VOLUME III OF III

Mitigation Monitoring and Reporting Program

Sienna Solar and Storage Project

SCH No. 2022080518

San Bernardino County, California

September 2025

Prepared for

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FINAL EIR SECTION 0.4 MITIGATION MONITORING AND REPORTING PROGRAM

CONTENTS

TABLES

ACRONYMS

AAM	American Association of Museums
ADL	aerially deposited lead
BESS	Battery Energy Storage Systems
BMP	best management practice
CRS	Cultural Resources Specialist
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Ranks
CTMP	California Traffic Management Plan
CRMMP	Cultural Resource Mitigation and Management Plan
EIR	Environmental Impact Report
ESA	Environmentally Sensitive Area
FAA	Federal Aviation Administration
JHA	Job Hazard Analyses
LED	light-emitting diode
LPS	low-pressure sodium
MMRP	Mitigation Monitoring and Reporting Program
O&M	operation and maintenance
OSHA	Occupational Safety and Health Administration
RWQCB	Regional Water Quality Control Board
SCE	Southern California Edison
TCR	Tribal Cultural Resource
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VFMP	Valley Fever Management Plan
WEAP	worker environmental awareness program
YSMN	Yuhaaviatam of San Manuel Nation Cultural Resources Department

1.0 Introduction

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the Sienna Solar and Storage Project (proposed Project). An MMRP is required for the proposed Project because the Environmental Impact Report (EIR) prepared for the Project has identified significant adverse impacts, and measures have been identified to mitigate those impacts. This MMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to "adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment."

2.0 Mitigation Monitoring and Reporting Program

As the lead agency, the County of San Bernardino will be responsible for monitoring compliance with all mitigation measures. Different County departments are responsible for various aspects of the Project. The MMRP identifies the department with the responsibility for ensuring that each individual mitigation measure is completed; however, it is expected that one or more departments will coordinate efforts to ensure such compliance.

The MMRP is presented in tabular form on the following pages. Table 1 shows the mitigation monitoring associated with the Sienna Project, and Table 2 shows the mitigation monitoring associated with the Calcite Substation. The components of the MMRP are described briefly below.

- **Potential Significant Impact**: The significance threshold is restated to describe the potentially significant impact.
- **Mitigation Measure**: The mitigation measures to be adopted (as identified in the EIR) are restated.
- **Timeframe of Mitigation**: Identifies at which stage of the project the mitigation measure shall be completed.
- **Monitoring, Enforcement, and Reporting Responsibility**: Identifies the department within the County with responsibility for mitigation monitoring.

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Table 1. Mitigation Monitoring and Reporting Program – Sienna Project			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
Aesthetics			
3.2-3 In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	**S-AES-1: Surface Treatment and Design of Project Structures and Buildings.** To the extent commercially and technically feasible, the Applicant shall treat the surfaces of all non-temporary large Project structures and buildings (such as the O&M building and dedicated buildings for BESS modules) visible to the public and all gen-tie structures such that: (a) their colors minimize visual intrusion and contrast by blending with (matching) the existing characteristic landscape colors; (b) their colors and finishes do not create excessive glare; and (c) their colors and finishes are consistent with County policies and ordinances. Gen-tie line conductors shall be non-specular and non- reflective, and the insulators shall be non-reflective and non-refractive. The Applicant shall implement the following requirements where commercially and technically feasible: • Carefully consider the selection of color(s) and finishes based on the characteristic landscape. • Color treatment shall be applied to all major Project structures and buildings; the gen-tie line towers and/or poles; and walls. • Minimize the number of structures and combine different activities in one structure, where possible. Use natural, self-weathering materials or chemical treatments such as dulling and galvanizing on surfaces to reduce color contrast. Reduce the line contrast created by straight edges.	During Final Design	San Bernardino County
3.2-4 Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	**S-AES-2: Minimize Night Lighting at Project Facilities.** The Applicant shall avoid night lighting where possible and minimize its use under all circumstances. To ensure this, the Applicant shall implement the following requirements for both construction and operation: • Illumination of the Project and its immediate vicinity shall be minimized • Lamps and reflectors are to be fully shielded with sufficient cutoff angles such that they are not visible from beyond the construction site or facility including any off-site security buffer areas • Lighting shall emphasize the use of low-pressure sodium (LPS) or amber light-emitting diode (LED) lighting • Lighting shall not cause excessive reflected glare and shall not illuminate the nighttime sky, except for required Federal Aviation Administration (FAA) aircraft safety lighting (which, if required, shall be an on-demand, audio-visual warning system that is triggered by radar technology) • Creation of sky glow caused by project lighting shall be avoided • All permanent light sources shall be below 3,500 Kelvin color temperature (warm white) and shall be full cutoff fixtures (directs light downward). • All security lighting is to be motion activated only through the use of passive infrared sensors and controlled as specific zones such that only targeted areas are illuminated	During construction activities	San Bernardino County
Air Quality			
3.4-3 Would the Project expose sensitive receptors to substantial pollutant concentrations?	**S-AQ-1: Valley Fever Management Plan.** Prior to ground disturbance activities, the Sienna Project Applicant shall prepare a Valley Fever Management Plan (VFMP), including a Valley Fever training program, to be implemented during construction to address potential risks from CI by minimizing the potential for unsafe dust exposure during construction. The VFMP will identify best management practices including: • Development of an educational Valley Fever Training Handout for distribution to onsite workers, which will include general information about the causes, symptoms, and treatment instructions regarding Valley Fever, including contact information of local health departments and clinics knowledgeable about Valley Fever. • Conducting Valley Fever training sessions to educate all construction workers regarding appropriate dust management and safety procedures, symptoms of Valley Fever, testing, and treatment options. This training must be completed by all workers and visitors	Prior to ground disturbance activities	San Bernardino County

Table 1. Mitigation Monitoring and Reporting Program – Sienna Project			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	(expected to be on-site for more than 2 days) prior to participating in or working in proximity to any ground disturbing activities. Signed documentation of successful completion of the training is to be kept on-site for the duration of construction. Evidence of training shall be provided to the San Bernardino County Land Use Services Department within 24 hours of the training session. • Developing a job-specific Job Hazard Analyses (JHA), in accordance with Cal/OSHA regulations, to analyze the risk of worker exposure to dust, and maintain and manage safety supplies identified by the JHA. • Provide and/or require, if determined to be needed based on the applicable JHA, OSHA-approved half-face respirators equipped with a minimum N-95 protection factor for use during worker collocation with surface disturbance activities, following completion of medical evaluations, fit-testing, and proper training on use of respirators.		
Biological Resources			
3.5-1 Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS*?*	**S-BIO-1: Pre-Construction Rare Plant Survey.** Prior to the start of construction, a Qualified Biologist shall conduct a pre-construction rare plant survey within the Project site, particularly focusing on areas with suitable habitat to support special-status plant species. The survey shall be floristic in nature (i.e., identifying all plant species to the taxonomic level necessary to determine rarity) and shall be inclusive of, at a minimum, areas proposed for disturbance. The results of the survey shall be documented in a letter report that will be submitted to San Bernardino County. If special-status plant species (i.e., endangered, threatened, or California Native Plant Society CRPR 1 and 2 species) are observed during the pre-construction rare plant survey within the development area of the Sienna Project, the Sienna Project shall be designed to reduce impacts to these species through the establishment of buffers, to the extent feasible. Buffer distances will be determined by the Qualified Biologist, typically 50 feet or greater from an identified special-status plant species, unless the Qualified Biologist determines a reduced buffer would suffice to avoid impacts to the species. If avoidance of special-status plant species is not feasible, a Special-Status Plant Relocation Plan shall be developed and implemented. The Special-Status Plant Relocation Plan shall address mitigation for special-status plants, including topsoil salvage to preserve seed bank and management of salvaged topsoil; seed collection, storage, possible nursery propagation, and planting; salvage and planting of bulbs as feasible; location of on-site receptor sites; land protection instruments for receptor areas, and; funding mechanisms. The Special-Status Plant Relocation Plan shall include methods, monitoring, reporting, success criteria, adaptive management, and contingencies for achieving success. All special-status plant species identified on site shall be mapped onto a site-specific aerial photograph and topographic map and included on the construction, grading, fuel modification, and landscape plans	Prior to the start of construction	San Bernardino County
	S-BIO-2: Biological Monitoring. Prior to the issuance of grading or building permits, the Project proponent shall retain a Qualified Biologist, with experience and expertise in desert species to oversee compliance with protection measures for all listed and other special-status species. The Qualified Biologist or other Qualified Biological Monitors shall be on the Project area during initial grading, ground disturbance and vegetation removal activities in natural scrub vegetation communities to monitor construction activity where that activity could directly or indirectly impact biological resources. The Qualified Biologist shall have the authority to halt all activities that are in violation of the special-status species protection measures. Work shall proceed only after potential hazards to special-status species are removed and the species is no longer at risk. The Qualified Biologist shall have in her/his possession a copy of all the compliance measures while work is being conducted on the Project area.	Prior to the issuance of grading or building permits	San Bernardino County
	S-BIO-3: Desert Tortoise. To avoid construction-level impacts to desert tortoise, not more than 45 days prior to ground-disturbing activities for the construction and/or decommissioning phase(s), qualified personnel shall perform a 100% coverage pre-construction presence/absence protocol survey for desert tortoise in accordance with the U.S. Fish and Wildlife Service survey methodology. If desert tortoise are not documented during appropriate conditions and seasonally time protocol desert tortoise surveys, no additional measures related to desert tortoise avoidance	Not more than 45 days prior to ground-disturbing activities	San Bernardino County

Table 1. Mitigation Monitoring and Reporting Program – Sienna Project			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	and minimization are recommended. If desert tortoise are documented inhabiting any portion of the Sienna Project area during presence/absence surveys, the following avoidance, minimization, and mitigation measures shall be implemented: • The Project proponent shall consult with the appropriate state and federal agencies regarding the potential for project activities to result in incidental take and shall comply with any incidental take permit(s) issued for the project • Develop a plan for desert tortoise translocation and monitoring prior to Project construction. The plan shall provide the framework for implementing the following measures and other conditions of approval per the incidental take permit: ○ If a permanent tortoise-proof exclusion fence is practicable or required by an obtained incidental take permit, a fence shall be installed around all construction areas prior to the initiation of ground disturbing activities, in coordination with a Qualified Biologist. The fence shall be constructed per U.S. Fish and Wildlife specifications (or as conditioned per the incidental take permit, if obtained) of 0.5-inch mesh hardware cloth and extend 18-24 inches above ground and 14 inches below ground. Where burial of the fence is not possible, the lower 12 inches shall be folded outward against the ground and fastened to the ground so as to prevent desert tortoise entry. The fence shall be supported sufficiently to maintain its integrity, be checked daily during construction and until the end of the subsequent desert tortoise active season, then at least monthly during operations, and maintained when necessary by the Project proponent to ensure its integrity. Provisions shall be made for closing off the fence at the point of vehicle entry. Raven perching deterrents should be installed as part of the fence construction. ○ After fence installation, an authorized biologist shall conduct a clearance survey in accordance with the U.S. Fish and Wildlife Service survey methodology for desert tortoise within the construction site. The authorized biologist shall have the appropriate education and experience to accomplish biological monitoring and mitigation tasks and is approved by the CDFW and the USFWS through an incidental take permit. Two surveys without finding any tortoises or new tortoise sign shall occur prior to declaring the site clear of tortoises. ○ All burrows that could provide shelter for a desert tortoise shall be hand-excavated prior to ground-disturbing activities. ○ An authorized biologist shall remain on-site until all vegetation is cleared and, at a minimum, conduct site and fence inspections daily throughout construction and the subsequent desert tortoise active season, in order to ensure Project compliance with mitigation measures. Should the biologist identify deteriorate fencing or fencing that needs to be improved in order to meet the intended purpose of the exclusionary fencing, SCE shall be responsible for fixing or maintaining the fence in accordance with the biologist's recommendations. ○ A biologist shall remain on-site throughout fencing and grading activities to monitor Project activities in the event a desert tortoise wanders onto the Project area. ○ The Project applicant shall provide compensatory mitigation in the form of a conservation easement (on-site or off-site) or purchase of credits from an approved desert tortoise mitigation bank to compensate for the loss of occupied desert tortoise habitat at a minimum ratio of 1:1, with habitat of equal or greater value. The amount of credits purchased and the location of the mitigation bank used are subject to approval by USFWS and CDFW. Prior to disturbance of occupied desert habitat (if determined to be present), a compensatory mitigation plan, which would include identification of the compensatory mitigation area and any necessary easements shall be prepared and approved by USFWS and CDFW.		
	S-BIO-4: Construction Worker Environmental Awareness Training and Education Program. Prior to any activity on site and for the duration of construction activities, all personnel at the Project area (including laydown areas and/or transmission routes) shall attend a Worker Environmental Awareness Program (WEAP) developed and presented by the Qualified Biologist. New personnel shall receive WEAP training on the first day of work and prior to commencing work on the site. Any employee responsible for the operation and maintenance (O&M) or decommissioning of the Project facilities shall also attend WEAP training.	Prior to any activity on site and for the duration of construction activities	San Bernardino County

Table 1. Mitigation Monitoring and Reporting Program – Sienna Project			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	1. The program shall include information on the life history of the desert tortoise, burrowing owl, golden eagle, and other raptors, nesting birds, desert kit fox, as well as other wildlife and plant species that may be encountered during construction activities. 2. The program shall also discuss the legal protection status of each species, the definition of "take" under the Federal Endangered Species Act and California Endangered Species Act, measures the Project proponent is implementing to protect the species, reporting requirements, specific measures that each worker shall employ to avoid take of wildlife species, and penalties for violation of the Federal Endangered Species Act or California Endangered Species Act. 3. The program shall provide information on how and where to bring injured animals for treatment in the case any animals are injured on the Project area. 4. An acknowledgement form signed by each worker indicating that WEAP training has been completed shall be kept on record. 5. A sticker shall be placed on hard hats indicating that the worker has completed the WEAP training. Construction workers shall not be permitted to operate equipment within the construction areas unless they have attended the WEAP training and are wearing hard hats with the required sticker. 6. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms shall be submitted to the San Bernardino County Land Use Services Department, Planning Division.		
	S-BIO-5: Desert Kit Fox. To avoid construction-level impacts to desert kit fox, not more than 30 days prior to Project disturbance activities, qualified personnel shall perform a pre-construction clearance survey for desert kit fox in accordance with CDFW guidelines. Surveys shall also consider the potential presence of active dens within 100 feet of the boundaries of the on-site disturbance footprint, access roads, and selected alignment for the gen-tie line. If dens are detected, each shall be classified as either inactive, potentially active, or definitely active. If potential desert kit fox dens are observed and avoidance is feasible, buffer distances shall be established by the Qualified Biologist prior to construction activities. Typical buffer distances for desert kit fox are: • Desert kit fox potential den: 50 feet • Desert kit fox active den: 100 feet • Desert kit fox natal den: 500 feet If avoidance of the potential desert kit fox dens is not feasible, the following measures are recommended to minimize potential adverse effects to the desert kit fox: • If a Qualified Biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel and collapse them to prevent desert kit foxes from re-using them during construction. • If the Qualified Biologist determines that potential dens may be active, an on-site passive relocation program shall be implemented, subject to coordination with CDFW. Based on coordination with CDFW, it is anticipated that this program shall only be implemented during the non-breeding season (September 1 through February 1) and consist of passive eviction of desert kit foxes from occupied burrows by installation of one-way doors at burrow entrances and monitoring of the burrow for seven days to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. Non-breeding season dates will be confirmed based on coordination with CDFW. After the Qualified Biologist determines that desert kit foxes have stopped using active dens within the Project boundary, the dens shall be hand- excavated with a shovel and collapsed to prevent re-use during construction. Only non-natal dens shall be passively excluded, disturbance to natal dens shall be avoided.	Not more than 30 days prior to Project disturbance activities	San Bernardino County
	S-BIO-6: Burrowing Owl. To avoid construction-level impacts to burrowing owl, not more than 30 days prior to Project disturbance activities, qualified personnel shall perform a pre-construction clearance survey for burrowing owl in accordance with CDFW guidelines. If the species is present on-site and/or	Not more than 30 days prior to Project disturbance activities	San Bernardino County

Table 1. Mitigation Monitoring and Reporting Program – Sienna Project			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	within 500 feet of the site, the biologist shall prepare and submit a passive relocation plan to the CDFW for review/approval and shall implement the approved plan to allow commencement of disturbance activities on-site. If burrowing owls are detected on-site, a no-work buffer shall be established, restricting all ground-disturbing activities, such as vegetation clearance or grading, from occurring within the buffer. Typical avoidance buffer distances for burrowing owl range from 100 meters (330 feet) to 250 meters (825 feet) depending on Project activity, line of sight and local topography, during the breeding season (February 1 to September 15). During the non-breeding (winter) season (September 15 to January 31), typical avoidance buffers range from 50 meters (165 feet) to 100 meters (330 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with CDFW. If burrowing owl burrow avoidance is infeasible during the non-breeding season or during the breeding season (February 1 through August 31), where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, a Qualified Biologist shall implement a passive relocation program. At a minimum, the program shall include the following performance standards: • Excavation shall require hand tools. Sections of flexible plastic pipe or burlap bag shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. One-way doors shall be installed at the entrance to the active burrow and other potentially active burrows within 160 feet of the active burrow and monitored for at least 48 hours after installation. If burrows will not be directly impacted by the Project, one-way doors shall be installed to prevent use and shall be removed after ground-disturbing activities have concluded in the area. Only burrows that will be directly impacted by the Project shall be excavated and filled. • Detailed methods and guidance for passive relocation of burrowing owls to off-site "replacement burrow site(s)" consisting of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated. • Monitoring and management of the replacement burrow site(s) and a reporting plan. The objective shall be to manage the replacement burrow sites for the benefit of burrowing owls (e.g., minimizing weed cover), with the specific goals of maintaining the functionality of the burrows for a minimum of 2 years.		
	S-BIO-7: Measures for Nesting Birds and Raptors. If construction is scheduled to commence during the non-breeding season (September 1 to January 31), no pre-construction surveys or additional measures with regard to nesting birds and other raptors are required. To avoid impacts to nesting birds in the Project area, a qualified wildlife biologist shall conduct pre-construction surveys of all potential nesting habitats within the Project area for project activities that are initiated during the breeding season (February 1 to August 31). The raptor survey shall focus on potential nest sites (e.g., cliffs, large trees, windrows, Joshua trees, and shrubs) within a 0.5-mile buffer around the Project area. These surveys shall be conducted no fewer than 14 days prior to ground-disturbing activities without prior agency approval. Surveys need not be conducted for the entire Project area at one time. They may be conducted in phases so that surveys occur shortly before a portion of the site is disturbed. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer, as determined by the Qualified Biologist (e.g., 200-300 feet for common raptors, 30-50 feet for passerines, 0.5 mile for golden eagle), should be established around active nests, and no construction within the buffer shall be allowed until a Qualified Biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest). Encroachment into the buffer may occur at the discretion of a Qualified Biologist. However, for State-listed species, consultation with the CDFW shall occur prior to encroachment into the aforementioned buffers.	No fewer than 14 days prior to ground-disturbing activities	San Bernardino County
3.5-3 Would the Project have a substantial adverse effect on state or federally-protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, hydrological interruption, or other means?	**S-BIO-8: Avoidance and Minimization.** Jurisdictional features (ephemeral drainages) identified in the delineation shall be avoided where possible. If all waters of the U.S and waters of the State can be avoided, no further mitigation is recommended. Any activities that would result in impacts to waters of the U.S. and/or waters of the State will be required to receive issuance of regulatory permits from USACE, CDFW and/or RWQCB. If regulatory permits are required, the Project applicant shall submit a copy of issued regulatory permits to the San Bernardino County Land Use	Prior to construction activities; during construction	San Bernardino County

Table 1. Mitigation Monitoring and Reporting Program – Sienna Project			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	Services Department, Planning Division, prior to issuance of a grading permit. If the Project will directly impact waters of U.S. for waters of the State, the following measures shall be implemented to reduce impacts to less than significant. • Any material/spoils generated from Project activities shall be located away from jurisdictional areas or special-status habitat and protected from storm water run-off using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate. • Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and generally at least 50 feet from the top of bank. • Any spillage of material will be stopped if it can be done safely. The contaminated area will be cleaned, and any contaminated materials properly disposed. For all spills, the Project foreman or designated environmental representative will be notified. • Compensatory mitigation to offset permanent impacts to waters of the State. Mitigation shall occur at a minimum ratio of 1:1 through the establishment of a conservation easement, restoration of existing habitat and/or payment of in-leu fees. A Compensatory Mitigation and Restoration Plan is recommended for inclusion with agency permit applications that are proposing on-site restoration and shall include the following components: o A description of the purpose and goals of the mitigation Project including the improvement of specific physical, chemical, and/or biological functions at the mitigation site. o A description of the plant community type(s) and amount(s) that will be provided by the mitigation and how the mitigation method will achieve the mitigation Project goals. o A description of the mitigation site, including a site plan of the location and rationale for site selection. o A plant palette and methods of salvaging, propagating, and planting the site to be restored. o Methods of soil preparation. o Best Management Practices (BMPs) that will be utilized to avoid erosion and excessive runoff before plant establishment. o Maintenance and monitoring necessary to ensure that the restored plant communities meet the success criteria. o Schedule for restoration activities including weed abatement, propagating and planting, soil preparation, irrigation, erosion control, qualitative and quantitative monitoring, and reporting to the County. Identification of measurable performance standards for each objective to evaluate the success of the compensatory mitigation. o Identification of contingency and adaptive management measures to address unforeseen changes in site conditions or other components of the mitigation Project. Or, If off-site mitigation is proposed, the following measure would apply: • Identification of an appropriate mitigation bank and the purchase of credits commensurate with the type of impacts associated with the Project, which would be subject to approval by USFWS and/or CDFW depending on the jurisdictional impact (e.g., waters of the U.S. or waters of the state).		
Cultural Resources			
3.6-2 Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	**S-CR-1: Archaeological Resources.** The Project Applicant shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology (NPS 1983), to perform mitigation measures related to archaeological and historic resources listed below. 1. If feasible, archaeological sites Sienna S-8 and Sienna-S-28 identified within the Project area plus a 200-foot buffer shall be avoided. The 200-foot buffer shall be delineated using a high visibility barrier (i.e., Environmentally Sensitive Area [ESA] fencing). The buffer may be reduced in consultation with qualified archaeologist based on the Phase II Study.	Prior to the initiation of ground-disturbing activities	San Bernardino County

Table 1. Mitigation Monitoring and Reporting Program – Sienna Project			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	2. In the event where avoidance of archaeological sites Sienna S-8 and Sienna S-28 is infeasible, the Project Applicant shall implement the following: a. Prior to the initiation of ground-disturbing activities, a Phase II Study shall be conducted to determine whether a subsurface deposit with significant data potential exists at each of these sites and to establish the subsurface boundaries of the resource. The Phase II study shall be conducted by a qualified archaeologist. The qualified archaeologist shall prepare a subsurface testing plan based on accepted archaeological practices. The Phase II testing plan shall include, but not be limited to, a research design, testing methods, laboratory methods, and a list of any applicable special studies to be completed. The Phase II plan shall also include testing locations proposed within the site. The Phase II study shall comprise subsurface testing designed to establish the presence or absence and extent of intact archaeological deposits and to assess whether the site(s) retains enough data potential to be considered significant under CEQA. The Phase II testing shall be observed by a Native American monitor. b. If a Phase II investigation at sites Sienna S-8 and/or Sienna S-28 finds the resource(s) as eligible for listing in the NRHP and CRHR and avoidance is not feasible, a Phase III data recovery program (Phase III) shall be undertaken to mitigate any significant impacts. Mitigation consists of obtaining sufficient cultural materials such that no further material recovery would result in additional knowledge regarding the site. A Phase III investigation shall begin with the development of a data recovery plan prepared by a qualified archaeologist and reviewed and approved by San Bernardino County prior to execution. The data recovery plan shall include, but not be limited to, an expanded research design, testing methods, proposed testing locations, laboratory methods and analyses, and special studies. The Phase III plan shall include extensive subsurface testing and a full analysis of artifacts identified during each phase of subsurface investigation with the goal of exhausting the data potential of the site(s). These studies shall include but not be limited to faunal analysis of any animal bones, radiocarbon dating where appropriate, and/or protein residue analysis of stone tools and groundstone. The results of the Phase III study shall be presented in a technical report documenting the prehistoric and ethnographic background of the area, the field and laboratory methods used, results, and final deposition of the artifact collection. The data collected during the study may also be prepared for publication in a scientific journal as part of the data recovery mitigation.		
	S-CR-2: Preparation of a Cultural Resources Mitigation and Monitoring Program. Prior to the start of any ground-disturbing activity for Project construction, including but not limited to site clearing, grubbing, trenching, and excavation, the Sienna Project applicant shall perform pre-construction pedestrian surveys along the final gen-tie alignment. Any cultural resources identified shall be avoided if feasible. A qualified archaeologist who meets or exceeds the Secretary of Interior's Professional Qualifications Standards for archaeology shall be retained to prepare a Cultural Resources Mitigation and Monitoring Program (CRMMP) for unanticipated discoveries during Project construction or to address any resources discovered during pre-construction surveys that cannot be avoided. The CRMMP shall be prepared in consultation with Native American tribes who have participated in consultation for the Project. The CRMMP shall include provisions for archaeological and Native American monitoring of all construction related ground disturbance within Project areas of moderate to high archaeological sensitivity. The CRMMP shall include a treatment plan for any resources discovered during pre-construction surveys that cannot be avoided, consisting of documentation, evaluation and if warranted, data recovery. The CRMMP shall also include the Project construction schedule, procedures to be followed in the event of discovery of archaeological resources, and protocols for Native American coordination and input, including review of documents. The CRMMP shall outline the role and responsibilities of both the archaeological and Native American monitor(s). It shall include communication protocols and opportunity and timelines for review of cultural resources documents related to discoveries that are Native American in origin. The CRMMP shall include provisions for Native American monitoring during testing or data recovery efforts for unknown resources that are Native American in origin. A copy of the executed CRMMP shall be provided to the County of San Bernardino Planning Division.	Prior to the initiation of ground-disturbing activities	San Bernardino County
	S-CR-3: Archaeological Sensitivity Training. Prior to the initiation of ground-disturbing activities, the Sienna Project Applicant and construction manager shall conduct a Worker Education Awareness Program (WEAP) to alert field personnel to the possibility of buried prehistoric or historic cultural deposits. Development of the WEAP shall include consultation with a Qualified Archaeologist meeting the Secretary of the Interior standards. The WEAP shall provide an overview of potential significant archaeological resources that could be encountered during ground disturbing activities, including how to identify prehistoric or historic cultural deposits, to facilitate worker recognition, avoidance, and subsequent	Prior to the initiation of ground-disturbing activities	San Bernardino County

Table 1. Mitigation Monitoring and Reporting Program – Sienna Project			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	immediate notification to the Qualified Archaeologist. Documentation shall be provided to the County of San Bernadino Planning Division and retained demonstrating that all construction personnel attended the training prior to ground disturbing activities. In the event that cultural resources are discovered during Sienna Project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease, and a Qualified Archaeologist shall be hired to assess the find. The Qualified Archaeologist shall have the authority to stop or divert construction excavation as necessary. Work on the other portions of the Sienna Project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within Mitigation Measure TCR-1, regarding any pre-contact and/or post-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.		
	S-CR-4: Archaeological and Native American Monitoring. Archaeological and Native American monitoring of Project-related initial ground disturbing activities including grading, scraping and other clearing shall occur in areas of moderate to high archaeological sensitivity (as established and defined in the CRMMP). Within areas of moderate to high archaeological sensitivity, archaeological monitoring shall be performed under the direction of the qualified archaeologist. The qualified archaeologist, in consultation with the County of San Bernardino and the Native American monitor, shall have the power to reduce or suspend monitoring depending upon observed conditions. If archaeological resources are encountered during ground-disturbing activities, work within the immediate area must halt and the find evaluated for significance under CEQA. If significant pre-contact and/or post-contact cultural resources, as defined by CEQA, are discovered and avoidance cannot be ensured, the qualified archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to the Director of the Planning Division for review and comment, as detailed within Mitigation Measure TCR-1. The archaeologist shall monitor the remainder of the Sienna Project and implement the plan accordingly.	During ground-disturbing activities	San Bernardino County
Geology and Soils			
3.7-3 Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	**S-GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Sienna Project and Implement Required Measures.** Facility design for all Sienna Project components shall comply with the site-specific design recommendations as provided by a licensed geotechnical or civil engineer to be retained by the Sienna Project applicant. The final geotechnical and/or civil engineering report shall address and make recommendations on the following: • Site preparation • Soil bearing capacity • Appropriate sources and types of fill • Potential need for soil amendments • Structural foundations • Grading practices • Soil corrosion of concrete and steel • Erosion/winterization • Seismic ground shaking • Liquefaction • Expansive/unstable soils The 2022 Geotechnical Engineering Report recommended grading on site where significant fissuring exists, to provide a relatively level surface for the PV arrays, substation area, roadways, and other development features. The project would excavate fissured areas down to the bottom of the fissures (approximately up to 4 feet in some areas) and recompact the soils to remove any open fissures. The project	Prior to Construction	San Bernardino County

Table 1. Mitigation Monitoring and Reporting Program – Sienna Project			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	would remove unsuitable soils associated with the open fissures (vegetation, loose alluvial materials, and in some cases household trash) to permit installation of the solar piles and access roadways. 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 Sienna Project applicant. The final geotechnical and/or civil engineering report shall be submitted to San Bernardino County Land Use Services Department for review and approval prior to issuance of building permits.		
3.7-4 Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Mitigation Measure **S-GEO-1**	Prior to Construction	San Bernardino County
3.7-5 Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	Mitigation Measure **S-GEO-1**	Prior to Construction	San Bernardino County
3.7-6 Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**S-GEO-2: Paleontological Worker Environmental Awareness Program (WEAP).** Prior to the start of construction, workers shall participate in a WEAP led by a qualified paleontologist who meets the minimum qualifications per standards set forth by the Society of Vertebrate Paleontology (2010). Construction personnel shall be alerted to the potential for paleontological resources to be present on site and educated on the appearance of fossils and the procedures for notifying paleontological staff if fossils are discovered by construction staff. This information shall be conveyed to all new staff during WEAP presentation. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms shall be submitted to the San Bernardino County Land Use Services Department.	Prior to Construction	San Bernardino County
	S-GEO-3: Paleontological Monitoring. Initially, full-time monitoring shall be conducted during ground construction activities (i.e., grading, trenching, foundation work, and other excavations) where ground disturbance exceeds 10 feet in depth within intact Holocene and Pleistocene deposits (i.e., Qa, Qs, Qc, Qog). Monitoring shall be conducted by a qualified paleontological monitor or cross-trained monitor, who is defined as an individual who meets the minimum qualifications per standards set forth by the Society of Vertebrate Paleontology (2010), which includes a B.S. or B.A. degree in geology or paleontology with one year of monitoring experience and knowledge of collection and salvage of paleontological resources, or requisite field experience and training and a B.S. or B.A. degree in a similar scientific field. The duration and timing of the monitoring shall be determined by the Qualified Paleontologist and the location and extent of proposed ground disturbance. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted based on the specific geologic conditions, the Qualified Paleontologist may recommend that monitoring be reduced to periodic spot-checking or ceased entirely. If paleontological resources are discovered, the qualified paleontologist shall establish an avoidance buffer, develop a paleontological recovery plan in consultation with the County, and implement the specifics of the recovery plan.	During ground construction activities	San Bernardino County
Noise and Vibration			
3.12-1 Would the Project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	**S-NOI-1: Employ Noise-Reducing Measures During Construction.** The construction contractor shall employ measures to minimize and reduce construction noise. Noise reduction measures that will be implemented include, but are not limited to, the following: • Electrically powered equipment instead of internal combustion equipment shall be used where feasible.	During Construction	San Bernardino County

Table 1. Mitigation Monitoring and Reporting Program – Sienna Project			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	• Limit use of intensive excavating and earthmoving machinery to daytime hours. • To the extent feasible, schedule construction activity during daytime working hours. • Temporary noise barriers and/or blankets with a minimum height of eight feet shall be deployed when construction activities are within 100 feet of a sensitive receiver during nighttime or cumulative construction activities. The temporary noise barriers and/or blankets shall be constructed of material with a minimum weight of two pounds per square foot with no gaps or perforations and extend 25 feet from equipment activity area to ensure line of sight is blocked at sensitive receiver locations. Temporary noise barriers and/or blankets may be constructed of, but not limited to, 5/8-inch plywood, 5/8-inch oriented strand board, and hay bales.		
Transportation			
3.13-1 Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	**S-TRA-1: Construction Traffic Management Plan.** Prior to the start of construction, the Project Applicant shall submit a Construction Traffic Management Plan (CTMP) for review and approval to the San Bernardino County Department of Public Works Traffic Division. The CTMP shall address all roads that will be directly affected by the construction activities or would require permits and approvals. The CTMP shall include consideration of the specific contents defined below: • At least 15 days prior to the start of ground disturbance, the Project Applicant shall notify all property owners within 1 mile of the Sienna Project site, by mail or by other effective means, of the commencement of construction of the Sienna Project. Provide written notification to all property owners at properties affected by access restrictions to inform them about the timing and duration of obstructions and to arrange for alternative access, if necessary. Additional notices shall be provided if conditions or schedules change, at least one week prior to any change or road closures. • Restrict non-worker construction trips, to the maximum extent feasible, to outside the hours of 7:00-9:00 a.m. and 4:00-6:00 p.m. to increase safety and traffic flow through Apple Valley and Lucerne Valley during peak construction commuter hours. • Use flaggers, warning signs, lights, barricades, delineators, cones, arrow boards, etc., at key locations according to standard guidelines outlined in the Manual on Uniform Traffic Control Devices (FHWA 2021), the Standard Specifications for Public Works Construction (SFPUC 2021), and/or the California Manual on Uniform Traffic Control (Caltrans 2021) to ensure safe site ingress/egress and use of public roadways. • Implement a public outreach campaign (signage, direct mail, website, recorded telephone update line, newspaper notices, etc.) to notify the public of construction traffic routes and construction duration. • Install signage along the east and west shoulders of SR-247 at Sunset Road, Sunrise Road, and Rabbit Springs Road in the vicinity of Lucerne Valley Elementary School and Lucerne Valley Middle/High School notifying drivers of the school entrance and school traffic. Develop other provisions to ensure safe crossings of SR-247 by students at Lucerne Valley Elementary School and Lucerne Valley Middle/High School during peak Project commute hours and months. • Submit to Caltrans, the CHP, and San Bernardino County Department of Public Works Traffic Division a description of required oversize vehicles anticipated, permits from Caltrans, and means to follow all safety requirements such as flaggers, flashing lights, and/or the use of continuous traffic breaks operated by the CHP on state highways (if necessary). • Develop plans to coordinate in advance with emergency service providers to avoid restricting the movements of emergency vehicles. Notify the San Bernardino Sheriff's Department and San Bernardino County Fire Department in advance of the proposed locations, nature, timing, and duration of any roadway disruptions, areas of likely congestion, and access restrictions that could impact their effectiveness. At locations where roads will be blocked or constrained, provisions shall be ready at all times to accommodate emergency vehicles, such as immediately stopping work for emergency vehicle passage, providing short detours, and developing alternate routes in conjunction with the public agencies. • Develop and implement a method for maintaining close coordination with San Bernardino County and other federal and local agencies responsible for approving major projects that may include significant traffic volumes on shared segments of regional and local roadways where the majority of Project-related trips would occur. This coordination would allow Lead Agencies to consider	Prior to the start of construction	San Bernardino County

Table 1. Mitigation Monitoring and Reporting Program – Sienna Project			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	staggering project construction timeframes to minimize the potential for multiple simultaneous construction projects affecting shared portions of the circulation system.		
3.13-3 Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Mitigation Measure **S-TRA-1**	Prior to the start of construction	San Bernardino County
3.13-4 Would the Project result in inadequate emergency access?	Mitigation Measure **S-TRA-1**	Prior to the start of construction	San Bernardino County
Tribal Cultural Resources			
3.14-1 Would the Project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	**S-TCR-1: Tribal Cultural Resources.** The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed in Mitigation Measure S-CR-3, if any pre-contact and/or post-contact cultural resources is discovered during Project implementation and be provided information regarding the nature of the find so as to provide Tribal input with regards to significance and treatment. Should the discovery be deemed significant, as defined by the California Environmental Quality Act, a Cultural Resources Monitoring and Treatment Plan shall be created by a Qualified Archaeologist, in coordination with YSMN and the County Planning Department, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to represent YSMN for the remainder of the Sienna Project, should SMBMI elect to place a monitor on-site. If a pre-contact cultural resource is discovered during implementation of the Sienna Project, the following actions are required: a. Ground-disturbing activities shall be suspended 60 feet around the resource(s), and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed; b. The Qualified Archaeologist shall develop a research design that shall include a plan to evaluate the resource for significance under CEQA criteria. Representatives from the YSMN, the Applicant, and the County shall confer regarding the research design, as well as any testing efforts needed to delineate the resource boundary. Following the completion of evaluation efforts, all parties shall confer regarding the resource's archaeological significance, its potential as a Tribal Cultural Resource (TCR), and avoidance (or other appropriate treatment) of the discovered resource. Should any significant resource and/or TCR not be a candidate for avoidance or preservation in place, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall include a comprehensive discussion of sampling strategies, resource processing, analysis, and reporting protocols/obligations. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the Tribe unless otherwise decided by YSMN. All plans for analysis shall be reviewed and approved by the Applicant and YSMN prior to implementation, and all removed material shall be temporarily curated on-site. YSMN has indicated it is the preference of YSMN that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during Project implementation not be feasible, then a reburial location for future reburial shall be decided upon by YSMN and the landowner, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground disturbing activities associated with the Project have been completed, all monitoring has ceased, all cataloging and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to the County, CHRIS, and YSMN. All reburials are subject to a reburial agreement that shall be developed between the landowner and YSMN outlining the determined reburial process/location and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.). Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with YSMN to identify an American Association of Museums (AAM)- accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriately qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This	During Project implementation	San Bernardino County

Table 1. Mitigation Monitoring and Reporting Program – Sienna Project			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the Applicant's obligation to pay for those fees. All draft records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the County and YSMN for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Information Center, the County, and YSMN. Inadvertent Discovery Guideline 1. In the event that cultural resources are discovered during Sienna Project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease, and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the Sienna Project outside of the buffered area may continue during this assessment period. Additionally, the YSMN shall be contacted regarding any pre-contact and/or post-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. 2. If significant pre-contact and/or post-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered, and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment. The archaeologist shall monitor the remainder of the Project and implement the plan accordingly. 3. If human remains or funerary objects are encountered during any activities associated with the Project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease, and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the Sienna Project.		
	S-TCR-2: Archaeological/Cultural Documentation. Any and all archaeological/cultural documents created as a part of the Sienna Project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the Applicant and County for dissemination to the YSMN. The County and/or Applicant shall, in good faith, consult with YSMN throughout the life of the Sienna Project.	During construction activities	San Bernardino County
3.14-2 Would the Project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	Mitigation Measures **S-TCR-1** and **S-TCR-2**	During implementation and construction activities	San Bernardino County

Notes:
AAM=American Association of Museums; BESS=Battery Energy Storage Systems; BMP=best management practices; CDFW=California Department of Fish and Wildlife; CEQA=California Environmental Quality Act; CRHR=California Register of Historical Resources; CRPR=California Rare Plant Ranks; CTMP=California Traffic Management Plan; CRMMP=Cultural Resource Mitigation and Management Plan; ESA=Environmentally Sensitive Area; FAA=Federal Aviation Administration; JHA=Job Hazard Analyses; LED=light-emitting diode; LPS=low-pressure sodium; O&M=operation and maintenance; OSHA=Occupational Safety and Health Administration; RWQCB=Regional Water Quality Control Board; TCR=Tribal Cultural Resource; USACE=United States Army Corps of Engineers; USFWS=United States Fish and Wildlife Service; VFMP=Valley Fever Management Plan; WEAP=worker environmental awareness program; YSMN= Yuhaaviatam of San Manuel Nation Cultural Resources Department

Table 2. Mitigation Monitoring and Reporting Program – Calcite Substation			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
Aesthetics			
3.2-3 In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	**CS-AES-1: Surface Treatment and Design of Project Structures and Buildings.** To the extent commercially and technically feasible in accordance with SCE standards, SCE shall treat the surfaces of all non-temporary large Project structures and buildings visible to the public such that: (a) their colors minimize visual intrusion and contrast by blending with (matching) the existing characteristic landscape colors; and (b) their colors and finishes do not create excessive glare. SCE shall implement the following requirements where commercially and technically feasible: • Carefully consider the selection of color(s) and finishes based on the characteristic landscape and would consult with the County of San Bernardino regarding color choice. • Color treatment shall be applied to all major Project structures and buildings; and walls or fencing (excludes chain-link fence). • Minimize the number of structures and combine different activities in one structure, where practicable in accordance with SCE standards. Use natural, self-weathering materials or chemical treatments such as dulling and galvanizing on surfaces to reduce color contrast. Reduce the line contrast created by straight edges.	During Final Design	San Bernardino County
3.2-4 Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	**S-AES-2: Minimize Night Lighting at Project Facilities.** The Applicant shall avoid night lighting where possible and minimize its use under all circumstances. To ensure this, the Applicant shall implement the following requirements for both construction and operation: • Illumination of the Project and its immediate vicinity shall be minimized • Lamps and reflectors are to be fully shielded with sufficient cutoff angles such that they are not visible from beyond the construction site or facility including any off-site security buffer areas • Lighting shall emphasize the use of low-pressure sodium (LPS) or amber light-emitting diode (LED) lighting • Lighting shall not cause excessive reflected glare and shall not illuminate the nighttime sky, except for required Federal Aviation Administration (FAA) aircraft safety lighting (which, if required, shall be an on-demand, audio-visual warning system that is triggered by radar technology) • Creation of sky glow caused by project lighting shall be avoided • All permanent light sources shall be below 3,500 Kelvin color temperature (warm white) and shall be full cutoff fixtures (directs light downward). • All security lighting is to be motion activated only through the use of passive infrared sensors and controlled as specific zones such that only targeted areas are illuminated.	During construction activities	San Bernardino County
Air Quality			
3.4-3 Would the Project expose sensitive receptors to substantial pollutant concentrations?	**CS-AQ-1: Valley Fever Management Plan.** Prior to ground disturbance activities, SCE shall prepare a Valley Fever Management Plan (VFMP), including a Valley Fever training program, to be implemented during construction to address potential risks from CI by minimizing the potential for unsafe dust exposure during construction. The VFMP will identify best management practices including:	Prior to ground disturbance activities	San Bernardino County

Table 2. Mitigation Monitoring and Reporting Program – Calcite Substation			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	• Development of an educational Valley Fever Training Handout for distribution to onsite workers, which will include general information about the causes, symptoms, and treatment instructions regarding Valley Fever, including contact information of local health departments and clinics knowledgeable about Valley Fever. • Conducting Valley Fever training sessions to educate all construction workers regarding appropriate dust management and safety procedures, symptoms of Valley Fever, testing, and treatment options. This training must be completed by all workers and visitors (expected to be on-site for more than 2 days) prior to participating in or working in proximity to any ground disturbing activities. Signed documentation of successful completion of the training is to be kept on-site for the duration of construction. • Developing a job-specific Job Hazard Analyses (JHA), in accordance with Cal/OSHA regulations, to analyze the risk of worker exposure to dust, and maintain and manage safety supplies identified by the JHA. • Provide and/or require, if determined to be needed based on the applicable JHA, OSHA-approved half-face respirators equipped with a minimum N-95 protection factor for use during worker collocation with surface disturbance activities, following completion of medical evaluations, fit-testing, and proper training on use of respirators.		
Biological Resources			
3.5-1 Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	**CS-BIO-1: Pre-Construction Rare Plant Survey.** Prior to the start of construction, a Qualified Biologist shall conduct a pre-construction rare plant survey within the Calcite Substation site, particularly focusing on areas with suitable habitat to support special-status plant species. The survey shall be floristic in nature (i.e., identifying all plant species to the taxonomic level necessary to determine rarity) and shall be inclusive of, at a minimum, areas proposed for disturbance. The results of the survey shall be documented in a letter report that will be submitted to SCE. If special-status plant species (i.e., endangered, threatened, or California Native Plant Society CRPR 1 and 2 species) are observed during the pre-construction rare plant survey within the development area of the Calcite Substation, the project shall be designed to reduce impacts to these species through the establishment of buffers, to the extent feasible. Buffer distances shall be determined by the Qualified Biologist, typically 50 feet or greater from an identified special-status plant species, unless the Qualified Biologist determines a reduced buffer would suffice to avoid impacts to the species. If avoidance of special-status plant species is not feasible, a Special-Status Plant Relocation Plan shall be developed and implemented. The Special-Status Plant Relocation Plan shall address mitigation for special-status plants, including topsoil salvage to preserve seed bank and management of salvaged topsoil; seed collection, storage, possible nursery propagation, and planting; salvage and planting of bulbs as feasible; location of on-site receptor sites; land protection instruments for receptor areas, and; funding mechanisms. The Special-Status Plant Relocation Plan shall include methods, monitoring, reporting, success criteria, adaptive management, and contingencies for achieving success. All special-status plant species identified on site shall be mapped onto a site-specific aerial photograph and topographic map and included on the construction, grading, fuel modification, and landscape plans.	Prior to the start of construction	San Bernardino County
	CS-BIO-2 Biological Monitoring. Prior to the issuance of grading or building permits, SCE shall retain a Qualified Biologist, with experience and expertise in desert species, to oversee compliance with protection measures for all listed and other special-status species. The Qualified Biologist or other Qualified Biological Monitors shall be on the Project area during initial grading, ground disturbance and vegetation removal activities in natural scrub vegetation communities to monitor construction activity where that activity could directly or indirectly impact special status biological resources. The Qualified Biologist shall have the authority to halt all activities that are in violation of the special-status species protection measures. Work shall proceed only after potential hazards to special-status species are removed and the species is no longer at risk. The Qualified Biologist shall have in her/his possession a copy of all the compliance measures while work is being conducted on the Project area.	Prior to grading	San Bernardino County

Table 2. Mitigation Monitoring and Reporting Program – Calcite Substation			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	CS-BIO-3 Desert Tortoise. To avoid construction-level impacts to desert tortoise, not more than 45 days prior to ground-disturbing activities for the construction phases~~,~~ qualified personnel shall perform a 100% coverage pre-construction presence/absence protocol survey for desert tortoise in accordance with the U.S. Fish and Wildlife Service survey methodology. If desert tortoise are not documented during appropriate conditions and seasonally time<u>d</u> protocol desert tortoise surveys, no additional measures related to desert tortoise avoidance are recommended. If desert tortoise are documented inhabiting any portion of the Calcite Substation area during presence/absence surveys, the following avoidance, minimization, and mitigation measures shall be implemented: • The Project proponent shall consult with the appropriate state and federal agencies regarding the potential for project activities to result in incidental take and shall comply with any incidental take permit(s) issued for the project • Develop a plan for desert tortoise translocation and monitoring prior to construction. The plan shall provide the framework for implementing the following measures and other conditions of approval per the incidental take permit: ○ If a permanent tortoise-proof exclusion fence is practicable or required by an obtained incidental take permit, a fence shall be installed around all construction areas prior to the initiation of ground disturbing activities, in coordination with a Qualified Biologist. The fence shall be constructed per U.S. Fish and Wildlife specifications (or as conditioned per the incidental take permit, if obtained) of 0.5-inch mesh hardware cloth and extend 18-24 inches above ground and 6-12 inches below ground. Where burial of the fence is not possible, the lower 14 inches shall be folded outward against the ground and fastened to the ground so as to prevent desert tortoise entry. The fence shall be supported sufficiently to maintain its integrity, be checked daily during construction and until the end of the subsequent desert tortoise active season, then at least monthly during operations, and maintained when necessary by the Project proponent to ensure its integrity. Provisions shall be made for closing off the fence at the point of vehicle entry. ○ After fence installation, an authorized biologist shall conduct a clearance survey in accordance with the U.S. Fish and Wildlife Service survey methodology for desert tortoise within the construction site. The authorized biologist shall have the appropriate education and experience to accomplish biological monitoring and mitigation tasks and is approved by the CDFW and the USFWS through an incidental take permit. Two surveys without finding any tortoises or new tortoise sign shall occur prior to declaring the site clear of tortoises. ○ All burrows that could provide shelter for a desert tortoise shall be hand-excavated prior to ground-disturbing activities. ○ An authorized biologist shall remain on-site until all vegetation is cleared and, at a minimum, conduct site and fence inspections daily throughout construction and the subsequent desert tortoise active season, in order to ensure Project compliance with mitigation measures. Should the biologist identify deteriorate fencing or fencing that needs to be improved in order to meet the intended purpose of the exclusionary fencing, SCE shall be responsible for fixing or maintaining the fence in accordance with the biologist's recommendations. ○ A biologist shall remain on-site throughout fencing and grading activities in the event a desert tortoise wanders onto the Project area. ○ Compensatory mitigation in the form of a conservation easement or purchase of mitigation bank credits to compensate for the loss of occupied desert tortoise habitat at a minimum ratio of 1:1, with habitat of equal or greater value. If the compensation habitat is higher quality than the impacted habitat, then SCE shall mitigate at a 0.5:1 ratio.	Not more than 45 days prior to ground-disturbing activities	San Bernardino County
	REC-1 **Raven Management** The Project Proponent shall prepare a Raven Management Plan to minimize the potential to attract common ravens to the site and submit it to CDFW for review and approval. In addition, the Project Proponent shall provide funds to the Renewable Energy Action Team (REAT) account established with the National Fish and Wildlife Foundation (NFWF) to contribute to a region-wide raven control plan to help address raven predation on a regional basis and shall be calculated as a one-time payment of $105 per acre (most up to date cost) of project disturbance. Based on this calculation the Project Proponent shall provide a one-time payment to the REAT account established with NFWF's Raven Management Plan fund. A minimum of 30 days prior to the start of Project activities these funds shall be provided to NFWF using appropriate deposit document provided by CDFW and proof of paying this fee shall be provided to CDFW within 24 hours after the funds have been provided NFWF.		

Table 2. Mitigation Monitoring and Reporting Program – Calcite Substation			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	CS-BIO-4: Construction Worker Environmental Awareness Training and Education Program. Prior to any activity on site and for the duration of construction activities, all personnel at the Project area (including laydown areas and/or transmission routes) shall attend a Worker Environmental Awareness Program (WEAP) developed and presented by the Qualified Biologist. New personnel shall receive WEAP training on the first day of work and prior to commencing work on the site. 1. The program shall include information on the life history of the desert tortoise, burrowing owl, golden eagle, and other raptors, nesting birds, desert kit fox, as well as other wildlife and plant species that may be encountered during construction activities. 2. The program shall also discuss the legal protection status of each species, the definition of "take" under the Federal Endangered Species Act and California Endangered Species Act, measures the Project proponent is implementing to protect the species, reporting requirements, specific measures that each worker shall employ to avoid take of wildlife species, and penalties for violation of the Federal Endangered Species Act or California Endangered Species Act. 3. The program shall provide information on how and where to bring injured animals for treatment in the case any animals are injured on the Project area. 4. An acknowledgement form signed by each worker indicating that WEAP training has been completed shall be kept on record. 5. A sticker shall be placed on hard hats indicating that the worker has completed the WEAP training. Construction workers shall not be permitted to operate equipment within the construction areas unless they have attended the WEAP training and are wearing hard hats with the required sticker. 6. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms shall be submitted to SCE.	Prior to any activity on site and for the duration of construction activities	San Bernardino County
	CS-BIO-5: Burrowing Owl. To avoid construction-level impacts to burrowing owl, not more than 30 days prior to Project disturbance activities, qualified personnel shall perform a pre-construction clearance survey for burrowing owl in accordance with CDFW guidelines. If the species is present on-site and/or within 500 feet of the site, the biologist shall prepare and submit a passive relocation plan to the CDFW for review/approval and shall implement the approved plan to allow commencement of disturbance activities on-site. If burrowing owls are detected on-site, a no-work buffer shall be established, restricting all ground-disturbing activities, such as vegetation clearance or grading, from occurring within the buffer. Typical avoidance buffer distances for burrowing owl range from 100 meters (330 feet) to 250 meters (825 feet) depending on Project activity, line of sight and local topography, during the breeding season (February 1 to August 31). During the non-breeding (winter) season (September 1 to January 31), typical avoidance buffers range from 50 meters (165 feet) to 100 meters (330 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with CDFW. If burrowing owl burrow avoidance is infeasible during the non-breeding season or during the breeding season (February 1 through August 31), where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, a Qualified Biologist shall implement a passive relocation program. At a minimum, the program shall include the following performance standards: • Excavation shall require hand tools. Sections of flexible plastic pipe or burlap bag shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. One-way doors shall be installed at the entrance to the active burrow and other potentially active burrows within 160 feet of the active burrow and monitored for at least 48 hours after installation. If burrows will not be directly impacted by the Project, one-way doors shall be installed to prevent use and shall be removed after ground-disturbing activities have concluded in the area. Only burrows that will be directly impacted by the Project shall be excavated and filled. • Detailed methods and guidance for passive relocation of burrowing owls to off-site "replacement burrow site(s)" consisting of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated.	Not more than 30 days prior to Project disturbance activities	San Bernardino County

Table 2. Mitigation Monitoring and Reporting Program – Calcite Substation

Potential Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	• Monitoring and management of the replacement burrow site(s) and a reporting plan. The objective shall be to manage the replacement burrow sites for the benefit of burrowing owls (e.g., minimizing weed cover), with the specific goals of maintaining the functionality of the burrows for a minimum of 2 years.		
	CS-BIO-6: Measures for Nesting Birds and Raptors. If construction is scheduled to commence during the non-breeding season (September 1 to January 31), no pre-construction surveys or additional measures with regard to nesting birds and other raptors are required. To avoid impacts to nesting birds in the Project area, a qualified wildlife biologist shall conduct pre-construction surveys of all potential nesting habitats within the Project area for project activities that are initiated during the breeding season (February 1 to August 31). The raptor survey shall focus on potential nest sites (e.g., cliffs, large trees, windrows, and shrubs) within a 0.5-mile buffer around the Project area. These surveys shall be conducted no fewer than 14 days prior to ground-disturbing activities without prior agency approval. Surveys need not be conducted for the entire Project area at one time. They may be conducted in phases so that surveys occur shortly before a portion of the site is disturbed. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer as determined by the Qualified Biologist (e.g., 200-300 feet for common raptors, 30-50 feet for passerines, 0.5 mile for golden eagle) shall be established around active nests, and no construction within the buffer shall be allowed until a Qualified Biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest). Encroachment into the buffer may occur at the discretion of a Qualified Biologist. However, for State-listed species, consultation with the CDFW shall occur prior to encroachment into the aforementioned buffers.	Between February 1 to August 31 for construction activities scheduled during the breeding season	San Bernardino County
3.5-3 Would the Project have a substantial adverse effect on state or federally-protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, hydrological interruption, or other means**?**	**CS-BIO-7 Avoidance and Minimization.** Jurisdictional features identified in the delineation shall be avoided where possible. If all waters of the U.S and waters of the State can be avoided, no further mitigation is recommended. Any activities that would result in impacts to waters of the U.S. and/or waters of the State will be required to receive issuance of regulatory permits from USACE, CDFW and/or RWQCB. If the Project will directly impact waters of U.S. for waters of the State, the following measures shall be implemented to reduce impacts to less than significant. • Any material/spoils generated from Project activities shall be located away from jurisdictional areas or special-status habitat and protected from storm water run-off using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate. • Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and generally at least 50 feet from the top of bank. • Any spillage of material will be stopped if it can be done safely. The contaminated area will be cleaned, and any contaminated materials properly disposed. For all spills, the Project foreman or designated environmental representative will be notified. • Compensatory mitigation to offset permanent impacts to waters of the State. Mitigation shall occur at a minimum ratio of 1:1 through the establishment of a conservation easement, restoration of existing habitat and/or payment of in-leu fees. A Compensatory Mitigation and Restoration Plan is recommended for inclusion with agency permit applications that are proposing on-site restoration and shall include the following components: o A description of the purpose and goals of the mitigation Project including the improvement of specific physical, chemical, and/or biological functions at the mitigation site. o A description of the plant community type(s) and amount(s) that will be provided by the mitigation and how the mitigation method will achieve the mitigation Project goals. o A description of the mitigation site, including a site plan of the location and rationale for site selection. o A plant palette and methods of salvaging, propagating, and planting the site to be restored. o Methods of soil preparation. o Best Management Practices (BMPs) that will be utilized to avoid erosion and excessive runoff before plant establishment.	Prior to construction activities	San Bernardino County

Table 2. Mitigation Monitoring and Reporting Program – Calcite Substation			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	○ Maintenance and monitoring necessary to ensure that the restored plant communities meet the success criteria. ○ Schedule for restoration activities including weed abatement, propagating and planting, soil preparation, irrigation, erosion control, qualitative and quantitative monitoring, and reporting to the County. Identification of measurable performance standards for each objective to evaluate the success of the compensatory mitigation. ○ Identification of contingency and adaptive management measures to address unforeseen changes in site conditions or other components of the mitigation Project. Or, If off-site mitigation is proposed, the following measure would apply: ○ Identification of an appropriate mitigation bank and the purchase of credits commensurate with the type of impacts associated with the Project.		
Cultural Resources			
3.6-1 Would the Project cause a substantial adverse change in the significance of historical resources pursuant to §15064.5**?**	**CS-CR-1 Retain a Cultural Resources Specialist.** Prior to the start of construction, SCE shall propose a Cultural Resources Specialist (CRS) to manage and direct implementation of all cultural resources requirements during construction. The CRS shall have training and background that conforms to the U.S. Secretary of Interior's Professional Qualifications Standards, as published in Title 36, Code of Federal Regulations, part 61 (36 C.F.R., part 61). The CRS shall be retained by SCE to supervise monitoring of construction excavations and to prepare the project's Cultural Resources Management Plan (see Mitigation Measure CS-CR-2) for the approved project. The CRS shall be an archaeologist with demonstrated prior experience in the southern California desert and previous experience working with southern California Tribal Nations. A copy of the CRS' qualifications shall be provided to the County of San Bernardino Planning Division for review and approval at least 60 days before the start of construction.	Prior to the start of construction	San Bernardino County
	CS-CR-2 Prepare and Implement a Cultural Resources Management Plan. The developer of the Calcite Substation shall perform pre-construction pedestrian surveys along any finally selected alignment. Any cultural resources identified shall be avoided if feasible**.** Prior to start of construction, SCE shall develop a Cultural Resource Monitoring Plan (CRMP) that addresses the details of all activities and provides procedures that must be followed in order to reduce the impacts to cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried archaeological resources and Tribal cultural resources associated with the approved Project. Specifics requirements of the CRMP are: The CRMP shall be provided to SCE and the Yuhaaviatam of San Manuel Nation Cultural Resources Department representative for review and approval at least 60 days before the start of construction. The CRMP shall incorporate the results of preconstruction geoarchaeological testing including any project-related design or route changes that would successfully result in resource avoidance. Based on the geoarchaeological test results, the CRMP shall define the level of archaeological monitoring that is recommended. The CRMP shall include a treatment plan for any resources discovered during pre-construction surveys that cannot be avoided, consisting of documentation, evaluation and if warranted, data recovery. The CRMP shall specify the level of tribal participation in monitoring, the qualifications for archaeological monitors, the handling of discoveries, and the process for evaluating unanticipated resources (as defined in Mitigation Measure CS-CR-5) The CRMP shall include provisions for treatment of cultural resources that are Native American in nature consistent with CS-TCR-2 (Treatment of Cultural Resources; see Section 3.14, Tribal Cultural Resources of this EIR)	Prior to the start of construction	San Bernardino County
	CS-CR-3: Develop and Implement Cultural Resources Environmental Awareness Training. Prior to ground disturbance, Cultural Resources Management Training will be provided by the CRS (as defined in Mitigation Measure CS-CR-1) for all construction personnel. Training shall include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the protocols that apply in the event unanticipated cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. This is a mandatory training, and all construction personnel must attend prior to beginning work on the	Prior to ground disturbance	San Bernardino County

Table 2. Mitigation Monitoring and Reporting Program – Calcite Substation

Potential Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	project site. A copy of the agreement and a copy of the sign in sheet shall be kept ensuring compliance with this mitigation measure. Documentation shall be provided to the County of San Bernardino Planning Division and retained demonstrating that all construction personnel attended the training prior to ground disturbing activities.		
	CS-CR-4: Archaeological Monitoring. Due to the heightened cultural sensitivity of the proposed project area, one or more qualified archaeological monitors with at least 3 years of regional experience in archaeology, shall be present for all ground-disturbing activities at the start of construction and reduced if no resources are encountered within the approved Project area (including, but not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of archaeological monitors, under the direction of the CRS, shall be present each workday to ensure that simultaneously occurring ground disturbing activities receive appropriate levels of monitoring coverage, as defined in the CRMP (Mitigation Measure CS-CR-2) and in CS-TCR-1 (Tribal Monitoring) in Section 3.14, Tribal Cultural Resources of this EIR. The archaeological monitor(s) shall complete daily monitoring forms. The archaeological monitor(s), in coordination with the CRS, will have the authority to increase or decrease the monitoring effort should the monitoring results indicate that a change is warranted.	During ground-disturbance activities	San Bernardino County
	CS-CR-5: Unanticipated Discoveries. If construction personnel unearth Tribal cultural resources, or precontact or historic-period archaeological resources during Project implementation, all Project activities within 100 feet will halt until the CRS or an approved archaeological monitor determines the significance of the discovery. Precontact archaeological materials/Tribal cultural resources might include lithic scatters, ceramic scatters, quarries, habitation sites, temporary camps/rock rings, ceremonial sites, and trails. Historic period materials may include structural remnants (such as cement foundations), historic era objects (such as bottles and cans), and sites (such as refuse deposits or scatters). After stopping Project activities, the approved archaeologist will determine impacts, significance, and mitigation in consultation with local Native American representatives. If the resource is a Tribal Cultural Resource, substantial adverse changes to this resource shall be avoided or minimized following the measures identified in Public Resources Code section 21084.3, subdivision (b), if feasible, unless other equally or more effective measures are mutually agreed on by SCE, the archaeologist, and the interested local Native American representative(s). A treatment plan, if needed to address a find, shall be developed cooperatively by the archaeologist and, for Tribal cultural resources, the interested local Native American representative(s). The plan will be submitted to the appropriate tribal representatives and SCE staff for review, input, and concurrence prior to its implementation. Protection in place of Tribal cultural resources shall be prioritized, if feasible. If the archaeologist or Tribal representative determines that damaging effects on the cultural Tribal cultural resource can be avoided in place, then work in the area may resume provided the area of the find is clearly marked for no disturbance. If avoidance in place of tribal cultural resources is infeasible, the treatment plan shall include measures that place priority on Tribal self-determination over collection and curation, including the option to repatriate (rebury) materials nearby at a location of their choosing, and to transfer possession/ownership to the culturally affiliated Tribe.	During ground-disturbance activities	San Bernardino County
	CS-CR-6: Monitoring Report. Within 6 months of completing construction, a Cultural Resources Monitoring Report shall be submitted to the County of San Bernardino Planning Division. The report shall include evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting and evidence that any artifacts have been treated in accordance with procedures stipulated in the Cultural Resources Management Plan.	Within 6 months of completing construction	San Bernardino County
	CS-CR-7: Avoidance of Environmentally Sensitive Area. SCE shall protect site 3380-13, plus a 200-foot buffer where feasible, by installing exclusion fencing or other visible markings and labeling the site as an Environmentally Sensitive Area. WEAP training shall include instructions for avoiding the Environmentally Sensitive Area. Subsurface geo-archaeological testing shall be performed along the proposed underground route for the new distribution and telecommunications conduits.	During construction activities	San Bernardino County

Table 2. Mitigation Monitoring and Reporting Program – Calcite Substation			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	Mitigation Measures **CS-TCR-1** and **CS-TCR-2** (See Section 3.14, Tribal Cultural Resources, of the EIR)	During implementation and construction	San Bernardino County
3.6-2 Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Mitigation Measures **CS-CR-1, CS-CR-2, CS-CR-3, CS-CR-4, CS-CR-5, CS-CR-6, CS-TCR-1,** and **CS-TCR-2**	Prior to the start of construction; during construction and ground-disturbance activities; within 6 months of completing construction	San Bernardino County
Hazards and Hazardous Materials			
3.9-2 Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	**CS-HAZ-1: Aerially Deposited Lead Testing Program.** Prior to Project construction, an aerially deposited lead (ADL) soil testing program will be prepared and conducted to determine the presence and extent of ADL contaminated soils along and adjacent to Lucerne Valley Cutoff and SR 247 in areas where Project-related ground disturbance would occur. The ADL Testing Program shall be submitted to the Hazardous Materials Division of the San Bernardino County Fire Department 60 days prior to the start of construction for review, comment, and approval. If ADL contaminated soil is identified, SCE shall manage and dispose of contaminated soil in accordance with DTSC guidelines.	Prior to construction	San Bernardino County
	CS-HAZ-2: Soil and Groundwater Management Plan. SCE shall prepare or authorize the preparation of a Soil and Groundwater Management Plan that outlines how construction crews would identify, handle, and dispose of previously unidentified potentially contaminated soil and groundwater. The Soil and Groundwater Management Plan shall be submitted to Hazardous Materials Division of the San Bernardino County Fire Department 60 days prior to the start of construction for review, comment, and approval. Due to the potential for unknown contamination, the plan shall include the following requirements: • Identify the anticipated field screening methods and appropriate regulatory limits to be applied to determine proper handling and disposal of excavated soil spoils • Any suspect soil already excavated shall be segregated, and work will stop in the subject area until sampling and testing is done to determine appropriate treatment and disposal • Although dewatering during construction is unlikely, any water produced by dewatering shall be tested prior to disposal, which would be in accordance with all applicable regulations • Include requirements for documenting and reporting incidents of encountered contaminants, such as documenting locations of occurrence, sampling results, and reporting actions taken to dispose of contaminated materials. SCE shall immediately notify the Hazardous Materials Division of the San Bernardino County Fire Department in the event of encountering contaminated soil or groundwater. A weekly report listing encounters with contaminated soils and describing actions taken shall be submitted to the County Fire Department within 1 week following any week during which construction on the Calcite Substation Project has occurred.	Prior to construction	San Bernardino County
Hydrology and Water Quality			
3.10-3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would: *i. Result in substation erosion or siltation on- or off-site?*	**CS-HWQ-1: Drainage Plan Development.** At least 60 days before site mobilization, SCE shall submit a Drainage Plan for review and approval to the County of San Bernardino. The Drainage Plan shall address management of stormwater flow during Project construction and operation, and shall contain the following components: • An assessment of runoff discharges, floodplains, and flood depths entering and passing through the property under conditions both with and without the Project • Measures to avoid erosion damage that may result from concentration of flows, including consideration of providing dedicated entryways for incoming flood flows, collection and conveyance channels, and/or fence design that does not obstruct flows	At least 60 days before site mobilization	San Bernardino County

Table 2. Mitigation Monitoring and Reporting Program – Calcite Substation			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	• Consideration of potential flood, erosion, and siltation that could occur on or adjacent to the Project site, by identifying off-site flow concentration points, discharges, and flood depths and widths, and ensuring that flow patterns entering and exiting the site are not altered in a manner that would induce erosion and siltation • Demonstration that during and after Project construction, existing drainage patterns will not be disturbed, and runoff will not be increased to the extent that either adjacent properties or Project components would be adversely affected by erosion or flooding		
ii. Substantially increase the rate of amount of surface runoff in a manner which would result in flooding on- or off-site?	Mitigation Measure **CS-HWQ-1**	At least 60 days before site mobilization	San Bernardino County
iv. Impede or redirect flood flows?	Mitigation Measure **CS-HWQ-1**	At least 60 days before site mobilization	San Bernardino County
3.10-4 Would the Project be located in a flood hazard, tsunami, or seiche zone, risk release of pollutants due to Project inundation?	Mitigation Measure **CS-HWQ-1**	At least 60 days before site mobilization	San Bernardino County
Noise and Vibration			
3.12-1 Would the Project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	**CS-NOI-1: Construction Restrictions.** Heavy equipment operation relating to any Project features shall be restricted to the hours between 6:00 a.m. and 7:00 p.m. on Monday through Saturday, and not allowed on Sundays or federal holidays, unless a special approval has been granted by the County of San Bernardino.	During construction activities	San Bernardino County
	CS-NOI-2: Public Notification Process. At least 15 days prior to the start of ground disturbance, SCE owner shall notify all residents within 1 mile of the Calcite Substation site, by mail or by other effective means, of the commencement of construction of the Calcite Substation. Notification materials shall identify a mechanism for residents to register complaints with the appropriate jurisdiction if construction noise levels are overly intrusive or construction occurs outside the permitted hours. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) shall be included in the notification. At the same time, SCE shall establish a telephone number for use by the public to report any undesirable noise conditions associated with the construction of the proposed Calcite Substation. If the telephone is not staffed 24 hours a day, SCE shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the Calcite Substation site during construction where it is visible to passersby.	At least 15 days prior to the start of ground disturbance	San Bernardino County
	CS-NOI-3: Noise Complaint Process. Throughout construction of the Calcite Substation, SCE shall document, investigate, evaluate, and attempt to resolve all noise complaints relating to the construction of the Calcite Substation. SCE or authorized agent shall be responsible for responding to any complaints about construction activities. The disturbance coordinator shall receive all public complaints about construction disturbances and be responsible for determining the cause of the complaint and implementation of feasible measures to be taken to alleviate the problem.	During construction	San Bernardino County
	CS-NOI-4: Operational Noise Performance Standard. The design and implementation of the Calcite Substation shall include appropriate noise control features adequate to ensure that the operation of the Calcite Substation will not cause the noise levels due to operation alone to exceed 45 dBA Leq measured at a property boundary of any inhabited dwelling [County Development Code Chapter 83.01.080(c)]. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. To achieve this standard, the final design in site plans shall avoid placing stationary sources of noise within 1,000 feet of residential property boundaries. If the final design of includes any stationary source of	Prior to construction	San Bernardino County

Table 2. Mitigation Monitoring and Reporting Program – Calcite Substation			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	noise, within 1,000 feet of a residential property boundary, then a final noise study shall be submitted to the County of San Bernardino demonstrating that noise will not exceed 45 dBA Leq at nearby property boundaries of any inhabited dwelling.		
Transportation			
3.13-1 Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	**CS-TRA-1: Construction Traffic Management Plan.** Prior to the start of construction, SCE shall submit a Construction Traffic Management Plan (CTMP) for review and approval to the San Bernardino County Department of Public Works Traffic Division. The CTMP shall address all roads that will be directly affected by the construction activities or would require permits and approvals. The CTMP shall include consideration of the specific contents defined below: • Provide written notification to all property owners at properties affected by access restrictions to inform them about the timing and duration of obstructions and to arrange for alternative access, if necessary. Initial notification defining the start of construction and the anticipated length of construction shall be included in the public notices defined in Mitigation Measure CS-NOI-2 (Public Notification Process). Additional notices shall be provided if conditions or schedules change, at least one week prior to any change or road closures. • When practicable, stagger shifts for construction workers to spread associated traffic over longer times in the morning and evening to improve traffic flow and safety challenges resulting from all workers having the same starting and ending times. • Restrict non-worker construction trips, to the maximum extent feasible, to outside the hours of 7:00-9:00 a.m. and 4:00-6:00 p.m. to increase safety and traffic flow through Apple Valley and Lucerne Valley during peak construction commuter hours. • SCE shall prepare a construction traffic management plan for review and approval by the County of San Bernardino prior to the commencement of construction at the Calcite Substation. • Use flaggers, warning signs, lights, barricades, delineators, cones, arrow boards, etc., at key locations according to standard guidelines outlined in the Manual on Uniform Traffic Control Devices (FHWA 2021), the Standard Specifications for Public Works Construction (SFPUC 2021), and/or the California Manual on Uniform Traffic Control (Caltrans 2021), and SCE construction standards to ensure safe site ingress/egress and use of public roadways. • Implement a public outreach campaign (signage, direct mail, website, recorded telephone update line, newspaper notices, etc.) to notify the public of construction traffic routes and construction duration. • Install signage along the east and west shoulders of SR-247 at Sunset Road, Sunrise Road, and Rabbit Springs Road in the vicinity of Lucerne Valley Elementary School and Lucerne Valley Middle/High School notifying drivers of the school entrance and school traffic. Develop other provisions to ensure safe crossings of SR-247 by students at Lucerne Valley Elementary School and Lucerne Valley Middle/High School during peak Project commute hours and months. • Submit to Caltrans, the CHP, and San Bernardino County Department of Public Works Traffic Division, a description of required oversize vehicles anticipated, permits from Caltrans, and means to follow all safety requirements such as flaggers, flashing lights, and/or the use of continuous traffic breaks operated by the CHP on state highways (if necessary). • Develop plans to coordinate in advance with emergency service providers to avoid restricting the movements of emergency vehicles. Notify the San Bernardino Sheriff's Department and San Bernardino County Fire Department in advance of the proposed locations, nature, timing, and duration of any roadway disruptions, areas of likely congestion, and access restrictions that could impact their effectiveness. At locations where roads will be blocked or constrained, provisions shall be ready at all times to accommodate emergency vehicles, such as immediately stopping work for emergency vehicle passage, providing short detours, and developing alternate routes in conjunction with the public agencies. • Develop and implement a method for maintaining close coordination with San Bernardino County and other federal and local agencies responsible for approving major projects that may include significant traffic volumes on shared segments of regional and local roadways where the majority of Project-related trips would occur. This coordination would allow Lead Agencies to consider staggering project construction timeframes to minimize the potential for multiple simultaneous construction projects affecting shared portions of the circulation system.	Prior to the start of construction	San Bernardino County

Table 2. Mitigation Monitoring and Reporting Program – Calcite Substation			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
3.13-3 Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Mitigation Measure **CS-TRA-1**	Prior to the start of construction	San Bernardino County
3.13-4 Would the Project result in inadequate emergency access?	Mitigation Measure **CS-TRA-1**	Prior to the start of construction	San Bernardino County
Tribal Cultural Resources			
3.14-1 Would the Project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	**CS-TCR-1: Tribal Cultural Resources.** The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted if any pre-contact and/or post-contact cultural resources is discovered during Project implementation and be provided information regarding the nature of the find so as to provide Tribal input with regards to significance and treatment. Should the discovery be deemed significant, as defined by the California Environmental Quality Act, a Cultural Resources Management Plan (defined in Mitigation Measure CS-CR-2) shall be created by the Cultural Resources Specialist (CRS), in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to represent YSMN for the remainder of the project, should SMBMI elect to place a monitor on-site. If a pre-contact cultural resource is discovered during implementation of the Calcite Substation, the following actions are required: a) Ground-disturbing activities shall be suspended 60 feet around the resource(s), and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed; b) The CRS shall develop a research design that shall include a plan to evaluate the resource for significance under CEQA criteria. Representatives from the YSMN and SCE shall confer regarding the research design, as well as any testing efforts needed to delineate the resource boundary. Following the completion of evaluation efforts, all parties shall confer regarding the resource's archaeological significance, its potential as a Tribal Cultural Resource (TCR), and avoidance (or other appropriate treatment) of the discovered resource. Should any significant resource and/or TCR not be a candidate for avoidance or preservation in place, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall include a comprehensive discussion of sampling strategies, resource processing, analysis, and reporting protocols/obligations. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the Tribe unless otherwise decided by YSMN. All plans for analysis shall be reviewed and approved by SCE and YSMN prior to implementation, and all removed material shall be temporarily curated on-site. YSMN has indicated it is the preference of YSMN that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during Project implementation not be feasible, then a reburial location for future reburial shall be decided upon by YSMN and the landowner, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground disturbing activities associated with the Calcite Substation have been completed, all monitoring has ceased, all cataloging and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to the CHRIS and YSMN. All reburials are subject to a reburial agreement that shall be developed between the landowner and YSMN outlining the determined reburial process/location and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.). Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with YSMN to identify an American Association of Museums (AAM)- accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriately qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and SCE's obligation to pay for those fees. All draft records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to YSMN for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Information Center, SCE, and YSMN.	During Project implementation	San Bernardino County

Table 2. Mitigation Monitoring and Reporting Program – Calcite Substation			
Potential Significant Impact	**Mitigation Measure**	**Timeframe of Mitigation**	**Monitoring, Enforcement, and Reporting Responsibility**
	Inadvertent Discovery Guidelines 1. In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease, and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the YSMN shall be contacted regarding any pre-contact and/or post-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. 2. If significant pre-contact and/or post-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered, and avoidance cannot be ensured, the CRS shall develop a Cultural Resources Management Plan, the drafts of which shall be provided to YSMN for review and comment. The archaeologist shall monitor the remainder of the project and implement the plan accordingly. 3. If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease, and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the Calcite Substation.		
	CS-TCR-2: Archaeological/Cultural Documentation. Any and all archaeological/cultural documents created as a part of the Calcite Substation (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the County for dissemination to the YSMN. The County shall, in good faith, consult with YSMN throughout construction of the Calcite Substation as needed.	During construction activities	San Bernardino County
	Mitigation Measures **CS-CR-1, CS-CR-2, CS-CR-3, CS-CR-4, CS-CR-5, CS-CR-6,** and **CS-CR-7**		San Bernardino County
3.14-2 Would the Project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	Mitigation Measures **CS-TCR-1, CS-TCR-2, CS-CR-1, CS-CR-2, CS-CR-3, CS-CR-4, CS-CR-5, CS-CR-6,** and **CS-CR-7**	Prior to the start of construction and ground disturbance; during Project implementation; during construction activities; within 6 months of completing construction	San Bernardino County

Notes:
AAM=American Association of Museums; ADL=aerially deposited lead; BESS=Battery Energy Storage Systems; BMP=best management practices; CDFW=California Department of Fish and Wildlife; CEQA=California Environmental Quality Act; CRHR=California Register of Historical Resources; CRS=Cultural Resources Specialist; CRPR=California Rare Plant Ranks; CTMP=California Traffic Management Plan; CRMMP=Cultural Resource Mitigation and Management Plan; ESA=Environmentally Sensitive Area; FAA=Federal Aviation Administration; JHA=Job Hazard Analyses; LED=light-emitting diode; LPS=low-pressure sodium; O&M=operation and maintenance; OSHA=Occupational Safety and Health Administration; RWQCB=Regional Water Quality Control Board; SCE=Southern California Edison; TCR=Tribal Cultural Resource; USACE=United States Army Corps of Engineers; USFWS=United States Fish and Wildlife Service; VFMP=Valley Fever Management Plan; WEAP=worker environmental awareness program; YSMN= Yuhaaviatam of San Manuel Nation Cultural Resources Department