**CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS**
**(Public Resource Code §21081, CEQA Guidelines §15091 AND 15093)**
**Final Environmental Impact Report for the**
**Sienna Solar and Storage Project**
**(SCH No. 2022080518)**

# 1 Introduction

The following Findings are made for the Environmental Impact Report SCH #2022080518 (the "EIR") for the proposed Sienna Solar and Storage Project (herein referred to as "Sienna Project" or "solar and energy storage Project") and the Calcite Substation. The proposed Sienna Project and the proposed Calcite Substation together represent the proposed Project for environmental evaluation purposes under CEQA (CEQA Guidelines Section 15378). The Sienna Project is proposed by 99MT 8ME, LLC (Applicant) and the Calcite Substation Project is proposed by Southern California Edison (SCE). The Sienna Project will interconnect at the SCE Calcite Substation via a proposed overhead and/or underground 220-kV gen-tie line, in addition to other ancillary facilities utilizing private and potentially public Rights of Way (ROWs).

99MT 8ME, LLC (Applicant) is requesting approval of a Conditional Use Permit (CUP) to develop the Sienna Project, a utility scale, solar photovoltaic (PV) electricity generation facility that would produce up to 525 megawatts (MW) of solar power and include up to 525 MW of energy storage capacity in a battery energy storage system (BESS) within an approximately 1,854-acre Project site.

Energy generated by the proposed Project will be transmitted to SCE's electric grid via an inter-connection with the proposed Calcite Substation. SCE proposes to construct and operate the Calcite Substation on approximately 7 acres, with an additional 4 acres for drainage, grading and access road, located on a portion of a 75-acre parcel of land on the west and east sides of State Route (SR) 247, directly north of Haynes Road, in San Bernardino County. SCE proposes to construct additional infrastructure (transmission lines and telecom facilities) and access roads associated with the Calcite Substation and necessary to operate the Calcite Substation on additional parcels (APNs 045-305-104, 045-305-105, 045-305-107, and 045-305-110) located to the south of the 75-acre parcel. The Calcite Substation is a necessary infrastructure improvement to allow the proposed Sienna Solar and Energy Storage Project to connect to the grid.

## 1.1 Purpose of CEQA Findings; Terminology

CEQA Findings play an important role in the consideration of projects for which an EIR is prepared. Under Public Resources Code §21081 and CEQA Guidelines §15091 above, where a final EIR identifies one or more significant environmental effects, a project may not be approved until the public agency makes written findings supported by substantial evidence in the administrative record regarding each of the significant effects. In turn, the three possible findings specified in CEQA Guidelines §15091(a) are:

1. Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

CEQA Guidelines §15092(b) provides that no agency shall approve a project for which an EIR was prepared unless either:

1. The project approved will not have a significant effect on the environment, or

2. The agency has:

a. Eliminated or substantially lessened all significant effects where feasible as shown in the findings under Section 15091, and

b. Determined that any remaining significant effects on the environment found to be unavoidable under Section 15091 are acceptable due to overriding concerns as described in Section 15093.

## 1.2 EIR Process

After the County reviewed the applications for the proposed Project, it concluded that the Project could have a significant impact on the environment and that preparation of an environmental impact report was determined to be the appropriate CEQA environmental document. The original Draft EIR was previously circulated for public review from August 30, 2023, to October 16, 2023 (a 45-day public review period). All interested persons and organizations had an opportunity during this time to submit their written comments on the Draft EIR to the County.

The Recirculated Draft EIR for the proposed Project was prepared to inform the public of changes to the original Draft EIR. The major additions or changes included the following:

1. The environmental impacts associated with the proposed Calcite Substation no longer incorporated by reference the information from the *Stagecoach Solar Project Draft EIR* (State Clearinghouse No. 2020100234) (California State Lands Commission 2021). The *Stagecoach Solar Project Draft EIR* was released for public review from October 22, 2021, to December 22, 2021. Since the end of the public review period for the *Stagecoach Solar Project Draft EIR*, the California State Lands Commission has not certified a Final EIR or made a decision to approve/reject the project.

   The County of San Bernardino will be the lead agency under CEQA for the proposed Calcite Substation. As such, the County will exercise its independent judgement and analysis of the potential impacts associated with the construction and operations of the proposed Calcite Substation including development of associated infrastructure within APNs 045-305-104, 045-305-105, 045-305-107, and 045-305-110.

2. The Project applicant included an additional 12.3 miles of gen-tie alternatives to be analyzed, which were not previously analyzed in the original Draft EIR.

Additionally, the Final EIR includes analysis of an additional 13.3 miles of gen-tie alignment alternatives, as provided in the Sienna Solar and Storage Project 2nd Addendum to Technical Reports regarding “Gen-tie line” Alternatives and Improvements Associated with the Southern California Edison (SCE) Calcite

Substation, included as Appendix P to this EIR. Therefore, approximately 64.6 total miles of collector lines and gen-tie alternatives are analyzed in the Final EIR. However, not all routes will be developed; rather, a final gen-tie alignment will be selected from the alternatives depending upon cost, engineering feasibility, and environmental impacts.

Based upon comments the County received in response to the DEIR, it was determined that the Final EIR should analyze Project related environmental impacts relative to the following 14 substantive potential impact areas in the Environmental Analysis section:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- GHG Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise and Vibration
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems (Water Supply)

Additionally, the EIR was required to include other CEQA substantive sections including an Executive Summary, Introduction, Environmental Setting, Project Description, Analysis of Long-Term Effects, Cumulative Impacts, Effects Not Significant, and Alternatives.

# 2 Project Location

## Sienna Project Location

The proposed Sienna Project is located on approximately 1,854-acres in the southwestern portion of the Mojave Desert and includes the Lucerne Dry Lake, in unincorporated San Bernardino County, California. The Sienna Project is predominately located east of State Route 247 (Barstow Road/SR 247), north of the unincorporated community of Lucerne Valley, with portions of the generation-interconnect (gen-tie) alternative corridors that include possible connections along Haynes Road, Huff Road, and Northside Road to the east of Barstow Road. The site is generally located approximately 35 miles south of Barstow, 45 miles northwest of the town of Yucca Valley, 15 miles southeast of the town of Apple Valley, and 20 miles north of the City of Big Bear Lake. Barstow Road would provide primary access to the Sienna Project. Land uses in the area are primarily rural residential, recreation, farmland, open space, and transportation corridors.

## Calcite Substation Location

The proposed Calcite Substation is located approximately 4-5 miles northwest of the Sienna Project area, within a 75-acre parcel (APN 0453-041-07) that occupies areas land both east and west of SR 247 (Barstow Road), directly north of Haynes Road, in San Bernardino County. Access roads, as well as the proposed transmission lines, generation tie-line connection, distribution line for light and power, telecommunication facilities, and other associated infrastructure would also be located within the parcels south of the proposed Substation site (APNs 045-305-104, 045-305-105, 045-305-107, and 045-305-110).The actual footprint of the proposed Calcite Substation encompasses 7 acres with an additional 4 acres for other required improvements, including site drainage for a total of 11 acres of the 75-acre parcel. SCE proposes to construct additional infrastructure (transmission lines and telecom facilities) and access roads associated with the Calcite Substation and necessary to operate the Calcite Substation to the south of the 75-acre parcel.

# 3 Project Description

### 3.1.1 Sienna Project

The Sienna Project consists of three primary components: 1) solar energy generation equipment and associated facilities including a substation and access roads (herein referred to as “solar energy facility”); 2) BESS, and; 3) on- and off-site gen-tie line that would connect the proposed on-site substation to the point of interconnection at the SCE Calcite Substation.

#### Photovoltaic Panels/Solar Arrays

The proposed Sienna Project will use PV panels or modules (including but not limited to bi-facial or concentrated PV technology) on mounting frameworks to convert sunlight directly into electricity. Individual panels will be installed on either fixed-tilt or tracker mount systems (single- or dual-axis, using galvanized steel or aluminum). If the panels are configured for fixed tilt, they will be oriented toward the south. For tracking configurations, the panels will rotate to follow the sun over the course of the day. The solar panels will be consistent with panel dimensions that are widely used in commercial solar installations in California and will conform to County building code requirements. Figure 2-10 of the Final EIR depicts representative examples of photovoltaic panel/mounting configurations.

The solar panel array will be arranged in groups referred to as “blocks”, with inverter stations generally located centrally within the blocks. Blocks will produce direct electrical current (DC), which is converted to alternating current (AC) at the inverter stations.

Each PV module will be placed on a fixed-tilt or tracker mounting structure. The foundations for the mounting structures can extend up to 8 feet below ground, depending on the structure, soil conditions, and wind loads, and may be encased in concrete or use small concrete footings. Final solar panel layout and spacing will be optimized for Project area characteristics and the desired energy production profile.

#### Battery Energy Storage System

The Sienna Project may include one or more BESS’, located at or near a substation/switchyard (onsite or shared) and/or at the inverter stations, or elsewhere onsite. The large-scale BESSs would be up to 525 MWac in capacity and occupy up to 45 acres in total area. BESS’ consist of modular and scalable battery

packs and battery control systems that conform to U.S. national safety standards. The BESS modules, which could include commercially available lithium, flow, or other batteries, typically consist of standard containers housed in pad- or post-mounted, stackable metal structures, but may also be housed in a dedicated building(s) in compliance with applicable regulations. The maximum height of a dedicated structure is not expected to exceed 45 feet. The actual dimensions and number of energy storage modules and structures vary depending on the application, supplier, and configuration chosen, as well as on offtaker/power purchase agreement requirements and on County building standards. Figure 2-11 of the Final EIR depicts representative examples of a typical BESS.

The BESS would also consist of an Energy Management System (EMS) and bidirectional inverters, The EMS is responsible for coordinating all subsystems within the BESS and generally controls the net output of solar generation plus BESS at the Point of Interconnection (POI) to prevent overload and charge the BESS exclusively from solar generation. The final location(s) of each component would be determined before the issuance of building permits.

### Substations

Output from inverter stations would be transferred via electrical conduits and electrical conductor wires to one or more Sienna Project substations or switchyards (collectively referred to as “substations” herein), and then onward via “gen-tie line(s).” The Sienna Project would have its own dedicated substation equipment located within the Sienna Project area. Dedicated equipment may incorporate several components, including auxiliary power transformers, distribution cabinets, revenue metering systems, microwave communication transmission tower(s), and switch gear and breakers. Each substation would occupy an area of up to approximately five acres, secured separately by a chain-link fence. The final location(s) of each component would be determined before the issuance of building permits.

Substations typically include a small control building (roughly 500 square feet) standing approximately 10 feet in height. The building is typically either prefabricated concrete or steel housing with rooms for the voltage switch gear and the metering equipment, a room for the station supply transformer, and a separate control technology room in which the main computer, the intrusion detection system, and the main distribution equipment are housed. Figure 2-13 of the Final EIR depicts a representative example of a typical substation design. Components (e.g., control technology room and intrusion detection system) may instead be located at an Operations & Maintenance (O&M) building (described below).

To provide any utilities that may be required to power or service substation related facilities, the Sienna Project may necessitate various retail service(s) from local utility providers, e.g., electric service could be obtained from the local electric utility (in this case SCE) by extending distribution circuitry to the Project substation site. Distribution power (also known as/called “station light and power”) related infrastructure would be collocated within gen-tie line and/or collector line corridors, when acceptable to local utility providers. In the event that the Sienna Project’s generation facilities would not be connected to SCE’s electric distribution, the Sienna Project would require “Project-generated” electricity to provide power for the Sienna Project substation related infrastructure as necessary (also known as/called “back feed power”). This would be accomplished by installing a step-down transformer within the Sienna Project substation. The voltage would be stepped down to distribution level voltage. Infrastructure selection and final location(s) of each applicable component would be determined before the issuance of building permits.

### Gen-Tie Line

The Sienna Project will interconnect at the proposed SCE Calcite Substation via a proposed overhead and/or underground 220-ky gen-tie line, in addition to other ancillary facilities utilizing private and/or potentially public ROWs (gen-tie corridors) that would typically be 300 feet wide, but may extend to 600 feet wide to facilitate construction and operations. If the use of public ROWs is not ultimately feasible, the Sienna Project would use additional private easements to establish gen-tie and collector line corridors. The gen-tie corridor may ultimately include a mix of both public and private ROWs and may also include private easements from SCE itself. The Sienna Project will require approval by the County of San Bernardino of a Franchise Agreement for any portion of the gen-tie located within the County of San Bernardino's public ROW. Approximately 64.6 miles of collector lines and gen-tie alternatives are analyzed in the Final EIR, although not all routes will be developed.

The 220-ky overhead gen-tie line would typically include steel structures, typically up to 125 feet above the surrounding grade, and aluminum aerial conductors (Figure 2-14 through Figure 2-18 of the Final EIR). The Sienna Project's gen-tie line would be authorized pursuant to the Project CUP in accordance with Chapter 84.29 of the County's Development Code.

At least one fiber-optic communication line would be included at the top of the transmission towers. A second fiber-optic communication line would be installed underground in conduit within the gen-tie right-of-way. Any underground line would be installed in a buried duct bank system with precast concrete splice vaults staged along the duct bank, where necessary.

Microwave communication tower(s) would be installed within the Sienna Project substation when possible. If required, a microwave communication tower may be installed within a fenced enclosure within the gen-tie right-of way. Microwave communication towers typically consist of a steel mono-pole with an approximate five-foot diameter microwave antenna located at the top of the mono-pole. Microwave towers are typically less than 150 feet above surrounding grade, depending on the terrain between the transmitter and the receiver antennas.

To interconnect at SCE's proposed Calcite Substation, the proposed 220-ky gen-corridor may require relocation of local distribution wet and dry utilities in the event that the line construction and/or other infrastructure conflicts with local distribution utility infrastructure. In this case, the distribution infrastructure would be relocated with owner's consent and direction to ensure that all facilities are constructed in accordance with best utility practices and standards.

## 3.1.2 Calcite Substation

The proposed Sienna Project will interconnect at the proposed SCE Calcite Substation via a proposed overhead and/or underground 220-ky gen-tie line in addition to other ancillary facilities utilizing private and potentially public ROWs. The proposed Calcite Substation would comprise of the following infrastructure: 1) Calcite Substation; 2) transmission line(s); 3) generation tie-line connection; 4) distribution line for Calcite Substation light and power, and; 5) telecommunication facilities.

The Calcite Substation and associated infrastructure would be located on portions of five parcels (APNs 0453-041-07, 045-305-104, 045-305-105, 045-305-107, and 045-305-110), as described in the Final EIR.

### Substation

The substation component includes a 220 kV switchyard on approximately 7 acres along with approximately 4 additional acres for drainage, grading, and an access road. The proposed substation

would measure approximately 620 feet by 500 feet and would be surrounded by a 10-foot-high prefabricated perimeter wall, including the top guard, and with two vehicular gates and a pedestrian gate.

The proposed substation would be designed to accommodate a total of eight 220 kV positions, with four positions initially constructed. Three positions would be utilized in the initial design: one position for the Sienna Solar Project gen-tie line, one position for the Pisgah 220 kV transmission line, and one position for the Lugo 220 kV transmission line. The remaining positions would be available for future network or generation tie-lines.

### Transmission Lines

The proposed Calcite Substation involves looping-in the Lugo-Pisgah No. 1 220 kV transmission line into the SCE Calcite Substation adding a total of approximately 4,600 feet of new transmission line (two lines of approximately 1,600 and 3,000 feet in the same vicinity) creating the Calcite-Lugo and Calcite-Pisgah 220 kV transmission lines.

### Gen-Tie Line

The proposed Calcite Substation involves connecting the Sienna Project's gen-tie line into the SCE-owned Calcite Substation. SCE will construct one structure, two spans, and the generator will construct approximately six structures including the point of change of ownership (POCO) structure within the proposed Calcite Substation property boundary.

## 3.2 Project Objectives

The following are the project objectives:

- Use proven and established PV and energy storage technology that is efficient and requires low maintenance.
- Assist California in meeting greenhouse gas emission reduction goals by 2030 as required by the California Global Warming Solutions Act (Assembly Bill 32), as amended by Senate Bill 32.
- Support California's Renewables Portfolio Standard (RPS) Program consistent with the timeline established by Senate Bill 100, which requires that by December 31, 2030, 60 percent of all electricity sold in the State shall be generated from renewable energy sources.
- To provide energy to the electric grid to meet increasing demand for in-state generation.
- Interconnect directly to the SCE electrical transmission system.
- Promote the County's role as the State's leading producer of renewable energy.
- Utilize a location that is in close proximity to existing powerlines and the proposed SCE Calcite Substation.

## 3.3 Project Approvals

This EIR is an informational document intended to inform public agency decision-makers and the public of environmental effects of the Project described above, identify ways to minimize potential significant effects, and describe and evaluate a reasonable range of alternatives to the Project.

### 3.3.1 Sienna Project

The County is the Lead Agency for the Sienna Project, as it is the agency with primary authority over the Sienna Project's discretionary approvals. Several other agencies, identified as responsible and trustee agencies, will also use the EIR for their consideration of approvals or permits under their respective authorities.

For the purposes of CEQA, the term "trustee agency" means a state agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of the state of California. The term "responsible agency" includes all public agencies other than a lead agency that may have discretionary actions associated with the implementation of a proposed project or an aspect of subsequent implementation of a project. Accordingly, Table 2-2 of the Final EIR identifies a list of approvals that could be required from the lead agency, trustee agencies and responsible agencies

### 3.3.2 Calcite Substation

The proposed Calcite Substation is not subject to any discretionary County approvals and, therefore, is not a part of the CUP application for the proposed Sienna Project. The CPUC has sole authority for siting approvals of the Calcite Substation. Table 2-2 of the Final EIR identifies a list of approvals that could be required from trustee agencies and responsible agencies.

# 4 Issues Addressed In the EIR

The County identified and analyzed the following environmental categories in more detail in the Final EIR:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- GHG Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise and Vibration
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems (Water Supply)

# 5 Mitigation Monitoring Program

Pursuant to PRC §21081.6, the County has adopted a detailed mitigation and monitoring program prepared under the County's direction. The program is designed to ensure that all mitigation measures as hereafter required are in fact implemented on a timely basis as the Project is implemented.

# 6 Record of Proceedings

For purposes of CEQA and these Findings, the Record of Proceedings for the proposed project consists of the following documents and other evidence, at a minimum:

- The NOP, NOA, and all other public notices issued by the County in conjunction with the proposed project.
- The original Draft EIR, Recirculated Draft EIR, and Final EIR for the proposed project.
- All written comments submitted by agencies or members of the public during the public review comment period on the original Draft EIR and Recirculated Draft EIR.
- All responses to those written comments submitted by agencies or members of the public during the public review comment period on the original Draft EIR and Recirculated Draft EIR.
- All written and verbal public testimony presented during a noticed public hearing for the proposed project.
- The Mitigation Monitoring and Reporting Program.
- The reports and technical memoranda included or referenced in the Final EIR.
- All documents, studies, EIRs, or other materials incorporated by reference in the original Draft EIR, Recirculated Draft EIR and Final EIR.
- The Resolutions adopted by the County in connection with the proposed project, and all documents incorporated by reference therein, including comments received after the close of the comment period and responses thereto.
- Matters of common knowledge to the County, including but not limited to federal, state, and local laws and regulations.
- Any documents expressly cited in these Findings and Statement of Overriding Considerations.
- Any other relevant materials required to be in the record of proceedings by Public Resources Code Section 21167.6(e).

# 7 Findings of Significant Impacts, Required Mitigation Measures and Supporting Facts – Sienna Project

The County, having reviewed and considered the information contained in the EIR and the entire administrative record, including but not limited to the expert opinions of the County's professional

planning staff and independent consultants familiar with the environmental conditions of the County and the facts and circumstances of the project who prepared the EIR, finds pursuant to Public Resources Code §21081(a)(1) and Guidelines §15091(a)(1) that changes or alterations have been required in, or incorporated into, the Sienna Project which would mitigate, avoid, or substantially lessen to below a level of significance the following potential significant environmental effects identified in the EIR.

# 7.1 Aesthetics

## 7.1.1 Existing Visual Character

**A. Potential Impact.** The Sienna Project is located within a non-urbanized area. The existing visual character in views of the Sienna Project would not be substantially altered based primarily on proximity of viewpoints to the Sienna Project site. Short-term visual impacts would occur in association with construction activities, including introducing heavy equipment (e.g., cranes), staging and materials storage areas and potential dust and exhaust to the Sienna Project area. While construction equipment and activity may present a visual nuisance, it would be temporary (approximately 12-24 months) and would not represent a permanent change in views.

To provide a basis for evaluating the visual effect of the Sienna Project on views, visual simulations were produced to illustrate the "after" visual conditions from each of the KOPs. At each KOP, the existing visual conditions were compared to those under the development of the Sienna Project area, based on the visual simulations. The comparison considers the existing quality of scenic backdrops, background vistas, and foreground views across the Sienna Project area and the Project's alteration of these scenic views. The locations of the six KOPs in relation to the Sienna Project site are presented in Figure 3.2-2 of the Final EIR. Descriptions and potential impacts on these KOPs are discussed in Section 3.2-16 of the Final EIR.

As described and illustrated in Figure 3.2-6 through Figure 3.2-11 of the Final EIR, in most views, the Sienna Project is minimally discernable in the landscape. When visible, the Sienna Project's solar array adds new man-made features to the landscape, but the degree of contrast introduced to the view is low. The proposed gen-tie line also adds new man-made features, especially in views where the associated transmission structures are in the horizon, but the structures are similar in form to existing electrical infrastructure in the vicinity.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR

**C. Facts in Support of Finding.** Implementation of Mitigation Measure S-AES-1 would reduce potential visual impacts by ensuring that the proposed structures and buildings associated with the Sienna Project are designed with colors that minimize visual intrusion and contrast by blending

with (matching) the existing characteristic landscape colors, colors and finishes do not create excessive glare, and colors and finishes are consistent with local policies and ordinances. With implementation of Mitigation Measure S-AES-1, potential visual impacts would be reduced to a less than significant level.

**Mitigation Measure 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.

### 7.1.2 Substantial Light or Glare

**A. Potential Impact.**

**Lighting**

**Construction.** Construction associated with the Sienna Project would generally occur between 7:00 AM and 7:00 PM, Monday through Saturday. However, if necessary and approved by the County, nighttime construction activities could occur, which may involve the use of temporary construction lighting equipment. This could result in substantial adverse nighttime lighting visual effects given the general lack of any significant night lighting at the Project site.

**Operation.** Nighttime illumination of the Project site during the operational phase could cause substantial visual contrast given the general absence of light in the existing landscape. This could result in substantial adverse nighttime lighting visual effects given the general lack of any significant night lighting at the Project site.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Implementation of Mitigation Measure S-AES-2 would reduce potentially significant impacts associated with nighttime lighting during construction and operation to a less than significant level.

**Mitigation Measure 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

# 7.2 Air Quality

## 7.2.1 Sensitive Receptors

**A. Potential Impact. Valley Fever.** Construction activities that include ground disturbance can result in fugitive dust, which can cause fungus *Coccidioides* (CI) spores to become airborne if they are present in the soil. These spores can cause Valley Fever. Workers who disturb soil where fungal spores are found, whether by digging, operating earthmoving equipment, driving vehicles, or by working in dusty, wind-blown areas, are more likely to breathe in spores and become infected. It is not a contagious disease and secondary infections are rare. However, construction activities associated with the Sienna Project would include ground-disturbing activities that could result in an increased potential for exposure of nearby residents and on-site workers to airborne spores, if they are present.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Compliance with dust control measures required by MDAQMD Rule 403 and San Bernardino County Development Code Section 84.29.035 would minimize personnel and public exposure to Valley Fever and reduce the potential risk of nearby resident and on-site worker exposure. In addition, implementation of Mitigation Measure S-AQ-1, would further ensure worker safety through education and ensuring implementation of OSHA safety measures. Therefore, this impact would be reduced to a less than significant level

**Mitigation Measure 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 (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.

# 7.3 Biological Resources

## 7.3.1 Special-Status Plants

**A. Potential Impact.** The Sienna Project has the potential to impact special-status species through loss of habitat as well as direct and indirect impacts to these species. Direct impacts to the special-status plants and their habitat may include mortality of individuals as a result of permanent removal or damage to root structures during the construction phase of the project through activities like clearing vegetation and removal of suitable habitat, trampling by construction vehicles or personnel, or unauthorized collection.

No special-status plant species were observed within the Sienna Project area during the biological field surveys. However, there is potential for seven special-status plant species to occur in the Sienna Project area. Of the seven species with potential to occur on the Sienna Project site, only one species has a moderate potential to occur: Parish's phacelia (Figure 3.5-4 of the Final EIR) (Appendix D1 and D2 of the Final EIR). Rare plant protocol surveys did not document any special-status plant species within the Sienna Project area. However, the rare plant protocol surveys were conducted in drought conditions where the occurrence of annual plant species may have been negatively affected due to lack of rainfall. As such, impacts are analyzed in the event that special-status plant species are present on the Sienna Project Site between the time it takes for the EIR to be finalized and construction implementation. Therefore, impacts would be potentially significant.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Mitigation Measure S-BIO-1 would be implemented to reduce potentially significant impacts on special-status plant species that could be present onsite prior to the commencement of Project construction. Implementation of Mitigation Measure S-BIO-1 would require a pre-construction rare-plant survey to be conducted by a Qualified Biologist and require the establishment of buffers to avoid impacts to potential special-status plant species if observed on the Sienna Project site. If avoidance of special-status plant species is not feasible, Mitigation

Measure S-BIO-1 would require the preparation and implementation of a Special-Status Plant Relocation Plan, which will incorporate various measures, including topsoil salvage to preserve seed bank, seed collection, storage, possible nursery propagation, and planting, and funding mechanisms. The Special-Status Plant Relocation Plan would include methods, monitoring, reporting, success criteria, adaptive management, and contingencies for achieving success. Implementation of Mitigation Measure S-BIO-2 would require the Project Applicant to 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 and to monitor the Sienna Project area during initial grading, ground disturbance and vegetation removal activities. With implementation of Mitigation Measures S-BIO-1 and S-BIO-2, potential impacts on special-status plant species would be reduced to a less than significant level.

**Mitigation Measure 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.

**Mitigation Measure 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.

### 7.3.2 Special-Status Wildlife

**A. Potential Impact.**

**Desert tortoise.** Surveys were conducted pursuant to the USFWS' protocols for surveying Mojave desert tortoise within identified desert tortoise habitat. No Mojave desert tortoise or sign were observed within the Sienna Project area during the surveys (Appendix D2 of the Final EIR). Although no desert tortoise were observed within the Sienna Project area, the northern and eastern portions of the Sienna Project site contain the least disturbed natural saltbush scrub communities and, therefore, the greatest potential to support desert tortoise. It is therefore assumed conservatively that desert tortoises could be present prior to construction and, therefore, that Project disturbance activities (e.g., vegetation clearing, site grading, excavation earthwork) could significantly impact desert tortoises.

**Desert kit fox.** Although no desert kit foxes were observed during field surveys, the Sienna Project area contains suitable habitat for the species. The Sienna Project could directly impact suitable habitat for desert kit fox and has the potential to impact individual foxes if they are present on-site at the time of scheduled disturbance activities. This potential direct impact is considered significant.

**Burrowing owl.** Two burrowing owls were flushed from an active burrow located within a drainage pipe during the reconnaissance surveys in the southwestern portion of the Sienna Project area (Appendix D1 and D2 of the Final EIR). Portions of the Sienna Project area and adjacent areas with low density scrub cover include potentially suitable foraging habitat for the species and burrows suitable for occupation by burrowing owls. Based on the CNDDB occurrences, presence of suitable habitat, and the siting of two individual burrowing owls and an active burrow, the species is considered present within the Sienna Project area and may occur for wintering or breeding throughout the Project area, wherever suitable burrows occur. The Sienna Project has the potential to impact burrowing owl individuals if they are present on the site at the time of scheduled disturbance activities.

**Nesting birds and raptors.** Many common MBTA bird species were observed throughout the Sienna Project area and vicinity. Native birds protected by the CFGC and the MBTA (potentially including prairie falcon and loggerhead shrike) may nest on-site. Construction activity has the potential to directly (by destroying a nest) or indirectly (by causing an active nest to fail) impact nesting birds protected under the CFGC and MBTA, and this would be potentially significant.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.**

**Desert tortoise.** This potential direct impact would be mitigated to less than significant with implementation of Mitigation Measures S-BIO-2, S-BIO-3, and S-BIO-4. Mitigation Measure S-BIO-2 requires the Project Applicant to 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 and to monitor the Sienna Project area during initial grading, ground disturbance and vegetation removal activities. Mitigation Measure S-BIO-3 would reduce impacts to desert

tortoise by requiring a pre-construction clearance survey to determine species presence and preparing a desert tortoise translocation and monitoring plan if desert tortoise are documented on the Sienna Project site. Mitigation Measure S-BIO-4 requires implementation of a construction worker environmental awareness program would reduce potentially significant impacts to desert tortoise to a less than significant level.

**Desert kit fox.** Mitigation Measure S-BIO-2 requires the Project Applicant to 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 and to monitor the Sienna Project area during initial grading, ground disturbance and vegetation removal activities. Mitigation Measure S-BIO-4 requires implementation of a construction worker environmental awareness program. Mitigation Measure S-BIO-5 requires qualified personnel to perform a pre-construction clearance survey for desert kit fox in accordance with CDFW guidelines. Implementation of Mitigation Measures S-BIO-2, S-BIO-4, and S-BIO-5 would reduce this impact to a less than significant level.

**Burrowing owl.** However, implementation of Mitigation Measures S-BIO-2, S-BIO-4, and S-BIO-6 would reduce potentially significant impacts to burrowing owl to a less than significant level. Measure S-BIO-2 requires the Project Applicant to 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 and to monitor the Sienna Project area during initial grading, ground disturbance and vegetation removal activities. Mitigation Measure S-BIO-4 requires implementation of a construction worker environmental awareness program. Mitigation Measure S-BIO-6 requires a pre-construction clearance survey to determine species presence and identifying proper measures for avoidance and/or species relocation, as needed.

**Nesting birds and raptors.** Mitigation Measure S-BIO-7 requires preparation of preconstruction nesting bird surveys, that when implemented, would reduce impacts to a less than significant level. Furthermore, Mitigation Measures S-BIO-2 requires the Project Applicant to 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 and to monitor the Sienna Project area during initial grading, ground disturbance and vegetation removal activities. Mitigation Measure S-BIO-4 requires implementation of a construction worker environmental awareness program.

**Mitigation Measure S-BIO-2: Biological Monitoring (as previously described above).**

**Mitigation Measure 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 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.

**Mitigation Measure 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.

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.

**Mitigation Measure 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.

**Mitigation Measure 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 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.

**Mitigation Measure 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.

### 7.3.3 State or Federally-Protected Wetlands

**A. Potential Impact.** As mentioned in Section 3.5.1 of the Final EIR, the JDR prepared for the Sienna Project (Appendix E of the Final EIR) identified a total of 33 stream segments, 4 retention basins, and 1 isolated wetland within the Sienna Project area. In addition, a number of ephemeral streams, classified as riverine and intermittently flooded streambeds, surround the dry lakebed. In these areas, most of the streambeds are depicted as connecting to the dry lakebed. However, as discussed above, field observations indicate that the streams onsite lack a clear surface connection via defined channels with bed and bank to the dry lakebed and flows dissipate to sheet flow before entering the lake. Additionally, the USACE considered Lucerne Dry Lake in an AJD for the Granite Mountain Wind Project (Appendix E of the Final EIR), and found that it is a dry lake, not a traditional lake, due to the general lack of surface water precluding use for harvesting fish or shellfish. Therefore, only the retention basins and leaked pipe within the dry lakebed were delineated as CDFW and/or RWQCB-jurisdictional features.

Nonetheless, the ephemeral streams and drainages observed within the Sienna Project area may be subject to RWQCB and CDFW jurisdiction, and direct impacts to these jurisdictional features would be considered potentially significant.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Implementation of Mitigation Measure S-BIO-8, which would ensure jurisdictional features are avoided where possible, would reduce potentially significant impacts to jurisdictional waters to a less than significant level. Impacts are considered less than significant after mitigation has been incorporated.

**Mitigation Measure 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 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:
    - 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.
    - 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.
    - A description of the mitigation site, including a site plan of the location and rationale for site selection.
    - A plant palette and methods of salvaging, propagating, and planting the site to be restored.
    - Methods of soil preparation.
    - Best Management Practices (BMPs) that will be utilized to avoid erosion and excessive runoff before plant establishment.
    - 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, 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).

# 7.4 Cultural Resources

## 7.4.1 Archaeological Resources

**A. Potential Impact.** The Cultural Resources Study (Appendix F of the Final EIR) identified 38 new archaeological resources, including 15 isolates (4 prehistoric, 11 historical), and 23 sites (1 prehistoric, 1 multicomponent, and 21 historical). Of these, two archaeological sites (prehistoric site [Sienna S-8] and multicomponent site [Sienna S-28]) may include a subsurface deposit with significant data potential. Although unlikely, the potential for unearthing a previously-undiscovered archaeological resource during construction does exist. This potential impact is considered significant.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Preservation in place (avoidance) is the preferred manner of mitigating impacts to archaeological sites. Mitigation Measure S-CR-1 identifies avoidance of archaeological sites Sienna S-8 and Sienna-S-28, if feasible. If avoidance of these sites is not feasible, Phase II testing and Phase III data recovery may be required to reduce impacts to a less than significant level. Implementation of Mitigation Measures S-CR-2 through S-CR-4 would reduce this potential impact to a less than significant level. Mitigation Measure S-CR-2 requires preparation of a Cultural Resources Mitigation and Monitoring Program (CRMMP) for unanticipated discovering during construction of the Sienna Project. Mitigation Measure S-CR-3 requires cultural resources sensitivity training program to assist in identifying any unanticipated cultural resources that may be encountered during ground disturbing activities associated with Project construction. Mitigation Measure S-CR-4 requires archaeological and Native American monitoring of Project related ground disturbance within Project areas of moderate to high archaeological sensitivity as established in and defined by the CRMMP.

**Mitigation Measure 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.

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.

**Mitigation Measure 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.

**Mitigation Measure 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 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.

**Mitigation Measure 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.

# 7.5 Geology and Soils

## 7.5.1 Unstable Geologic Unit or Soil

**A. Potential Impact.** Seismic related ground failure includes hazards such as liquefaction, landslides, and settlement. As explained in Section 3.7.1 of the Final EIR, the Sienna Project site is located within an area that has low potential for landslides and liquefaction. The Sienna Project site is relatively flat and there are no slopes near the site. According to the County of San Bernardino General Plan (2010), the Sienna Project site is not located within an area identified as having a potential for slope instability. Further, the Sienna Project site is not mapped within a liquefaction hazard potential area as designated by the CGS, as their mapping efforts have not reached the region of the site. The Sienna Project site is also not included within a liquefaction hazard zone designated by San Bernardino County on their Geologic Hazard Overlay Maps (Appendix G of the Final EIR). Therefore, the potential for landslide or slope instability, liquefaction, or other geologic hazards related to liquefaction, such as lateral spreading is considered low as well.

According to the Geotechnical Study prepared for the Sienna Project, the Sienna Project may be susceptible to subsidence and ground fissuring (Appendix G of the Final EIR). The observed fissuring on the site parcels is considered to be the result of subsidence and subsidence is expected to continue. The amount and location of expected subsidence cannot be reliably predicted with the information that is currently available. Future subsidence may negatively impact level-sensitive structures such as gravity flow pipelines. This is considered a potentially significant impact.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Implementation of Mitigation Measure S-GEO-1, which requires the preparation of a design-level geotechnical report, would reduce the potential impacts associated

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with subsidence and ground fissuring. Additionally, construction and operation of the Sienna Project would be carried out in accordance with the applicable state and local regulations pertaining to earthquake hazards reduction, including the most recent CBC to further reduce potential impacts.

The Sienna Project is a solar energy generation project that would not introduce any structures intended for habitation. Thus, Project operation would not increase or exacerbate the potential for ground failure, including landslide, lateral spreading, subsidence, liquefaction or collapse.

Based on the evaluation above, the Sienna Project may be susceptible to subsidence and ground fissuring. However, with implementation of Mitigation Measure S-GEO-1, which requires the preparation of a design-level geotechnical report, impacts are considered less than significant with mitigation incorporated.

**Mitigation Measure 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 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.

## 7.5.2 Expansive Soils

**A. Potential Impact.** Expansive soils are characterized by their ability to undergo significant volume changes (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from precipitation, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may result in unacceptable settlement or heave of structures. According to the Geotechnical Study prepared for the Sienna Project, the Atterberg limit test results indicate that the on-site soils are generally medium to high plasticity clayey soils (Appendix G of the Final EIR).

Unless properly mitigated, shrink-swell soils could exert additional pressure on buried structures and electrical connections producing shrinkage cracks that could allow water infiltration and compromise the integrity of backfill material. These conditions could be worsened if structural

facilities are constructed directly on expansive soil materials. This potential impact would be significant as structures could be damaged by these types of soils. In addition, the on-site soils, particularly clay/silty clay, are known to be corrosive. Corrosive soils can damage underground utilities including pipelines and cables or weaken roadway structures.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** A site-specific geotechnical investigation would be required at the Sienna Project site to determine the extent and effect of problematic soils. Therefore, implementation of Mitigation Measure S-GEO-1, which requires the preparation of a design-level geotechnical report, would reduce potential impacts associated with expansive and corrosive soils to a less than significant level.

**Mitigation Measure S-GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Sienna Project and Implement Required Measures (as previously described above).**

### 7.5.3 Wastewater Disposal Systems

**A. Potential Impact.** The Sienna Project may include an O&M building which may involve the construction of a septic tank and leach field. According to the Geotechnical Study (Appendix G of the Final EIR), the clayey nature of the on-site soils may present a hazard for the use of septic tanks or other wastewater disposal systems, as well as infiltration systems for stormwater management.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Implementation of Mitigation Measure S-GEO-1, which requires the preparation of a design-level geotechnical report, would ensure that site-specific design recommendations, made by a licensed geotechnical or civil engineer, are identified to address potential impacts associated with soils incapable of supporting the use of septic tanks or alternative wastewater disposal systems. As such, impacts would be reduced to a less than significant level.

**Mitigation Measure S-GEO-1: Prepare Geotechnical Report(s) as Part of Final Engineering for the Sienna Project and Implement Required Measures (as previously described above).**

### 7.5.4 Paleontological Resources

**A. Potential Impact.** As explained in Section 3.7.1 of the Final EIR, the surficial geology of the Project area has a low paleontological sensitivity that increases with depth. Fine-grained Quaternary old (Pleistocene) sediments (e.g., Qoa) may underlie Quaternary young (Holocene) deposits and coarse-grained Quaternary old (Pleistocene) sediments at unknown depths within the Project area at depths of 10 feet or greater below ground surface, and the Project area is determined to have low paleontological sensitivity for paleontological resources at depths of 10 feet or less and high paleontological sensitivity at depths exceeding 10 feet below ground surface.

Construction of the Sienna Project would include site preparation, grading and earthwork, concrete foundations, structural steel work, electrical/instrumentation work, collector line installation, architecture, and landscaping. Ground disturbing activities are expected to be limited to the construction of the access roads, site grading, electrical trenching, foundation work for O&M building

and substation, boring for transmission lines, and panel post installations. Groundwork is generally shallow, with trenching to moderate depths (3-5 feet). As proposed, ground disturbing activities associated with trenching would be generally shallow (3-5 feet), while proposed foundations for mounting structures can extend up to 10 feet below ground surface. Therefore, the proposed Project has potential for impacts to scientifically significant vertebrate fossils as a result of construction activities. This is considered a potentially significant impact.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Implementation of Mitigation Measure S-GEO-2, which requires implementation of a paleontological worker environmental awareness program, and Mitigation Measure S-GEO-3, which requires paleontological monitoring during ground disturbing activities where ground disturbance exceeds 10 feet within intact Holocene and Pleistocene deposits, would reduce potentially significant impacts to a less than significant level.

**Mitigation Measure 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.

**Mitigation Measure S-GEO-3: Paleontological Monitoring.** Initially, full-time monitoring shall be conducted during ground construction activities (i.e., grading, trenching, foundation work, 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.

# 7.6 Noise and Vibration

## 7.6.1 Ambient Noise Levels

**A. Potential Impact. Construction.** Construction of the Sienna Project would involve the use of noise-generating equipment during various phases, including transport of personnel and materials to the Sienna Project site, heavy machinery used in grading and clearing Project parcels, pneumatic post drivers to install foundation supports for solar array modules, as well as equipment used during construction of the proposed solar arrays, infrastructure improvements, and related structures. Emergency diesel generators may be used during construction activities. The Sienna Project would be constructed over a 12 to 24 month period.

Table 3.12-5 of the Final EIR shows the noise levels associated with heavy construction equipment at a reference distance of 50 feet from the source. As shown in Table 3.12-5 of the Final EIR, noise levels at this distance can range from about 74 to 85 dBA, depending upon the types of equipment in operation at any given time and phase of construction.

Construction activities would be subject to San Bernardino County policies and regulations. Heavy construction activities would normally occur on-site between the hours of 7:00 a.m. and 7:00 p.m., which is between the hours considered exempt from San Bernardino County Development Code noise regulations (7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays). Additional hours may also be necessary to make up schedule deficiencies or to complete critical construction activities. As a result, some construction activities may be required to continue 24 hours per day, seven days per week. Activities that generate relatively low amounts of noise, such as refueling equipment, staging material for the following day's construction activities, quality assurance/control, and commissioning, may potentially occur between the hours of 9:00 p.m. and 6:00 a.m. on weekdays and the hours of 9:00 p.m. and 8:00 a.m. on Saturdays.

Noise-sensitive receivers near Project construction include single-family residences throughout the Sienna Project area. These land uses would experience a temporary increase in noise during construction of the Sienna Project. The following subsections detail the impacts to noise-sensitive receivers in proximity to the Sienna Project parcels and the gen-tie corridor.

As previously mentioned above, the Sienna Project components (solar facility, BESS, and gen-tie line) would be constructed over a 12 to 24 month period. This analysis makes a conservative assumption that construction at the Sienna Project parcels and the gen-tie would occur simultaneously. Concurrent construction activity at more than one parcel and the gen-tie line may expose nearby residences to cumulative noise impacts. This analysis of cumulative effects focuses on the effects of concurrent construction activities for the worst-case scenario (i.e., the closest residences which would be exposed to construction activities at multiple sites).

Some noise sensitive receivers located in Sienna Project area would be exposed to adjacent construction noise from gen-tie construction and more distant noise from Project parcels. Because of these residences' proximity to gen-tie construction (as close as 50 feet), cumulative noise levels are dominated by gen-tie construction noise. The residence on Lincoln Road (Receiver R-20 on Figure 3.12-2 of the Final EIR) is the closest noise-sensitive receiver within 50 feet of gen-tie construction that is also close to multiple parcel construction, including on parcels 100, 150, and 200 feet from construction. This residence is representative of a reasonable conservative scenario for combined Project construction noise impacts, assuming concurrent construction of gen-tie corridor and the nearest Sienna Project parcels.

Table 3.12-8 of the Final EIR provides the estimate of the cumulative construction noise levels for this scenario, which could reach 83 dBA $L_{eq}$. This would be above FTA's construction noise threshold of 80 dBA $L_{eq}$ (8-hour). Therefore, cumulative construction noise would potentially exceed applicable FTA thresholds and is considered a significant impact. Implementation of Mitigation Measure S-NOI-1 would include limiting the most intensive excavating and earthmoving machinery to daytime hours, scheduling construction activity during daytime working hours, to the extent feasible, installation of 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.

**Decommissioning.** At the end of the Project's useful life (anticipated to be 30 years), the solar facility and associated infrastructure may be decommissioned in accordance with then-current decommissioning practices. Given the Sienna Project's operating life cycle and distant timeframe for decommissioning activities, it is too speculative to quantify the potential noise impacts that could occur during decommissioning activities. On a rough basis, decommissioning would be similar to Project construction and be completed in 12-months. Assuming that the facility would be torn down and the materials present recycled or disposed, temporary noise associated with such actions are conservatively assumed to be similar to the noise levels that would result from Project construction.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** With implementation of Mitigation Measure S-NOI-1, construction noise levels would be reduced to a level that does not exceed the applicable FTA daytime construction noise threshold of 80 dBA Leq, and impacts during construction and decommissioning would be reduced to a less than significant level with mitigation incorporated.

**Mitigation Measure 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.
- 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

# 7.7 Transportation

## 7.7.1 Circulation System

**A. Potential Impact. Construction.** Construction traffic generated by the Sienna Project would occur primarily as a result of construction workers traveling to and from the Sienna Project site. Traffic would also be generated by heavy equipment. However, once the heavy equipment vehicles arrive at the site, they will generally stay on the site and will not generate daily trips. Vehicle traffic would also be generated by construction material deliveries.

**Trip Generation**

As shown in Table 3.13-3 of the Final EIR, detailed trip generation was estimated for the Sienna Project's six construction phases: 1) Site Preparation; 2) Grading and Earthwork; 3) Foundations; 4) Steel Installation; 5) Electrical Installation; and 6) Collector Line Installation. Each phase describes off-road equipment, construction vehicle types, number of units, phase duration, daily hours and daily mileage per vehicle. Types of vehicles include passenger (commuters), and truck type (pickup, water, flatbed, gravel, concreted, delivery trucks, etc.). Because the six phases are staggered and overlap (i.e., they will not occur simultaneously), the traffic assessment assumes the worst-case construction phases (based upon vehicle/truck trips) that could potentially occur at the same time (based upon the Sienna Project Schedule provided by the applicant). It was determined that the combination of Phases 3, 4 and 5 would make up the most trips that could potentially overlap, resulting in a total of 860 construction workers and associated construction equipment contributing trips at one time.

In addition, a passenger car equivalent (PCE) was applied to vehicle type. A PCE is a metric used in transportation engineering to assess traffic-flow rate on a highway. A PCE is essentially the impact that a mode of transport has on highway variable (e.g., headway, speed, density, etc.) compared to a single passenger car. For this analysis, a conservative PCE of 2.0 was applied to account for large trucks. This is consistent with the methodology presented in Highway Capacity Manual (HCM) (6th Edition).

Trip generation for Sienna Project construction was based on types of vehicles used and number of workers that are anticipated to report to the job site. Based on San Bernadino County Ordinance 83.01.080 (Noise); "Temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., (except Sundays and Federal holidays)" are considered exempt from County noise regulations. Therefore, construction may occur during the a.m. peak (7:00 – 9:00 a.m.) and the p.m. peak (4:00 to 6:00 p.m.) commute periods, even though construction activities will occur throughout the day.

In order to simulate the worst-case trip generation scenario, construction workers were conservatively assumed to arrive in the AM peak hour and leave during the PM peak hour each weekday. Although some construction workers may carpool, this is not assumed (i.e., each worker will drive alone to/from work). Therefore, a PCE of 860 construction workers are anticipated to commute to and from the proposed Sienna Project area during phases 3 through 5 (worst-case scenario). Table 3.13-3 of the Final EIR shows the Sienna Project's projected construction daily trips.

As shown in Table 3.13-3 of the Final EIR, a maximum of 1,830 daily trips (including PCE factor) are forecasted to be generated for short-term construction purposes during phases 3, 4, and 5 of

construction. This would include short-term AM and PM peak hour trips of 813 in and out, respectively.

**Trip Distribution**

The Sienna Project is expected to "generate" and "attract" construction-related trips throughout the County and from other locations throughout the region. However, the majority of Project trips will be to/from the west and east on SR-18. Remaining Sienna Project trips are expected to be to/from SR-247 via northern and southern origins. Based upon existing traffic flow patterns, geographical location of Sienna Project area, location of lodging and/or employment bases, and previous traffic impact studies, these considerations resulted in a distribution of trip types for the Sienna Project throughout the study area, as follows (see Appendix L of the Final EIR for details):

- 50 percent to/from SR-18 (Old Woman Springs Road) west of SR-247
- 30 percent to/from SR-18 south of SR-247
- 15 percent to/from SR-247 (Barstow Road) north of Rabbit Springs Road
- 5 percent to/from SR-247 (Old Woman Springs Road) east of Granite Road

**Intersection Operations**

Existing plus Sienna Project weekday AM and PM peak hour intersection traffic operations were quantified by superimposing traffic volumes generated by the proposed Sienna Project onto Existing conditions (Table 3.13-1 of the Final EIR). Table 3.13-4 of the Final EIR shows the summary of the Existing plus Project roadway analysis and LOS conditions.

Construction of the proposed Sienna Project would also likely include oversize vehicles required to deliver equipment and materials, which would also increase safety risks on these roads and be considered inconsistent with Caltrans Plans for SR-18 and SR-247.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Findings.** To reduce potential temporary impacts, Mitigation Measure S-TRA-1 would require the Project applicant to prepare a Construction Traffic Management Plan (CTMP) for review and approval by Caltrans and the County Department of Public Works, Transportation Operations Division. Mitigation Measure S-TRA-1 requires a number of traffic control practices to reduce the number of temporary construction trips, control traffic ingress/egress, and ensures any oversized vehicle trips associated with delivery of materials for the Sienna Project are obtained and followed. The CTMP will include the number of trucks, type of trucks (size), the total number of Equivalent Single Axle Loads, and planned truck routes to the Sienna Project site during construction. This information will be used to determine if a maintenance agreement is required to ensure all County maintained roads utilized by Project construction traffic remain in acceptable condition during construction. With implementation of Mitigation Measure S-TRA-1, potential impacts associated with oversize vehicles would be reduced to a less than significant level.

Implementation of the CTMP would ensure that Project construction would not result in any access or traffic issues on roads surrounding the Sienna Project site, such that there would be a conflict with a program, plan, ordinance, or policy addressing the circulation system. Therefore, impacts during construction would be less than significant.

**Mitigation Measure 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 staggering project construction timeframes to minimize the potential for multiple simultaneous construction projects affecting shared portions of the circulation system.

### 7.7.2 Geometric Design Features

**A. Potential Impact.** The Sienna Project site is located in a rural portion of unincorporated San Bernardino County, and would not require improvements to existing offsite roads, or development of new public roads. Vehicular access to the Sienna Project site driveways would be provided via Barstow Road, Camp Rock Road, and Old Woman Springs Road. All perimeter and interior road networks would be designed to comply with fire access roadway widths as required by County Fire Code and County Code requirements.

As previously described in Impact 3.13-1 of the Final EIR, construction trips associated with the proposed Sienna Project would include oversized vehicles, which could create hazards to motorists.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Findings.** To reduce impacts from temporary trips accessing the site and from oversize vehicle trips, Mitigation Measure S-TRA-1 would require the preparation of a CTMP for review and approval by Caltrans and the San Bernardino County Department of Public Works Traffic Division. With the implementation of Mitigation Measure S-TRA-1, construction of the Sienna Project would have a less than significant impact with respect to substantially increasing roadway hazards.

**Mitigation Measure S-TRA-1: Construction Traffic Management Plan (as previously described above).**

### 7.7.3 Emergency Access

**A. Potential Impact.** Because of the short-term nature of the construction activities, the Sienna Project's construction activities would not require a new risk management, emergency response, or evacuation plan or significantly interfere with an existing plan

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Findings.** Implementation of Mitigation Measure S-TRA-1 requires implementation of a CTMP. The CTMP would include construction traffic control measures to ensure that emergency access is maintained during Project construction. The CTMP will include implementation of safety measures, such as directing construction traffic with a flag person (as needed to maintain safety adjacent to existing roadways), placing temporary traffic control signage along access routes to indicate the presence of heavy vehicles and construction traffic, and ensure access for emergency vehicles to the Sienna Project site. Therefore, the Sienna Project would not

result in inadequate emergency access during construction, and any potential impacts would be less than significant.

The Sienna Project would not develop new public roads or introduce new hazards to roads leading to the Sienna Project site. Vehicular access to the Sienna Project site driveways would be provided via Barstow Road, Camp Rock Road, and Old Woman Springs Road. All access roads interior to the Sienna Project site would be constructed consistent with County Fire code. The Sienna Project would not result in inadequate emergency access during operation, and potential impacts would be less than significant

**Mitigation Measure S-TRA-1: Construction Traffic Management Plan (as previously described above).**

# 7.8 Tribal Cultural Resources

## 7.8.1 Tribal Cultural Resources

**A. Potential Impact.** As stated in Section 3.14.1 of the Final EIR, a SLF search request was submitted to the NAHC on August 6, 2021. The NAHC sent a response on September 3, 2021, stating that a search of the SLF was completed with negative results. As a result of the County's consultation efforts and other archival research, no known tribal cultural resources or tribal cultural places have been identified within the Sienna Project site or immediate vicinity. Therefore, the Sienna Project would result in no impacts to tribal cultural resources.

The Sienna Project site does not contain any existing structures or extant historical tribal cultural resources with the potential for inclusion on the California Register of Historical Resources or a local register. However, the potential exists that there may be undiscovered tribal cultural resources that could be unearthed during ground-disturbing activities during construction. Therefore, as there is potential for ground-disturbing activities to encounter buried or unknown tribal cultural resources, impacts would be considered potentially significant

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** The Sienna Project would be required to implement Mitigation Measures S-TCR-1 and S-TCR-2 to reduce potential impacts to tribal cultural resources to a less than significant level during Project construction. Once construction is complete, operation of the Sienna Project would not involve ground disturbing activities that could impact buried TCRs, as defined in PRC Section 21074 or 5020.1(k), and no impact would occur.

**Mitigation Measure 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:

**D.** Ground-disturbing activities shall be suspended 60 feet around the resource(s), and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed;

**E.** 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 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.

**Mitigation Measure 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.

### 7.8.2 Public Resources Code Section 5024.1

**A. Potential Impact.** As stated in Impact 3.14-1 of the Final EIR, a SLF search request was submitted to the NAHC on August 6, 2021. The NAHC sent a response on September 3, 2021, stating that a search of the SLF was completed with negative results. Pursuant to AB 52, Native American tribal consultation was initiated in April 2022. Project notifications were provided in a letter sent via certified mail on April 20, 2022, to the Fort Mojave Indian Tribe, Morongo Band of Mission Indians, and the YSMN. The County received a response from the on May 12, 2022, indicating that the Sienna Project area exists within Serrano ancestral territory and, therefore, is of interest to the YSMN. However, due to the nature and location of the Sienna Project, and given the CRM Department's present state of knowledge, YSMN does not have any concerns with the Sienna Project's implementation, as planned, at this time. The YSMN did not indicate the potential for traditional cultural properties or sacred sites on the Sienna Project site. However, the YSMN requested preferred tribal mitigation measures be implemented during construction of the Sienna Project. These mitigation measures are provided above (Mitigation Measures S-TCR-1 and S-TCR-2) and in Section 3.6, Cultural Resources, of the Final EIR. To date, no other responses from the Native American community have been received as part of the AB 52 tribal consultation effort.

As described under Impact 3.14-1 of the Final EIR, the potential exists that there may be undiscovered tribal cultural resources that could be unearthed during ground-disturbing activities during construction. Therefore, as there is potential for ground-disturbing activities to encounter buried or unknown tribal cultural resources, impacts would be considered potentially significant.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** The Sienna Project would be required to implement Mitigation Measures S-TCR-1 and S-TCR-2 to reduce potential impacts to tribal cultural resources to a less

than significant level during Project construction. Once construction is complete, operation of the Sienna Project would not involve ground disturbing activities that could impact buried TCRs, as defined in PRC Section 21074 or 5024.1(c), and no impact would occur.

**Mitigation Measure S-TCR-1: Tribal Cultural Resources (as previously described above).**

**Mitigation Measure S-TCR-2: Archaeological/Cultural Documentation (as previously described above).**

# 8 Findings of Significant Impacts, Required Mitigation Measures and Supporting Facts – Calcite Substation

The County, having reviewed and considered the information contained in the EIR and the entire administrative record, including but not limited to the expert opinions of the County's professional planning staff and independent consultants familiar with the environmental conditions of the County and the facts and circumstances of the project who prepared the EIR, finds pursuant to Public Resources Code §21081(a)(1) and Guidelines §15091(a)(1) that changes or alterations have been required in, or incorporated into, the project which would mitigate, avoid, or substantially lessen to below a level of significance the following potential significant environmental effects identified in the EIR.

## 8.1 Aesthetics

### 8.1.1 Existing Visual Character

**A. Potential Impact.** The long-term presence of the proposed Calcite Substation would introduce new man-made features and visual contrast to a predominantly natural-appearing landscape, which could cause substantial visual degradation of the site.

The proposed Calcite Substation and associated facilities would connect to the existing Lugo-Pisgah No. 1 line, which is the southernmost transmission facility in the corridor, via a series of interconnect poles. The proposed Calcite Substation and associated facilities would result in the introduction of a visually prominent and structurally complex electric transmission facility and structural contrast into the predominantly natural desert landscape of the central portion of Lucerne Valley. The new and existing high voltage transmission lines and the new Calcite Substation would be the most visible man-made structures for motorists traveling along SR 247.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** The existing transmission corridor establishes a prominent man-made feature in the landscape, and the "transparent" nature of the corridor's lattice structures helps to lessen the overall structural prominence. The proposed Calcite Substation would generally be absorbed into the broader landscape that already includes electricity transmission and utility lines. Furthermore, implementation of Mitigation Measure CS-AES-1 would reduce potential visual impacts by ensuring that the proposed structures and buildings associated with the Calcite Substation are designed with colors that minimize visual intrusion and contrast by blending with

(matching) the existing characteristic landscape colors, colors and finishes do not create excessive glare, and colors and finishes are consistent with local policies and ordinances. With implementation of Mitigation Measure CS-AES-1, potential visual impacts would be reduced to a less than significant level.

**Mitigation Measure 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.

### 8.1.2 Substantial Light or Glare

**A. Potential Impact.** It is anticipated that some construction activity could occasionally take place at night, which could result in substantial adverse nighttime lighting visual effects given the general lack of any significant night lighting at the Calcite Substation site. Nighttime illumination of Calcite Substation facilities during the operational phase could cause substantial visual contrast given the general absence of light in the existing landscape

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

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**C. Facts in Support of Finding:** As such, implementation of Mitigation Measure CS-AES-2 would reduce potentially significant impacts associated with nighttime lighting to a level less than significant.

**Mitigation Measure CS-AE-2: Minimize Night Lighting at Project Facilities.** SCE shall avoid night lighting where possible and minimize its use under all circumstances. To ensure this, SCE 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).

# 8.2 Air Quality

## 8.2.1 Sensitive Receptors

**A. Potential Impact. Valley Fever.** Construction activities such as grading, excavation, and construction vehicle traffic, could stir up dust containing Coccidioides fungus spores, exposing workers and the public to contracting Valley Fever. Construction activities would be subject to dust control requirements (including MDAQMD Rules). Standard construction dust suppression procedures, including the use of water trucks and the application of non-toxic soil binders in construction areas, covering of temporary soil stockpiles, and maintaining roads, reduce airborne emissions of fungal spores and reduce the risk of exposure of workers and the public. In addition, gravel or surface treatments on the unpaved access roads may be required.

The risk of contracting Valley Fever in connection with construction of the proposed Calcite Substation is considered to be low due to the MDAQMD required fugitive dust control rules and standard construction dust suppression procedures. However, there is still a potential for minor amounts of dust containing *Coccidioides* fungus spores to become air born and infect construction workers and residents of adjacent properties.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Implementation of Mitigation Measure CS-AQ-1 would ensure worker safety through education and ensuring implementation of OSHA safety measures. Therefore, this impact would be reduced to a less than significant level.

**Mitigation Measure 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:

- 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.

# 8.3 Biological Resources

## 8.3.1 Special-Status Plants

**A. Potential Impact.** Two special-status plant species have been assessed as present within the Calcite Substation area: Borrego milk-vetch and Beaver Indian breadroot. The following six special-status plant species have a moderate potential to occur within the Calcite Substation area: Mojave monkeyflower, Clokey's cryptantha, Purple-nerve cymopterus, Parish's popcornflower, White pygmy-poppy, and Mojave menodora.

The proposed Calcite Substation has the potential to impact special-status species through loss of habitat as well as direct and indirect impacts to these species. Direct impacts to the special-status plants and their habitat may include mortality of individuals as a result of permanent removal or damage to root structures during the construction phase of the project through activities like clearing vegetation and removal of suitable habitat, trampling by construction vehicles or personnel, or unauthorized collection. Therefore, impacts would be potentially significant..

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Mitigation Measure CS-BIO-1 would be implemented to reduce potentially significant impacts on special-status plant species that could be present onsite prior to the commencement of Project construction. Implementation of Mitigation Measure CS-BIO-1 would require a pre-construction rare-plant survey to be conducted by a Qualified Biologist and require the establishment of buffers to avoid impacts to potential special-status plant species if observed on the Calcite Substation site. If avoidance of special-status plant species is not feasible, Mitigation Measure CS-BIO-1 would require the preparation and implementation of a Special-Status Plant Relocation Plan, which will incorporate various measures, including topsoil salvage to preserve seed bank, seed collection, storage, possible nursery propagation, and planting, and funding mechanisms. The Special-Status Plant Relocation Plan would include methods, monitoring, reporting, success criteria, adaptive management, and contingencies for achieving success. Implementation of Mitigation Measure CS-BIO-2 would require SCE to 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 and to monitor the Calcite Substation area during initial grading, ground disturbance and vegetation removal activities. With implementation of Mitigation

Measures CS-BIO-1 and CS-BIO-2, potential impacts on special-status plant species would be reduced to a less than significant level.

**Mitigation Measure 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.

**Mitigation Measure 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.

### 8.3.2 Special-Status Wildlife

**A. Potential Impact.**

**Desert tortoise**. As previously discussed in Section 3.5-1 of the Final EIR, no desert tortoises were detected within the Calcite Substation site during the protocol-level surveys conducted in 2016 and 2017. Although the DRECP distribution data shows that desert tortoise may occur on the Calcite Substation site, there is a low chance of their occurring on site based on the lack of

observations within the site and due to the lack of preferred habitat (i.e., steep slopes, and rocky outcrops). However, the DRECP distribution data shows that desert tortoise may occur on the Calcite Substation site. It is therefore assumed conservatively that desert tortoises could be present prior to construction and, therefore, that Project disturbance activities (e.g., vegetation clearing, site grading, excavation earthwork) could significantly impact desert tortoises.

**Burrowing Owl.** As previously discussed in Section 3.5.-1 of the Final EIR, two potential burrows were identified during burrowing owl focused surveys. Burrowing owl sign, including whitewash, pellets, and feathers, were observed at both potential burrow locations, though no individuals were observed. Therefore, there is potential for this species to occur within the Calcite Substation site. The proposed Calcite Substation has the potential to impact burrowing owl individuals if they are present on the site at the time of scheduled disturbance activities.

**Loggerhead Shrike, Le Conte's Thrasher, and Bendire's Thrasher.** The proposed Calcite Substation would remove habitat suitable for nesting and foraging habitat for Le Conte's thrasher, Bendire's thrasher, and loggerhead shrike, potentially resulting in direct impacts to these species if they are present within the Calcite Substation site at the time of construction.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.**

**Desert tortoise.** This potential direct impact would be mitigated to less than significant with implementation of Mitigation Measures CS-BIO-2, CS-BIO-3, and CS-BIO-4. Mitigation Measure CS-BIO-2 requires SCE to 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 and to monitor the Calcite Substation area during initial grading, ground disturbance and vegetation removal activities. Mitigation Measure CS-BIO-3 would reduce impacts to desert tortoise by requiring a pre-construction clearance survey to determine species presence and preparing a desert tortoise translocation and monitoring plan if desert tortoise are documented on the Calcite Substation site. Mitigation Measure CS-BIO-4 requires implementation of a construction worker environmental awareness program would reduce potentially significant impacts to desert tortoise to a less than significant level.

**Burrowing Owl.** Implementation of Mitigation Measures CS-BIO-2, CS-BIO-4, and CS-BIO-5 would reduce potentially significant impacts to burrowing owl to a less than significant level.

Measure CS-BIO-2 requires SCE to 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 and to monitor the Calcite Substation area during initial grading, ground disturbance and vegetation removal activities. Mitigation Measure CS-BIO-6 requires preparation of preconstruction nesting bird surveys, that when implemented, would reduce impacts to a less than significant level.

**Loggerhead Shrike, Le Conte's Thrasher, and Bendire's Thrasher.** There is the potential for direct impacts to special-status bird nests and would require implementation of CS-BIO-6, pre-construction nesting bird surveys, to reduce impacts to less than significant.

**Mitigation Measure CS-BIO-2: Biological Monitoring** (as previously described

above). **Mitigation Measure 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 phase, 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 timed 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, and be approved by agency review:
    - 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.

**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.

**Mitigation Measure 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.

**Mitigation Measure 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.
- 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.

**Mitigation Measure 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.

### 8.3.3 State or Federally-Protected Wetlands

**A. Potential Impact.** Within the Calcite Substation area, 12 features were delineated as non-wetland waters subject to the jurisdiction of the RWQCB and potential streambeds subject to the jurisdiction of the CDFW. However, these features are not federally jurisdictional due to the Lucerne Dry Lake closed drainage basin having no surface water connection to the interstate waters or navigable waters. Additionally, no wetlands are present on the Calcite Substation site.

Nonetheless, the proposed Calcite Substation would impact State-jurisdictional features as proposed construction, O&M activities, and decommissioning would directly and indirectly impact waters along ephemeral and sparsely vegetated washes.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Approximately 0.7 acres of jurisdictional waters would be impacted, but with implementation of Mitigation Measure CS-BIO-7, impacts would be less than significant and jurisdictional waters would not be substantially impacted.

**Mitigation Measure 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:

- 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.
- 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.
- A description of the mitigation site, including a site plan of the location and rationale for site selection.
- A plant palette and methods of salvaging, propagating, and planting the site to be restored.
- Methods of soil preparation.
- Best Management Practices (BMPs) that will be utilized to avoid erosion and excessive runoff before plant establishment.
- 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 measures would apply:

- Identification of an appropriate mitigation bank and the purchase of credits commensurate with the type of impacts associated with the Project.

# 8.4 Cultural Resources

## 8.4.1 Historical Resources

**A. Potential Impact.** Two resources within the proposed Calcite Substation site are recommended eligible for the CRHR and are considered historical resources per CEQA.

Prehistoric Site 3380-13 was recommended eligible for the CRHR under Criterion 1, 3, and 4, but it is not within the proposed substation boundary so direct impacts to the prehistoric site are not anticipated.

The second historical resource that could be affected by the proposed Calcite Substation is the SCE Lugo-Pisgah No. 1 220 kV transmission line, which is directly associated with the history of the boulder Dam and Hoover Dam construction and hydroelectric generation project, and serves as one of the first lines to transmit high voltage electricity to the Los Angeles region by SCE. By looping in the existing Lugo-Pisgah No. 1 220 kV transmission line to the proposed Calcite Substation, two new 220 kV transmission lines would be created. These new transmission lines would depart from the existing SCE Lugo-Pisgah No. 1 line approximately 2,500 feet south of the Calcite Substation, and cross under two other SCE lines before entering the Calcite Substation from the north. The addition of two new transmission line segments directly north of the SCE Lugo-

Pisgah No. 1 transmission line would not disrupt the larger important historical connections associated with the conveyance of power between the Hoover Dam and Los Angeles. Therefore, potential impacts to this historical resource would be considered less than significant, and no mitigation is required.

Potential indirect visual impacts would occur as a result of the presence of the proposed Calcite Substation. There are 12 eligible resources identified within the 1-mile indirect effects area surrounding the Calcite Substation. Of these, 11 are prehistoric period rock features (rock rings and hearths) and one resource is unknown. All 12 resources have been recommended eligible for the NRHP/CRHR under Criterion D/4. The setting of these resources has not been identified as a contributing feature to their integrity, but rather the integrity of these known rocks features was based on the artifacts observed at the surface level or sub-surface level. Construction of the Calcite Substation would not impact the integrity of these resources and they would remain eligible under Criteria D/4. Therefore, the indirect visual impact is less than significant and no mitigation is required.

However, if a previously unidentified resource were to be discovered during construction of the proposed Calcite Substation and determined to be eligible for listing in the CRHR, proposed construction activities could result in a change to the significance of the resource.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Avoidance of Prehistoric Site 3380-13 is important, which would be ensured primarily through implementation of Mitigation Measure CS-CR-7 (Avoidance of Environmentally Sensitive Area). This measure would be implemented in conjunction with Mitigation Measures CS-CR-1 through CS-CR-6 to reduce impacts to a level less than significant. Implementation of Mitigation Measures CS-CR-1 through CS-CR-7 and CS-TCR-1 and CS-TCR-2 would reduce potential impacts to a less than significant level.

**Mitigation Measure 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.

**Mitigation Measure 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 the EIR)

**Mitigation Measure 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 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.

**Mitigation Measure 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 the 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.

**Mitigation Measure 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.

**Mitigation Measure 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.

**Mitigation Measure 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.

**Mitigation Measure CS-TCR-1: Tribal Cultural Resources** (See Section 3.14, Tribal Cultural Resources, of the Final EIR).

**Mitigation Measure CS-TCR-2: Archaeological/Cultural Documentation** (See Section 3.14, Tribal Cultural Resources, of the Final EIR).

### 8.4.2 Archaeological Resources

**A. Potential Impact.** A total of 10 cultural resources were discovered within the Calcite Substation footprint . Two of these resources were found to be historical resources per CEQA and are addressed in Impact 3.6-1 above. The remaining resources include isolated artifacts, historic trash scatters, and a well. These resources do not meet the definition of an archaeological resource per CEQA. Therefore, construction of the proposed Calcite Substation would not have a direct or indirect impact to known unique archaeological resources. Additionally, there are no known unique archaeological resources within the indirect effects area. Therefore, indirect impacts would not occur.

However, during ground disturbing activities, it is possible to encounter unknown buried archaeological resources or Tribal cultural resources. Inadvertent disturbance or destruction of an unanticipated cultural resource or Tribal cultural resource could result in an adverse change to the significance of the resource if it is determined to be a unique archaeological resource under CEQA.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Upon implementation of Mitigation Measures CS-CR-1 through CS-CR-6, CS-TCR-1, and CS-TCR-2 potential impacts would be reduced to a level less than significant.

**Mitigation Measure CS-CR-1: Retain a Cultural Resources Specialist** (as previously described above)

**Mitigation Measure CS-CR-2: Prepare and Implement a Cultural Resources Management Plan** (as previously described above)

**Mitigation Measure CS-CR-3: Develop and Implement Cultural Resources Environmental Awareness Training** (as previously described above)

**Mitigation Measure CS-CR-4: Archaeological Monitoring** (as previously described above)

**Mitigation Measure CS-CR-5: Unanticipated Discoveries** (as previously described above)

**Mitigation Measure CS-CR-6: Monitoring Report** (as previously described above)

**Mitigation Measure CS-TCR-1: Tribal Cultural Resources** (refer to Section 3.14, Tribal Cultural Resources, of the Final EIR)

**Mitigation Measure CS-CR-2: Archaeological/Cultural Documentation** (refer to Section 3.14, Tribal Cultural Resources, of the Final EIR)

## 8.5 Hazards and Hazardous Materials

### 8.5.1 Release of Hazardous Materials

**A. Potential Impact.** Unanticipated soil contamination could exist at the proposed Calcite Substation site and access road due to illegal dumping or other historical activities (e.g., mining, military training activities). Due to the isolated nature of the area and availability of remote access roads, there is a potential that unknown dumping of trash and other materials may have occurred within the Calcite Substation site or in the vicinity. Other possible types of contamination include heavy metals and/or other hazardous materials.

There is a potential that aerially deposited lead (ADL) contaminated soils may occur within the Calcite Substation site where it is traversed by SR 247. While the Applicant's SWPPP and SPCC Plan would partly address the excavation, handling, and disposal of contaminated soil, additional mitigation is necessary to fully protect workers and the public from unanticipated soil contamination. Environmentally contaminated soil could be improperly identified, handled, and disposed of, resulting in additional environmental contamination or exposure of workers to contaminated materials.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** The potential impacts at the Calcite Substation site related to encountering unanticipated contaminated soil would be reduced to a less than significant level through the implementation of Mitigation Measures CS-HAZ-1 and CS-HAZ-2.

**Mitigation Measure 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.

**Mitigation Measure 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.

# 8.6 Hydrology/Water Quality

## 8.6.1 Alteration of Drainage Pattern

**F. Potential Impact.** Construction activities and O&M associated with the proposed Calcite Substation could alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on- or off-site. Several desert washes that cross the Calcite Substation site flow mainly from the north and west. There is potential for flood flows along these washes to occur and to cross the site during construction that may result in erosion and siltation downstream.

During operation of the proposed Calcite Substation, the site would be surrounded by a prefabricated wall and drainage conveyances, so flood flows would not enter the substation site itself. However, the proposed Calcite Substation includes structures, access roads, communication equipment, and electric distribution lines that would increase the site's impervious surfaces and potentially result in an increase in discharge frequency and magnitude that would accelerate downstream erosion. This could result in concentration of flows that could induce local erosion.

**G. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**H. Facts in Support of Finding.** Implementation of Mitigation Measure CS-HWQ-1 would ensure that a site drainage study is complete prior to construction of the proposed Calcite Substation. Mitigation Measure CS-HWQ-1 would ensure that a site drainage plan is prepared and incorporates a study of potential flood, erosion, and siltation issues 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. The drainage plan developed by Mitigation Measure CS-HWQ-1 would also allow identification of design measures to avoid erosion damage that may result from concentration of flows (e.g., identifying entryways for incoming flood flows, defining collection and conveyance channels, or developing fence design that does not obstruct flows.

To minimize erosion and siltation impacts associated with O&M activities, Mitigation Measure CS-HWQ-1 would ensure that site drainage would be controlled. Therefore, impacts from construction and O&M activities associated with the proposed Calcite Substation would be reduced to a level less than significant.

**Mitigation Measure 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
- 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

### 8.6.2 Surface Runoff

**A. Potential Impact.** As described in Impact 3.10-3(i) of the Final EIR, there are several desert washes that cross the Calcite Substation site mainly from the north and west. There is potential for flood flows along these washes to occur and to cross the site during construction. During operation of the proposed Calcite Substation, the site would be surrounded by a prefabricated wall, so flood flows would not enter the substation site itself. However, the proposed Calcite Substation includes structures, access roads, communication equipment, and electric distribution lines that would increase the site's impervious surfaces and potentially result in an increase in discharge frequency which could result in concentration of flows.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Implementation of Mitigation Measure CS-HWQ-1 would require a site drainage study to be completed and approved prior to grading and construction of the proposed Calcite Substation to ensure that all site drainage issues are addressed. Therefore, impacts would be reduced to a less than significant level.

**Mitigation Measure CS-HWQ-1: Drainage Plan Development** (as previously described above)

### 8.6.3 Flood Flows

A. **Potential Impact.** As described in Section 3.10.1 of the Final EIR, FEMA flood insurance rate maps have not been prepared for the Calcite Substation site or surrounding lands and the site is not within a federally mapped floodplain. However, the Calcite Substation area is subject to occasional flooding due mainly to the presence of desert washes. Flow depths are likely shallow due to the flat terrain and lack of definition for the washes. Additionally, runoff is activated by rainfall only, and typical of desert washes, rainfall is of short duration.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** If floods occur during construction or operation of the proposed Calcite Substation, implementation of Mitigation Measure CS-HWQ-1 would require that the site drainage study addresses all issues related to flooding onsite. Therefore, impacts would be reduced to a less than significant level.

**Mitigation Measure CS-HWQ-1: Drainage Plan Development** (as previously described above)

### 8.6.4 Flood Hazard Zone

**A. Potential Impact.** As previously described in Impact 3.10-1 of the Final EIR, there is potential for runoff during construction and O&M activities for the Calcite Substation. Flood flows could allow pollutants to enter surface flows representing a potentially significant impact.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** With adherence to and compliance with a SWPPP and erosion control plan, along with implementation of Mitigation Measure CS-HWQ-1, impacts would be minimized to the extent practical. This mitigation measure and compliance with water quality regulations would minimize drainage and flooding issues. Therefore, impacts would be reduced to less than significant level.

**Mitigation Measure CS-HWQ-1: Drainage Plan Development** (as previously described above)

## 8.7 Noise and Vibration

### 8.7.1 Substantial Increase in Ambient Noise Levels

**A. Potential Impact.**

**Construction.** The construction spread for the proposed Calcite Substation would require a small crew, using equipment capable of generating noise at levels noise up to 84 dBA Leq at 50 feet. Construction of the proposed Calcite Substation would not be subject to community noise standards in the County Development Code. However, County policies require implementation of acceptable practices to minimize the effects of adverse construction noise.

**Operation.** Routine operation of the proposed Calcite Substation would be unstaffed, and electrical equipment within the substation would be remotely monitored and controlled by SCE. Maintenance activities would occur as needed for inspections, repairs and replacements, and for access road maintenance and vegetation management. Equipment at the substation would include 220 kV buses, circuit breakers, disconnect switches, and an equipment room. Noise sources would include HVAC systems and corona discharge noise. The equipment at the proposed substation could include cooling systems that, if necessary, typically could generate 81 dBA at a distance of 10 feet, which would cause over 45 dBA Leq for locations within 900 feet of the source. Locations beyond 900 feet would not be likely to exceed 45 dBA Leq.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding. Construction.** Mitigation Measure CS-NOI-1 would require SCE to control noise in a manner consistent with the County Development Code, and Mitigation Measure CS-NOI-2 and Mitigation Measure CS-NOI-3 would require implementation of best practices for engaging the surrounding community to avoid potential noise complaints. With these measures, the impact of construction noise relative to applicable community noise standards would be less than significant.

**Operation.** Mitigation Measure CS-NOI-4 would prevent installing noise-generating components at the proposed Calcite Substation within 1,000 feet of the property line of a residential use and to

ensure that all stationary sources of noise comply with the property-line standard of 45 dBA Leq at all times. With mitigation, the impact relative to applicable community noise standards would not be significant.

**Mitigation Measure CS-NOI-1: Construction Restrictions.** Heavy equipment operation relating to any Project features shall be restricted to the hours between 7:00 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.

**Mitigation Measure 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.

**Mitigation Measure 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.

**Mitigation Measure 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 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.

# 8.8 Transportation

## 8.8.1 Conflict with Circulation System

**A. Potential Impact.** Construction of the proposed Calcite Substation would not require any temporary road or travel lane closures, except for a brief closure of SR-247 when distribution line stringing across the highway is required. It is estimated that peak construction could temporarily result in up to 180 vehicle trips per day (60 passenger vehicle trips and 120 truck trips). Construction of the

proposed Calcite Substation would also likely include oversize vehicles required to deliver substation equipment and components, which would also increase safety risks on these roads and be considered inconsistent with Caltrans Plans for SR-18 and SR-247.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** To reduce potential temporary impacts, Mitigation Measure CS-TRA-1 SCE would be required to prepare a CTMP for review and approval by Caltrans and the County Department of Public Works, Transportation Operations Division. Mitigation Measure CS-TRA-1 requires a number of traffic control practices to reduce the number of temporary construction trips, control traffic ingress/egress, and ensures any oversized vehicle trips associated with delivery of materials for the Calcite Substation are obtained and followed. The CTMP will include the number of trucks, type of trucks (size), the total number of Equivalent Single Axle Loads, and planned truck routes to the Calcite Substation site during construction. This information will be used to determine if a maintenance agreement is required to ensure all County maintained roads utilized by construction traffic remain in acceptable condition during construction. With implementation of Mitigation Measure CS-TRA-1, potential impacts associated with oversize vehicles would be reduced to a less than significant level.

**Mitigation Measure 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), 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

## 8.8.2 Geometric Design Hazards

**A. Potential Impact.** As previously described in Impact 3.13-1 of the Final EIR, construction trips associated with the proposed Calcite Substation would include oversized vehicles, which could create hazards to motorists.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** To reduce impacts from temporary trips accessing the site and from oversize vehicle trips, Mitigation Measure CS-TRA-1 would require the preparation of a CTMP for review and approval by Caltrans and the San Bernardino County Department of Public Works Traffic Division. With the implementation of Mitigation Measure CS-TRA-1, construction of the

Calcite Substation would have a less than significant impact with respect to substantially increasing roadway hazards.

**Mitigation Measure CS-TRA-1: Construction Traffic Management Plan** (as previously described above)

### 8.8.3 Emergency Access

**A. Potential Impact.** Because of the short-term nature of the construction activities, construction activities associated with the Calcite Substation would not require a new, or significantly interfere with an existing risk management, emergency response, or evacuation plan.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** The proposed Calcite Substation includes implementation of a CTMP. The CTMP would include construction traffic control measures to ensure that emergency access is maintained during Project construction. The CTMP will include implementation of safety measures, such as directing construction traffic with a flag person (as needed to maintain safety adjacent to existing roadways), placing temporary traffic control signage along access routes to indicate the presence of heavy vehicles and construction traffic, and ensuring access for emergency vehicles to the Calcite Substation site. Therefore, the proposed Calcite Substation would not result in inadequate emergency access during construction, and any potential impacts would be less than significant.

**Mitigation Measure CS-TRA-1: Construction Traffic Management Plan** (as previously described above)

## 8.9 Tribal Cultural Resources

### 8.9.1 Historical Resources

**A. Potential Impact.** The records search and the NAHC sacred lands file results for the proposed Calcite Substation did not indicate the existence of areas of significance within the proposed Calcite Substation area. However, the intensive pedestrian surveys identified a prehistoric site that is considered eligible for the CRHR (3380-13). The site is located near the former northern shoreline of Pleistocene Lake Lucerne.

As previously discussed, in Section 3.14.1 of the Final EIR, the County began the AB 52 Native American Consultation on April 20, 2022 for the Sienna Project, which included the Calcite Substation as part of the Project. As a result of the County's consultation efforts, no known tribal cultural resources or tribal cultural places have been identified within the Calcite Substation area. However, previous consultation occurred as part of the Stagecoach Solar Project environmental review process, in which the SMBMI (now the Yuhaaviatam of San Manuel Nation) responded. During the previous consultation with the SMBMI (now the Yuhaaviatam of San Manuel Nation), the Tribal representative indicated that the area is considered by the Tribe to have a high sensitivity for Tribal cultural resources. While the Tribal cultural resources described therein are not eligible or listed on the CRHR, the CSLC staff determined them to be significant, based on the formal statements and testimony provided by the SMBMI Tribal Historic Preservation Officer, as provided in the Office of Planning and Research AB 52 Technical Advisory. Therefore, impacts of the proposed Calcite Substation to Tribal cultural

resources are potentially significant, because project activities could adversely affect the significance of these identified Tribal cultural resources.

**B. Finding.** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** Implementation of Mitigation Measure CS-TCR-1 (Tribal Monitoring) and CS-TCR-2 (Treatment of Cultural Resources) as described below, and Mitigation Measures CS-CR-1 through CS-CR-7 as described in Section 3.6 of the Final EIR, Cultural Resources, would be implemented to reduce potential impacts associated with direct impacts to Tribal cultural resources to a less than significant level.

**Mitigation Measure 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.

Inadvertent Discovery Guideline

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.

**Mitigation Measure 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.

**Mitigation Measure CS-CR-1: Retain a Cultural Resources Specialist** (refer to Section 3.6, Cultural Resources, of the Final EIR)

**Mitigation Measure CS-CR-2: Prepare and Implement a Cultural Resources Management Plan** (refer to Section 3.6, Cultural Resources, of the Final EIR)

**Mitigation Measure CS-CR-3: Develop and Implement a Cultural Resource Environmental Awareness Training** (refer to Section 3.6, Cultural Resources, of the Final EIR)

**Mitigation Measure CS-CR-4: Archaeological Monitoring** (refer to Section 3.6, Cultural Resources, of the Final EIR)

**Mitigation Measure CS-CR-5: Unanticipated Discoveries** (refer to Section 3.6, Cultural Resources, of the Final EIR)

**Mitigation Measure CS-CR-6: Monitoring Report** (refer to Section 3.6, Cultural Resources, of the Final EIR)

**Mitigation Measure CS-CR-7: Avoidance of Environmentally Sensitive Area** (refer to Section 3.6, Cultural Resources, of the Final EIR)

### 8.9.2 Public Resources Code Section 5024.1

**A. Potential Impact:** As stated above in Impact 3.14-1 of the Final EIR, the proposed Calcite Substation site is located in an area with high sensitivity for Tribal cultural resources according to consultation with the YSMN. In addition, the pedestrian surveys for the Calcite Substation identified a prehistoric site considered eligible for the CRHR. As such, construction of the Calcite Substation has the potential to substantially impact or change the significance of a Tribal cultural resource, as defined in Public Resources Code Section 21074.

**B. Findings:** Pursuant to CEQA Guidelines §15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**C. Facts in Support of Finding.** With the implementation of Mitigation Measures CS-TCR-1 and CS-TCR-2, and CS-CR-1 through CS-CRL-7, potential impacts would be reduced to a less than significant level.

**Mitigation Measure CS-TCR-1: Tribal Cultural Resources** (as previously described above)

**Mitigation Measure CS-TCR-2: Archaeological/Cultural Documentation** (as previously described above)

**Mitigation Measure CS-CR-1: Retain a Cultural Resources Specialist** (refer to Section 3.6, Cultural Resources, of the Final EIR)

**Mitigation Measure CS-CR-2: Prepare and Implement a Cultural Resources Management Plan** (refer to Section 3.6, Cultural Resources, of the Final EIR)

**Mitigation Measure CS-CR-3: Develop and Implement a Cultural Resource Environmental Awareness Training** (refer to Section 3.6, Cultural Resources, of the Final EIR)

**Mitigation Measure CS-CR-4: Archaeological Monitoring** (refer to Section 3.6, Cultural Resources, of the Final EIR)

**Mitigation Measure CS-CR-5: Unanticipated Discoveries** (refer to Section 3.6, Cultural Resources, of the Final EIR)

**Mitigation Measure CS-CR-6: Monitoring Report** (refer to Section 3.6, Cultural Resources, of the Final EIR)

**Mitigation Measure CS-CR-7: Avoidance of Environmentally Sensitive Area** (refer to Section 3.6, Cultural Resources, of the Final EIR)

# 9 Cumulative Impacts

As analyzed in Chapter 5 of the Final EIR, cumulative impacts to aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology/water quality, noise and vibration, transportation, and tribal cultural resources would be significant prior to implementation of project specific mitigation measures, and mitigation that would be required of other cumulative projects.

## Aesthetics

The geographic scope for the analysis of cumulative impacts on aesthetics and visual resources includes both the local viewshed within a one-mile radius of the Project Site and area. Local cumulative effects could occur in the immediate Project viewshed if cumulative projects, activities, and landscapes are visible in the same field of view as the Project and could generally be visible from the Project area. Beyond three miles, structures become less distinct because they blend with background forms, colors, and textures. Also, beyond the three miles, it is likely that sight lines become impaired or blocked by intervening terrain and existing structures. However, regional cumulative effects could still occur if viewers perceive that the general visual quality or landscape character of a regional area is diminished by the proliferation of visible similar structures or construction, even if the changes are not in the same field of view as existing or known future structures or facilities. The scenic experience could be degraded due to the perceived addition of new man-made features to the landscape. The extent of regional cumulative effects is limited to the project valley.

The proposed Project and any potential cumulative project within one mile are not within a scenic vista or visible from any designated scenic vistas. Therefore, the proposed Project would not contribute to cumulative impacts associated with scenic vistas, and no cumulative impact on scenic vistas would occur.

The grand scale of the open desert panoramas impart an overall general impression of a relatively unimpaired, isolated desert landscape. The cumulative scenario includes large-scale solar generation plants (with large expanses of photovoltaic panels) and including gen-tie lines (Calcite Solar I and Ord Mountain and Energy Storage Project) whose scale and character would have cumulative effects largely attributed to the extent of the solar panel arrays that would be placed in areas that are generally vacant and/or undeveloped. If all the projects were implemented, they would substantially degrade the visual character and general scenic appeal of the existing landscape visible from SR 247, a State-Eligible and County-Designated Scenic Highway, as well as from scattered rural residences. The result would be the conversion of a relatively undeveloped desert landscape into one with new man-made features and urbanized appearance, which is considered to be cumulatively considerable and although mitigation measures would be implemented for each of the projects, the residual cumulative impact would be significant. The utility-scale size of the Sienna Project would contribute to this cumulatively considerable aesthetic impact. This contribution is considered significant due to the large area (1,854 acres) proposed for solar development and associated gen-tie lines in the context of the valley. While the proposed Calcite Substation would be located on an approximately 75-acre parcel, only a 7-acre portion would be developed. The Calcite Substation and associated components in and of itself, would not contribute to a cumulatively considerable aesthetic impact due to its relatively small scale and area of disturbance, topography and distance from other planned solar projects, and that it would not involve large expanses of solar arrays. Although projects located within private lands and/or under the jurisdiction of the County of San Bernardino would be designed in accordance with the County's Policy Plan, which includes policies to protect visual resources in the County, and San Bernardino County Development Code, for

many travelers along SR 247, the scenic experience would be substantially degraded by the solar arrays and associated gen-ties due to the perceived addition of new man-made features to the landscape.

The County is known for its dark skies. Any potential cumulative project would be subject to the County's Night Sky Ordinance and Glare and Outdoor Lighting standards (County Development Code Section 83.07.040), which would limit the amount of lighting that would be introduced in the area and restrict the type of lighting that could be used. The proposed Calcite Substation would require a minimal amount of lighting and would not contribute to a cumulative impact related to dark skies. The cumulative impact on the night sky would be less than significant due to required conformance with the County's applicable ordinance which are specifically intended to reduce impacts on nighttime skies.

### Air Quality

The geographic scope of cumulative air quality impacts is the Mojave Desert Air Basin (MDAB). The MDAB consists of the desert portions of northwestern Los Angeles County, eastern Kern County, northeastern Riverside County, and San Bernardino County, and encompasses all the cumulative projects (Table 5-1 of the Final EIR). The MDAQMD has jurisdiction within the MDAB and monitors and regulates its local air quality.

As shown in Table 5-1 of the Final EIR, the majority of the cumulative projects are large-scale renewable energy generation projects, where the main source of air emissions would be generated during construction. However, two of the projects (Ord Mountain and Energy Storage Project, Calcite Solar I – Lendlease Energy Development, LLC,) are currently on hold, one project (Camp Rock Solar Farm LLC) is under review, one project (SCE Eldorado-Pisgah-Lugo Project: Segment 1 and 2) is in the planning phase, two projects are currently under construction (SCE Eldorado-Lugo Mohave Capacitor Project and Monastery, P201700152). There is a possibility that the projects on hold and under review could be constructed at the same time as the proposed Project.

From a cumulative air quality standpoint, the potential cumulative impact associated with the generation of $O_3$, $PM_{2.5}$ and $PM_{10}$ emissions during construction of the cumulative projects is a consideration, because the portion of the MDAB overseen by the MDAQMD is designated severe nonattainment for the federal eight-hour $O_3$ standard, federal 24-hour $PM_{10}$ standard (San Bernardino

County only), state $O_3$ standard, state $PM_{10}$ standard, and state $PM_{2.5}$ standard under existing conditions. However, the cumulative projects would be required to comply with MDAQMD's rule for fugitive dust control (Rule 403 applies to both the construction and operational phases of projects) and would be required to prepare and implement operational dust control plans as approved by the MDAQMD for compliance with all federal and state air quality standards. Similar to the Sienna Project, the cumulative projects would also be required to reduce potentially significant air quality impacts to the extent practicable under CEQA.

Operational impacts of other renewable energy facilities identified in Table 5-1 of the Final EIR would also be similar. Although these cumulative projects generally involve large areas, their operational requirements are very minimal, requiring minimal staff or use of machinery or equipment that generate emissions. Further, alternative energy projects, such as the proposed Project, would assist attainment of regional air quality standards and improvement of regional air quality by providing clean, renewable energy sources.

Based on the evaluation above, cumulative impacts to air quality, while potentially significant, are anticipated to be reduced to a level that is considered less than cumulatively considerable with implementation of State-required mitigation.

As discussed in Section 3.4 of the Final EIR, Air Quality, the proposed Project would be required to comply with MDAQMD Rule 403 and San Bernardino County Development Code Section 84.29.035 to control fugitive dust along with the San Bernardino County Development Code Section 83.01.040 to reduce exhaust emissions during construction. With implementation of the required water control measures, $PM_{10}$ emissions would not exceed MDAQMD's threshold of 15 tons per year. Therefore, all construction-related criteria pollutant emissions would not exceed the applicable MDAQMD thresholds, and the Project's incremental contribution to cumulative construction air quality impacts would not be cumulatively considerable and would be less than significant.

## Biological Resources

Table 5-1 of the Final EIR lists the projects considered for the biological resources cumulative impact analysis. Cumulative impacts for a project would be significant if the incremental effects of the individual project are considerable when combined with the effects of past projects, other current projects, and probable future projects. As in Section 3.5, Biological Resources, of the Final EIR, the Project-specific impacts of the Sienna Project would be reduced to less than significant levels with implementation of Mitigation Measures S-BIO-1 through S-BIO-8. The Project-specific impacts of the proposed Calcite Substation would be reduced to less than significant levels with implementation of Mitigation Measures CS-BIO-1 through CS-BIO-7.

There are a number of special-status species, both plants and wildlife, that currently utilize the Project area and/or surrounding vicinity. Implementation of the proposed Project, along with related projects, have the potential to impact transient wildlife species, including burrowing owls, loggerhead shrike, burrowing owls, other raptors, migratory birds, Mojave ground squirrel, desert kit fox, and desert tortoise.

Development of cumulative projects, primarily other renewable energy projects in the County's Desert Region, could result in: Direct take to special-status plant and wildlife species; construction, operational, and decommissioning disturbances; and/or special-status habitat conversion. While most of the cumulative projects would convert undeveloped land into renewable energy facilities, over time, vegetation communities could re-establish between the panels, fencing, and utility structures, allowing wildlife (e.g., rodents, raptors, small birds, and reptiles) to continue inhabiting and foraging on the sites over the lifetime of the projects (approximately 30 years). Decommissioning plans, required for solar projects, also outline revegetation requirements for potential habitat restoration. Therefore, while habitat would be temporarily disturbed or removed during the construction and decommissioning phases, operation and post-operation of such renewable energy facilities would not result in substantial permanent impacts to special-status species and habitats, and the affected lands could return to existing conditions for the foreseeable future.

Further, as with the proposed Project, these cumulative projects would also be required to avoid and/or mitigate impacts to special-status species and habitats in accordance with County, CDFW, and USFWS requirements. Thus, cumulative impacts would not be cumulatively considerable and would be less than significant.

Due to the relatively low-maintenance operational nature of solar energy facilities and substations, no operational impacts to biological resources are anticipated following construction, and the Project's contribution to cumulative operational impacts would not be cumulatively considerable and would be less than significant.

## Cultural Resources

Table 5-1 of the Final EIR lists the projects considered for the cultural resources cumulative impact analysis. Construction and (to a lesser extent) operation of solar facilities within the county has the potential to directly damage cultural resources, including historic resources, archaeological resources, and human remains within the County. However, cumulative projects would be required to avoid or minimize impacts to cultural and tribal resources to the extent practicable pursuant to federal and State law, including CEQA.

As discussed in Section 3.6, Cultural Resources, of the Final EIR, given that the Sienna Project would have neither a direct impact or an indirect impact on historical resources, it would not contribute to or have a cumulative impact on historic resources. Prehistoric Site 3380-13 was recommended eligible for the CRHR, but it is not within the proposed boundary of the Calcite Substation, so direct impacts to the prehistoric site are not anticipated. However, avoidance of this site is important, which would be ensured primarily through implementation of Mitigation Measure CS-CR-7 (Avoidance of Environmentally Sensitive Area). Therefore, with avoidance of Prehistoric Site 3380-13, implementation of the proposed Calcite Substation would not contribute to or have a cumulative impact on historic resources.

Regarding archaeological resources, in association with CEQA review, and depending on the depth of excavation and sensitivity of respective sites, mitigation measures would be required for cumulative projects that have the potential to cause significant impacts to undiscovered archaeological resources, including existing regulations for undiscovered human remains. Implementation of such mitigation measures and regulations would avoid significant impacts. State requirements regarding impacts on archaeological resources and CEQA compliance require monitoring of excavation activities and treatment and/or curation of discovered resources where appropriate (PRC Section 15064.5). Such standard construction practices, particularly over a range of project sites, provide for protection, recovery and curation of discovered resources and preserve their contributions to the knowledge base of past population activity in the area. For those projects not subject to CEQA review, there would be some potential for impacts on archaeological resources and human remains in the event there are excavations that extend into soils conducive to retaining resources. However, regulations contained in the California HSC and Penal Code would apply in some instances, and circumstances involving a loss of such resources are expected to be limited. Therefore, the cumulative effects from cumulative projects are considered less than significant.

The proposed Project would be required to comply with Mitigation Measures S-CR-1 through S-CR-4, CS-CR-1 through CS-CR-7, and regulations cited above in the event resources are found, thus reducing significant impacts on archaeological resources to less than significant levels. Therefore, the proposed Project's contribution to cumulative impacts associated with archaeological resources would not be considerable.

## Geology and Soils

Table 5-1 of the Final EIR lists the projects considered for the cumulative impact analysis. Ongoing development and growth in the broader area may result in a cumulatively significant impact to geology and soils and to paleontological resources.

Due to the site-specific nature of geological conditions (i.e., soils, geological features, subsurface features, seismic features, etc.), impacts associated with geology and soils are typically assessed on a project-by-project basis rather than on a cumulative basis. However, as with the proposed Project, cumulative projects would be subject to the same established guidelines and regulations pertaining to

building design and seismic safety, including those set forth in the CBC and other applicable regulations. In addition, the cumulative projects would not have the potential to directly or indirectly exacerbate existing seismic conditions cumulatively in combination with the proposed Project. Therefore, considering the existing regulatory requirements and regulations that would apply to all development, the proposed Project's contribution to cumulative impacts associated with geology and soils would not be considerable.

With regard to paleontological resources, some of the cumulative projects may include excavation on parcels that have been disturbed or are already developed, as well as on open space parcels, and would have the potential to disturb geological units that are sensitive for paleontological resources. Generally, however, projects that require substantial excavation would be subject to environmental review under CEQA. If the potential for significant impacts on paleontological resources were identified given the site characteristics and development program of the cumulative projects, the cumulative projects would be required to implement mitigation measures to avoid significant impacts. Implementation of similar mitigation measures, as proposed under the Project, would ensure that cumulative effects from cumulative projects are considered less than significant.

The proposed Project would be required to comply with Mitigation Measures S-GEO-2 and S-GEO-3 to reduce the potential for significant impacts on paleontological resources to less than significant levels. Therefore, the proposed Project's contribution to cumulative impacts associated with paleontological resources would not be considerable and would be less than significant.

### Hazards and Hazardous Materials

Hazards and hazardous materials impacts are typically highly localized and site specific. The EIR evaluates potential environmental concerns in connection with the Project site and surrounding area. The database searches document the findings of various governmental database searches regarding properties with known or suspected releases of hazardous materials or petroleum hydrocarbons within a search radius of up to one mile from the site and serves as the basis for defining the cumulative impacts study area.

Although some of the cumulative projects also have potential impacts associated with hazardous materials, the environmental concerns associated with hazardous materials are typically site-specific.

Each cumulative project is required to address any issues related to hazardous materials or wastes. While other solar PV projects may include similar battery storage systems, similar to the proposed Project's BESS, all battery storage systems would be required to include fire preventative measures and fire and safety systems to reduce the potential for battery thermal runaway and other potentially hazardous events. All construction, operation, and decommissioning of the solar projects would need to follow the same safety standards and suppression systems. Projects must adhere to applicable regulations for the use, transport, and disposal of hazardous materials and implement mitigation in compliance with federal, State, and local regulations to protect against site contamination by hazardous materials. Compliance with all applicable federal, State, and local regulations related to hazardous materials would ensure that the routine transport, use, or disposal of hazardous materials would not result in adverse impacts. Additionally, site-specific investigations would be conducted at sites where contaminated soils or groundwater could occur to minimize the exposure of workers and the public to hazardous substances.

With adherence to applicable federal, State, and local regulations governing hazardous materials, the potential risks associated with hazardous wastes would be reduced to a level of less than significant. The incremental effects of the proposed Project related to hazards and hazardous materials, are anticipated to be minimal, and any effects would be site-specific. Therefore, the proposed Project would

not result in incremental effects to hazards with respect to hazardous materials that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable probable future projects. As such, the proposed Project would not result in cumulatively considerable impacts to or from hazards or hazardous materials and would be less than significant.

### Hydrology/Water Quality

Cumulative impacts to hydrology and water quality generally occur as a result of incremental changes that degrade water quality. Cumulative impacts can also include individual projects which, taken together, adversely contribute to drainage flows or increase potential for flooding in a project area or watershed.

As with the proposed Project, cumulative projects would also be subject to the same regulatory requirements, including, where applicable, NPDES permits and other discharge requirements. Each cumulative project would be evaluated individually to determine appropriate BMPs needed to avoid impacts to water quality. Therefore, compliance with applicable regulatory measures would ensure that impacts on drainage/flooding conditions, water quality, and groundwater quality would be less than significant. Accordingly, the proposed Project and cumulative projects would not result in cumulatively considerable impacts with respect to hydrology, drainage quantities/patterns, and water quality.

As demonstrated above, through compliance with applicable regulatory requirements via site-specific systems and BMPs, the proposed Project and cumulative projects would not substantially conflict with or obstruct implementation of a water quality control plan. Each cumulative project would also be required to, if they were to utilize groundwater, analyze their respective impacts on groundwater supply and recharge.

Accordingly, with these considerations, along with the proposed Project's and cumulative projects' compliance to applicable regulatory requirements, no significant cumulative impacts regarding conflicts with or obstructing implementation of a water quality control plan or sustainable groundwater management plan would occur.

As with the proposed Project, cumulative projects would similarly not be located within a tsunami zone or seiche zones. Thus, there would be no cumulative potential for risk of release of pollutants within these zones. Accordingly, the proposed Project and cumulative projects would not result in cumulatively considerable impacts with respect to release of pollutants due to project inundation by flooding, tsunami, or seiche.

### Noise and Vibration

The proposed Project's construction activities would not result in a substantial temporary increase in ambient noise levels at the nearest sensitive receptors. Construction noise would be periodic and temporary noise impacts that would cease upon completion of construction activities. The proposed Project would contribute to other proximate construction project noise impacts if construction activities were conducted concurrently. However, based on the noise analysis contained in Section 3.12, Noise and Vibration, of the Final EIR, the proposed Project's construction-related noise impacts would be reduced to a less than significant level with implementation of mitigation and would be required to comply with the San Bernardino County Development Code.

The combination of the proposed Project together with other related present and reasonably foreseeable future projects in the Project vicinity could involve actions with the potential to result in

noise impacts. However, construction noise impacts for each cumulative project would be mitigated through compliance with the County's standards and ordinances, and any necessary mitigation measures identified through the County's development review process. Thus, construction noise impacts would not be cumulatively considerable and impacts would be less than significant.

Operation of the proposed Project would not result in a substantial permanent increase in ambient noise levels from on-site stationary or off-site mobile traffic noise sources. In addition, cumulative projects in the Project vicinity would be subject to the development review process, which could include conditions of approval to minimize the exposure of sensitive receptors and other receiving land uses to excessive noise to the furthest extent possible. Therefore, operational noise impacts would not be cumulatively considerable and impacts would be less than significant.

### Transportation

Each of the cumulative projects considered in this cumulative analysis of consistency with programs, plans, policies, and ordinances would be separately reviewed and approved by the County, including a review of consistency with applicable policies. As the proposed Project would not be inconsistent and would not conflict with the programs, plans, policies, and ordinances, the proposed Project in combination with the cumulative projects would not create inconsistencies nor result in cumulative impacts with respect to the identified programs, plans, policies, and ordinances.

Similar to the proposed Project, any cumulative project that would be subject to environmental review would be required to evaluate VMT on a project-by-project basis. If the cumulative project were determined to have potentially significant VMT impacts, it would be required to include appropriate mitigation measures to reduce VMT impacts to a less-than-significant level. As the proposed Project would result in a less than significant impact on VMT, the proposed Project would similarly result in a less than significant impact on VMT in cumulative conditions, and further analysis is not necessary.

With regard to geometric hazards, the proposed Project would not result in a significant impact due to a design feature. Each cumulative project would be reviewed by the County to ensure compliance with applicable County requirements relative to the provision of safe access for vehicles, pedestrian, and bicyclists.

Furthermore, since modifications to access and circulation plans are largely confined to a project site and immediate surrounding area, a combination of impacts with other cumulative projects that could potentially lead to cumulative impacts is not expected. Therefore, the proposed Project's potential contribution to cumulative impacts associated with hazardous design conditions would not be considerable.

With regard to emergency access, the proposed Project would not result in a significant impact. The Project site and the surrounding area are developed with existing roadway networks, with existing routes for emergency vehicles and evacuation. Similar to the proposed Project, cumulative projects would likely implement a similar CTMP to include construction traffic measures to ensure adequate emergency access is maintained in and around the cumulative project sites throughout construction activities. Coordination of these plans will ensure construction activities of concurrent cumulative projects and associated hauling activities (if any) are managed in collaboration with one another and the proposed Project. Therefore, the proposed Project's potential contribution to cumulative impacts associated with emergency access would not be considerable.

### Tribal Cultural Resources

Ongoing development and growth in the broader area and in the Project vicinity may result in a cumulatively significant impact to tribal cultural resources, due to the continuing disturbance of

undeveloped areas, which could potentially contain significant, buried archaeological or tribal cultural resources, or transform an area related to tribal cultural history.

Because there is always a potential to encounter undiscovered tribal cultural resources during construction activities, no matter the location or sensitivity of a particular site, Mitigation Measures S-TCR-1, S-TCR-2, CS-TCR-1, and CS-TCR-2 have been included to and would serve to protect, preserve, and maintain the integrity and significance of tribal cultural resources in the event of the unanticipated discovery of a resource.

The individual, Project-level impacts were found to be less than significant with incorporation of mitigation measures, and the proposed Project would be required by law to comply with all applicable federal, State, and local requirements related to historical, archaeological and tribal cultural resources. Other related cumulative projects would similarly be required to comply with all such requirements and regulations, to be consistent with the provisions set forth by CEQA, and to implement all feasible mitigation measures should a significant project-related or cumulative impact be identified. Impacts would be less than significant in this regard and additional mitigation is not required.

# 10 Effects Found Not to Be Significant

CEQA Guidelines §15128 require that an EIR contain a brief statement disclosing the reasons why various possible significant effects of the project were found not to be significant, and therefore would not be discussed in detail in the EIR. The following issues areas that will not be impacted by the project: Agricultural Resources, Greenhouse Gas Emissions, Land Use and Planning, and Utilities and Service Systems (wastewater, stormwater, and solid waste).

# 11 Findings Regarding Feasible Alternatives

Pursuant to CEQA Guidelines §15126.6(a), EIRs must “describe a range of reasonable alternatives to the project, or to the location of this project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.”

CEQA establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR. To be legally sufficient, the consideration of project alternatives in an EIR must permit informed agency decision-making and informed public participation. The analysis of alternatives is evaluated against a rule of reason. Alternatives are suitable for study in an EIR if they meet all of the following thresholds: (1) substantially reduce or avoid the project’s significant environmental impacts; (2) attain most of the basic project objectives; (3) are potentially feasible; and (4) are reasonable and realistic. (Guidelines §15126.6, Subds. (a), (c).) Candidate alternatives that do not satisfy these requirements may be excluded from further analysis. An EIR need not consider alternatives that would change the fundamental nature of the project or that cannot achieve the fundamental goals and purposes of the proposed project.

The alternatives to the project are evaluated in Chapter 7 of the Final EIR in terms of their ability to meet the basic objectives of the project, and eliminate or further reduce its significant environmental effects. Based on these parameters, the following alternatives were considered and analyzed in the EIR:

1) Alternative 1−No Project/No Development Alternative
2) Alternative 2−Reduced Footprint Alternative

## 11.1 Alternative 1 − No Project/No Development

The CEQA Guidelines require analysis of the No Project Alternative (PRC Section 15126). According to Section 15126.6(e)(1), “the specific alternative of ‘no project’ shall also be evaluated along with its impact.” Also, pursuant to Section 15126.6(e)(2); “The ‘no project’ analysis shall discuss the existing conditions at the time the notice of preparation is published, ... at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.”

The No Project Alternative assumes that the proposed Project, as proposed, would not be implemented and the Project site would not be further developed with a solar energy project. The proposed Calcite Substation may still be developed if other solar generation projects, such as the Stagecoach Solar project which was previously analyzed by the California State Lands Commission, are developed.

**A. Finding.** Implementation of the No Project Alternative would generally result in reduced impacts for a majority of the environmental issues areas considered in Chapter 3, Environmental Analysis, of this EIR when compared to the proposed Project. A majority of these reductions are realized in terms of significant impacts that are identified as a result of Project construction-related ground disturbing activities. While the No Project Alternative would result in fewer environmental impacts than the proposed Project, it would also fail to meet any of the Project objectives or realize the benefits of reduced GHG emissions associated with energy use, which are desirable benefits that are directly attributable to the proposed Project.

**B. Facts in Support of Findings.** Alternative 1-No Project/No Development Alternative is rejected as infeasible because it will not meet the primary objectives of the proposed project which include:

- Use proven and established PV and energy storage technology that is efficient and requires low maintenance.
- Assist California in meeting greenhouse gas emission reduction goals by 2030 as required by the California Global Warming Solutions Act (Assembly Bill 32), as amended by Senate Bill 32.
- Support California’s Renewables Portfolio Standard (RPS) Program consistent with the timeline established by Senate Bill 100, which requires that by December 31, 2030, 60 percent of all electricity sold in the State shall be generated from renewable energy sources.
- To provide energy to the electric grid to meet increasing demand for in-state generation.
- Interconnect directly to the SCE electrical transmission system.
- Promote the County’s role as the State’s leading producer of renewable energy.
- Utilize a location that is in close proximity to existing powerlines and the proposed SCE Calcite Substation.

For the reasons stated above, the County finds that this alternative is infeasible and less desirable than the proposed Project and rejects this alternative.

## 11.2 Alternative 2 – Reduced Footprint Alternative

The purpose of this alternative is to reduce the size of the Sienna Project site to minimize impacts on agricultural resources and special-status plant and wildlife species. The Sienna Project site would be reduced by 655 acres from 1,854 acres to 1,199 acres. The Reduced Footprint Alternative would avoid impacts to important farmland designated "Farmland of Statewide Importance" located in the southern portion of the Sienna Project site, and reduce impacts to air quality, biological resources, cultural resources, hydrology and water quality, and tribal cultural resources due to the reduced construction footprint. All other Project components including the proposed Calcite Substation and gen-tie lines would remain the same as with the proposed Project.

A conceptual layout of the Reduced Footprint Alternative is provided in Figure 7-1 of the Final EIR.

**A. Finding.** It is found pursuant to Public Resources Code Section 21081(a)(3), that specific economic, legal, social, technological, or other considerations, make Alternative 2 infeasible.

**B. Facts in Support of Findings.** The Reduced Footprint Alternative would avoid impacts to important farmland designated "Farmland of Statewide Importance" located in the southern portion of the proposed Sienna Project site, and reduce impacts to air quality, biological resources, cultural resources, hydrology and water quality, tribal cultural resources, and utilities/service systems due to the reduced construction footprint. However, although the Reduced Footprint Alternative would reduce some construction-related impacts and achieve the goals and objectives of the Project, the long-term benefits of the Reduced Footprint Alternative would not be equivalent to those realized under the proposed Project.

For the reasons stated above, the County finds that this alternative is infeasible and less desirable than the proposed Project and rejects this alternative.

## 11.3 Findings Regarding Range of Alternatives

**A. Finding.** The EIR considers a reasonable range of alternatives. Substantial evidence supports the conclusion of the Final EIR regarding alternatives considered and rejected.

**B. Facts in Support of Findings.** The purpose of studying alternatives to the proposed project is to identify alternatives that would substantially reduce or avoid the significant environmental impacts of the proposed project. Substantial evidence shows that all potentially significant environmental impacts of the proposed project are mitigated below significant levels and that no significant unavoidable significant environmental impacts remain, except cumulative aesthetics impacts. Consequently, the range of alternatives studied in the EIR is reasonable because it included two alternatives to the proposed project despite there being no significant unavoidable environmental project-level impacts. Both alternatives would reduce some of the potentially significant impacts of the proposed project, and Alternative 1 would eliminate the significant unavoidable cumulative impact to aesthetics. Thus, the EIR considers a reasonable range of alternatives that can substantially reduce significant environmental impacts; can attain most of the basic project objectives; are potentially feasible; and are reasonable and realistic.

### Findings Regarding Growth Inducing Impacts

#### Sienna Project

The Sienna Project is located within the unincorporated area of San Bernardino County and it does not involve the development of permanent residences that would directly result in population growth in the

area. The unemployment rate in the Riverside-San Bernardino-Ontario Metropolitan Statistical Area (MSA) (Riverside and San Bernardino Counties), as of December 2023, was 5.1 percent (State of California Employment Development Department 2024). With respect to employment, construction workers would be working in the area temporarily and are not expected to relocate to the area with their families. It is anticipated that the construction workforce would commute to the site each day from local communities, and the majority would likely come from the existing labor pool as construction workers travel from site to site as needed. Construction staff not drawn from the local labor pool would stay in any of the local hotels in Barstow or other local communities. Temporary construction workers are not expected to generate a demand for services that would require an extension of infrastructure into areas that have not previously been served by public facilities (e.g., new water mains, sewer mains, or roadways). Based on the unemployment rate and the availability of the local workforce, construction of the Sienna Project would not have a growth-inducing effect related to workers moving into the area and increasing the demand for housing and services.

Once construction is completed, the Sienna Project would require up to 15 full-time employees, with periodic on-site personnel visitations for security, maintenance and system monitoring. As the Sienna Project's PV arrays produce electricity passively, maintenance requirements are anticipated to be very minimal. Therefore, the Sienna Project would not result in a substantial growth in the area, as the number of employees required to operate and maintain the facility is minimal. Security personnel may also conduct unscheduled security rounds and would be dispatched to the Sienna Project site in response to a fence breach or other alarm. It is anticipated that maintenance of the facilities would require minimal site presence to perform periodic visual inspections and minor repairs. On intermittent occasions, the presence of additional workers may be required for repairs or replacement of equipment and panel washing. However, because of the nature of the facility, such actions would likely occur infrequently. Overall, minimal maintenance requirements are anticipated. The Sienna Project would not result in substantial population growth, as the number of employees required to operate and maintain the facility is minimal.

While the Sienna Project would contribute to energy supply, which indirectly supports population growth, the Sienna Project is a response to the state's need for renewable energy to meet its Renewable Portfolio Standard, and while it would increase the availability of renewable energy, the Sienna Project would also replace existing sources of non-renewable energy. Unlike a gas-fired power plant, the Sienna Project is not being developed as a source of base-load power in response to growth in demand for electricity. The power generated would be added to the state's electricity grid with the intent that it would displace fossil fueled power plants and their associated environmental impacts, consistent with the findings and declarations in SB 100 that a benefit of the Renewable Portfolio Standard is displacing fossil fuel consumption within the state. The Sienna Project is being proposed in response to state policy and legislation promoting development of renewable energy.

The Sienna Project would supply energy to accommodate and support existing demand and projected growth, but the energy provided by the Sienna Project would not foster any new growth because: (1) the additional energy would be used to ease the burdens of meeting existing statewide energy demands within and beyond the area of the Project site; (2) the energy would be used to support already-projected growth; or, (3) the factors affecting growth are so diverse that any potential connection between additional energy production and growth would necessarily be too speculative and uncertain to merit further analysis.

Under CEQA, an EIR should consider potentially significant energy implications of a project (CEQA Guidelines Appendix F(II); PRC Section 21100(b)(3)). However, the relationship between the Sienna Project's increased electrical capacity and the growth-inducing impacts outside the surrounding area is

too speculative and uncertain to warrant further analysis. When a project's growth-inducing impacts are speculative, the lead agency should consider 14 CCR Section 15145, which provides that, if an impact is too speculative for evaluation, the agency should note this conclusion and terminate discussion of the impact. As the court explained in Napa Citizens for Honest Gov't v. Napa County Board of Supervisors, 91 Cal. App.4th 342, 368: "Nothing in the Guidelines, or in the cases, requires more than a general analysis of projected growth" *Napa Citizens, 91* CA4th at 369. The problem of uncertainty of the proposed Project's growth-inducing effects cannot be resolved by collection of further data because of the diversity of factors affecting growth.

While this document has considered that the Sienna Project, as an energy project, might foster regional growth, the particular growth that could be attributed to the Sienna Project is unpredictable, given the multitude of variables at play, including uncertainty about the nature, extent, and location of growth and the effect of other contributors to growth besides the Sienna Project. No accurate and reliable data is available that could be used to predict the amount of growth outside the area that would result from the Sienna Project's contribution of additional electrical capacity. The County of San Bernardino has not adopted a threshold of significance for determining when an energy project is growth-inducing. Therefore, further evaluation of this impact is not required under CEQA.

Additionally, the Sienna Project would not involve the development of any new roadways, new water systems, or sewers. Thus, the Project would not further facilitate additional development into outlying areas. For these reasons, the Sienna Project is not considered growth-inducing.

### Calcite Substation

The proposed Calcite Substation would be unstaffed and would not require SCE to hire additional personnel. The facilities would be remotely monitored and could be controlled by an automated system from any of SCE's switching centers. SCE personnel would visit the proposed substation on an as-needed basis for electrical switching and routine maintenance, including equipment testing, monitoring, and repair. Therefore, no new employees would be required, and no new population growth would result from the presence of the new substation.

Currently, residences in the Lucerne Valley are adequately served by the existing SCE electric distribution system from the SCE Thorn Substation (on SR-247 just north of Old Woman Springs Road) and this substation is connected to the SCE Cottonwood Substation (approximately 7 miles southeast of the center of the Lucerne Valley community). The proposed Calcite Substation would not interconnect with the distribution lines that serve local load. The presence of the Calcite Substation would be unlikely to lead to construction of additional infrastructure or housing that would encourage population growth in the region.

## Findings Regarding Significant Irreversible Environmental Changes

In accordance with CEQA Guidelines Section 15126.2(d), an EIR must identify any significant irreversible environmental changes that would be caused by implementation of the proposed project being analyzed. Irreversible environmental changes may include current or future commitments to the use of non-renewable resources or secondary growth-inducing impacts that commit future generations to similar uses.

### Sienna Project

Energy resources needed for the construction of the Sienna Project would contribute to the incremental depletion of renewable and non-renewable resources. Resources, such as timber, used in building

construction are generally considered renewable and would ultimately be replenished. Non-renewable resources, such as petrochemical construction materials, steel, copper, lead and other metals, gravel, concrete, and other materials, are typically considered finite and would not be replenished over the lifetime of the Sienna Project. Thus, the Sienna Project would irretrievably commit resources over the anticipated 30-year life of the Project.

At the end of the Sienna Project's operational term, the Applicant may determine that the Project should be decommissioned and deconstructed. Should the Sienna Project be decommissioned, the Project Applicant is required to restore land to its pre-Project state. Consequently, some of the resources on the site could potentially be retrieved after the site has been decommissioned. Concrete footings, foundations, and pads would be removed and recycled at an off-site location. All remaining components would be removed, and all disturbed areas would be reclaimed and recontoured. The Applicant anticipates using the best available recycling measures at the time of decommissioning. Furthermore, Project decommissioning would be carried out in compliance with the County of San Bernardino Development Code Section 84.29.070, Decommissioning Requirements.

Implementation and operation of the Sienna Project would promote the use of renewable energy and contribute incrementally to the reduction in demand for fossil fuel use for electricity-generating purposes. Therefore, the incremental reduction in fossil fuels would be a positive effect of the commitment of nonrenewable resources. Additionally, the Sienna Project is consistent with the State's definition of an "eligible renewable energy resource" in Section 399.12 of the California Public Utilities Code and the definition of "in-State renewable electricity generation facility" in Section 25741 of the California PRC.

### Calcite Substation

Energy resources needed for the construction of the proposed Calcite Substation would contribute to the incremental depletion of renewable and non-renewable resources. Resources, such as timber, used in building construction are generally considered renewable and would ultimately be replenished. Non-renewable resources, such as petrochemical construction materials, steel, copper, lead and other metals, gravel, concrete, and other materials, are typically considered finite and would not be replenished over the lifetime of the Calcite Substation. Thus, the Calcite Substation would irretrievably commit resources over its lifetime. However, given the relative size of the Calcite Substation and the low intensity of its future operation, this commitment of resources is considered less than significant.

1. The County of San Bernardino (the County), acting through the Board of Supervisors, is the Lead Agency for the project evaluated in the EIR. The County finds that the EIR was prepared in compliance with CEQA and the CEQA Guidelines. The County finds that it has independently reviewed and analyzed the EIR for the project, that the Draft EIR which was circulated for public review reflected its independent judgment and that the Final EIR reflects the independent judgment of the County.
2. The County finds that the EIR provides objective information to assist the decision-makers and the public at large in their consideration of the environmental consequences of the project. The public review period provided all interested jurisdictions, agencies, private organizations, and individuals the opportunity to submit comments regarding the Draft EIR. The Final EIR was prepared after the review period and responds to comments made during the public review period.
3. The Planning and Development Services Department evaluated comments on environmental issues received from persons who reviewed the Draft EIR. In accordance with CEQA, the Planning and Development Services Department prepared written responses describing the disposition of significant environmental issues raised. The Final EIR provides adequate, good faith and reasoned

responses to the comments. The Planning Department reviewed the comments received and responses thereto and has determined that neither the comments received nor the responses to such comments add significant new information regarding environmental impacts to the Draft EIR. The Lead Agency has based its actions on full appraisal of all viewpoints, including all comments received up to the date of adoption of these findings, concerning the environmental impacts identified and analyzed in the EIR.

4. The EIR evaluated the following potential project and cumulative environmental impacts:
    - Aesthetics
    - Air Quality
    - Biological Resources
    - Cultural Resources
    - Geology and Soils
    - GHG Emissions
    - Hazards and Hazardous Materials
    - Hydrology/Water Quality
    - Land Use/Planning
    - Noise and Vibration
    - Public Services
    - Transportation
    - Tribal Cultural Resources
    - Utilities/Service Systems (Water Supply)

    Additionally, the EIR considered, in separate sections, Analysis of Long-Term Effects and potential secondary effects of the project. The significant environmental impacts of the project were identified in the Final EIR. The significant environmental impacts of the project and the alternatives were also identified in the Draft and Final EIR.
5. The mitigation measures which have been identified for the project were identified in the Draft and Final EIR. The final mitigation measures are described in the MMRP. Each of the mitigation measures identified in the MMRP, and contained in the Final EIR, is incorporated into the project. The County finds that the impacts of the project have been mitigated to the extent feasible by the mitigation measures identified in the MMRP, and contained in the Final EIR.
6. Textual refinements and errata were compiled and presented to the decision-makers for review and consideration. The Planning and Development Services Department staff has made every effort to notify the decision-makers and the interested public/agencies of each textual change in the various documents associated with the project review. These textual refinements arose for a variety of reasons. First, it is inevitable that draft documents would contain errors and would require clarifications and corrections. Second, textual clarifications were necessitated in order to describe refinements suggested as part of the public participation process.
7. The responses to the comments on the Draft EIR, which are contained in the Final EIR, clarify and amplify the analysis in the Draft EIR.

8. Having reviewed the information contained in the EIR and in the administrative record as well as the requirements of CEQA and the CEQA Guidelines regarding recirculation of Draft EIRs, the County finds that there is no new significant information in the Final EIR, finds that the additional information provided therein merely clarifies, amplifies and/or makes insignificant modifications to the adequate Draft EIR, and finds that recirculation of the Draft EIR is not required.
9. CEQA requires the Lead Agency approving a project to adopt an MMRP for the changes to the project which it has adopted or made a condition of project approval in order to ensure compliance with the mitigation measures during project implementation. The mitigation measures included in the EIR as certified by the County and included in the MMRP as adopted by the County serves that function. The MMRP includes all of the mitigation measures identified in the EIR and adopted by the County in connection with the approval of the project and has been designed to ensure compliance with such measures during implementation of the project. In accordance with CEQA, the MMRP provides the means to ensure that the mitigation measures are fully enforceable. In accordance with the requirements of Public Resources Code §21081.6, the County hereby adopts the MMRP.
10. In accordance with the requirements of Public Resources Code §21081.6, the County hereby adopts each of the mitigation measures expressly set forth herein as conditions of approval for the project.
11. The custodian of the documents or other material which constitute the record of proceedings upon which the County's decision is based is the Department of Land Services, 385 North Arrowhead Avenue, 1st Floor, San Bernardino, California, 92415.
12. The County finds and declares that substantial evidence for each and every finding made herein is contained in the EIR, which is incorporated herein by this reference, or is in the record of proceedings in the matter.
13. The County is certifying an EIR for, and is approving and adopting findings for, the entirety of the actions described in these Findings and in the EIR as comprising the project. It is contemplated that there may be a variety of actions undertaken by other State and local agencies (who might be referred to as "responsible agencies" under CEQA). Because the County is the Lead Agency for the project, the EIR is intended to be the basis for compliance with CEQA for each of the possible discretionary actions by other State and local agencies to carry out the project.
14. The EIR is a Project EIR for purposes of environmental analysis of the project. A Project EIR examines the environmental effects of a specific project. The EIR serves as the primary environmental compliance document for entitlement decisions regarding the project by the County of Imperial and the other regulatory jurisdictions.

# STATEMENT OF OVERRIDING CONSIDERATIONS

CEQA requires decision makers to balance the benefits of the proposed project against its unavoidable environmental risks when determining whether to approve the project. If the benefits of the project outweigh the unavoidable adverse effects, those effects may be considered "acceptable" (State CEQA Guidelines § 15093[a]). CEQA requires the agency to support, in writing, the specific reasons for considering a project acceptable when significant impacts are infeasible to mitigate. Such reasons must be based on substantial evidence in the FEIR or elsewhere in the administrative record (State CEQA Guidelines § 15093 [b]). The agency's statement is referred to as a Statement of Overriding Considerations. The following provides a description of the project's significant and unavoidable adverse impact and the justification for adopting a statement of overriding considerations.

## A. SIGNIFICANT AND UNAVOIDABLE IMPACTS

Although most potential project impacts have been substantially avoided or mitigated, there remains one impact which would be significant unavoidable:

### Aesthetics (Cumulative)

After thorough study and environmental review, as provided in this EIR, it was determined that Project level impacts would not result in any significant and unavoidable impacts. All potentially significant impacts, after implementation of proposed mitigation measures, would be reduced to a less than significant level. However, the grand scale of the open desert panoramas impart an overall general impression of a relatively unimpaired, isolated desert landscape. The cumulative scenario includes large-scale solar generation plants (with large expanses of photovoltaic panels) and including gen-tie lines whose scale and character would have cumulative effects largely attributed to the extent of the solar panel arrays that would be placed in areas that are generally vacant and/or undeveloped. If all the projects were implemented, they would substantially degrade the visual character and general scenic appeal of the existing landscape visible from SR 247, a State-Eligible and County-Designated Scenic Highway, as well as from scattered rural residences. The result would be the conversion of a relatively undeveloped desert landscape into one with new man-made features and urbanized appearance, which is considered to be cumulatively considerable. Although mitigation measures would be implemented for each of the projects, and the projects located within private lands and/or under the jurisdiction of the County of San Bernardino would be designed in accordance with the County's Policy Plan, which includes policies to protect visual resources in the County, and San Bernardino County Development Code, for many travelers along SR 247, the scenic experience would be substantially degraded due to the perceived addition of new man-made features to the landscape. The utility-scale size of the Sienna Project would contribute to this cumulatively considerable aesthetic impact. The Sienna Project's contribution is considered significant due to the large area (1,854 acres) proposed for solar development and associated gen-tie lines in the context of the valley. This is considered a cumulatively considerable impact and would result in a significant and unavoidable cumulative impact.

## B. PROJECT BENEFITS IN SUPPORT OF THE STATEMENT OF OVERRIDING CONSIDERATIONS

This section describes the benefits of the proposed project that outweigh the project's unavoidable adverse effects and provides specific reasons for considering the project acceptable even though the Final PEIR has indicated that there will a significant cumulative impact for which complete mitigation is not feasible. Accordingly, this Statement of Overriding Considerations has been prepared regarding potentially significant adverse environmental impacts resulting from the Sienna Project. Pursuant to CEQA Guidelines §15093(c), the Statement of Overriding Considerations will be included in the record of the project approval and will also be noted in the Notice of Determination. Each of the identified benefits provides a separate and independent basis for overriding the significant environmental effects of the Countywide Plan.

Having reduced the potential effects of the Sienna Project through all feasible mitigation measures, and balancing the benefits of the proposed project against its potential and unavoidable cumulative adverse impacts to Aesthetics, the County finds that the following economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits of the Sienna Project, as discussed below, individually and collectively outweigh the potentially significant unavoidable cumulative adverse impact to Aesthetics:

1. The Sienna Project would use proven and established PV and energy storage technology that is efficient and requires low maintenance to establish a solar facility capable of producing approximately 525 MWs of reliable electricity, and up to 525 MWs of energy storage capacity, and help meet the increasing demand of the State of California for clean, renewable electrical power at a competitive cost.

2. The Sienna Project would assist the State of California in meeting greenhouse gas emission reduction goals by 2030 as required by the California Global Warming Solutions Act (Assembly Bill 32), as amended by Senate Bill 32.

3. The Sienna Project would support California's Renewables Portfolio Standard (RPS) Program consistent with the timeline established by Senate Bill 100, which requires that by December 31, 2030, 60 percent of all electricity sold in the State shall be generated from renewable energy sources.

4. The Sienna Project would interconnect directly to the SCE electrical transmission system, and would enhance electrical distribution infrastructure and provide greater support to existing and future customer loads to ensure Southern California Edison can provide power to all customers, including customers in San Bernardino County

5. The Sienna Project would promote the County's role as the State's leading producer of renewable energy.

6. The Sienna Project would utilize a location that is in close proximity to existing powerlines and the proposed SCE Calcite Substation and would minimize environmental effects by

locating generating facilities in areas which receive intense solar radiation; minimizing water use; and reducing greenhouse gas emissions.

7. Sienna Project construction would generate up to 550 jobs during peak construction periods, and approximately 15 full time jobs during operation, which would provide increased business for local contractors and vendors.

8. The Sienna Project pay property taxes and fees to the General Fund for the benefit of San Bernardino County.

## C. CONCLUSION

The San Bernardino Board of Supervisors has balanced the Sienna Project's benefits against its significant, unavoidable impacts. The Board of Supervisors finds that the Sienna Project's benefits outweigh its significant unavoidable impacts, and these impacts are therefore considered acceptable. The Board of Supervisors finds that each of the benefits described above is an overriding consideration, independent of the other benefits, that warrants approval of the project notwithstanding the Sienna Project's significant unavoidable impacts.