IV.1 MITIGATION MONITORING AND REPORTING PROGRAM

Mount Signal and Calexico Solar Farm Projects, County of Imperial

The County of Imperial will adopt this Mitigation Monitoring and Reporting Program (MMRP) in accordance with Public Resources Code (PRC) Section 21081.6 and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines. The purpose of the MMRP is to ensure that the Mount Solar Signal and Calexico Solar Farm Projects, which is the subject of the Environmental Impact Report (EIR), comply with all applicable environmental mitigation requirements. The mitigation measures for the project will be adopted by the County of Imperial, in conjunction with the adoption of the EIR. The mitigation measures have been integrated into this MMRP. Within this document, the approved mitigation measures are organized and referenced by subject category and include: Aesthetics, Agricultural Resources, Air Quality, Biological Resources, Cultural Resources, Greenhouse Gas Emissions, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, and Noise and Vibration. The mitigation measures are provided in Table 1. The specific mitigation measures are identified, as well as the monitoring method, responsible monitoring party, monitoring phase, verification/approval party, date mitigation measure verified or implemented, location of documents (monitoring record), and completion requirement for each mitigation measure.

The mitigation measures applicable to the project include avoiding certain impacts altogether, minimizing impacts by limiting the degree or magnitude of the action and its implementation, and/or reducing or eliminating impacts over time by maintenance operations during the life of the action.

Public Resources Code Section 21081.6 requires the Lead Agency, for each project that is subject to CEQA, to monitor performance of the mitigation measures included in any environmental document to ensure that implementation does, in fact, take place. The County of Imperial is the designated CEQA lead agency for the Mitigation Monitoring and Reporting Program. The County of Imperial is responsible for review of all monitoring reports, enforcement actions, and document disposition as it relates to impacts within the County's jurisdiction. The County of Imperial will rely on information provided by the monitor as accurate and up to date and will field check mitigation measure status as required.

The Bureau of Land Management (BLM) is also identified within this MMRP for those portions of the project located within BLM lands (the off-site transmission line). As a Federal Lead Agency, the National Policy Act and BLM jurisdiction would ultimately supersede any specific monitoring provisions related to BLM lands. Mitigation measures have been identified in the EIR that include BLM lands, however, should the project ultimately involve construction of the off-site transmission line within BLM lands, the BLM would review an application for grant of right of way, and prepare the appropriate NEPA documentation and mitigation monitoring requirements associated with the transmission line within BLM lands.

A record of the MMRP will be maintained at County of Imperial, Department of Planning and Development Services, 801 Main Street, El Centro, CA 92243. All mitigation measures contained in the EIR shall be made conditions of the project as may be further described below.

TABLE IV-1. MOUNT SIGNAL AND CALEXICO SOLAR FARM PROJECTS MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
Chapter 4.1 Aest CSF2(A)	4.1-4	Coordinate Final Design Plans for CSF2(A) with	Prior to the	Department of	Prior to the	Department			
		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 less than significant levels. 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	approval of Final Design Plans, Planning and Development Services and the Imperial County ALUC shall verify final design plans incorporate design recommendations prescribed by ALUC.	Planning and Development Services and ALUC	approval of the Final Design Plans	of Planning and Development Services			
Chapter 4.2 Agric	cultural F	desources							
MSSF1, CSF1(A), CSF1(B), CSF2(A), and CSF2(B)	4.2-1	Minimize Impacts to Important Farmlands. 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. Option 1: Provide Agricultural Conservation Easement(s). The applicant shall provide agricultural conservation easements on a "2 to 1" basis for Prime Farmland and "1 to 1" basis for Prime Farmland and "1 to 1" basis for Farmland of Statewide Importance 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. Option 2: Pay Agricultural In-Lieu Mitigation Fee. The applicant shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent of the fair market	Prior to the issuance of a grading permit, Planning and Development Services shall verify that the Applicant has procured a conservation easement, paid an agricultural inlieu mitigation fee, or submitted revised applicable CUP applications and associated site plans.	Department of Planning and Development Services	Prior to the issuance of a grading permit	Department of Planning and Development Services			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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.							
		Option 3: Prepare an Important Farmland Restoration Plan. The applicant shall submit to Imperial County a site-specific restoration plan capable of restoring onsite 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.							
MSSF1, CSF1(A), CSF1(B), CSF2(A), and CSF2(B)	4.2-2	Weed and Pest Control Plan. 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: 1) Monitoring, preventative, and management strategies for weed and pest control during construction activities at any portion of the project (e.g., transmission line) that are adjacent agricultural lands; 2) Control and management of weeds and pests in areas temporarily disturbed during construction where native seed will aid in site revegetation; and,	Prior to the issuance of a grading permit, Planning and Development Services shall review and approve the Weed and Pest Control Plan.	Department of Planning and Development Services	Prior to the issuance of a grading permit	Department of Planning and Development Services			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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:							
		Use of specific types of ground cover and maintenance (mowing, replacement, etc.) of such ground cover;							
		 b. Use of specific types of herbicides and pesticides on a scheduled basis; and 							
		 Maintenance and management of project site conditions to reduce the potential for a significant increase in pest-related nuisance conditions on adjacent agricultural lands. 							
Chapter 4.3 Air C	Quality								
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	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 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.	Prior to the issuance of a grading permit, Planning and Development Services shall verify that construction equipment are equipped with an engine designation of EPA Tier 2 or better.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	Prior to the issuance of a grading permit	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF- Private Land, and OTF-BLM Land	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. These mitigation measures listed below shall be implemented prior to and during construction. The Imperial County Air Pollution Control District will verify implementation and compliance with these measures. ICAPCD Standard Measures for Fugitive Dust (PM10) Control 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 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.	Prior to and during construction, the Imperial County Air Pollution Control District will verify that the project is in compliance with Regulation VIII-Fugitive Dust Control Measures.	Imperial County Air Pollution Control District/BLM for the portion of the transmission line within BLM Lands	Prior to and during construction	Imperial County Air Pollution Control District/BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	
Component		 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 	incurou	Tury	Tiluse	Turty	implemented	Record	requirement
		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. ICAPCD Standard Measures for Construction							
		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).							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		 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.							
		ICAPCD "Discretionary" Measures for Fugitive Dust (PM ₁₀) Control							
		 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. 							
		Standard Mitigation Measures for Construction Combustion Equipment							
		 Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel powered equipment. 							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		 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). 							
		To help provide a greater degree of reduction of PM emissions from construction combustion equipment the ICAPCD recommends the following enhanced measures.							
		Enhanced Mitigation Measures for Construction Equipment ¹							
		 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). 							
		Implementation of the above-listed fugitive dust control measures was assumed to control PM ₁₀ emissions by 85%.							
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land,	4.3-2c	Vehicular Emissions. 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 PM ₁₀ and NO _x emissions. The applicable fee in Policy Number 5 is derived from utilizing the last three year Carl Moyer grant program	Prior to construction activities, the Department of Planning and Development Services will	Department of Planning and Development Services/BLM for the portion of the	Prior to construction activities	Department of Planning and Development Services/ BLM for the portion of the			

¹ Enhanced Mitigation Measures for Construction Equipment are derived from the ICAPCD Air Quality Handbook and all of the measures are applicable to the projects.

Project Component and OTF-BLM Land	MM No.	Mitigation Measure 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.	Monitoring Method verify that the applicant has procured an in- lieu impact fee, as determined by ICAPCD (pursuant to	Responsible Monitoring Party transmission line within BLM Lands	Monitoring Phase	Verification/ Approval Party transmission line within BLM Lands	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
			ICAPCD policy Number 5).						
Chapter 4.4 Biolo	gical Re	sources							
OTF-BLM Land	4.4-1a	Ratios. 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 prior to issuance	Prior to the issuance of a grading permit, the Applicant shall provide required mitigation acreage for impacts to vegetation communities, as identified in the EIR table 4.4-7, presented as Appendix A.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	Prior to the issuance of a grading permit	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			
OTF-BLM Land	4.4-1b	FTHL Rangewide Management Strategy. 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.	Prior to the issuance of a grading permit, the Applicant shall provide required mitigation acreage for impacts FTHL habitat, as identified in the EIR table 4.4-8, presented as Appendix B.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	Prior to the issuance of a grading permit	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
OTF-BLM Land		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 that construction of the OTF within BLM Land may have on FTHL. The following shall be implemented, when conducting construction activities on the transmission line within BLM Land: 1. Prior to ground-disturbing activities, an individual shall be designated and approved by the USFWS and BLM as 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. 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. 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: • 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	During construction of the proposed project, the measures listed in Mitigation Measure 4.4-1c will be implemented.	Department of Planning and Development Services and BLM	During construction	Department of Planning and Development Services and BLM			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
·		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. 							
		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.							
		3. Approved Biological Monitor(s) shall assist the Designated Biologist in conducting preconstruction 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 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							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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:							
		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. 							
		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,							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		and maintenance personnel. The education program shall include the following aspects:							
		 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. 							
		5. FTHLs shall be removed from harm's way during all construction activities, per conservation measure #6 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).							
		 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: 							
		 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 							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		reporting requirements described in Conservation Measure #1 above, shall be submitted to the USFWS, BLM, and CDFG.							
		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.							
		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).							
		Temporarily disturbed areas associated with transmission line construction and staging areas shall be revegetated according to a Habitat Restoration Plan (HRP) approved by the BLM,							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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 five years (or less if the restoration meets all success criteria). Components of the HRP will include:							
		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.							
OTF-BLM Land	4.4-1d	O&M Mitigation Measures. To reduce the potential impacts to FTHL (and burrowing owl) during O&M, the following shall be implemented when conducting O&M activities along the transmission line within BLM Land: 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: • A general description of the status of the project site;	During operations and maintenance of the proposed project, the measures listed in Mitigation Measure 4.4-1d will be implemented.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	During operations and maintenance	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		 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. 							
		 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: 							
		 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 							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
MSSF1, CSF1(A), CSF1(B), CSF2(B), OTF-Private Land, and OTF- BLM Land	4.4-1e	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. 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). Burrowing Owl Mitigation. Burrowing owls have been observed in the active agricultural fields within the project study areas. The following measures will avoid, minimize, or mitigate potential impacts to burrowing owl during construction activities: 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.	Prior to construction, the Planning and Development Services and BLM shall verify that preconstruction surveys were conducted. If active burrows are present, the measures as provided in Mitigation Measures 4.4-1e and 4.4-1f shall be implemented.	Department of Planning and Development Services and Designated Biologist/BLM for the portion of the transmission line within BLM Lands	Prior to and during construction	Department of Planning and Development Services and CDFG/BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Location of Documents (Monitoring Record)	Completion Requirement
		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, so that owls can be properly relocated before nesting occurs.						
		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						

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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. The Mitigation and Monitoring Plan shall include success criteria, remedial measures, and an annual report to CDFG and shall be funded by the applicant to ensure long-term management and monitoring of the protected lands.							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	4.4-1f	Burrowing Owl Compensation. The project applicant shall compensate for impacts to burrowing owl habitat through the following measures: 1. CDFG's mitigation guidelines for burrowing owl (1995) require the acquisition and protection of replacement foraging habitat per pair or unpaired resident bird to offset the loss of foraging and burrow habitat on the project sites. 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, pursuant to a Mitigation and Monitoring Plan that is reviewed and approved by CDFG 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 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 CDFG determines provides equivalently effective mitigation. Such alternative mitigation may	Prior to and during construction. The Department of Planning and Development Services and BLM, shall verify the measures as provided in Mitigation Measures 4.4-1e and 4.4-1f are implemented if active burrows are present.	Department of Planning and Development Services and Designated Biologist/BLM for the portion of the transmission line within BLM Lands	Prior to and during construction	Department of Planning and Development Services and CDFG/BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		include off-site preservation of the required amount of foraging habitat through a CDFG-approved conservation easement, or an inlieu fee in an amount approved by CDFG that is sufficient to acquire such conservation easements, or some combination of the two.							
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	4.4-1g	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 4.4-1h.	During construction Mitigation Measure 4.4-1g shall be implemented.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	During construction and O&M	Department of Planning and Development Services/BL M for the portion of the transmission line within BLM Lands			
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF- Private Land, and OTF-BLM Land	4.4-1h	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:	During construction and O&M, the applicant shall implement Mitigation Measure 4.4-1h which would include adherence to the stipulations of the ABPP	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	During construction and operations and maintenance	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			
		 Minimizing disturbance to vegetation to the maximum extent practicable. 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 							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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 plantsO&M conservation measures to be incorporated into the ABPP include:							
		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.							
		 Implement post—construction avian monitoring that will incorporate of the Wildlife Mortality Reporting Program. 							
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land and OTF- BLM Land	4.4-1i	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 redtailed hawk, the following measures shall be implemented: 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, 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	Prior to construction, Department of Planning and Development Services shall verify that preconstruction clearance surveys were conducted. If active raptor nests are present, the measures as listed in Mitigation Measure 4.4-1i shall be implemented.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	Prior to construction	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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.							
OTF-BLM Land	4.4-3	Riparian Habitat. 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.	Prior to grading and during construction Mitigation Measure 4.4-3a shall be implemented	Department of Planning and Development Services, CDFG, and Designated Biologist/BLM for the portion of the transmission line within BLM Lands	Prior to grading and during construction	Department of Planning and Development Services and CDFG/BLM for the portion of the transmission line within BLM Lands			
OTF-BLM Land	4.4-6	 Weed Minimization. To minimize the introduction and spread of weed species, a Weed Management and Habitat Restoration Plan shall be developed and implemented. This management plan for temporary disturbance construction sites will have the following objectives: 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. 	Prior to and during construction and during operation, the Applicant shall develop and implement a Weed Management Plan.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	Prior to and during construction and during operation	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		Weed containment: preventing infestation expansion or spread as a result of this project.							
		The Weed Management and Habitat Restoration Plan shall 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 shall be undertaken to prevent the introduction and spread of new weed species as a result of the project.							
		General measures to prevent the spread of weeds include:							
		Limiting disturbance areas during construction to the minimal required to perform work and limiting ingress and egress to defined routes.							
		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 need weed invasions. 							
		Weed control methods that may be used include 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 shall be required to							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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.							
Chapter 4.5 Cult	ural Resc	urces							
OTF - BLM Land			Prior to the issuance of a grading permit, data recovery and construction monitoring programs are required for those sites considered eligible for listing on the NRHP. If the sites are determined to be eligible for listing on the NRHP, CRHR, and/or local register, best management practices shall be implemented to ensure avoidance of project impacts.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	Prior to issuance of a grading permit	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		cause a new significant environmental impact or increase the severity of a significant environmental impact. (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. 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.							
OTF - BLM Land	4.5-2b	Construction Measures to Avoid Archaeological Sites. 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.	Prior to the issuance of a grading permit, temporary fencing shall be required around the perimeters of cultural sites to avoid project impacts. Prior to grading, grading plans must be verified	BLM for the portion of the transmission line within BLM Lands	Prior to issuance of grading permit or grading activities within BLM lands	BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
			and approved by the Engineering Department.						
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF- Private Land and OTF- BLM Land	4.5-2c	Accidental Discovery of Unknown Archaeological Resources. 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 determined by a Registered Professional Archaeologist familiar with the resources of the region. Applicant shall notify the County within 24 hours. Applicant shall provide contingency funding sufficient to allow for implementation of avoidance measures or appropriate mitigation.	The Applicant shall notify the County within 24 hours if unknown historic or unique archaeological resources are encountered. The County shall verify that the Applicant has provided contingency funding sufficient to allow for implementation of avoidance measures or appropriate mitigation.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	During and post-construction	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF - Private Land, and OTF- BLM Land	4.5-2d	Discovery of Archaeological Materials. In the event of the discovery of historical and 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	The Applicant shall notify the County immediately if unknown historical and archaeological materials are encountered. The Applicant shall retain the services of a qualified professional archaeologist in the event of an	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	During construction	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		Planning and Development Services. The contractor shall not resume work until authorization is received from the County. 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.	unanticipated discovery.						
OTF - BLM Land	4.5-3a	Paleontological Resources Surveys. Prior to grading or any ground disturbance, a paleontological field survey shall be conducted for the OTF within BLM land. 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." 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. 1. Field surveys are performed prior to any surface disturbing activities. Before conducting field surveys, the project location shall be as final as possible and any staking of the location shall be complete. 2. Surveys are conducted by a BLM-permitted consulting paleontologist hired by the project proponent. (A) Surveys shall be performed by a consulting paleontologist holding a	Prior to the issuance of a grading permit, a paleontological field survey will be conducted and the results reviewed by the BLM.	BLM	Prior to the issuance of a grading permit	BLM			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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. (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							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		the findings and determine the need for monitoring prior to approval to proceed. 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 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 5 feet, or other unsafe areas. 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 5 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	Method	Party	Phase		Implemented	Record)	Requirement

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		wildlife timing restrictions, management restrictions, road restrictions or construction, and any other relevant information.							
		 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. 							
		(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 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. (C) Occurrences of plant or 							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	
		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. (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. 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, spotchecking, or testing shall be made in the report. This may include areas where no							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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. 5. Surveys must be performed only during times when the ground is visible. Biological timing restrictions, such as critical nesting or birthing times, may							
		confine or delay field activities. 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. 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							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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, 1:24,000 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 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, either as a point or an outline of the							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		locality as appropriate, and be clearly labeled with the locality or field number. 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. 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							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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 implemented as timely as possible so as not to delay project actions. 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. 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. 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.							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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.							
OTF - BLM Land	4.5-3b		Prior to the issuance of a grading permit, a monitoring plan shall be developed and approved by the BLM.	BLM	Prior to the issuance of a grading permit	BLM			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		operations; and (2) spot-checks, performed during or after disturbance, or at key times during the progress of the project. 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. 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.							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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 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.							
		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. 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. 1. Principal Investigator. The person listed as Permittee (Permit Item 1a) on the							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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. Resumes 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 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							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
	MM No.	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. 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. 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		3					
		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							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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. Work may not resume until approval is granted from both the PI or Agent and the Authorized Officer.							
OTF - BLM Land	4.5-3c	Surveys. 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.	The Authorized Officer to provide written verification that the final report has been accepted by the BLM.	BLM	Prior to issuance of a grading permit	BLM			
OTF - BLM Land	4.5-3d	Reporting. 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.	The Authorized Officer to provide written verification that the final report has been accepted by the BLM.	BLM	Prior to issuance of a grading permit	BLM			
		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.							

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
OTF - BLM Land	4.5-3e	Data Collection. 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	The consulting paleontologist to submit receipts to the BLM that fossil specimens and related data collected from public lands were placed in the approved	BLM	Prior to the issuance of a grading permit	BLM	принение	Record	Requirement
MSSF1, CSF1(A), CSF1(B), CSF2(A), OTF-Private Land, and OTF- BLM Land	4.5-4	Human Remains. 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 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.	period, discovery of human remains shall result work stoppage in that area until the coroner and the	BLM	Prior to the issuance of a grading permit	BLM			
Chapter 4.6 Geol	ogy and								
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	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: • Site preparation;	Prior to the issuance of a grading permit, the Department of Planning and Development Services shall verify a Geotechnical Report has been	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	Prior to issuance of a grading permit	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		 Soil bearing capacity; Appropriate sources and types of fill; Potential need for soil amendments; Road, pavement, and parking areas; Structural foundations, including retainingwall design; Grading practices; Soil corrosion of concrete and steel; Erosion/winterization; Seismic ground shaking; Liquefaction; and Expansive/unstable soils. 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. 	completed by the Applicant.						
CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	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.	During O&M, the Department of Planning and Development Services shall verify and approve a Geotechnical Report has been completed by the Applicant.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands		Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
MSSF1, CSF1(A), CSF1(B), CSF2(A) and CSF2(B)	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)	Prior to construction and again prior to operation, the Imperial County Public Works Department shall verify that on-site wastewater system and disposal requirements adequately meets County requirements.	Imperial County Public Works Department	Prior to construction and again prior to operation	Department of Planning and Development Service			
Chapter 4.7 Gree	nhouse (Anti-Degradation Policy.							
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	4.7-1a	Diesel Equipment (Compression Ignition) Offset Strategies 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).	Prior to the issuance of a grading permit, the Applicant shall identify measures to reduce greenhouse gas emissions as listed in Mitigation Measure 4.7-1a.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	Prior to issuance of a grading permit	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	4.7-1b	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	Prior to issuance of a grading permit, the Applicant shall identify measures to reduce greenhouse gas emissions as	Department of Planning and Development Services/BLM for the portion of the transmission		Department of Planning and Development Services/ BLM for the portion of the transmission		_	

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
CSF2(A) and OTF-Private Land	4.10-2	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. 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.	Prior to the approval of final design plans, the Applicant shall incorporate site-specific design recommendations and submit to the Airport Land Use Commission and the Department of Planning and Development Services for consistency determination.	Airport Land Use Commission and Department of Planning and Development Services	Prior to the approval of final design plans	Airport Land Use Commission and Department of Planning and Development Services			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
Chapter 4.9 Hydi	ology an	<u> </u>	<u>.</u>		<u> </u>		•		•
MSSF, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	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: 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; Temporary and post-construction on- and off-site runoff controls; 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;	Prior to construction and site restoration, the Applicant shall acquire appropriate Clean Water Act regulatory permits; prepare SWPPP with incorporated control measures outlined in Mitigation Measure 4.9-1a; and implement BMPs. Department of Planning and Development Services to confirm.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	site	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		 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. 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 areas 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. 							
MSSF, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	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	Prior to issuance of a grading permit, the Applicant shall provide Colorado River Basin Regional Water Quality Control Board with the	Colorado River Basin RWQCB and Department of Planning and Development Services/BLM for the portion	Prior to construction	Colorado River Basin RWQCB and Department of Planning and Development Services/ BLM for the			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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.	location, type of discharge, and methods of treatment and monitoring for all groundwater dewatering discharges if the project requires construction dewatering.	of the transmission line within BLM Lands		portion of the transmission line within BLM Lands			
MSSF, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	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. 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.	Post construction, the Applicant shall implement a Drainage Plan in accordance with the County and Imperial Irrigation District guidelines as outlined in Mitigation Measure 4.9-2. Department of Planning and Development Services and Imperial Irrigation District to confirm.	Department of Planning and Development Services and Imperial Irrigation District/BLM for the portion of the transmission line within BLM Lands	Post construction	Department of Planning and Development Services and Imperial Irrigation District/BLM for the portion of the transmission line within BLM Lands			

	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
MSSF, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	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.	Prior to construction, the Applicant shall prepare site specific Drainage Plans for all project facilities and also incorporate measures to maintain off-site runoff during peak conditions to preconstruction discharge levels. Department of Planning and Development Services to confirm.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	Prior to construction	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			
Chapter 4.10 Lan	nd Use an	d Planning							
CSF2(A) and OTF-Private Land	4.10.2	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.	Prior to the approval of building permit approval, the Applicant shall demonstrate that site-specific recommendations have been incorporated into design plans. Department of Planning and Development Services to provide final approval.	Airport Land Use Commission and Department of Planning and Development Services	Prior to the approval of final design plans	Airport Land Use Commission and Department of Planning and Development Services			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
•	Chapter 4.11 Noise and Vibration								
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land		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.	During construction and decommissioning activities, the Applicant shall adhere to construction hours identified in Mitigation Measure 4.11-a.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	During construction and decommis- sioning activities	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land		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.	Prior to construction and decommissioning activities, the Applicant shall implement measures outlined in Mitigation Measure 4.11-1b to prevent noise from construction equipment and staging. Department of Planning and Development Services to provide inspection for final approval.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	Prior to construction and decommissioning activities	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	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	Prior to construction and decommissioning activities, the Applicant shall implements those measures outlined in Mitigation Measure 4.11-1c	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	Prior to construction and decommis- sioning activities	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
		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.	to sensitive receptors. Department of Planning and Development Services to provide inspection for final approval.						
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	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.	During construction and decommissioning activities, the Applicant shall verify no amplified noise sources are in use. Department of Planning and Development Services to provide inspection for final approval.	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	During construction and decommis- sioning activities	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			
MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF-Private Land, and OTF- BLM Land	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.	During construction the Applicant shall provide a mechanism for residents, businesses, and agencies to register complaints with the County if construction noise levels are overly intrusive or outside required hours. Department of Planning and	Department of Planning and Development Services/BLM for the portion of the transmission line within BLM Lands	During construction	Department of Planning and Development Services/ BLM for the portion of the transmission line within BLM Lands			

Project Component	MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
			Development Services to provide inspection for final approval.						
CSF1(A) and OTF-Private	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: 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. 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. 	Prior to grading, the Applicant shall implement operational noise minimization measures, as outlined in Mitigation Measure 4.11-3. Department of Planning and Development Services to provide inspection for final approval.	Department of Planning and Development Services	Prior to construction	Department of Planning and Development Services			

APPENDIX A

TABLE 4.4-7. VEGETATION COMMUNITY MITIGATION REQUIREMENTS FOR OTF-BLM LAND

Vegetation Communities/	OTF-BLM Land Impact	Mitigation	OTF-BLM Land Mitigation
Land Cover Types	(acres)	Ratio	Required (acres)
Access Roads	2.3	6:1	13.8
Monopole Footings	<0.1	6:1	<0.1
Lattice Tower Footings*	<0.1	6:1	0.3
CBS Subtotal	2.3		14.1
Access Roads	0.6	6:1	3.6
Lattice Tower Footings	<0.1	6:1	0.1
DW Subtotal	0.6		3.7
Active Agriculture (AG)	<0.1		
Permanent Total	2.9		17.8
Pull Site	0.8	6:1	4.8
Monopole Work Areas	1.7	6:1	10.2
Lattice Tower Work Areas*	4.0	6:1	24.0
Trench	<0.1	6:1	<0.1
CBS Subtotal	6.5		39.0
Lattice Tower Work Areas	0.8	6:1	4.8
DW Subtotal	0.8		4.8
Monopole Work Areas	(11.5)	N/A	
AG Subtotal	(11.5)	N/A	
Temporary Total	7.3		43.8
Total Mitigation			61.6

Source: RECON, October 2011. **Note**: *Includes A-frames.

^() Indicates temporary transmission impacts that overlap proposed solar field permanent impact areas for MSSF1, CSF1, CSF2, and ISEC South projects. These work areas are not included in the total due to their overlap with the solar fields.

APPENDIX B

TABLE 4.4-8. FLAT-TAILED HORN LIZARD HABITAT MITIGATION REQUIREMENTS FOR OTF-BLM LAND

	OTF-BLM Land Impact		OTF-BLM Land Mitigation
FTHL Habitat	(acres)	Mitigation Ratio	Required (acres)
Permanent Impacts			
Inside FTHL MA			
Access Roads	2.9	6:1	17.4
Monopole Footings	<0.1	6:1	<0.1
Lattice Tower Footings*	<0.1	6:1	0.4
Total Permanent	2.9		17.8
Temporary Impacts			
Inside FTHL MA			
Pull Site	0.8	6:1	
Monopole Work Areas	1.7	6:1	
Lattice Tower Work Areas*	4.8	6:1	
Outside FTHL MA	<0.1	6:1	
Total Temporary	7.3		43.8
Total Mitigation Required			61.6

Source: RECON, October 2011. **Note**: *Includes A-frames.

This page intentionally left blank.