidelines require analysis of the No Project Alternative (Public Resources Code Section 15126). According to Section 15126.6(e), “the specific alternative of ‘no project’ shall also be evaluated along with its impacts. The ‘no project’ analysis shall discuss the existing conditions at the time the Notice of Preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.”

The No Project/No Development Alternative assumes that the FSF, RSF, ISF and LSF projects, as proposed, would not be implemented and the project sites would not be developed.

The No Project/No Development Alternative would not meet any of the objectives of the projects. Additionally, the No Project/No Development Alternative would not help California meet its statutory and regulatory goal of increasing renewable power generation, including GHG reduction goals of Assembly Bill (AB) 832 (California Global Warming Solutions Act of 2006).

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 Alternative Location – Private Land	Alternative 5 Alternative Location – Desert Land	Alternative 6 No Utility-Scale Solar Development – Distributed Commercial and Industrial Rooftop Solar Only
Aesthetics	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Projects: Less impact (avoid)	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact	CEQA Significance: Potentially significant Comparison to Projects: Greater impact	CEQA Significance: Potentially significant Comparison to Projects: Greater impact	CEQA Significance: Potentially Significant Comparison to Projects: Greater impact
Agriculture	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Projects: Less impact (avoid)	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Less impact	CEQA Significance: No impact Comparison to Projects: Less impact (avoid)	CEQA Significance: No impact Comparison to Projects: Less impact (avoid)	CEQA Significance: No impact Comparison to Projects: Less impact (avoid)
Air Quality	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Projects: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Greater impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Greater impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Greater impact
Biological Resources	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Projects: Less impact (avoid)	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Less impact	CEQA Significance: Potentially significant Comparison to Projects: Greater impact	CEQA Significance: Potentially significant Comparison to Projects: Greater impact	CEQA Significance: Potentially Significant Comparison to Projects: Greater 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 Alternative Location – Private Land	Alternative 5 Alternative Location – Desert Land	Alternative 6 No Utility-Scale Solar Development – Distributed Commercial and Industrial Rooftop Solar Only
Cultural Resources	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Projects: Less impact (avoid)	CEQA Significance: Mitigated to below a level of significance Comparison to Projects: Similar impact	CEQA Significance: Mitigated to below a level of significance Comparison to Projects: Similar impact	CEQA Significance: Potentially significant Comparison to Projects: Greater impact	CEQA Significance: Mitigated to below a level of significance Comparison to Projects: Greater impact	CEQA Significance: Potentially Significant Comparison to Projects: Greater impact
Geology and Soils	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Projects: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Greater impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact
Greenhouse Gas Emissions	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Projects: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: 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 Projects: 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 Projects: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: 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 Alternative Location – Private Land	Alternative 5 Alternative Location – Desert Land	Alternative 6 No Utility-Scale Solar Development – Distributed Commercial and Industrial Rooftop Solar Only
Hazards and Hazardous Materials	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Projects: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact
Hydrology/ Water Quality	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Projects: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Greater impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Greater impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Less impact
Land Use/Planning	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: Similar impact	CEQA Significance: Less than significant Comparison to Projects: Similar impact	CEQA Significance: Less than significant Comparison to Projects: Greater impact
Noise	Mitigated to below a level less than significant	CEQA Significance: No impact Comparison to Projects: Less impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Greater impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Similar impact	CEQA Significance: Mitigated to below a level less than significant Comparison to Projects: Greater 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 Alternative Location – Private Land	Alternative 5 Alternative Location – Desert Land	Alternative 6 No Utility-Scale Solar Development – Distributed Commercial and Industrial Rooftop Solar Only
Public Services	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: Similar Impact	CEQA Significance: Less than significant Comparison to Projects: Similar Impact	CEQA Significance: Less than significant Comparison to Projects: Similar impact
Transportation/ Traffic	Less than significant	CEQA Significance: No impact Comparison to Projects: Similar	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: Similar Impact	CEQA Significance: Less than significant Comparison to Projects: Greater Impact	CEQA Significance: Less than significant Comparison to Projects: Similar
Utilities	Less than Significant	CEQA Significance: No impact Comparison to Projects: Greater impact (water use)	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: Similar Impact	CEQA Significance: Less than significant Comparison to Projects: Similar Impact	CEQA Significance: Less than significant Comparison to Projects: Greater impact (water use)

Alternative 2: Reduced Acreage Alternative (Avoid Prime Farmland)

This alternative would avoid the Prime Farmlands, as mapped by the California Department of Conservation Important Farmlands Mapping, located within the project area, specifically associated with the FSF and ISF. The 2010 Important Farmland maps for Imperial County indicate that a majority of the four project sites are comprised of Farmland of Statewide Importance with small isolated areas designated as Prime Farmland and “other.” Under this alternative, approximately 160.4 acres of Prime Farmland would be avoided.

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. This alternative would not result in any greater environmental impacts when compared to the proposed projects.

Alternative 3: Reduced Acreage (Avoid Williamson Act Land)

This alternative would avoid Williamson Act Contract lands that are located within the project sites, specifically the FSF and ISF sites. This alternative would reduce the size of the projects by approximately ~~662684~~ acres (~~662.15683.9~~ acres) as compared to the proposed projects. There are three active Williamson Act Contracts within the FSF and ISF project sites. Agricultural Preserve 160 includes the two parcels associated with Contract 2003-02 (APNs 059-050-003 and 059-120-001); and one parcel associated with Contract 2004-01 (APN 059-050-002) within the ISF project site. One parcel associated with Contract 2003-001 (APN 059-050-001) is also part of Agricultural Preserve 160 and is located within the FSF project site.

The Reduced Acreage Alternative (Avoid Williamson Act Land) would meet most of the basic objectives of the proposed projects and should remain under consideration. However, this alternative would make it more difficult to achieve the overall objective of providing a total of 360 megawatts of renewable solar energy, as there would be less area available for the placement of PV or CPV structures.

Alternative 4: Alternative Location – Privately Owned, Non-Agricultural Land

The purpose of this alternative is to develop the proposed projects on privately owned, non-agricultural land. This alternative would avoid the temporary conversion of agricultural land to non-agricultural uses associated with the proposed projects. This alternative considers development of the proposed project within the Mesquite Lake Specific Plan Area (SPA) located in central Imperial County between SR 86 on the west and SR 111 plus ¼ mile on the east, and bordered by Harris Road on the south and Keystone Road on the north.

Compared to the proposed projects, implementation of Alternative 4: Alternative Location – Privately Owned, Non-Agricultural Land would avoid impacts on agriculture. Overall, this alternative would result in greater impacts related to aesthetics, air quality, biological resources, cultural resources, geology and soils, hydrology/water quality, and noise.

Alternative Location – Desert Land

The Alternative Location – Desert Land considers developing the proposed projects on desert land to avoid the conversion of agricultural land to non-agricultural uses. This alternative considers development of the proposed projects in the Yuha Desert, taking advantage of the existing Utility Corridor “N,” other nearby solar projects (i.e., Imperial Solar Energy Center West), and the existing Imperial Valley Substation. This alternative would minimize the construction of miles of additional transmission infrastructure because it would share transmission with adjacent projects to maximize this utility and minimize potential environmental impacts. This alternative would avoid the construction of the solar farms on agricultural lands, as well as miles of additional transmission infrastructure on agricultural lands in order to connect to the Imperial Valley Substation. This alternative would require a right-of-way (ROW)

grant with the BLM to construct, operate, maintain, and decommission the proposed projects on BLM lands. The California Desert Conservation Act (CDCA) Plan would also need to be amended to identify the projects as suitable for solar energy development.

Compared to the proposed projects, implementation of the Desert Land would avoid impacts on agriculture. Overall, this alternative would result in greater impacts related to aesthetics, air quality, biological resources, cultural resources, and transportation/traffic.

Alternative 6: No Utility-Scale Solar Development – Distributed Commercial and Industrial Rooftop Solar Only Alternative

This alternative would involve the development of a number of geographically distributed small to medium solar PV systems (100 kilowatts to 1 MW) within existing developed areas, typically on the rooftops of commercial and industrial facilities throughout Imperial County. Under this alternative, no new land would be developed or altered and agricultural land would not be temporarily converted to non-agricultural uses. This alternative would involve placement of PV structures, transmission lines, and development of additional supporting facilities, such as switching stations and substations at various locations throughout the County. This alternative assumes that rooftop development would occur primarily on commercial and industrial structures due to the greater availability of large, relatively flat roof areas necessary for efficient solar installations.

Implementation of the Distributed Commercial and Industrial Rooftop Solar Only Alternative would result in reduced impacts for the following environmental issue areas as compared to the proposed projects: agriculture and hydrology/water quality. Overall, this alternative would result in greater impacts related to aesthetics, air quality, biological resources, cultural resources, land use and planning, noise, and utilities.

Environmentally Superior Alternative

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 projects. 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 Alternative 3: Reduced Acreage Alternative (Avoid Williamson Act Land) because it would reduce impacts for the following environmental issue areas as compared to the proposed projects: agriculture, air quality, biological resources, greenhouse gas emissions (construction phase only), and hydrology/water quality.