SAN BERNARDINO COUNTY
INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the California Environmental Quality Act (CEQA) Guidelines.

PROJECT LABEL

APN:	0498-111-04, 0498-111-05	***USGS Quad:***	Boron
Applicant:	RPCA Solar 13, LLC	***T, R, Section:***	T11N, R7W, Section 33
Location:	Generally located at Twenty Mule Team Road along the western boundary of San Bernardino County	***Thomas Bros:***	N/A
Project No:	PROJ-2023-00169	***Community Plan:***	N/A
Rep:	Kimley-Horn and Associates, Inc.	***LUZD:***	RLM, RC
Proposal:	A Conditional Use Permit (CUP) to establish a single-axis tracker ground-mounted photovoltaic (PV) community solar and battery energy storage system (BESS) with approximately 14 megawatts of alternating current (MWac) in capacity.	***Overlays:***	Biotic Resources (BR) for Burrowing Owl, Desert Tortoise – Sparse Population

PROJECT CONTACT INFORMATION

Lead Agency: San Bernardino County
Land Use Services Department
385 N. Arrowhead Avenue, 1st Floor
San Bernardino, CA 92415-0182

Contact Person: David J.R. Mack, AICP
Phone No: (831) 320-0413
E-mail: David.Mack@weareharris.com

PROJECT DESCRIPTION

RPCA Solar 13, LLC (Applicant) proposes to construct and operate the Sunrise Road Solar Project (Project), a single-axis tracker ground-mounted photovoltaic (PV) community solar facility and battery energy storage system (BESS) with approximately 14 megawatts of alternating current (MWac) in capacity. The Project is proposed to be located on two privately-owned parcels located in unincorporated San Bernardino County (County). The Applicant is requesting Conditional Use Permit (CUP) approval from the County.

Project Location and Settings

As shown in **Figure 1: Regional Vicinity Map**, the Project would be located along the western boundary of the County and is approximately 0.25 miles east of the census-designated place of Boron in Kern County. The Project would occupy approximately 59 acres (Project Site) across two 40-acre parcels (County Assessor Parcel Number [APNs] 0498-111-04 and 0498-111-05) generally located at Twenty Mule Team Road. As shown in **Figure 2: Local Vicinity Map**, the Project Site is bordered by undeveloped land to the north, east, and south and the unpaved North San Bernardino Boulevard to the west. Regional access to the Project Site is provided via State Route 58 (SR 58) to the north and east and Old Highway 58 to the east. Local access to the Project Site would be accessed via North San Bernardino Boulevard as well as Twenty Mule Team Road located approximately 230 feet to the south.

Existing Site Conditions

As previously discussed, the Project would occupy 59 acres on the northern portions of the two parcels. The Project Site is currently undeveloped land and is void of structures. An unnamed dirt road bisects the Project Site in a north-south orientation that extends south to Twenty Mule Team Road. Another unnamed dirt road is located just south of the Project Site that runs in a slight northwest-southeast manner and touches the southwest corner of the Project Site. The Project Site is relatively flat and is approximately 2,500 feet above mean sea level (amsl).

Surrounding Land Uses

As depicted on Figure 2, the Project Site is bordered by North San Bernardino Boulevard to the west and undeveloped land to the north, east, and south. A cluster of abandoned storage structures and stables is located approximately 140 feet north of the Project Site's boundaries. Existing power poles and overhead electrical lines are located along the unnamed dirt road just south of the Project Site. The nearest residence is approximately 220 feet south of the Project Site. Additional rural residences are located farther north and west. The Project Site is also approximately 800 feet north of the Burlington Northern Santa Fe (BNSF) Railway, which runs parallel to Twenty Mule Team Road.

Land Use Designations and Zoning

The Project Site is designated as Resource Land Management (RLM) in the Countywide Plan, which permits natural resource conservation, mineral resource extraction, and renewable energy facilities consistent with the Renewable Energy and Conservation Element (RECE). The implementing Zoning Districts within the RLM designation include Resource Conservation (RC) and Agriculture (AG). The Project Site is zoned Resource Conservation (RC). The RC land use zoning district provides sites for open space and recreational activities, single-family homes on very large parcels, and similar and compatible uses. Pursuant to San Bernardino County Development Code Table 82-4, renewable energy generation facilities are a permitted use in the RC zoning district with an approved CUP.

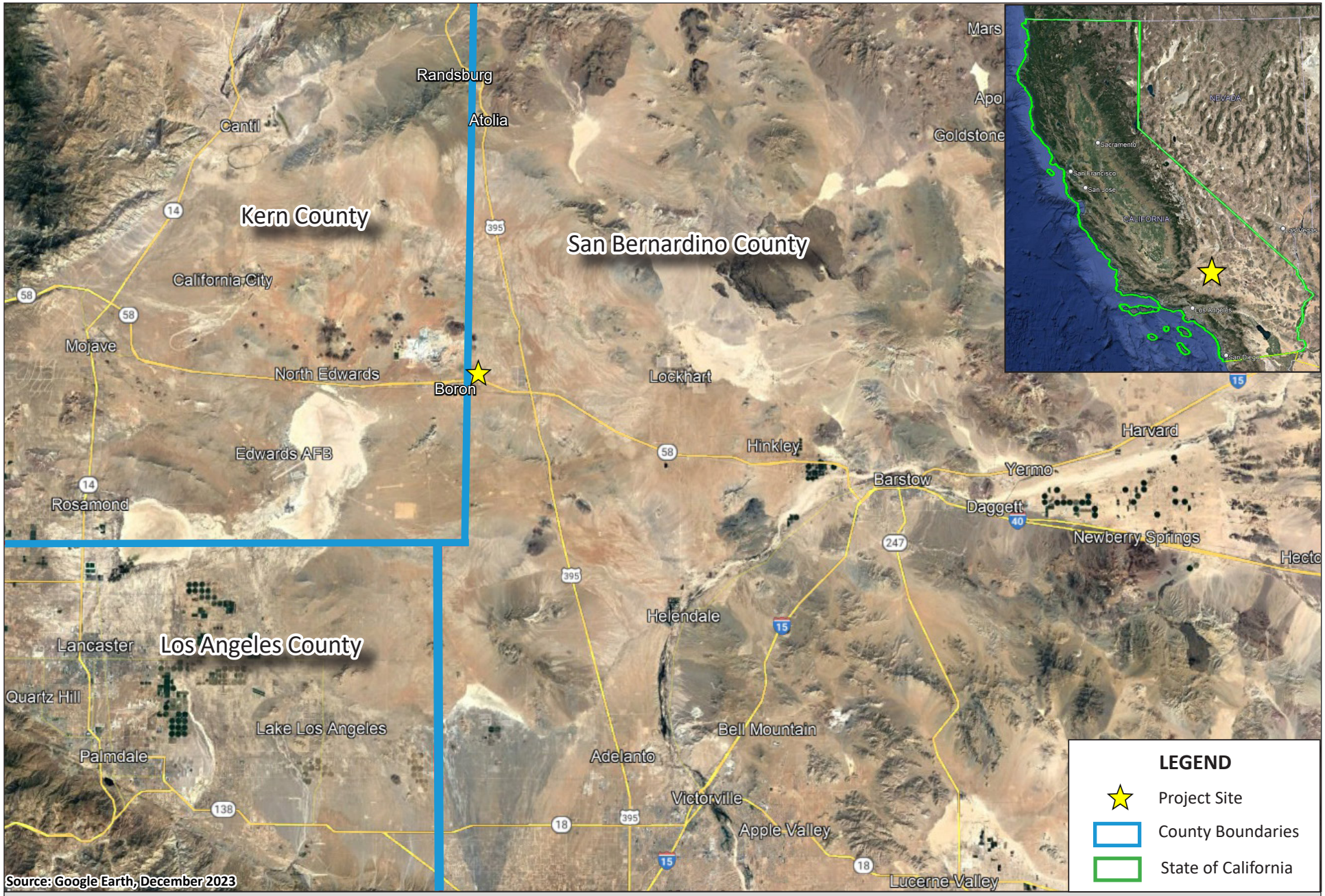

Figure 1: REGIONAL VICINITY MAP
Sunrise Road Solar Project
Initial Study/Mitigated Negative Declaration

NOT TO SCALE

Kimley»Horn

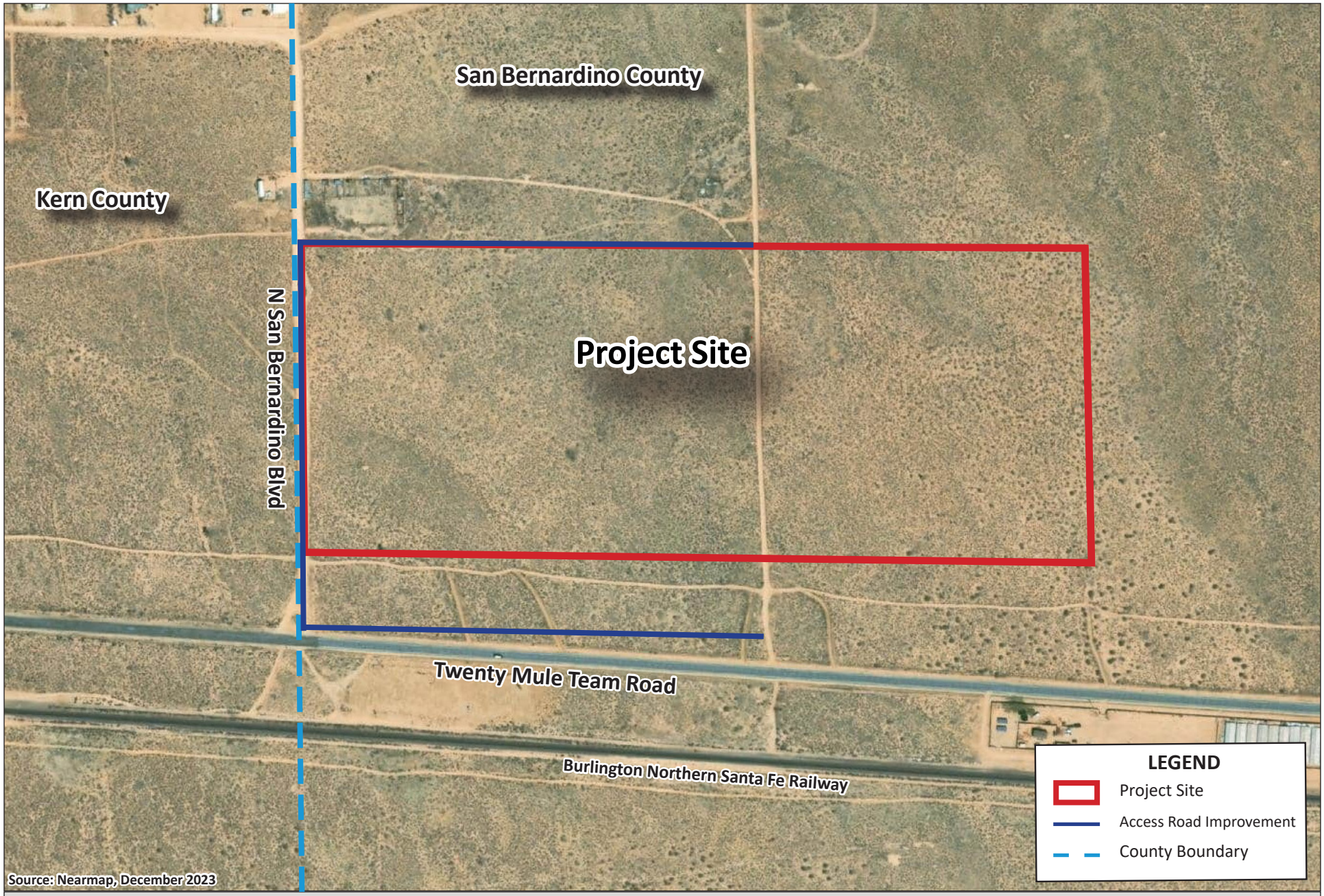

Figure 2: LOCAL VICINITY MAP
Sunrise Road Solar Project
Initial Study/Mitigated Negative Declaration

NOT TO SCALE

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Table 1: Project Site and Surrounding Uses summarizes the on-site and surrounding land uses.

Table 1: Project Site and Surrounding Uses

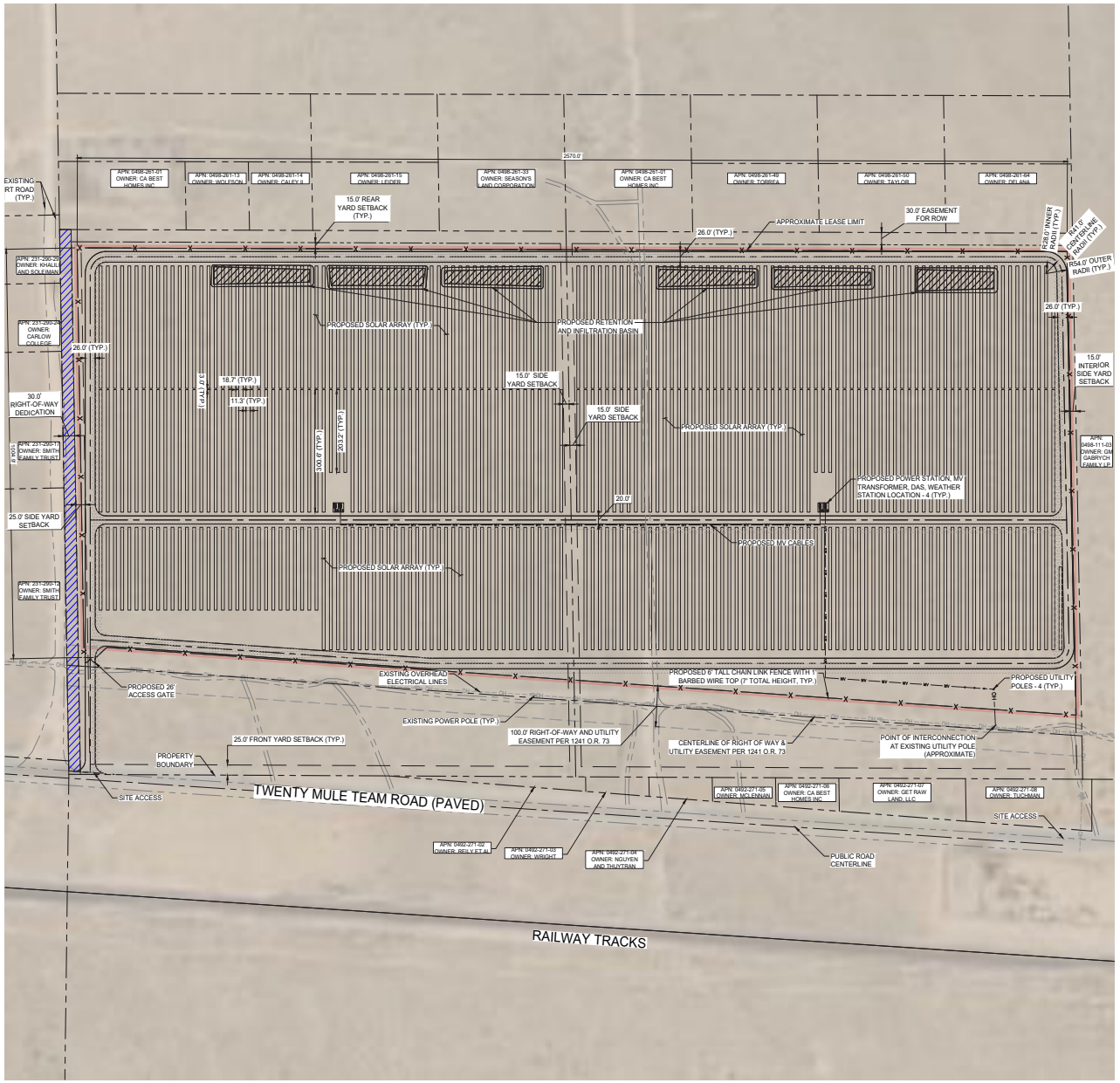
Description	Existing Land Use	General Plan Land Use and Zoning
Project Site	Undeveloped land	Resource Land Management (RLM) / Resource Conservation (RC)
North	Undeveloped land	RLM/RC
South	Undeveloped land	RLM/RC
East	Undeveloped land	RLM/RC
West	Undeveloped land	RLM/RC
Source: San Bernardino County, Public San Bernardino County Map Viewer, https://www.arcgis.com/apps/webappviewer/index.html?id=87e70bb9b6994559ba7512792588d57a. Accessed February 12, 2024.		

Proposed Project

The Applicant is requesting a CUP from the County to construct approximately 14 MWac capacity single-axis tracker ground-mounted PV community solar and BESS. The Project would consist of the following components: solar modules, BESS, underground electrical conductors, Balance of System Equipment, access roads, and fencing. The Project would be interconnected to an electrical distribution system owned by Southern California Edison (SCE) located adjacent to the southern Project Site boundary.

As depicted in **Figure 3: Conceptual Site Plan**, the Project would include solar modules and string inverters. The modules would be manufactured off-site and delivered by truck in wooden crates or cardboard boxes. The solar modules would be fully enclosed in metal and glass frames and would rotate throughout the day to maximize sun exposure. The frames of solar modules would be mounted on steel posts, which would be driven or screwed into the ground to a depth between 10 and 15 feet. The posts would be made from galvanized or corrosion-resistant metal to minimize the potential for corrosion over the lifespan of the Project. The foundations securing the solar modules would be designed to withstand high winds and snow loads. To protect equipment from potential ponding or overland stormwater flow, all equipment skids and pads would be elevated at a minimum of 12 inches above the 100-year flood elevation. The overall height of the solar array would be no more than 15 feet tall.

The BESS would store electrical energy produced by the Project during the day and flexible dispatch it to the grid when it is most needed, typically in the evening. The BESS would be comprised of four battery banks located in the southeast corner of the PV array on a gravel pad. Each battery bank would be approximately the size of a standard shipping container. The BESS would include redundant safety measures, such as hydrogen detection, active ventilation, fire detection and remote shutdown, fireproof insulation, and internal fire suppression technology.



LEGEND

- 78 MODULE SAT ROW
- 52 MODULE SAT ROW
- POWER STATION, MV TRANSFORMER, DAS, WEATHER STATION LOCATION
- EXISTING PROPERTY LINE
- APPROXIMATE LEASE LIMIT
- PROPERTY LINE SETBACK
- PROPERTY EASEMENT
- PROPOSED ROAD CENTERLINE
- PROPOSED 6' TALL CHAIN LINK FENCE WITH 1' BARBED WIRE TOP (7' TOTAL HEIGHT)
- EXISTING OVERHEAD LINE
- PROPOSED OVERHEAD LINE
- ALL WEATHER ACCESS ROAD (VARYING WIDTHS)
- 26' WIDE SITE ACCESS GATE
- 50' OVERHEAD LINE SETBACK
- PROPOSED MV CABLES
- EXISTING ROADS (VARYING WIDTHS)
- LANDSCAPE BUFFER
- PROPOSED RETENTION AND INFILTRATION BASIN

SITE INFORMATION

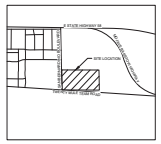
PROJECT ADDRESS:	SUNRISE ROAD, BORON, CA 93516
PROPERTY AREA:	81 AC
PROPOSED SITE DISTURBANCE:	60 AC
FLOOD NOTE:	THIS PROPERTY IS IN ZONE "X" OF THE FLOOD INSURANCE RATE MAP, PANEL NO. 060293394 AND PANEL NO. 060293775, PANEL DATED AUGUST 28, 2008.

GENERAL NOTES

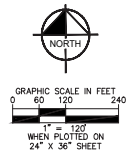
1. PHOTOVOLTAIC PANELS, INVERTERS, AND INTERCONNECTION EQUIPMENT LOCATIONS SHOWN FOR REFERENCE ONLY. DESIGN AND FINAL LAYOUT PER DRAWINGS BY THE CONTRACTED ELECTRICAL DESIGN CONSULTANT.
2. TO PROTECT EQUIPMENT FROM POTENTIAL PONDING OR OVERLAND STORMWATER FLOW, ALL EQUIPMENT SKIDS/PADS (FOR INVERTERS, INTERCONNECTION EQUIPMENT, ETC.) SHALL BE ELEVATED A MINIMUM OF 12" ABOVE 100 YEAR FLOOD ELEVATION.
3. THE NEW ON-SITE ROAD SURFACE CLOSELY MATCHES THE EXISTING SURFACE GRADES. THE INTENT IS TO MAINTAIN EXISTING SURFACE FLOWS ACROSS THE SITE AND ELIMINATE AREAS OF PONDING.
4. FOR ONSITE AND OFFSITE DRAINAGE ANALYSIS, REFER TO "ONSITE AND OFFSITE DRAINAGE REPORT" FOR SUNRISE SOLAR, PREPARED BY KIMLEY-HORN, DATED MARCH, 2024.
5. EXISTING JOSHUA TREES WERE DISCOVERED DURING THE SITE VISIT ON 10/13/2023. A FORMAL JOSHUA TREE SURVEY IS SCHEDULED TO OCCUR AND THIS SURVEY WILL BE UPDATED AT A LATER DATE.

ZONING DEVELOPMENT STANDARDS			
ZONE: RESOURCE CONSERVATION (RC) - DESERT REGION			
REQUIREMENTS	STANDARD (FT)	PROPOSED (FT)	MEETS REQ. (Y/N)
FRONT YARD SETBACK	25	130+	Y
STREET SIDE YARD SETBACK	25	25+	Y
INTERIOR SIDE YARD SETBACK	15	15+	Y
REAR YARD SETBACK	15	15+	Y
LANDSCAPE BUFFER	N/A	15	Y
MAXIMUM TRACKER HEIGHT	35	15	Y
MINIMUM PERIMETER ROAD WIDTH	26	26	Y
MINIMUM INTERIOR ROAD WIDTH	20	20	Y

TRACKER QUANTITY	
# OF ATI 78 MODULE TRACKER ROWS	356
# OF ATI 52 MODULE TRACKER ROWS	39



VICINITY MAP
NTS



Source: Renewable Properties, dated October 17, 2024

Figure 3: CONCEPTUAL SITE PLAN

Sunrise Road Solar Project
Initial Study/Mitigated Negative Declaration

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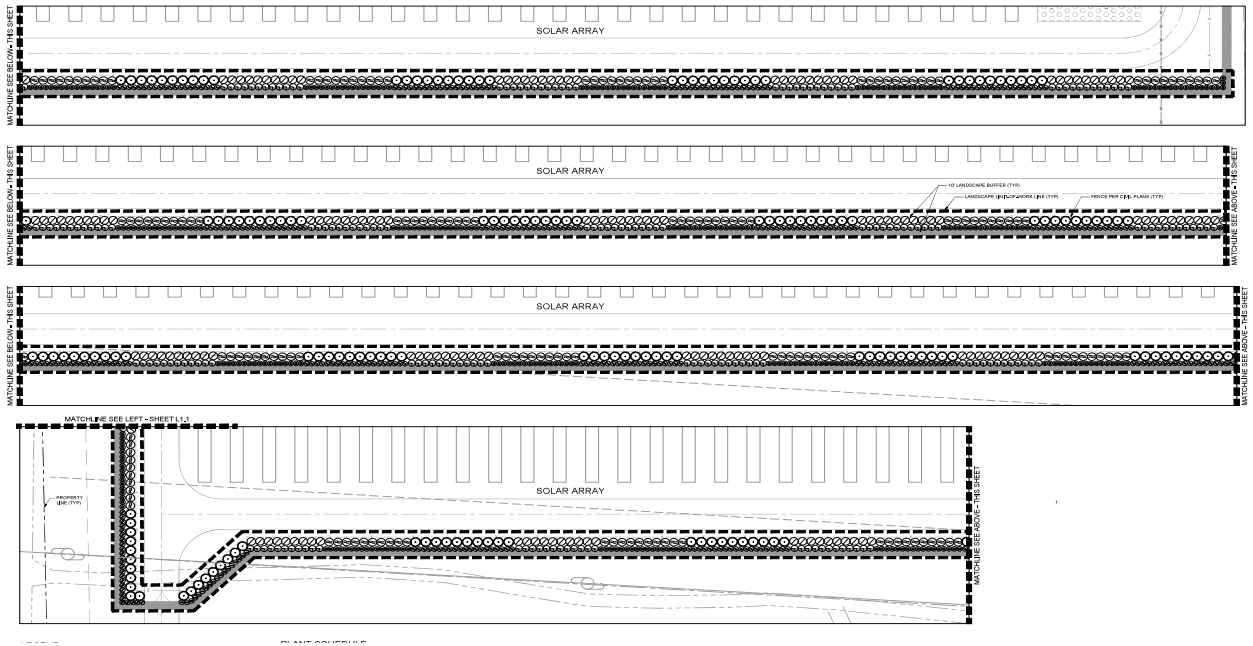
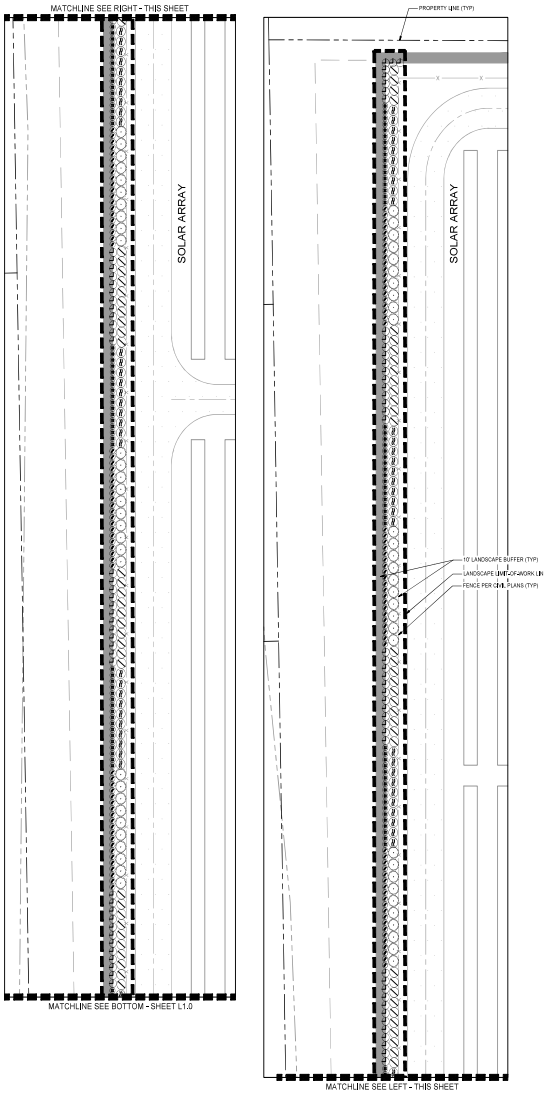
The Balance of System Equipment, including, but not limited to, inverters, AC combiner boxes, transformers, and/or medium voltage switchgear may be installed near the solar array within the Project's fence line. The Balance of System Equipment would be installed on H-Frames and concrete pads and in compliance with equipment manufacturer instructions. Low voltage conductors connecting the solar modules to the Balance of System Equipment would be run underground in conduit. The medium voltage conductors would mostly run underground in a similar fashion to low voltage wiring. A portion of the medium voltage conductor would ultimately come above ground and be strung along new distribution poles on the Project Site, ultimately terminating at the electrical distribution system along the unnamed dirt road bordering the southern boundary of the Project Site, maintained by SCE.

Site access would be provided via a new driveway along the western boundary of the Project Site and constructed from Twenty Mule Team Road. Where necessary, the access roads would be upgraded using gravel and geotextile fabric and extended into the Project's fence line. The new on-site access roads would consist of a perimeter access road that would encircle the entire solar array and another road that would bisect the Project Site in an east-west orientation. The roads would be wide enough to accommodate emergency vehicles (20 feet wide and 15 feet wide for the perimeter and internal access roads, respectively) and designed in compliance with County building and fire department standards. Approximately 11 feet of space would be maintained between each row of solar modules for operations and maintenance (O&M) access. The access roads would be placed such that the farthest panel is no further than 330 feet from the center of the fire road.

The Project would be enclosed in a six-foot-tall chain link fence with one foot of barbed wire on top (for a total fence height of 7-feet) in compliance with the National Electric Code. The fence would have at least one vehicle access gate at the boundary of the array. The vehicle access gate would remain locked, except during O&M activities. The Project proposes a 10-foot landscape buffer beyond the fence on the western and southern boundaries of the Project Site to screen the Project from nearby motorists on North San Bernardino Avenue and Twenty Mule Team Road, respectively. See **Figure 4: Conceptual Landscape Plan** for more details. A Knox box would be installed at the entrance gate to provide two hour access for emergency responders.

To mitigate a potential increase in runoff flows, in compliance with the San Bernardino County Mojave River Watershed Infiltration Basin Best Management Practice Guidelines, the Project would also construct six retention basins along the northern boundary of the Project Site with a combined volume of approximately 3,030 cubic feet. All electrical equipment would be elevated 12 inches above the 100-year flood elevation to protect equipment from potential ponding or overland stormwater flow and so as not to add or decrease baseline stormwater on- or off-site.





LEGEND

- 81 MODULE SAT ROW
- 54 MODULE SAT ROW
- EXISTING PROPERTY LINE
- APPROXIMATE LEASE LIMIT
- PROPERTY LINE SETBACK
- PROPOSED ROAD CENTERLINE
- PROPOSED 6' TALL CHAIN LINK FENCE WITH 1' BARBED WIRE TOP (7' TOTAL HEIGHT)
- EXISTING OVERHEED LINE
- PROPOSED OVERHEAD LINE
- ALL WEATHER ACCESS ROAD (VARYING WIDTHS)
- 26' SITE ACCESS GATE
- 50' OVERHEAD LINE SETBACK
- PROPOSED MV CABLES
- EXISTING ROADS (VARYING WIDTHS)

PLANT SCHEDULE

SHRUBS	QTY	BOTANICAL / COMMON NAME	CONT.	SPACING	WUCOLS
	230	CHRYSOTHAMNUS NAUSEOSUS / RABBIT BRUSH	5 GAL.	60" O.C.	VERY LOW
	463	ENCELIA FARINOSA / BRITTLEBUSH	5 GAL.	48" O.C.	VERY LOW
	230	ERIOGONUM FASCICULATUM / CALIFORNIA BUCKWHEAT	5 GAL.	72" O.C.	VERY LOW
	223	PERITOMA ARBOREA / BLADDERPOD	5 GAL.	60" O.C.	LOW
	394	SALVIA DORRII / DESERT SAGE	5 GAL.	36" O.C.	LOW
	271	SPHAERALCEA AMBIGUA / DESERT GLOBEMALLOW	5 GAL.	48" O.C.	VERY LOW

LANDSCAPE NOTE:

THE SELECTION OF PLANT MATERIAL IS BASED ON CLIMATIC, AESTHETIC, AND MAINTENANCE CONSIDERATIONS. ALL PLANTING AREAS SHALL BE PREPARED WITH APPROPRIATE SOIL AMENDMENTS. FERTILIZERS AND APPROPRIATE SUPPLEMENTS BASED UPON A SOILS REPORT FROM AN AGRICULTURAL SUITABILITY SOIL SAMPLE TAKEN FROM THE SITE. ALL SHRUB BEDS SHALL BE MULCHED TO A 3" DEPTH TO HELP CONSERVE WATER, LOWER SOIL TEMPERATURE, AND REDUCE WEED GROWTH. THE SHRUBS SHALL BE ALLOWED TO GROW IN THEIR NATURAL FORMS. ALL LANDSCAPE IMPROVEMENTS SHALL FOLLOW THE GUIDELINES SET FORTH BY SAN BERNARDINO COUNTY MUNICIPAL CODE.

IRRIGATION NOTE:

ALL PROPOSED LANDSCAPE AREAS SHALL BE WATERED BY HAND AND TRUCK OR A TEMPORARY IRRIGATION SYSTEM FOR A PERIOD OF 1 (ONE) YEAR UNTIL ESTABLISHMENT. ANY PLANT MATERIAL THAT DIES DURING THIS PERIOD SHALL BE REPLACED AT THE COST TO THE CONTRACTOR.

Source: Kimley-Horn Associates, Inc., dated October 31, 2023

Figure 4: CONCEPTUAL LANDSCAPE PLAN
Sunrise Road Solar Project
Initial Study/Mitigated Negative Declaration

Kimley»Horn

Construction

Project construction is anticipated to be completed over a period of approximately nine months, beginning as early as September 2025 and ending as early as May 2026. Project construction activities generally fall into seven main categories: (1) access road construction, (2) demolition, (3) Project Site preparation (vegetation clearing), (4) grading, (5) paving, (6) system installation, and (7) testing, commissioning, and cleanup. The on-site construction workforce is expected to peak at approximately 70 individuals during the construction period. Construction personnel will be divided between civil and electrical services.

The 7-foot perimeter fence would be installed at the onset of construction to establish the outer boundaries of the Project Site. Project Site preparation would consist of clearing the existing vegetation in those areas on the Project Site where construction would be undertaken, grading, and establishing temporary staging area (including stockpile and laydown areas) as necessary. Selected vegetation would be removed to accommodate the construction of the array and its appurtenances, as well as to prevent shading on the array during operation. Any vegetation taller than two feet (e.g., the height of the solar modules above grade) or expected to exceed two feet in height would be removed. Grass and groundcover may remain between rows and under the solar modules. All cleared vegetation would be chipped or spread on-site or disposed of responsibly. Various shrubs with very low and low water use classification of landscape species (WUCOL) would be planted in the landscape buffer.

A temporary staging area would be used as laydown area for construction equipment and materials. The staging area would also include a location for sanitary facilities and a construction trailer. The area containing the equipment and materials would be closed within a temporary construction fence with a lockable gate. Construction equipment such as tractors, backhoes, loaders, dozers, and graders may be needed to clear vegetation from the Project Site, and to grade roads and areas where structures will stand. Grading would be required to even out the terrain for the roads and equipment pads, which is currently characterized by mounds of loose aggregate material. All soils would be balanced on-site, and no import or export is expected.

Erosion and sediment control best management practices (BMPs) would be installed on-site to prevent stormwater runoff. These BMPs would remain in place until construction is complete and until the Project Site is reseeded and stabilized in accordance with applicable code requirements. The construction contractor would be required to incorporate BMPs consistent with the County's zoning ordinance and with guidelines provided in the California Stormwater Quality Association's Construction Best Management Practice Handbook, including the preparation of a Stormwater Pollution Prevention Plan (SWPPP) and an Erosion Control Plan to reduce potential impacts related to construction of the Project.

Erection of the solar arrays would include support structures and associated electrical equipment and cabling. During this work, there would be multiple crews working on the Project Site with various equipment and vehicles, including special vehicles for transporting the modules and other equipment. As the solar arrays are installed, the electrical collection and communication systems would be installed.

During Project construction, non-potable water would be required for common construction-related purposes, including but not limited to dust suppression, soil compaction, and grading. No new water infrastructure would be proposed during Project construction. Temporary sanitary facilities would be placed on-site during construction.

Operations

The first full year of facility operation is expected to be 2026. The Project would operate year-round. The Project would be unmanned, and no employees would report to the Project Site daily. Typical O&M activities during Project operations include, but are not limited to, facility monitoring; administration and reporting; remote operations of inverters, BESS system, and other equipment; repair and maintenance of solar facilities; and periodic panel and inverter washing. It is estimated that the Project would require 6 maintenance-related visits per year and up to 4 solar panel and inverter washing visits per year, resulting in approximately 10 operational roundtrips per year (20 one-way trips).

During Project O&M, it is anticipated that minimal water would be required for solar panel washing. Water consumption for washing panels is expected to be approximately 0.3 acre-feet (AF) of water per year, and all water would be trucked in from an off-site source. Water washing is by deluge, or inundation of water, and no chemicals or other materials are used.

Decommissioning

At the end of the Project's operational term, which is expected to be 35 years, the Applicant may determine that the Project should be decommissioned and deconstructed. The Applicant will work with the County to ensure decommissioning complies with all applicable local, State, and federal requirements and BMPs. The Project would include BMPs to ensure the collection and recycling of modules and to avoid the potential for modules to be disposed of as municipal waste. Pursuant to San Bernardino County Development Code Section 84.29.070 (Decommissioning Requirements), following the operational life of the Project, the Project owner shall perform site closure activities to meet federal, State, and local requirements for the rehabilitation and revegetation of the Project Site after decommissioning.

Equipment would be de-energized prior to removal, salvaged (where possible), placed in appropriate shipping containers, and secured in a truck transport trailer for shipment off-site to be recycled or disposed of at an appropriately licensed disposal facility. Project Site infrastructure would be removed, including fences and concrete pads that may support the inverters and related equipment. The exterior fencing would be removed, and materials would be recycled to the extent feasible. Project internal and access roads would be restored to their pre-construction condition to the extent feasible unless the landowner elects to retain the improved roads for access throughout the property. A collection and recycling program would be utilized to promote reuse and recycling of Project components and minimize disposal in landfills.

APPROVALS THAT MAY BE REQUIRED BY OTHER AGENCIES

Federal: None.

State: Fish & Wildlife

Regional: Mojave Desert Air Quality Management District

Local (San Bernardino County): Land Use Services Department, Building and Safety, Public Health, Public Works, County Fire

SUMMARY OF CONSULTATION WITH CALIFORNIA NATIVE TRIBES

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

On April 23, 2024, County Land Use Services mailed notification pursuant to Assembly Bill (AB) 52 to the following tribes: Kern Valley Indian Community, Morongo Band of Mission Indians, Quechan Tribe of Fort Yuba Reservation, San Fernando Band of Mission Indians, San Manuel Band of Mission Indians, Serrano Nation of Mission Indians, and Twenty-Nine Palms Band of Mission Indians. Results of the consultation are summarized in **Section XVIII: Tribal Cultural Resources** below.

EVALUATION FORMAT

This Initial Study is prepared in compliance with the California Environmental Quality Act (CEQA) pursuant to PRC Section 21000, et seq. and the CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an Initial Study is guided by Section 15063 of the CEQA Guidelines. This format of the study is presented as follows. The proposed Project is evaluated based on its effect on 20 major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the proposed Project is categorized into one of the following four categories of possible determinations:

Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant	No Impact

Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

1. **No Impact**: No impacts are identified or anticipated, and no mitigation measures are required.
2. **Less Than Significant Impact**: No significant adverse impacts are identified or anticipated, and no mitigation measures are required.
3. **Less Than Significant Impact with Mitigation Incorporated**: Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List of mitigation measures)
4. **Potentially Significant Impact**: Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are: (List of the impacts requiring analysis within the EIR).

At the end of the analysis the required mitigation measures are restated and categorized as being either self-monitoring or as requiring a Mitigation Monitoring and Reporting Program.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below will be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology / Water Quality	☐ Land Use and Planning	☐ Mineral Resources
☐ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

DETERMINATION

Based on this initial evaluation, the following finding is made:

☐	The proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	Although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	The proposed Project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.
☐	The proposed Project MAY have a potentially significant or a potentially significant unless mitigated impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	Although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Signature: David J.R. Mack, AICP

Contract Planner

11/01/2024

Date

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
I. AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a State Scenic Highway?	☐	☐	☒	☐
c) If in a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

I. AESTHETICS

SUBSTANTIATION: (Check ☐ if project is located within the view-shed of any Scenic Route listed in the General Plan)

a. **Less Than Significant Impact.** A scenic vista is a viewpoint that provides expansive views of a highly valued landscape for the public benefit. The County's General Plan establishes Policy NR-4.1, which "consider[s] the location and scale of development of development to preserve regionally significant scenic vistas and natural features, including prominent hillsides, ridgelines, dominant landforms, and reservoirs."

The Project is in a desert area of unincorporated San Bernardino County with limited tall or dense development in the vicinity. The Project Site is surrounded by undeveloped vacant land in all directions and rural residences further north and west. The Project Site has views of mountain foothills and ridgelines to the north, west, and south. The General Plan designates SR 58 approximately 0.5-mile north of the Project Site as a County scenic route.[1] SR 58 is also an eligible State Scenic Highway according to the California Department of Transportation (Caltrans) California State Scenic Highway Systems Map.[2]

[1] San Bernardino, Policy Map NR-3 Scenic Routes & Highways, 2020, https://countywideplan.com/wp-content/uploads/sites/68/2021/02/NR-3-Scenic-Routes-Highways-201027.pdf?x23421. Accessed February 7, 2024.

[2] California Department of Transportation (Caltrans), California State Scenic Highway Systems Map, 2019,

Project components would not exceed a height of 15 feet. Due to the height of the Project components, distance from the Project Site to SR 58, and the intervening development and topography, the Project would unlikely be visible from SR 58. Additionally, there are no Caltrans vista points on State highways within the Project vicinity.[3] The nearest vista point identified by Caltrans is the Lamont Odett Vista Point in the San Gabriel Mountains, approximately 42 miles southwest of the Project Site.

During construction, the use of standard construction equipment including, but not limited to, trucks, cranes, and tractors would be required. The 7-foot perimeter fence would be installed at the onset of construction to establish the Project Site boundaries. Although some higher-profile construction equipment such as cranes may still be visible from nearby surrounding areas, the views of construction activities from the surrounding vicinity would be temporary and would not involve any designated scenic vistas as there are no designated scenic vistas in the Project vicinity.

The solar equipment proposed to be constructed on the Project Site is low in profile, including PV modules mounted on fixed-tilt foundations or tracker units and associated electrical equipment that would display a height of up to 15 feet. Implementation of the Project would also include overhead collection lines, access roads, and a seven-foot chain-link perimeter fence. Although the Project would alter the existing character of the Project Site, the introduction of Project components would not substantially obstruct or interrupt views of the surrounding mountains due to their height which would remain visually prominent. Therefore, impacts on scenic vistas would be less than significant.

b. **Less Than Significant Impact.** The Project Site is generally flat and contains no significant geologic features or vegetation unique to the area that could be considered a scenic resource. As described above in response to Threshold I.a, SR 58 is a County scenic route and an eligible, but not designated, State Scenic Highway. Nevertheless, due to the height of the Project components, distance from the Project Site to SR 58, and the intervening development and topography, the Project would unlikely be visible from SR 58. Therefore, the Project would not substantially damage scenic resources within a State Scenic Highway, and impacts would be less than significant.

c. **Less Than Significant Impact.** The Project is located in a non-urbanized area and is surrounded by undeveloped vacant land in all directions and rural residences to the north and west. The Project Site has views of mountain foothills and ridgelines to the north, west, and south.

The Project would be fenced at the onset of construction activities to stake out the Project Site boundaries. The fence would partially screen construction activities from view at the street level from off-site locations. Therefore, construction activities and equipment would not result in adverse visual effects.

https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed February 7, 2024.

[3] Caltrans, Vista Points – California, https://www.arcgis.com/apps/mapviewer/index.html?webmap=5f82ccb700874868bf07f8cfa2a43a1f. Accessed February 7, 2024.

During Project operations, the Project would include low profile solar equipment such that they would not limit views of the foothills. While the Project would change the existing public views at the immediate foreground on public right-of-way, the installation of the low profile solar equipment (e.g., the arrays and the BESS) would not degrade the visual quality and character of the Project Site and its immediate vicinity as the public would still retain views of the mountain foothills and ridgelines to the north, west, and south. Therefore, the Project would not significantly alter the existing visual character or quality of public views of the Project Site and its surroundings. Upon approval of the CUP, the Project would be consistent with all General Plan policies and zoning development standards and regulations, including standards governing scenic quality. The Project would also require the County and all applicable departments to review plans to determine compliance with development standards. Therefore, impacts on degrading existing visual character or quality of public views of the Project Site and surroundings would be less than significant.

d. **Less Than Significant Impact.** The Project Site is located in an area with limited existing sources of shadow (e.g., utility poles), light (e.g., cars), and glare. The Project Site is within a desert area of the County with a minimal number of rural residences in the vicinity of the Project Site. The nearest residence is approximately 220 feet (about one city block) south of the Project Site. Existing outdoor lighting near the Project Site includes rural residences to the north and west. The Project would generate new sources of shadow, light, and glare compared to existing conditions.

Construction

While the majority of Project construction would occur during daylight hours, there is a potential that that construction could require the use of artificial lighting (e.g., floodlights, spotlights), particularly during the winter season when daylight is no longer sufficient earlier in the day. To the extent artificial light sources are required, such use would be temporary and would cease upon completion of Project construction. Furthermore, the Project would be required to comply with the County's Light Trespass Ordinance (San Bernardino County Development Code Chapter 83.07), which requires that only the minimum amount of lighting is used, lights are to be shielded and directed downward and away from the sky, and no light spillage occurs. Construction lighting, while potentially bright, would be focused on the particular area undergoing work. All outdoor luminaires would be appropriately located and adequately shielded and directed such that no direct light falls outside the parcel of origin, onto the public right-of-way, and would not expose residential properties to unacceptable levels.

Daytime glare could potentially occur during construction activities if reflective construction materials were positioned in highly visible locations where the reflection of sunlight could occur. However, any glare would be highly transitory and short-term, given the movement of construction equipment and materials within the construction area, and the temporary nature of construction activities. In addition, large, flat surfaces that generate substantial glare are typically not an element of construction activities. Furthermore, temporary construction fencing comprised of a solid material or including screening would be placed along the periphery of the Project Site to screen construction activity from view at the street level from off-site locations. Therefore, there would be a negligible potential for daytime or nighttime glare associated with construction activities to occur.

Based on the above, light and glare associated with Project construction activities would not substantially alter the character of off-site areas surrounding the Project Site or adversely impact day or nighttime views in the area. Therefore, impacts related to light and glare during construction would be less than significant.

Operation

Project operation would introduce new sources of light and glare that are typically associated with solar facilities (e.g., security or perimeter lighting). However, as mentioned above, Project lighting would be required to comply with the County's Light Trespass Ordinance, which regulates outdoor lighting practices geared toward minimizing excessive lighting, light pollution, glare, and light trespass; conserving energy and resources while maintaining nighttime safety, visibility, utility, and productivity; and preserving the nighttime visual environment and the County's visual rural quality of life. The San Bernardino County Development Code Section 83.07.040 (Light Trespass Ordinance) specifically requires that only the minimum amount of lighting is used, lights are to be shielded and directed downward and away from the sky, and no light spillage occurs. In addition, the San Bernardino County Planning Department and the Building and Safety Department would review any proposed lighting to ensure conformance with the California Green Building Standards Code (CALGreen Code), such that only the minimum amount of lighting is used and no light spillage occurs. Therefore, the Project would not create a new source of substantial light or shadow which would adversely affect day or nighttime views in the area, and impacts would be less than significant.

The Project could potentially generate short-term and limited glare at various times of year and in the early morning and evening hours when the sun is at its lowest point on the horizon. Such glare could be briefly visible to drivers on North San Bernardino Boulevard and Twenty Mule Team Road. However, due to the distance to the roads, and short-term nature of such glare, it is not anticipated the glare would present a hazard to motorists. The PV panels would not be expected to cause significant glare as the panels will absorb sunlight during daylight hours and therefore, produce minimal reflectivity. PV solar panels are designed to be highly absorptive of light that strikes the panel surfaces, generating electricity rather than reflecting light. Solar panels are also designed to track the sun to maximize panel exposure to the sun, which would direct the majority of any reflected light back toward the sun in a skyward direction. PV panels have a lower index of refraction/reflectivity than common sources of glare in residential environments. The glare and reflectance levels from a given PV system are lower than the glare and reflectance levels of steel, snow, standard glass, plexiglass, and smooth water. Single-axis systems would employ a motor mechanism that would allow the arrays to track the path of the sun throughout the day. In the morning, the panels would face the east. Throughout the day, the panels would slowly move to the upright position at noon and on to the west at sundown. The panels would reset to the east in the evening or early morning to receive sunlight at sunrise. In general, the greatest potential for light reflection would occur when the panels would be angled toward the horizon at sunrise and sunset. As the panels would be angled in an east-west orientation (towards the horizon) at sunrise and sunset, expectation is that light reflection would be directed to the west towards drivers on North San Bernardino Road. Therefore, motorists on these highways are not expected to be exposed to potential light reflection generated from the PV panels. Any potential glare impacts that would occur would be further reduced by the chain link perimeter fence and the perimeter landscaping. Therefore, the solar PV panels would not create a new source

of substantial glare that would adversely affect day or nighttime views in the area, and impacts would be less than significant.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
II. AGRICULTURAL AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Will the project:				
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

II. AGRICULTURAL AND FORESTRY RESOURCES

SUBSTANTIATION: (Check ☐ if project is located in the Important Farmlands Overlay)

a. **No Impact.** The Project Site currently comprises undeveloped vacant land. The Project Site and vicinity does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.[4] Therefore, the Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, and no impact would occur in this regard.

b. **No Impact.** The Project Site currently consists of undeveloped land. The Project Site has a General Plan land use designation of RLM and is zoned RC. Pursuant to San Bernardino County Development Code Chapter 82.03 Table 82-4, renewable energy generation facilities are a permitted use with an approved CUP. According to the Department of Conservation's Williamson Act Contract Land Map, the Project Site is not enrolled in a Williamson Act contract.[5] The Project is also not within an established agricultural preserve.[6] Therefore, development of the Project would not conflict with existing zoning for agricultural uses or a Williamson Act contract, and no impact would occur in this regard.

c. **No Impact.** The Project Site is zoned RC. The Project would not rezone forest land, timberland, or timberland zoned Timberland Production. The Project would also not result in the loss of forest land or convert forest land to non-forest use. Therefore, no impact would occur in this regard.

d. **No Impact.** See response to Threshold I.c above.

e. **No Impact.** There is no Farmland or forest land within or near the Project Site. Implementation of the Project would not result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, the Project would not convert Farmland to non-agricultural use or convert forest land to non-forest use, and no impact would occur in this regard.

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4 California Department of Conservation (CDOC), California Important Farmland Finder, 2022, https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed February 7, 2024.

5 CDOC, California Williamson Act Enrollment Finder, 2022, https://maps.conservation.ca.gov/dlrp/WilliamsonAct/. Accessed February 7, 2024.

6 San Bernardino Valley Agricultural Planning and Preservation Program, Williamson Act Contracts and Agricultural Preserves, 2021, https://salc-grant-data-sbcounty.hub.arcgis.com/documents/18a08da2be3b4794bf0aff1e9486e662/explore. Accessed February 7, 2024.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Will the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

III. AIR QUALITY

SUBSTANTIATION: The discussion below regarding potential impacts on air quality is based in part on the Air Quality Technical Memorandum (see **Appendix A**) prepared by Kimley-Horn and Associates, Inc. (Kimley-Horn).[7]

a. **Less Than Significant Impact.** The State is divided geographically into 15 air basins, generally along geographic or topographic boundaries. The Project Site is located in the Mojave Desert Air Basin (Basin). The Basin includes the desert portion of Los Angeles and San Bernardino Counties, the eastern desert portion of Kern County, and the northeastern desert portion of Riverside County. The Mojave Desert Air Quality Management District (MDAQMD) has jurisdiction over stationary sources of air pollution located within San Bernardino County's High Desert and Riverside County's Palo Verde Valley, which includes the Project Site.

   Areas that meet ambient air quality standards established by the United States Environmental Protection Agency (U.S. EPA) and/or California Air Resources Board (CARB) are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. Areas for which there is insufficient data available are designated unclassified. Ambient air quality standards are set to be protective of human health. The Project Site is within a Federal nonattainment area for ozone (O_3) and particulate matter 10 microns in diameter or less (PM10), and a State nonattainment area for O_3 and PM10 and PM2.5. The Project Site is classified as attainment or unclassified for lead, visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

[7] Kimley-Horn, Air Quality Technical Memorandum, October 30, 2024. See **Appendix A** of this IS/MND.

The MDAQMD PM10 Attainment Plan and Ozone Attainment Plan established under the Western Mojave Desert Air Quality Management Plans (AQMPs) set forth a comprehensive set of programs that will lead the Mojave Desert Air Basin into compliance with Federal and State air quality standards. The control measures and related emission reduction estimates within the MDAQMD PM10 Attainment Plan and Ozone Attainment Plan are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with these attainment plans is determined by:

- Demonstrating Project consistency with local land use plans and/or population projections (Criterion 1);
- Demonstrating Project compliance with applicable MDAQMD Rules and Regulations (Criterion 2); and
- Demonstrating Project implementation will not increase the frequency or severity of a violation in the Federal or State ambient air quality standards (Criterion 3).

Criterion 1: Consistency with local land use plans and/or population projections.
Growth projections included in the AQMPs form the basis for the projections of air pollutant emissions and are based on general plan land use designations and the Southern California Association of Governments (SCAG) 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) demographics forecasts. While SCAG has recently adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), the MDAQMD has not released an updated AQMP that utilizes information from the 2020-2045 RTP/SCS. As such, this consistency analysis is based off the 2016-2040 RTP/SCS. The population, housing, and employment forecasts within the 2016-2040 RTP/SCS are based on local general plans as well as input from local governments, such as the County. The MDAQMD has incorporated these same demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment) into the AQMPs.

Zoning is the local law that regulates various aspects of how land can be used. Zoning in the Project area is regulated by the San Bernardino County Development Code and Zoning designations that are found in the Countywide Plan/Policy Plan. The Project Site is designated as RLM in the Countywide Plan/Policy Plan, and the existing zoning for the Project Site is RC. Pursuant to San Bernardino County Development Code Section 82.04.040, renewable energy generation facilities are a permitted use with an approved CUP.

SCAG growth forecasts in the 2016-2040 RTP/SCS estimate the County's unincorporated population to reach 344,100 persons by 2040, representing a total increase of 48,500 persons between 2012 and 2040. Additionally, SCAG growth forecasts in the 2016-2040 RTP/SCS estimate the unincorporated County's employment to reach 91,100 jobs by 2040, representing a total increase of 33,700 jobs between 2012 and 2040.

The Project would include neither a residential component that would increase local population growth, nor a commercial component that would substantially increase employment. Construction of the Project would not result in residential, commercial, or growth-inducing development that would result in a substantial increase in growth-related

emissions. In addition, because of the presence of locally available construction workers, and because of the relatively short duration of construction (approximately nine months), workers are not expected to relocate to the area with their families.

The Project would operate year-round. Typical operational and maintenance activities during Project operations include, but are not limited to, facility monitoring; administration and reporting; remote operations of inverters, BESS system, and other equipment; repair and maintenance of solar facilities, electrical transmission lines, and other Project facilities; and periodic panel washing. Therefore, limited staff would be required during operations. As such, there would be no employee or population growth as a result of the Project, and the Project would not cause the SCAG growth forecast to be exceeded. As the MDAQMD has incorporated these forecasts on population, housing, and employment into the AQMPs, the Project would be consistent with the AQMPs. The Project would be consistent with this criterion.

Criterion 2: Compliance with applicable AVAQMD Rules and Regulations.
The Project would be required to comply with all applicable MDAQMD Rules and Regulations. This would include MDAQMD Rules 401, 402, and 403. AVAQMD Rule 403 requires periodic watering for short-term stabilization of disturbed surface area to minimize visible fugitive dust (PM10) emissions, covering loaded haul vehicles, and reduction of non-essential earth moving activities during higher wind conditions. The Project would comply with applicable MDAQMD rules, enforced through Project Conditions of Approval, and not conflict with applicable MDAQMD Rules and Regulations. Therefore, the Project would be consistent with this criterion.

Criterion 3: Demonstrating Project implementation will not increase the frequency or severity of a violation in the Federal or State ambient air quality standards.
Analysis of the Project's potential to result in more frequent or severe violations of the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) can be satisfied by comparing Project emissions to MDAQMD thresholds. As discussed under response to Threshold III.b below, unmitigated short-term construction emissions would not exceed MDAQMD significance thresholds. Additionally, unmitigated long-term operational emissions of all criteria pollutants studied (nitrous oxides [NO_X], reactive organic gases [ROG], carbon monoxide [CO], PM10, and PM2.5) would be less than the applicable MDAQMD significance thresholds. Therefore, the Project would not delay the Mojave Desert Air Basin's attainment goals for O_3, PM10, and PM2.5, and would not result in an increase in the frequency or severity of existing air quality violations. As such, the Project would not cause or contribute to localized air quality violations or delay the attainment of air quality standard or interim emissions reductions specified in the AQMPs. Thus, the Project would be consistent with this criterion.

Conclusion
As discussed above, the Project would comply with MDAQMD Rules and Regulations and would not induce residential or worker population growth. Further, the Project would not cause or contribute to localized air quality violations or delay the attainment of air quality standard or interim emissions reductions specified in the AQMPs. Thus, the Project would not result in or cause NAAQS or CAAQS violations. The Project would meet Criterion 1, Criterion 2, and Criterion 3. As such, the Project would be consistent with the MDAQMD's AQMPs, and impacts would be less than significant.

b. **Less Than Significant Impact.**

Construction

Project construction involving the use of heavy-duty construction equipment is anticipated to be completed over a period of approximately nine months. The Project involves construction activities associated with demolition, site preparation, grading, paving, construction/installation, PV Panel Vendor Trips, and paving.

The analysis of daily construction emissions has been prepared using California Emissions Estimator Model version 2022.1 (CalEEMod) and Road Construction Emissions Model (RCEM) Version 9.0.0. Refer to **Appendix A** for the CalEEMod and RCEM outputs and results. **Table 2: Daily Construction Emissions** and **Table 3: Annual Construction Emissions** present the anticipated short-term construction emissions. As indicated in Table 2 and Table 3, criteria pollutant emissions during Project construction would not exceed the MDAQMD significance thresholds. Therefore, total Project construction-related air emissions would be less than significant.

Table 2: Daily Construction Emissions

Construction Year	Maximum Pounds per Day[1, 2]					
	ROG	**NO_X**	**CO**	**SO_2**	**PM10**	**PM2.5**
2025	7.24	69.27	73.62	0.19	5.87	4.52
2026	3.29	26.87	37.49	0.07	9.73	4.45
MDAQMD Threshold	137	137	548	137	82	65
Exceed MDAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
1. The highest values between summer and winter results were used as a worst-case scenario.
2. The reductions/credits for construction emissions are based on adjustments to CalEEMod and are required by the MDAQMD Rules. The adjustments applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; and limit speeds on unpaved roads to 15 miles per hour.

Source: CalEEMod version 2022.1 and RCEM version 9.0.0; see **Appendix A** for model outputs.

Table 3: Annual Construction Emissions

Construction Year	Maximum Tons per Year[1]					
	ROG	**NO_X**	**CO**	**SO_2**	**PM10**	**PM2.5**
2025	0.09	0.72	0.97	<0.01	0.24	0.10
2026	0.09	0.76	1.07	<0.01	0.02	0.01
MDAQMD Threshold	25	25	100	25	15	12
Exceed MDAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
1. The reductions/credits for construction emissions are based on adjustments to CalEEMod and are required by the MDAQMD Rules. The adjustments applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; and limit speeds on unpaved roads to 15 miles per hour.

Source: CalEEMod version 2022.1 and RCEM Version 9.0.0; see **Appendix A** for model outputs.

Operations

Operational emissions associated with the Project would include those generated from panel washing, maintenance, and the BESS. **Table 4: Daily Operational Emissions** and **Table 5: Annual Operational Emissions** present the Project's anticipated mobile source (i.e., motor vehicle use), energy source, and area source emissions. Each of these source types are described below.

Table 4: Daily Operational Emissions

Source	Maximum Pounds per Day					
	ROG	**NO_X**	**CO**	**SO_2**	**PM10**	**PM2.5**
Area	76.61	0.94	111.77	0.01	0.20	0.15
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.01	0.36	0.06	<0.01	0.10	0.03
Total Emissions[1]	**76.62**	**1.30**	**111.82**	**0.01**	**0.30**	**0.18**
MDAQMD Threshold	137	137	548	137	82	65
Exceed MDAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Note: Total values are from CalEEMod and may not add up 100 percent due to rounding.
1. The highest values between summer and winter results were used as a worst-case scenario.
Source: CalEEMod version 2022.1; see **Appendix A** for model outputs.

Table 5: Annual Operational Emissions

Source	Maximum Tons per Year					
	ROG	**NO_X**	**CO**	**SO_2**	**PM10**	**PM2.5**
Area	12.28	0.08	10.06	<0.01	0.02	0.01
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	<0.01	0.05	0.01	<0.01	0.03	<0.01
Total Emissions[1]	***12.3***	***0.13***	***10.1***	***<0.01***	***0.03***	***0.02***
MDAQMD Threshold	25	25	100	25	15	12
Exceed MDAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Note: Total values are from CalEEMod and may not add up 100 percent due to rounding.
1. The highest values between summer and winter results were used as a worst-case scenario.

Source: CalEEMod version 2022.1; see **Appendix A** for model outputs.

Area Source Emissions. Area source emissions would be generated due to potential BESS architectural coatings, use of consumer products (e.g., cleaning supplies), and landscaping equipment. Default CalEEMod assumptions were utilized.

Energy Source Emissions. The Project's operational activities would not consume natural gas. The Project would consume negligible amounts of electricity for auxiliary equipment, such as BESS heating, ventilation, and air conditioning (HVAC) units; communications equipment; and lighting. It is assumed that electricity demand would be met by solar energy collected at the Project Site; therefore, zero emissions have been accounted for.

Mobile Source Emissions. Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_X, SO_X, PM10, and PM2.5 are all pollutants of regional concern (NO_X and ROG react with sunlight to form O_3 [photochemical smog], and wind currents readily transport SO_X, PM10, and PM2.5); however, CO tends to be a localized pollutant, dispersing rapidly at the source. During operations, the Project would generate minimal periodic operational vehicle trips internal to the Project Site for required maintenance activities. It is estimated that the Project would require 6 maintenance-related roundtrips per year and up to 4 solar panel and inverter washing roundtrips per year, resulting in approximately 10 total roundtrips per year (20 one-way trips). For purposes of a worse-case analysis assuming a maximum operational day, the model assumes that all 20 one-way trips would occur in one day; refer to **Appendix A** for assumptions and calculations.

Total Emissions. As shown in Table 4 and Table 5, estimated total Project operational emissions would not exceed established MDAQMD thresholds. Therefore, impacts associated with Project operational emissions would be less than significant.

Air Quality Health Impacts

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age, gender]). In particular, O_3 precursors (volatile organic compounds [VOCs] and NO_X) affect air quality on a regional scale. Health effects related to O_3 are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating criteria pollutants generated by an individual project to specific health effects or additional days of nonattainment would produce meaningless results. The NAAQS and CAAQS are set to be protective of human health, however, which means that the Project's less than significant increases in regional air pollution from criteria air pollutants would have less than significant impacts on human health.

The MDAQMD does not have clear thresholds or methodology to quantify health impacts of criteria pollutants from individual projects. Other air districts, including the South Coast Air Quality Management District (SCAQMD), have stated that it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants from individual projects for various reasons including modeling limitations as well as the fact that certain

emissions are the result of chemical interactions, and it is impossible to determine exactly where in the atmosphere precursor air pollutants will interact.

The SCAQMD acknowledges that health effects quantification from O_3, as an example, is correlated with the increases in ambient level of O_3 in the air (concentration) that an individual person breathes. SCAQMD has written that it would take a large amount of additional emissions to cause a modeled increase in ambient O_3 levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's 2012 AQMP, a reduction of 432 tons (864,000 pounds) per day of NO_X and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce O_3 levels at the site with the highest ozone levels by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify O_3-related health impacts caused by NO_X or VOC emissions from relatively small projects (defined as projects with less than a regional scope) due to photochemistry and regional model limitations.

Because the Project would not exceed MDAQMD's thresholds for construction and operational air emissions, the Project would have a less than significant impact for air quality health impacts as well and no modeling of health impacts was performed.

Decommissioning

At the end of the Project's operational term, the Applicant may determine that the Project should be decommissioned and deconstructed. Pursuant to San Bernardino County Development Code Section 84.29.070, the Applicant will work with the County to ensure decommissioning of the Project after its productive lifetime complies with all applicable local, State, and federal requirements and BMPs. The Project would include BMPs to ensure the collection and recycling of modules and to avoid the potential for modules to be disposed of as municipal waste.

Equipment would be de-energized prior to removal, salvaged (where possible), placed in appropriate shipping containers, and secured in a truck transport trailer for shipment off site to be recycled or disposed of at an appropriately licensed disposal facility. Site infrastructure would be removed, including fences and concrete pads that may support the inverters and related equipment. The exterior fencing would be removed, and materials would be recycled to the extent feasible. Project internal and access roads would be restored to their pre-construction condition to the extent feasible unless the landowner elects to retain the improved roads for access throughout the property. A collection and recycling program would be utilized to promote recycling of Project components and minimize disposal in landfills.

While decommissioning would likely take the same or fewer months than construction and involve less construction equipment and workers on a daily basis, for the purposes of presenting a conservative analysis, it was assumed that Project decommissioning would generate the same emissions as Project construction. As shown in Table 2 and Table 3, emissions would not exceed MDAQMD thresholds and impacts would be less than significant.

Cumulative Short-Term Construction Impacts

With respect to the Project's construction-period air quality emissions and cumulative Basin-wide conditions, the MDAQMD has developed strategies to reduce criteria pollutant

emissions outlined in the AQMPs pursuant to Clean Air Act mandates. As such, the Project would comply with MDAQMD Rule 403 greatest requirements and implement all applicable MDAQMD rules to reduce construction air emissions to the extent feasible. MDAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures in order to reduce dust so that it does not remain visible in the atmosphere beyond the property line of the Project Site. Examples of best available control measures for dust include the application of water and soil stabilizers, covering of loads, avoiding track out onto public roads, and the minimization of non-essential grading during high wind conditions. In addition, the Project would comply with adopted AQMPs emissions control measures. Implementation of MDAQMD Rule 403 and the AQMPs emissions control measures would help the Project further reduce emissions from construction activities. Pursuant to MDAQMD rules and mandates, these same requirements (i.e., Rule 403 compliance and compliance with adopted AQMPs emissions control measures) would also be imposed on construction projects throughout the Basin, which would include cumulative projects.

As discussed in Table 2 and Table 3 above, the Project's estimated short-term construction emissions would be below the MDAQMD thresholds and would result in less than significant air quality impacts. Thus, the Project's construction emissions would not contribute to a cumulatively considerable air quality impact for nonattainment criteria pollutants in the Basin, and impacts would be less than significant.

Cumulative Long-Term Operational Impacts

As discussed in Table 4 and Table 5, the Project would not result in long-term operational air quality impacts. Additionally, adherence to MDAQMD rules and regulations alleviate cumulatively considerable contributions to potential significant impacts related to cumulative conditions on a project-by-project basis. Emission reduction technology, strategies, and plans are constantly being developed to address existing significant cumulative impacts. As a result, the Project would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. Therefore, the Project would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant, and impacts would be less than significant.

c. **Less Than Significant Impact with Mitigation Incorporated for Construction, Less Than Significant Impact for Operation.** Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, parks, daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptor to the Project Site is a residential use located approximately 220 feet south of the Project Site. No schools, hospitals, or parks are located within two miles of the Project Site.

Construction

Project construction is anticipated to be completed over a period of approximately nine months. Project construction activities are anticipated to involve the operation of diesel-powered equipment, which would emit Diesel Particulate Matter (DPM). In 1998, the CARB identified diesel exhaust as a toxic air contaminant (TAC). Cancer health risks

associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 30-year exposure period often is assumed. Project construction would comply with the California Code of Regulations (CCR), Title 13, Section 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to not more than five minutes. Implementation of these regulations would reduce the amount of DPM emissions from Project construction.

Furthermore, construction activities are expected to occur well below the 30-year exposure period used in health risk assessments. Emissions would be short-term and intermittent in nature, and therefore would not generate TAC emissions at high enough exposure concentrations to represent a health hazard. Therefore, construction of the Project would not result in a significant increase in elevated cancer risk to nearby sensitive receptors and impacts would be less than significant.

Operations

Typical O&M activities during Project operations include, but are not limited to, facility monitoring; administration and reporting; remote operations of inverters, BESS system, and other equipment; repair and maintenance of solar facilities, electrical transmission lines, and other Project facilities; and periodic panel washing. None of these activities would result in the generation of excessive TAC emissions, or associated health risks. Therefore, operation of the Project is not anticipated to result in an elevated cancer risk to nearby sensitive receptors and potential impacts would be less than significant.

Carbon Monoxide Hotspots

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels (i.e., adversely affecting residents, school children, hospital patients, the elderly, etc.). CO is primarily a product of incomplete combustion of gaseous or liquid fuels, meaning tailpipe emissions are worse in stop-and-go congested traffic as compared to free flowing conditions. The Project does not include any stationary sources of combustion, and results in a net increase of approximately 10 maintenance and solar panel washing roundtrips per year (20 one-way trips) per year. The Project is not located near existing CO hotspots and the trips associated with the Project are insufficient to create a CO hotspot.

With such low existing ambient levels of CO, low levels of CO emissions from the Project, and lack of congested roadways around the Project, the Project would not cause CO hotspots in excess of applicable NAAQS or CAAQS standards at any intersections within the County. Impacts would be less than significant in this regard.

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by federal, State, and international agencies and was identified as a toxic air contaminant by the CARB in 1986. Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health

hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities.

According to the Department of Conservation Division of Mines and Geology, A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report (August 2000), serpentinite and ultramafic rocks do not occur within the vicinity of the Project Site. Thus, there would be no impact in this regard.

Valley Fever

Coccidioidomycosis (CM), often referred to as San Joaquin Valley Fever or Valley Fever, commonly affects people who live in hot dry areas with alkaline soil and varies with the season. This disease, which affects both humans and animals, is caused by inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis* (CI). CI spores are found in the top 2-to-12 inches of soil and the existence of the fungus in most soil areas is temporary. The cocci fungus lives as a saprophyte in dry, alkaline soil. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lie dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-moving activities and become airborne. Agricultural workers, construction workers, and other people who work outdoors and who are exposed to wind and dust are more likely to contract Valley Fever. Children and adults whose hobbies or sports activities expose them to wind and dust are also more likely to contract Valley Fever.

The fungus is known to live in the soil in the southwestern United States and parts of Mexico and Central and South America. People and animals can get sick when they breathe in dust that contains the Valley fever fungus. This fungus infects the lungs and can cause respiratory symptoms including cough, fever, chest pain, and tiredness. In California, the number of reported Valley fever cases has greatly increased in recent years. The number of Valley Fever cases in the United States has been steadily increasing over the past few years. There were over 20,000 reported cases in 2019, and the Center for Disease Control and Prevention (CDC) estimates that an additional 150,000 cases go undiagnosed each year. About 32 percent of all cases occur in California. In 2016, there were 45 cases of Valley Fever in San Bernardino County, an incidence rate of 2.1 cases per 100,000 people.

When a susceptible human who is not immune inhales these airborne spores, they enter the lungs and may cause respiratory infections, such as pneumonia. Roughly 60 percent of individuals infected with CI have no symptoms. For the remaining 40 percent, a wide spectrum of clinical symptoms can occur. The most common presentation of CM is a mild, influenza-like illness while the more severe includes pneumonia-like symptoms requiring rest and medication (fungus-killing medicines). The symptoms of the disease typically begin about two weeks after inhaling the spores. These symptoms typically include flu-like symptoms such as fever, aching, chills, sweats, fatigue, cough, and headache. In uncomplicated CM, symptoms usually subside in a few weeks or months.

In approximately one percent of infected persons, disseminated disease develops, in which CM is spread from the lungs to other areas of the body such as the skin, bones, brain, or other organs. This spreading of CM infection beyond the lungs can be fatal. Meningitis, the most lethal complication of disseminated CM, may cause a stiff neck, severe and persistent headache, nausea, vomiting, and various other central nervous system symptoms such as disorientation, loss of balance or equilibrium, inability to think

clearly and loss of consciousness. People with diabetes and women who contract CM while they are pregnant are particularly prone to dissemination of the disease.

Currently, no vaccine is available to prevent this infection. Further, there is no effective way to detect and monitor CI growth patterns in the soil. Thus, controlling the growth of the fungus in the environment to reduce the risk to individuals is currently not a viable option. A skin test can be conducted to identify individuals who have been infected in the past and would have developed immunity to the fungus, although recurrence as a result of immuno-suppression is possible. Even if the fungus is present in soil, earthmoving activities may not result in increased incidence of valley fever. Propagation of Coccidioides is dependent on climatic conditions, with the potential for growth and surface exposure highest following early seasonal rains and long dry spells.

To reduce exposure to CI, development projects implement measures to prevent wind dispersion of arthrospores, such as applying dust control palliatives, water, or vegetation to fungus-bearing soils. To facilitate early identification of infection and subsequent treatment the San Bernardino County Department of Public Health Division of Environmental Health Service recommends using dust suppression methods including wetting the soil during work or covering bare soil.

The California Department of Public Health recommends stopping outside activity during conditions where the dust cannot be controlled well. Appropriate use of respiratory protection may be also needed in some circumstances.

During ground disturbing activities associated with Project construction, the potential exists that such activities could disturb dust particles and, if present, CI spores, which could then be released into the air and potentially be inhaled by on-site workers and nearby sensitive receptors; exposure to these spores can cause Valley Fever. Impacts during Project construction related to CI spores would be potentially significant.

MDAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures in order to reduce dust so that it does not remain visible in the atmosphere beyond the property line of the Project Site. Examples of best available control measures for dust include the application of water and soil stabilizers, covering of loads, avoiding track into public roads, and the minimization of non-essential grading during high-wind conditions. Due to the distance of the nearest sensitive receptor, the Project is not anticipated to exacerbate the risk of existing sensitive receptors to contract Valley Fever. Although CEQA does not require the analysis of a Project's impacts on its construction workers, such analysis is included for informational purposes. The best approaches to reducing construction workers' risk of contracting Valley Fever are awareness and dust reduction because dust can be an indicator that increased efforts are needed to control other airborne particulates (including CI spores, if any). Compliance with MDAQMD rules reduce dust. For example, MDAQMD Rule 401 prohibits a person from discharging into the atmosphere any air emission contaminant for a period or periods aggregating more than three minutes in any single hour emissions that is: (a) as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines; or (b) of such opacity as to obscure an observer's view to a degree equal to or greater than 20 percent opacity. Rule 402 prohibits the discharge of air contaminants in quantities that would cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety

of any such persons or the public. Additionally, the Project would be required to provide training and awareness of Valley Fever via **Mitigation Measure (MM) AQ-1**. **MM AQ-1** would further ensure worker safety through education and ensuring implementation of required Occupational Safety and Health Administration (OSHA) safety measures.

With the implementation of **MM AQ-1**, the potential for the release of CI spores, if present, and the associated potential for workers or nearby residents to contract Valley Fever from Project construction activities would be minimized. Accordingly, the Project would not add significantly to the existing exposure level of construction workers or nearby residents to the CI fugus. Therefore, potential impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM AQ-1 Prior to ground disturbance activities, the Applicant must prepare a Valley Fever Management Plan (VFMP), including a Valley Fever training program, to be implemented during construction to address potential risks from *Coccidioides immitis* 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 should 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 Project 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, National Institute for Occupational Safety and Health-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.

With implementation of **MM AQ-1**, potentially significant impacts related to sensitive receptor pollutant exposure would be reduced to less than significant levels.

d. **Less Than Significant Impact.** According to the CARB's CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project includes construction of a PV electricity generation and energy storage facility and does not include any uses identified by the CARB as being associated with odors.

Project construction activities may generate detectable odors from heavy-duty equipment exhaust. However, construction-related odors would be short-term in nature and cease upon completion of Project construction. Further, the nearest potential residence is too far from the Project Site to detect construction odors. In addition, the Project would be required to comply with the CCR, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors, if any, from heavy-duty equipment exhaust. Therefore, potential impacts would be short-term and are considered less than significant.

As previously noted, land uses associated with odor complaints do not typically include PV electricity generation and energy storage facilities. During operations, the Project would generate minimal periodic operational vehicle trips internal to the Project Site for required maintenance activities.

It is estimated that the Project would require 6 maintenance-related visits per year, resulting in up to 4 solar panel and inverter washing visits per year, resulting in 10 total annual roundtrips (20 one-way trips). Project operational vehicle trips would be minimal and not of sufficient number to create concentrations of odorous fumes to form and cause a nuisance. As such, potential impacts would be easily dispersed in the atmosphere and are less than significant.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
IV. BIOLOGICAL RESOURCES: Will the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

IV. BIOLOGICAL RESOURCES

SUBSTANTIATION: (Check ☒ if project is located in the Biological Overlay or contains habitat for any species listed in the California Natural Diversity Database)

The discussion below regarding potential impacts on biological resources is based in part on the Biological Resources Assessment (BRA) (see **Appendix B**)[8] prepared by Kleinfelder, the Desert Tortoise Survey Report (DETO Survey Report) (see **Appendix C**)[9] prepared by Rincon Consultants, Inc. (Rincon), the Mohave Ground Squirrel Protocol Survey Report (MGS Report)

[8] Kleinfelder, Biological Resources Assessment, September 2023. Revised October 2024. See **Appendix B** of this IS/MND.

[9] Rincon Consultants, Inc. (Rincon), Desert Tortoise Survey Report, February 16, 2024. Revised October 24, 2024. See **Appendix C** of this IS/MND.

prepared by Rincon (**Appendix D**)[10], the Rare Plant Survey Report prepared by Rincon (**Appendix E**)[11], and the Western Joshua Tree (WJT) Survey Report prepared by Rincon (**Appendix F**).[12] The BRA, Rare Plant Survey Report, and WJT Report assessed the Project Site and a 50-foot buffer around the Project Site (Survey Area). The DETO Survey Report analyzed the two parcels (80 acres) and a 100-foot buffer (DETO Survey Area). The MGS Report assessed only the Project Site.

Special-status plant and wildlife species present or potentially present within or adjacent to the Survey Area were identified through a desktop literature review using the following sources: United States Fish and Wildlife Services (USFWS) Information for Planning and Consultation (IPaC) Trust Resource Report, California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB), and the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Vascular Plants. The CNDDB and CNPS database searches included the 7.5-minute United States Geological Survey (USGS) Boron quadrangle and eight surrounding quadrangles. The IPaC search included the Project Site and a two-mile buffer surrounding the Project Site. Additionally, the Rare Plant Survey Report perused recent aerial photography of the Project Site, the CNPS Inventory of Rare and Endangered Plants of California, and the USFWS Critical Habitat Portal. The CNPS and USFWS data searches included the quadrangles containing the Survey Area and within a five-mile radius of the Survey Area.

Additionally, Kleinfelder performed a field survey to evaluate the botanical and wildlife resources within the Survey Area. The survey consisted of walking through the Survey Area to map and characterize vegetation communities and land cover types, collect data on the relative quality of, and potential for existing habitats to support the special-status species identified during the database and resources review, and to identify any other sensitive biological resources present or potentially present within the Project Site.

a. **Less Than Significant Impact with Mitigation Incorporated.** Seven special-status wildlife species are known to occur within the two-mile/nine-quad search radius of the Project Site. Of these, four have a moderate potential to occur: desert tortoise (*Gopherus agassizii*), burrowing owl (*Athene cunicularia*), American badger (*Taxidea taxus*), and Mohave ground squirrel ("MGS", *Xerospermophilus mohavensis*). The remaining three special-status wildlife species are not expected to occur or have a low potential to occur within the Project Site due to a lack of suitable habitat, or the site is outside of the species' known range. As such, these three species were removed from further consideration. Three additional special-status species were observed during MGS trapping surveys: desert kit fox (*Vulpes macrotis arsipus*), loggerhead shrike (*Lanius ludovicianus*), and California horned lark (*Eremophila alpestris actia*).

   <u>Desert Tortoise</u>
   As part of Kleinfelder's field survey, a burrow that could support a desert tortoise was observed. Debris was present in the entrance and cavity of the burrow; however, no sign of desert tortoise was observed outside the burrow or in the vicinity of the burrow. Nevertheless, with potential burrows and signs observed within the Project Site, Rincon

[10] Rincon, Mohave Ground Squirrel Protocol Survey Report, July 25, 2024. Revised October 15, 2024. See **Appendix D** of this IS/MND.
[11] Rincon, Rare Plant Survey Report, July 24, 2024. Revised October 25, 2024. See **Appendix E** of this IS/MND.
[12] Rincon, Western Joshua Tree Survey Report, July 2024. Revised October 2024. See **Appendix F** of this IS/MND.

conducted a focused survey for the desert tortoise on October 12, 2023. No desert tortoises and no sign of tortoise (tracks, scat) were observed in the DETO Survey Area during the focused survey. Four burrows were documented during the survey, one of which was the approximate size and shape for a coyote, and the other three were the appropriate size and shape for desert kit fox. Given the physical barriers to desert tortoise surrounding the DETO Survey Area (i.e., railroad, SR 58, town of Boron, and bottleneck), the Project Site is generally cut off from desert tortoise populations in the area. However, tortoise could still utilize bridges and culverts under SR 58 to access the Project Site. With recent recorded occurrences of desert tortoise near the Project Site and proximity to desert tortoise critical habitat, the Project would result in potentially significant impacts related to desert tortoise.

MM BIO-1 would require the Project Proponent to retain a Qualified Biologist or other Qualified Biological Monitors to be on-site during initial grading, ground disturbance, and vegetation removal activities that could directly or indirectly impact special-status biological resources. **MM BIO-2** would require all construction personnel and employees responsible for Project O&M to participate in a Worker Environmental Awareness Program (WEAP). **MM BIO-3** would require BMPs related to special-status species, including preventing inadvertent entrapment during construction, covering/capping open ends of pipes and culverts at the end of the workday, and more. **MM BIO-4** would require a pre-construction desert tortoise presence/absence survey no more than 30 days in advance of Project development in accordance with USFWS survey protocols. If desert tortoise are not documented during the survey, no additional measures related to desert tortoise avoidance and minimization would be required. Should the pre-construction desert tortoise survey document that the species is inhabiting the Project Site, **MM BIO-5** would require development of a desert tortoise translocation plan, installation of a fence around the construction areas, completion of a clearance survey for desert tortoise within the fenced construction site, hand excavation of all burrows that could provide shelter for a desert tortoise, and compensatory habitat mitigation for the loss of occupied desert tortoise habitat. With implementation of **MM BIO-1** through **MM BIO-5,** impacts to desert tortoise would be reduced to less than significant.

<u>Desert Kit Fox</u>

Desert kit fox occurrences are not currently maintained by the CNDDB; however, the Project Site contains suitable habitat for the species. The species was detected during MGS camera trapping surveys in spring 2024 and may den within the natural scrub habitat on-site although habitation of the burrows on-site was not confirmed. Burrows documented on-site are of suitable size and shape for the species which also may occur transiently (during dispersal and foraging). Therefore, while desert kit fox was not observed on-site during the survey, impacts could be potentially significant. **MM BIO-6** would require a pre-construction survey be conducted for the presence of desert kit fox. If the species are not documented during the surveys or biological monitoring activities, no additional measures related to avoidance and minimization would be required. If potential desert kit fox dens are observed, **MM BIO-7** would require avoidance if feasible. If avoidance is not feasible, additional measures would be required to minimize potential adverse effects to the desert kit fox, including excavation of dens and collapse or implementation of an on-site passive relocation program. With implementation of **MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-6** and **MM BIO-7**, impacts to desert kit fox would be reduced to less than significant.

Burrowing Owl

The burrowing owl is a CDFW special-status species of concern (SSC) and is protected by California Fish and Game Code (CFGC) Section 3503 et. seq. and the Federal Migrating Birds Treaty Act (MBTA). The western burrowing owl also is a candidate for threatened or endangered status and is therefore protected under the California Endangered Species Act (CESA). Suitable habitat for the burrowing owl occurs within the Project Site in the form of fossorial mammal burrows, and there are documented occurrences of this species within 10 miles of the Project Site. No burrowing owls or sign thereof were observed during Rincon's focused surveys for the desert tortoise, MGS, rare plants, and WJT. If present during the timeframe of those surveys (between fall 2023 and spring 2024), the species would have been detected as surveys focused on burrow dwelling species and included survey transects to achieve 100 percent site coverage, daytime wildlife observations, as well as day and nighttime camera trapping at burrows. However, due to the presence of suitable habitat and documented occurrences, impacts to burrowing owl would be potentially significant. **MM BIO-6** would require a pre-construction survey be conducted for the presence of burrowing owl. If the species are not documented during the surveys or biological monitoring activities, no additional measures related to avoidance and minimization would be required. If burrowing owl are detected on-site, **MM BIO-8** would require establishment of a non-disturbance buffer around the species. If avoidance is not feasible, a passive relocation program shall be implemented consistent to the 2012 CDFW Staff Report on Burrowing Owl Mitigation. With implementation of **MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-6,** and **MM BIO-8**, impacts to burrowing owl would be reduced to less than significant.

American Badger

The American badger is a CDFW SSC. American badger were not documented in the CNDDB within the search radius of the Project Site. However, records of this species are often lacking in this database, and they are known to be present in the regional vicinity. There is moderate potential for this species to occur within the Project Site due to the presence of suitable foraging and burrowing habitat. Additionally, larger fossorial mammal burrows were found on-site during the biological surveys although no badgers or sign thereof were observed during focused survey or camera trapping studies. Since there is moderate potential for the American badger to occur, impacts could be potentially significant. **MM BIO-6** would require a pre-construction survey be conducted for the presence of American badger. If the species are not documented during the surveys or biological monitoring activities, no additional measures related to avoidance and minimization would be required. **MM BIO-8** requires additional measures to minimize potential adverse effects to the American badger, including excavation of dens and collapse or implementation of an on-site passive relocation program. With implementation of **MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-6** and **MM BIO-8**, impacts to American badger would be reduced to less than significant.

Mohave Ground Squirrel

According to the MGS Report conducted for the Project Site, the Project Site contained habitat suitable for MGS occupation, characterized by abundant small mammal burrows at the base of shrubs, sandy to gravelly soils, and appropriate desert scrub vegetation communities, Additionally, the Project Site is within the known yearlong range of MGS. In compliance with the CDFW's Mohave Ground Squirrel Survey Guidelines, three live and camera trapping sessions were conducted in spring of 2024 (April 8 through April 12, May 13 through May 17, and June 3 through June 7). The camera stations were set up on the

first day of each session and taken down on the last day of each session. During the surveys, no Mohave ground squirrel individuals were captured or observed within the trapping grid, and no individuals were captured on camera or observed during the habitat assessment survey or camera check site visits. Per the CDFW's Mohave ground squirrel protocol, no detection of Mohave ground squirrels are interpreted to mean that Mohave ground squirrels are not present within the Project Site. Therefore, impacts to Mohave ground squirrels would be less than significant.

Nesting Birds

As determined during Kleinfelder's field survey, several common native and non-native bird species are likely to use the Project Site for nesting and/or foraging, as there is suitable habitat available throughout the Project Site. Most bird nests and eggs are protected under the CFGC Section 3503 and the MBTA.

The loggerhead shrike is a USFWS bird of conservation concern (BCC) and CDFW SSC. This species can be found in lowlands and foothills throughout California. It is absent or rare in California's highest mountain ranges and the north coast. This species is a year-round resident in the southern deserts, parts of the south and central coasts, and the Central Valley. Loggerhead shrike prefer open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches, and require impaling sites, such as thorns, sharp twigs, or barbed wire, for skewering and manipulating their prey. The species nests in densely foliated trees or shrubs and feeds on arthropods, amphibians, small to medium-sized reptiles, small mammals and birds. This species was observed during 2024 focused survey efforts and suitable nesting habitat (desert scrub with shrub heights of 1 to 2 meters or more as well as Joshua trees) is present in the Project area.

California horned larks are year-round residents in open habitats. They forage on seeds and insects, nesting on open ground. Horned larks were observed during focused survey efforts and have potential to nest within the open desert habitat present on the Project Site.

Direct impacts (e.g., injury or mortality) to nesting birds or indirect impacts (e.g., noise, dust) that disrupt nesting behavior and reproductive success would be potentially significant. **MM BIO-10** requires pre-construction nesting bird surveys to determine if any native birds are nesting on or near the Project Site. If active nests are observed, a suitable avoidance buffer from the nests shall be determined by the Qualified Biologist based on species, location, and extent and type of planned construction activity. With implementation of **MM BIO-10,** impacts to nesting birds would be reduced to less than significant.

Special-Status Plants

A desktop database and literature review conducted by Rincon for the Rare Plant Survey Report identified 11 special-status plant species known to occur within the five-mile/nine-quad search radius of the Survey Area. Of the 11 species evaluated, none have a moderate or high potential to occur within the Survey Area based on factors ranging from the lack of suitable soils, inappropriate hydrologic conditions, absence of appropriate vegetation communities, lack of occurrences within five miles of the Survey Area, and lack of observation of conspicuous plant species during the field survey. Eight rare plant species have low potential; no other rare plant species are expected to occur in the Survey Area.

Additionally, two floristic rare plant surveys were completed by Rincon on March 21 and May 9, 2024, to assess the Project's potential impacts to rare plant species. A total of 51 plant species were observed during the survey, 42 of which are native and 9 are introduced. No rare plants were observed; however, 150 WJTs occur on-site as inventoried as part of the WJT census survey. No other protected trees, CRPR or DNPA species, or plants protected by the County were observed within the Survey Area. Impacts to the WJT are discussed below.

Western Joshua Tree

A protocol WJT census survey was completed by Rincon on October 23 and 24, 2023 to assess the Project's potential impacts to WJT pursuant to the California Department of Fish and Wildlife's (CDFW) recently developed Incidental Take Permit (ITP) permitting guidance. One-hundred fifty (150) WJTs were documented and surveyed within the Survey Area. Of the 150 WJTs, 33 are Size Class A (Trees less than 1 meter in height), 77 are Size Class B (Trees 1 meter or greater but less than 5 meters in height), and 40 are Size Class C (Trees 5 meters or greater in height). Of the 150 WJTs, 137 were identified as "Live" and the remaining 13 were "Dead." Additionally, of the 150 WJTs, all are proposed for removal within the disturbance area for the purpose of installing module trackers, setbacks, and Project-related fencing. The CDFW considers any tree present within the designated 50-foot buffer as "take". As the Project would result in removal of WJTs, impacts to WJTs are potentially significant. The Project would be required to obtain a Western Joshua Tree Conservation Act ITP, which provides authorization for take in association with renewable energy, housing, public works, and other projects. **MM BIO-11** requires payment of mitigation fees based on the number of individual WJTs taken and their defined size classes. With implementation of **MM BIO-1, MM BIO-2,** and **MM BIO-11**, impacts to WJTs would be reduced to less than significant.

Mitigation Measures

MM BIO-1 Prior to the issuance of grading or building permits, and prior to decommissioning, the Project Proponent shall retain a Qualified Biologist who has experience and expertise in desert species to oversee compliance with protection measures for all listed and other special-status species that may be affected by the construction, operation, and decommissioning of the Project. The contact information for the Qualified Biologist shall be provided in writing to the San Bernardino County Land Use Services Department. If State or Federally listed species or other special-status biological resources are identified in the Project Site during protocol and/or preconstruction surveys, then the Qualified Biologist may need to be approved by USFWS and/or CDFW as an authorized biologist for handling listed species. The Qualified Biologist or other Qualified Biological Monitors shall be on the Project Site during initial grading, ground disturbance and vegetation removal activities to monitor construction activity that 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 Site. A report of biological monitoring

activities and Project compliance shall be prepared at the end of the construction period and submitted to the County for documentation.

MM BIO-2 Prior to any activity on-site and for the duration of construction activities, all personnel at the Project Site (including laydown areas and/or transmission routes) shall attend a Worker Education 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) of the Project facilities shall also attend WEAP training.

A discussion of the biology and general behavior of any sensitive species which may be in the area, how they may be encountered within the work area, and procedures to follow when they are encountered shall be included in the training. Special-status species, including legal protection, penalties for violations, and Project-specific protective measures shall also be discussed. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to on-site Project activity. Copies of the training shall be maintained at the worksite with the construction supervisor, and a handout containing this information shall be distributed for workers to carry on-site. Upon completion of the program, employees shall sign an attendance log stating they attended the program and understand all protective measures. 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. 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 Planning and Community Development Department upon the County's request.

MM BIO-3 The following best management practices shall be implemented during Project grading, construction, and decommissioning activities to further address potential impacts on biological resources:

- The contractor shall clearly delineate the construction limits and prohibit any construction related traffic outside these boundaries.
- Project-related vehicles shall observe a 15-mile-per-hour speed limit within unpaved roads.
- Project-related vehicles and construction equipment shall restrict off-road travel outside of the designated construction area. Cross-country travel is prohibited.
- Project-related vehicles and construction equipment shall be cleaned before exiting the Project site and track out controls shall be implemented at the entrance(s) and exit(s) of the Project site to minimize the amount of sediment, dirt, mud, etc. from being tracked out of the Project Site.

- Project-related vehicles and construction equipment shall be cleaned before entering the Project Site to prevent the potential spread of invasive species.
- All open trenches shall be fenced or sloped, and open pipes shall be capped or covered to prevent entrapment of wildlife species. Openings should be inspected for the presence of wildlife species prior to fencing, sloping, capping, or covering.
- All food-related trash items such as wrappers, cans, bottles, and food scraps generated during Project construction shall be cleaned up daily and disposed of in closed containers only.
- No deliberate feeding of wildlife shall be allowed.
- No pets shall be allowed on the Project Site.
- Except for authorized personnel, no firearms shall be allowed on the Project Site.
- If construction must occur at night (between dusk and dawn), all lighting shall be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties and to reduce impacts on local wildlife.
- All equipment used on site shall be properly maintained such that no leaks of oil, fuel, or residues will take place. Provisions shall be in place to remediate any accidental spills.
- Any observation of a dead, injured, or entrapped special-status species shall immediately be reported to the construction foreman and Qualified Biologist. The observation shall be reported to all appropriate communications with the regulatory agencies.

MM BIO-4 A pre-construction desert tortoise presence/absence survey shall be conducted by a Qualified Biologist no more than 30 days in advance of Project development in accordance with USFWS survey protocols. A discussion of survey results, including negative findings, shall be provided to the County upon completion of the survey. If desert tortoise are not documented during the survey, no additional measures related to desert tortoise avoidance and minimization are recommended. If desert tortoise are documented inhabiting the Project Site during presence/absence surveys, **MM BIO-5** shall be implemented.

MM BIO-5 Implementation of any measures that would result in the "take" of desert tortoise cannot be undertaken without formal authorization from CDFW and USFWS. If pre-construction desert tortoise surveys (**MM BIO-4**) document that the species is inhabiting the Project Site, the Project Proponent shall develop a plan for desert tortoise translocation and monitoring prior to Project construction in accordance with USFWS guidelines. The plan shall provide the framework for implementing, but not limited to, the following measures, or similar measures deemed sufficient and approved during agency consultation (Note: any desert tortoise translocation plan must be reviewed and approved by CDFW and USFWS):

- If a tortoise-proof exclusion fence is practicable, a fence shall be installed around all non-linear construction areas prior to the initiation of ground disturbing activities, in coordination with a Qualified Biologist. The fence shall be constructed of 0.5-inch mesh hardware cloth and extend 18 inches above ground and 12 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 to prevent desert tortoise entry. The fence shall be supported sufficiently to maintain its integrity, be checked at least monthly during construction and 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. Common raven (Corvus corax) perching deterrents shall be installed as part of the fence construction.
- After fence installation, a Qualified Biologist shall conduct a clearance survey in accordance with USFWS protocols for desert tortoise within the fenced construction site. A Qualified Biologist shall have the appropriate education and experience to accomplish biological monitoring and mitigation tasks and be approved by the CDFW and the USFWS. Two surveys, with transects spaced at 5 meters, 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.
- A Qualified Biologist shall remain on-site until all vegetation is cleared and, at a minimum, conduct site and fence inspections on a regular basis throughout construction in order to facilitate Project compliance with mitigation measures.
- A Qualified Biologist shall remain on-call throughout fencing and grading activities in the event a desert tortoise enters the Project Site.
- Compensatory habitat mitigation shall be secured 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.

MM BIO-6 Pre-construction surveys shall be conducted by a Qualified Biologist for the presence of desert kit fox, American badger, and burrowing owl prior to commencement of construction activities. This survey shall be conducted no more than 30 days prior to ground disturbing activities. Surveys shall conform to CDFW guidelines for burrowing owl and to industry standards for desert kit fox and American badger. A report of all pre-construction survey efforts shall be submitted to the County within 30 days of completion of the survey effort to document compliance. The report shall include the dates, times, weather conditions, and personnel involved in the survey(s) and monitoring. The report shall also include, if applicable, observations of the species or potential dens/burrows, the UTM coordinates and habitat descriptions, and a description of any passive relocation, if applicable.

Biological monitoring and WEAP training as described in **MM BIO-2**, respectively, shall include these species. If desert kit fox, American badger, and/or burrowing owl observations are not documented during the survey(s) or biological monitoring activities, no additional measures related the avoidance and minimization of the absent species are recommended.

MM BIO-7 Two potential mitigation scenarios are applicable to mitigate potential impacts to the desert kit fox:

1) If potential desert kit fox dens are observed and avoidance is feasible, a non-disturbance buffer shall be established, demarcated using brightly colored flagging, and fenced-off prior to construction activity start and to be confirmed by the Qualified Biologist. The buffer may only be reduced at the discretion of a Qualified Biologist and the removal of the buffer shall only occur if a Qualified Biologist determines the potential den is inactive. Typical buffer distances for desert kit fox are:
    - Desert kit fox potential den: 50 ft
    - Desert kit fox active den: 100 ft
    - Desert kit fox natal den: 500 ft
2) 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 a Qualified Biologist determines that potential dens may be active, an on-site passive relocation program shall be implemented. 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, monitoring of the burrow for seven days to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After a Qualified Biologist determines that desert kit foxes have stopped using active dens within the Project Site, 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 until they are no longer active. If a natal den cannot be avoided by the Project, consultation with the CDFW shall be necessary.

MM BIO-8 If the Lead Biologist or Qualified Biological Monitors determines that a potential American badger dens are present on-site but inactive, the Qualified Biologist shall excavate the dens by hand to prevent badgers from re-using them during construction.

If the Lead Biologist or Qualified Biological Monitors determines that potential dens may be active, an on-site passive relocation program shall be implemented. This program shall consist of excluding badgers from

occupied burrows by installation of one-way doors at burrow entrances, remote camera monitoring of the burrow for one week to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the Lead Biologist or Qualified Biological Monitors determines that badgers have stopped using active dens within the Project site, the dens shall be hand-excavated to prevent re-use during construction.

If a potential den is observed, a non-disturbance buffer no less than 30 ft. from the den shall be established, restricting all ground-disturbing activities, such as vegetation clearance or grading, from occurring within the buffer. The buffer shall be demarcated using brightly colored flagging and the buffer may only be reduced at the discretion of the Lead Biologist or Qualified Biological Monitors. Removal of the buffer shall only occur if the Lead Biologist or Qualified Biological Monitors determines the potential den is inactive.

MM BIO-9 Two potential mitigation scenarios are applicable to mitigate potential impacts to the burrowing owl**:**

1) If burrowing owl are detected on-site, a non-disturbance buffer shall be established, restricting all ground-disturbing activities, such as vegetation clearance or grading, from occurring within the buffer. The buffer should be demarcated using brightly colored flagging and the buffer may only be reduced at the discretion of a Qualified Biologist. Removal of the buffer shall only occur if a Qualified Biologist determines burrowing owl are not present in the Project Site and any potential burrows are inactive. Typical avoidance buffer distances for burrowing owl range from 100 meters (330 ft) to 250 meters (825 ft) 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 ft) to 100 meters (330 ft) from the burrow. Depending on the level of disturbance, a smaller buffer may be established as determined by the Qualified Biologist based on the factors listed above and potential use of sound and visual barriers such as hay bales.

2) 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 consistent with Appendix E1 (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the 2012 CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012).

A habitat mitigation plan shall be developed in coordination with the County and CDFW for loss of active burrowing owl burrow sites if implementation of a passive relocation plan is necessary and/or burrowing owl are documented to nest on-site or within 500 feet of the Project Site. This would

be based upon the portion of the Project that overlaps with the owl(s) primary foraging area around the burrow site (approximately 500 foot buffer) to be replaced a minimum 1:1 ratio.

MM BIO-10 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 Site, a Qualified Biologist shall conduct pre-construction surveys of all potential nesting habitat within the Project Site for Project activities that are initiated during the breeding season (February 1 to August 31). The raptor survey shall focus on potential nest sites (i.e., utility poles and trees) within a 250-foot buffer around the Project Site. These surveys shall be conducted no more than 14 days prior to ground-disturbing activities without prior agency approval. The Qualified Biologist must be able to determine the status and stage of nesting 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). Buffers may be reduced at the discretion of a Qualified Biologist based on Project activity, line of sight, tolerance of individuals, and stage of the nest.

MM BIO-11 CDFW requires mitigation fees based on the number of individual WJT taken and their defined classes. CDFW details mitigation as described in their interactive Mitigation Map Fee Area (CDFW 2024), which designates areas that fall within a reduce fee area or standard fee area. Because the Project is located within the reduced mitigation fee map area, it is subject to the following mitigation fees per tree:

- Size Class A (Trees less than 1 meter in height) - $150.00 per tree
- Size Class B (Trees one 1 meter or greater but less than 5 meters in height) - $200.00 per tree
- Size Class C (Trees 5 meters or greater in height) - $1,000.00 per tree

Based on the WJTs surveyed and the mitigation fees per tree above, the Project Proponent shall pay a mitigation fee of $60,350 for the removal of 150 WJT. A breakdown of costs per tree is provided in **Table 6: Western Joshua Tree Removal Mitigation Fees**.

Table 6: Western Joshua Tree Removal Mitigation Fees

Size Class	Number of WJT	Mitigation Fee	Removals	Cost
A	33	$150	33	$4,950
B	77	$200	77	$15,400
C	40	$1,000	40	$40,000
Total	**150**	**--**	**150**	**$60,350**

b. **Less Than Significant Impact with Mitigation Incorporated.** As described above in Threshold IV.a, the Project Site consists of undeveloped vacant land with two unpaved roads. As stated in the BRA, no potential riparian habitat was observed in the Survey Area. Spinescale scrub dominates the vegetation cover in the Survey Area. As previously stated, 191 WJT were found within the WJT Survey Area, all of which are proposed for removal within the disturbance area for the purpose of installing module trackers, setbacks, and Project-related fencing. The CDFW considers any tree present within the designated 50-foot buffer as "take". As the Project would result in removal of WJTs, impacts to WJTs are potentially significant. The Project would be required to obtain a Western Joshua Tree ITP, which provides authorization for take in association with renewable energy, housing, public works, and other projects. **MM BIO-11** requires payment of mitigation fees based on the number of individual WJTs taken and their defined size classes. With implementation of **MM BIO-1, MM BIO-2,** and **MM BIO-11,** impacts to WJTs would be reduced to less than significant.

c. **No Impact**. No potential Waters of the U.S., including wetlands, under the jurisdiction of the U.S. Army Corps of Engineers, potential Wetlands or Waters of the State under the jurisdiction of the Lahontan Regional Water Quality Control Board (RWQCB), or rivers, streams, or lakes under the jurisdiction of the CDFW, including ephemeral washes, were observed during Kleinfelder's survey. Therefore, the Project would have no impact to State or federally protected wetlands.

d. **Less Than Significant Impact with Mitigation Incorporated.** The Project Site is mapped as an area for conservation planning linkages and a linkage design area for the California Desert Linkage Network. These conservation planning and linkage design areas are intended to help maintain connectivity with nearby desert habitats that contain sensitive species that are threatened by development. The Project Site is cut off from other areas of native desert habitat by the Burlington Northern and Santa Fe Railroad line, located approximately 300 feet south of the Survey Area, SR 58 located approximately 0.5 mile north of the Survey Area, and the town of Boron, located approximately 0.5 mile west of the Survey Area. A bottleneck occurs approximately 3 miles east of the Survey Area where the distance between SR 58 and the railroad narrows to approximately 650 feet.

Given the physical barriers surrounding the Survey Area (i.e., railroad, SR 58, town of Boron, and bottleneck) the Project Site is generally cut off from other wildlife populations in the regional vicinity. However, more mobile species could still utilize bridges and culverts under SR 58 to access the Project Site.

Given these potential barriers to movement, the Project Site does not likely provide a key habitat linkage. Similar habitats in the broader region that provide more natural

connectivity are likely to be more attractive for wildlife movement. The Project Site likely may supports support some level of local wildlife movement patterns and provides food and cover resources for several wildlife species that inhabit the site and immediate vicinity.

Furthermore, the field survey observed several common wildlife species or their signs, including desert cottontail (*Sylvilagus audubonii*), common raven (*Corvus corax*), and side-blotched lizard (*Uta stansburiana*). Small mammal burrows were evenly distributed throughout the site. Common wildlife species adapted to life in proximity to human activity like coyotes (*Canis latrans*) are likely to move through the Project Site on a regular basis to find food and cover. Additionally, as mentioned above in Threshold IV.a, several common native and non-native bird species are likely to use the Project Site for nesting and/or foraging, as there is suitable habitat available throughout the Project Site.

Project construction could temporarily interfere with the movement of native resident or migratory wildlife species due to the presence of workers on-site, equipment and vehicle travel, installation of fencing, and construction noise, and impacts to the movement of wildlife species would be potentially significant. With implementation of **MM BIO-2, MM BIO-3,** and **MM BIO-9**, impacts to the movement of wildlife species or the use of native wildlife nursery sites would be reduced to a less than significant level.

e. **Less Than Significant Impact with Mitigation Incorporated.** San Bernardino County Development Code Sections 88.01.050 and 88.01.060 provide regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wide use of desert resources. As discussed in Threshold IV.a, special-status plant and wildlife species were identified on the Project Site during the surveys. Development of the Project would result in potentially significant impacts on those species. The removal of all types of Joshua trees are regulated under these sections. As previously stated, 150 WJT were found within the WJT Survey Area, all of which are proposed for removal within the disturbance area for the purpose of installing module trackers, setbacks, and Project-related fencing. The CDFW considers any tree present within the designated 50-foot buffer as “take”. As the Project would result in removal of WJTs, impacts to WJTs are potentially significant. The Project would be required to obtain a Western Joshua Tree Conservation Act ITP, which provides authorization for take in association with renewable energy, housing, public works, and other projects. With implementation of **MM BIO-1** through **MM BIO-11** to reduce potentially significant impacts to special-status habitats and wildlife species to less than significant levels**,** the Project would be consistent with and would not interfere with Development Code Chapter 88.01 and the County’s programs for the:

- Management of biotic resources in unincorporated areas under private or public ownership, including conservation of native plant heritage;
- Regulation of native plant and tree removal activities;
- Protection and maintenance of local watersheds;
- Preservation of habitats for rare, endangered, or threatened plants; and
- Protection of wildlife with limited or specialized habitats.

Following implementation of **MM BIO-1** through **MM BIO-11** and compliance with the County Development Code, impacts regarding conflict with any local policies or ordinances protecting biological resources would be less than significant.

f. **No Impact.** The Project Site is located within the West Mojave Habitat Conservation Plan (WMHCP) and the Desert Renewable Energy Conservation Plan (DRECP). However, the WMHCP and the DRECP apply only to lands administered by the Bureau of Land Management and therefore do not apply to the Project. The Project Site is not located within any other adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, the Project would have no impact in this regard.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
V. CULTURAL RESOURCES: Will the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

V. CULTURAL RESOURCES

SUBSTANTIATION: (Check ☐ if project is located in the Cultural or Palaeontologic Resources overlays or cite results of cultural resource review) The discussion below regarding potential impacts on cultural resources is based in part on the Cultural Resources Identification Report (CRIR) (see **Appendix G**) prepared by Kleinfelder.[13] The CRIR assessed the Area of Potential Effects (APE), which consists of the Project Site and a 100-foot buffer around the Project Site.

a. **No Impact**. The Project Site and its vicinity are predominantly undeveloped. The CRIR's review of historic maps and aerial imagery of the Project Site indicate that the APE has primarily been undeveloped. The unpaved roads along the western boundary of the Project Site and through the center of the APE were developed as early as 1973.

   The on-site pedestrian survey conducted in July 2023 found disturbances from modern refuse (i.e., construction materials, household items, and vehicular parts) and vehicular tracks within the APE. Two roads intersect the APE: a north-south dirt road that bisects the APE, and an east-west transmission utility line access road that runs parallel to the southern APE boundary.

   Two historic-era refuse deposit sites and 36 isolated resources (isolates) were recorded within the APE during the field survey. However, neither of the refuse deposit sites are eligible as historic resources under the National Register of Historic Places (NRHP) or California Register of Historic Resources (CRHR). Furthermore, the 36 historic-era isolates lack context with no associated materials, appear to have been displaced from their original locations, and/or represent an isolated singular event and are therefore also ineligible for inclusion in the NRHP and CRHR. As such, no historic properties or historical resources were identified within the APE. Therefore, the Project would not result in a substantial adverse change to the significance of a historical resource, and no impact would occur.

b. **Less Than Significant Impact with Mitigation Incorporated.** The CRIR included a cultural resource record search by the San Joaquin Valley Information Center (SSJVIC) and South Central Coastal Information Center (SCCIC). The SSJVIC and SCCIC records

[13] Kleinfelder, Cultural Resources Identification Report, July 2024. **Appendix G** of this IS/MND.

search identified one previously recorded cultural resource, the Historic Santa Fe Railroad and Minkler Spur, within the APE. Eight cultural resources studies intersect the APE. The Historic Santa Fe Railroad and Minkler Spur resource was observed outside the APE during the pedestrian survey and is therefore not considered within the APE.

The CRIR also included a record search by the Native American Heritage Commission (NAHC). In June 2023, the NAHC record search of the Sacred Land File (SLF) results were negative. No prehistoric or tribal resources were found within the APE during the pedestrian survey. No prehistoric resources are recorded within a 0.5-mile radius of the APE. No prehistoric resources are recorded within a 0.5-mile radius of the APE. The closest water source appears to be an intermittent drainage approximately 1,900 feet north of the APE. Soils within the APE consist of brownish, yellow sandy loam Quaternary lake deposits with a low terrace landform. Given the large distance between the APE and the and historical water sources, the geomorphology in the vicinity of the APE, and the lack of previously recorded prehistoric resources in the Project vicinity, the APE is considered to have a low sensitivity for buried prehistoric resources. Nonetheless, the discovery of buried archaeological resources is a possibility during ground-disturbing activities; therefore, impacts to archaeological resources would be potentially significant. To address potential impacts to archaeological resources, the Project would be subject to implement **MM CUL-1** and **MM CUL-2**. With implementation of **MM CUL-1** and **MM CUL-2,** impacts would be reduced to less than significant.

Mitigation Measures

Please also refer to mitigation measures provided in **Section XVIII: Tribal Cultural Resources**.

MM CUL-1 Prior to the start of ground disturbance, the construction crew shall participate in on-site training on the proper procedures to follow if cultural resources are uncovered during the Project excavations, site preparation, or other related activities. This Worker Environmental Awareness Program (WEAP) shall include a comprehensive discussion of applicable laws and penalties under the law, samples or visuals of artifacts that might be found in the vicinity of the Project Site, a discussion of what such artifacts may look like when partially buried or wholly buried and then freshly exposed, a discussion of what prehistoric and historic-period archaeological deposits look like at the surface and when exposed during construction, and instruction that employees are to halt work in the vicinity of a discovery (within 100 feet). This information may be provided in an informational brochure that outlines reporting procedures in the event of a discovery and should be provided to all individuals working on site.

MM CUL-2 In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 60 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. Work on other portions of the Project outside of the buffered area may continue during this assessment period. The Consulting Tribe shall also be contacted, as detailed in **MM TCR-1**, regarding any pre-contact and/or historic-era 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.

If the resource is determined by the qualified archaeologist to be prehistoric, the Consulting Tribe shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR avoidance cannot be ensured, a qualified archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to the Consulting Tribe for review and comment, as detailed within **MM TCR-1.** The qualified archaeologist shall also prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of the California Code of Regulations (CCR) Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The County shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the California Historical Resources Information System, per CCR Guidelines Section 15126.4(b)(3)(C).

c. **Less Than Significant Impact.** California Health and Safety Code (HSC) Sections 7050.5, 7051, and 7054 collectively address the illegality of interference with human burial remains, as well as the disposition of Native American burials in archaeological sites. The law protects such remains from disturbance, vandalism, or inadvertent destruction, and establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, including the treatment of remains prior to, during, and after evaluation and reburial procedures.

   No human remains are known to be present within the APE. However, there is a possibility that human remains could be interred underneath the Project Site. Should human remains be encountered during Project construction, HSC Code Section 7050.5 states that no further disturbance shall occur within 100 feet of the remains until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). Treatment of the remains shall be directed by MLD upon visiting the site within 48 hours of access being granted to the MLD. If MLD recommendations have not been made within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. Therefore, following compliance with all required regulations, the Project would not disturb any human remains, including those interred outside of dedicated cemeteries. Impacts would be less than significant.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VI. ENERGY: Would the project:				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operations?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

VI. ENERGY

SUBSTANTIATION: Energy calculations were prepared for the Project by Kimley-Horn. The energy modeling outputs and results are included in Energy Documentation (**Appendix H**).

a. **Less Than Significant Impact.** The Project would increase the demand for electricity and natural gas at the Project Site during construction. The energy needs during Project construction would be temporary and would not require additional capacity or increase peak or base period demands for electricity or other forms of energy. Construction equipment use and associated energy consumption would be typical for that associated with the construction projects of this size. Thus, the Project's energy consumption during the construction phase would not be considered wasteful, inefficient, or unnecessary.

The Project would not increase the demand for electricity or natural gas at the Project Site during operations. The Project does not include any permanent components that would significantly increase demand for existing sources of energy, with the exception of fuel usage for maintenance visits totaling up to four times per year and operations of security lighting onsite. The Project would develop a solar energy and BESS facility that would provide a new secure and reliable electricity supply, improve community infrastructure, and support sustainable electricity generation. Project development would provide a clean, reliable resource to help integrate renewable energy sources, reduce dependence on gas-fired generation, eliminate ocean water for cooling, reduce freshwater consumption, and reduce greenhouse gas (GHG) emissions and criteria air pollutant emissions.

The analysis of construction and operational energy consumption is based on CalEEMod version 2022.1 and RCEM version 9.0.0 modeling results for the Project. The Project's estimated energy consumption is based primarily on CalEEMod's default settings for the County and consumption factors provided by SCE, who is the electricity provider for the Project Site. The results of the CalEEMod and energy consumption modeling are included in **Appendix H**. The amount of operational fuel consumption was estimated using the CARB Emissions Factor 2021 (EMFAC2021) computer program which provides projections for typical daily fuel (i.e., diesel and gasoline) usage in the County, and the Project's annual vehicle miles traveled (VMT) outputs from CalEEMod. The estimated construction fuel consumption is based on the Project's construction equipment list timing/phasing, and hours of duration for construction equipment, as well as vendor,

hauling, and construction worker trips. Energy consumption associated with the proposed Project is summarized in **Table 7: Project and Countywide Energy Consumption**.

Table 7: Project and Countywide Energy Consumption

Energy Type	Project Annual Energy Consumption	San Bernardino County Annual Energy Consumption[1,2]	Percentage of Countywide Consumption
Construction[3,4]			
Electricity Consumption			
Water[1]	11,452 kWh	10,327,755,820 kWh	<0.00001%
Fuel Consumption[5]			
Diesel	47,514 gallons	281,589,289 gallons	0.0169%
Gasoline	18,089 gallons	828,612,797 gallons	0.0022%
Operations			
Electricity Consumption			
Area[1]	0 kWh	10,327,755,820kWh	0.0000%
Water[1]	347 kWh		<0.0001%
Total Electricity	0 kWh		0.0000%
Fuel Consumption[5]			
Diesel	67 gallons	281,589,849 gallons	<0.0001%
Gasoline	0 gallons	828,612,797 gallons	0.0000%

Notes:
1. The Project increases in electricity consumption is compared with the total consumption in San Bernardino County in 2022.
2. The Project increases in automotive fuel consumption are compared with the Countywide fuel consumption (projected) in 2025 (start of construction).
3. Construction fuel consumption is based equipment and load factors from California Emissions Estimator Model (CalEEMod version 2022.1 and RCEM version 9.0.0).
4. The estimated construction fuel consumption is based on the Project's construction equipment list timing/phasing, and hours of duration for construction equipment, as well as vendor, hauling, and construction worker trips.
5. Countywide fuel consumption is from the California Air Resources Board (CARB) EMFAC2021 model.

Refer to **Appendix H** for assumptions used in this analysis.

Construction-Related Energy Consumption

During construction, the Project would consume energy in two general forms: (1) the fuel consumed by construction vehicles and equipment; and (2) electricity associated with the conveyance of water used for dust control. It should be noted that the construction activities would not consume natural gas.

Project construction is anticipated to be completed over a period of up to approximately nine months. Thus, energy consumed during Project construction would be temporary and would not represent a significant demand on energy resources.

Construction Transportation Energy Demand: Fossil fuels such as gasoline and diesel would be consumed during Project construction. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction. VMT associated with transportation of construction materials and construction worker commutes would also result in fuel consumption. Heavy-duty

construction equipment associated with construction activities would primarily rely on diesel fuel. It is conservatively assumed that construction workers would travel to and from the Project Site throughout construction in gasoline-powered vehicles.

As shown in Table 7, a total of 18,089 gallons of gasoline and 47,514 gallons of diesel is estimated to be consumed during Project construction. This constitutes 0.0022 percent and 0.0169 percent of the County's typical annual gasoline and diesel consumption, respectively. However, this fuel consumption would be short-term and finite, only being consumed over the course of the nine month construction period. Additionally, some incidental energy conservation would occur during construction through compliance with State requirements and through U.S. EPA and CARB engine emissions standards. These engine emissions standards require the use of more efficient engines in vehicles and equipment to encourage fuel efficiencies and reduce fuel consumption. Further, idling time of vehicles and equipment will be minimized to limit the amount of fuel consumption while no work is being completed. Therefore, Project construction activities would comply with existing energy standards with regard to transportation fuel consumption. As such, the demand for petroleum-based fuel during construction would not be considered wasteful, inefficient, or unnecessary. As such, the Project would have a less than significant impact as it relates to construction transportation energy demand.

Construction Electricity Demand: During construction of the Project, electricity would be consumed to supply and convey water for dust control. As shown in Table 7, a total of approximately 11,452 kWh of electricity is anticipated to be consumed during Project construction. Electricity consumed during construction would result in a nominal increase (less than 0.00001 percent) in energy use in the County. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed, and would cease upon completion of construction. As such, the demand for electricity during construction would not be considered wasteful, inefficient, or unnecessary. As such, the Project would have a less than significant impact as it relates to construction electricity demand.

Construction Material Energy Demand: The Project-related incremental increase in the use of energy bound in construction materials such as metal, concrete, and manufactured or processed materials would not substantially increase demand for energy compared to overall local and regional demand for construction materials. Additionally, it is noted that there are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or State. Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar projects of this nature. Further, energy consumed to construct a renewable energy project to reduce the State's GHG emissions from energy would not be considered wasteful, inefficient, or unnecessary. As such, the Project would have a less than significant impact as it relates to material energy demand.

Construction Conclusion: As summarized above, energy consumed during construction would result in a nominal increase in energy use in the County. As such, Project construction would have a minimal effect on the local and regional energy supplies. It is noted that construction energy use is temporary and would cease upon completion of construction activities. There are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable

construction sites in the region or State. Therefore, construction energy consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature, and impacts would be less than significant.

Operational-Related Energy Consumption

During Project operations, energy would be consumed for multiple purposes, including, but not limited to, panel washing and maintenance, BESS HVAC units, and lighting.

Operational Transportation and Fuel Energy Demand: Table 7 provides an estimate of the annual fuel consumed by Project vehicles traveling to and from the Project Site during operations. During operation, the Project is estimated to require 6 maintenance-related visits per year and up to 4 solar panel and inverter washing visits per year, resulting in approximately 10 operational roundtrips per year (20 one-way trips). As a result, the Project would consume approximately 67 gallons of diesel fuel, which represents less than 0.00001 percent of the County's current diesel use. Additionally, the Project does not propose any unusual features that would result in excessive long-term operational fuel consumption. Consequently, the proposed Project would not result in a substantial demand for energy that would require expanded supplies or the construction of other infrastructure or expansion of existing facilities. Therefore, Project operations would not result in wasteful, inefficient, or unnecessary fuel consumption. As such, the Project would have a less than significant impact as it relates to transportation and fuel energy demand.

Energy Demand and Generation: During Project operation, the electricity usage for HVAC units, communications equipment, lighting, and other typical O&M activities would be minimal and would be sufficiently offset by electricity produced by the Project. Additionally, the Project is anticipated to consumed approximately 347 kWh panel washing activities. The Project would not require additional energy capacity or supplies. Additionally, as a power-generating facility with solar PV and energy storage, the Project would generate energy that could ease stress on intensive peak or base period electricity demands. Furthermore, the Project would generate a significantly higher amount of energy than it will consume.

The Project would provide the County and the State with additional renewable energy sources on previously disturbed land that has been previously approved for renewable energy development that would assist the State in complying with the Renewable Portfolio Standards (RPS) under SB 350 and SB 100. The increase in reliance of renewable energy resources further ensures that new development projects would not result in the waste of the finite energy resources. Therefore, the Project would not cause wasteful, inefficient, and unnecessary consumption of energy during Project operation, or preempt future energy development or future energy conservation, and impacts would be less than significant.

Operations Conclusion: As shown in Table 7, the Project's operational energy consumption would represent less than 0.0001 percent of Countywide electricity and fuel consumptions. Additionally, the Project would not result in a substantial increase in demand for transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure. Therefore, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy during operation, and impacts would be less than significant.

Decommissioning Related Energy Consumption

At the end of the Project's operational term, the Applicant may determine that the Project Site should be decommissioned and deconstructed. However, due to the lack of available in-depth details on decommissioning at this time, as a worst-scenario analysis, it was assumed that the decommissioning phase would utilize the same amount of energy as the construction phase. As discussed above, impacts related to construction-related energy consumption would be less than significant. As such, energy impacts during Project decommissioning would be less than significant.

b. **Less Than Significant Impact.** Many of the regulations regarding energy efficiency are focused on increasing the energy efficiency of buildings and renewable energy generation, as well as reducing water consumption and reliance on fossil fuels. The Project, which comprises the building of a solar energy and battery storage facility, would be part of a sustainable solution to enable increasing amounts of renewable energy-generating sources to be accessed. The County's General Plan Infrastructure and Utilities Element and Renewable Energy Conservation Element includes the following guiding policies and implementing policies related to energy resources.

- Policy IU 5.5 Energy and Fuel Facilities: We encourage the development and upgrade of energy and regional fuel facilities in areas that do not pose significant environmental or public health and safety hazards, and in a manner that is compatible with military operation and local community identity.
- Policy RE 1.1: Continue implementing the energy conservation and efficiency measures identified in the County of San Bernardino Greenhouse Gas Emissions Reduction Plan.
- Policy RE 1.2.7: Encourage passive solar design in subdivision and design review processes.
- Policy RE 2.1.1: Support solar energy generation, solar water heating, wind energy, and bioenergy systems that are consistent with the orientation, siting, and environmental compatibility policies of the General Plan.
- Policy RE 2.2: Promote use of energy storage technologies that are appropriate for the character of the proposed location.
    - RE 2.2.1: Encourage on-site energy storage with RE generation facilities, consistent with County Development Code Requirements.
    - RE 2.2.2: Encourage and allow energy storage facilities as an accessory component of RE generation facilities.
- Policy RE 2.5: Support renewable energy systems that accelerates zero net energy (ZNE) through innovative design, construction, and operations of residences, businesses, and institutions that are grid-neutral and independent of centralized energy infrastructure.
- Policy RE 4-3: Require construction and operation of all renewable energy facilities to minimize negative effects and optimize benefits to unincorporated communities.

The Project would not develop structures or buildings, so the Project would not be required to be compliant with the implementation policies regarding buildings meeting the State energy efficiency standards. No conflicts with renewable energy or energy efficiency plans would occur. The applicable State plans and policies for renewable energy and energy efficiency include the SB 350 and SB 100. As discussed under Threshold VI.a above, the Project would provide the County and the State with additional renewable energy sources. Additionally, per the RPS, the Project would utilize electricity provided by SCE that is

composed of 30.9 percent renewable energy as of 2020 and would achieve at least 60 percent renewable energy by 2030. Therefore, the Project is supportive of the County's policies and State's goals, and would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VII. GEOLOGY AND SOILS: Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
(ii) Strong seismic ground shaking?	☐	☐	☒	☐
(iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
(iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

VII. GEOLOGY AND SOILS

SUBSTANTIATION: (Check ☐ if project is located in the Geologic Hazards Overlay District). The discussion below regarding potential impacts on geology and soils is based in part on the Geotechnical Engineering Investigation (see **Appendix I**) prepared by Salem Engineering Group, Inc.[14]

[14] Salem Engineering Group, Inc. Geotechnical Engineering Investigation, November 2023. **Appendix I** of this IS/MND.

Ground Rupture

a.i. **Less Than Significant Impact.** Southern California is a seismically active region subject to strong ground acceleration from earthquake events along major regional faults. According to the Geotechnical Engineering Investigation, the Project is not within an established Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards. The nearest potentially active fault identified by the Geotechnical Engineering Investigation is the Buttes fault located approximately 9 miles east of the Project Site. No active faults with the potential for surface fault rupture are known to pass directly beneath the Project Site. The Project would not require substantial ground disturbance that could induce seismic activity and would not include any habitable structures. Nonetheless, the design of any structures on the Project Site would be designed to accommodate seismic loading, pursuant to the latest version of the California Building Code (CBC) and the County's Building Code, and engineering design recommendations in the Geotechnical Engineering Investigation. Therefore, the Project would not directly or indirectly cause potential substantial adverse effects related to the most recent Alquist-Priolo Earthquake Fault Zoning Map, and impacts would be less than significant.

Strong Seismic Ground Shaking

a.ii. **Less Than Significant Impact.** As mentioned in Threshold VII.a.i, Southern California is a seismically active region, and the Project Site may be subject to shaking during earthquake events. The level of ground shaking that would be experienced at the Project Site from active or potentially active faults or blind thrust faults in the region would be a function of several factors including earthquake magnitude, type of faulting, rupture propagation path, distance from the epicenter, earthquake depth, duration of shaking, topography, and geology. According to the Geotechnical Engineering Investigation, the closest active faults are the Helendale-So Lockhart fault (7.79 miles away) and the Lenwood-Lockhart-Old Woman Springs fault (8.55 miles away). Project construction would be required to adhere to applicable regulations in the latest version of the CBC and the County's Building Code to minimize seismic-related hazards, because of the Project Site's location in seismically active southern California. With compliance with applicable regulations, impacts related to seismic ground shaking would be less than significant.

Seismic-Related Ground Failure Including Liquefaction

a.iii. **Less Than Significant.** Soil liquefaction is a state of soil particles suspension caused by a complete loss of strength when the effective stress drops to zero. Liquefaction normally occurs under saturated conditions in soils such as sand in which the strength is purely frictional. Primary factors that trigger liquefaction are: moderate to strong ground shaking (seismic source), relatively clean, loose granular soils (primarily poorly graded sands and silty sands), and saturated soil conditions (shallow groundwater). Due to the increasing overburden pressure with depth, liquefaction of granular soils is generally limited to the upper 50 feet of a soil profile.

According to the San Bernardino County Geologic Hazard Overlays Map, the Project Site is not within an area with susceptibility to liquefaction.[15] Additionally, in general, the near

[15] San Bernardino County, Land Use Plan General Plan Geologic Hazard Overlays, 2007, https://www.sbcounty.gov/Uploads/lus/GeoHazMaps/CHDHC.pdf. Accessed February 7, 2024.

surface soils encountered during the Geotechnical Engineering Investigation conducted for the Project Site included interbedded layers of loose to very dense silty sands and clayey silty sand to a depth ranging from 0.5 to 5 feet. The silty clayey sand soil is underlain by a thick layer of dense to very dense (caliche) clayey sand to the maximum depth explored of 21.5 feet below site grade (bsg). It should be noted that very dense soils (cemented soil/caliche) were encountered in all borings at depths greater than about 3 to 5 feet bsg. Free groundwater was not encountered to the depth of exploration during this investigation. Based on available water well data, historic groundwater depths to be 149 feet bsg in January 1958. Based on the relative density of soil encountered and the historic depth of groundwater (greater than 100 feet bsg), the potential for liquefaction-induced settlement is considered low.

Lateral spreading is a phenomenon in which soils move laterally during seismic shaking and is often associated with liquefaction. The amount of movement depends on the soil strength, duration and intensity of seismic shaking, topography, and free face geometry. Due to the relatively flat topography of the Project Site, the likelihood of lateral spreading is low.

Based on the factors described above, Project impacts associated with seismic-related ground failure, including liquefaction and lateral spreading, would be less than significant.

Landslides

a.iv. **No Impact.** According to the San Bernardino County Geologic Hazard Overlays Map, the Project Site is not within an area with susceptibility to landslides.[16] Furthermore, as stated in the Geotechnical Engineering Investigation, there are no known landslides at the Project Site, nor is the Project Site in the path of any known or potential landslides. The Project Site is relatively flat, ranging from approximately 2,473 to 2,478 feet above mean sea level. Further, the Project Site is not in immediate proximity to any mountains or steep slopes. As such, there is no potential for landslides to occur on or near the Project Site, and the Project would not expose people or structures to potential substantial adverse effects involving landslides. Therefore, no impacts related to landslides would occur.

b. **Less Than Significant Impact.** During construction, the Project Site would be subject to ground-disturbing activities (e.g., excavation, grading, foundation construction, the installation of utilities). These activities would expose soils to potential short-term erosion by wind and water. Since Project construction would require greater than one acre of ground-disturbing activities, the Applicant would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the National Pollutant Discharge Elimination System (NPDES) permit and an Erosion Control Plan in accordance with County Development Code 85.11.030. The SWPPP incorporates best-management practices (BMPs) in accordance with the California Stormwater Best Management Practices Handbook, to control erosion and to protect the quality of surface water runoff during Project construction. Typical BMPs that could be used during construction include good housekeeping practices (e.g., street sweeping, proper waste disposal, vehicle and equipment maintenance, materials storage, minimization of hazardous materials, proper handling and storage of hazardous materials, etc.) and erosion/sediment control

[16] San Bernardino County, Land Use Plan General Plan Geologic Hazard Overlays.

measures (e.g., silt fences, fiber rolls, gravel bags, storm water inlet protection, and soil stabilization measures, etc.). The SWPPP and Erosion Control Plan would be subject to review and approval by the County for compliance with the County's goals for storm water control. Following compliance with the established regulatory framework, the Project's impacts concerning soil erosion and loss of topsoil during construction would be less than significant.

With respect to soil erosion during Project operations, the potential is relatively low due to the fact that the Project Site would be entirely paved, developed, or landscaped. The use of vegetation and groundcover would act as an effective barrier to soil erosion by impeding direct contact between precipitation/irrigation and on-site soils. Therefore, the Project's operational impacts concerning soil erosion and loss of topsoil would be less than significant.

c. **Less Than Significant Impact.** See Thresholds VII.a.iii and VII.a.iv for discussion on liquefaction and landslides, respectively. Subsidence is commonly caused by the removal of subsurface water and underground mining. Regarding lateral spreading, the amount of movement during seismic shaking depends on the soil strength, duration, and intensity of seismic shaking ,topography, and free face geometry. As the Project is not in a liquefaction zone and is relatively flat, the likelihood of lateral spreading is low. Impacts from lateral spreading would be less than significant.

   Subsidence occurs when the withdrawal of groundwater, oil, or natural gas vertically displaces a large portion of land. Soils that are particularly subject to subsidence include those with high silt or clay content. Based on the Geotechnical Engineering Investigation, the near surface soils are interbedded layers of loose to very dense silty sands and clayey silty sands, all of which are underlain by a thick layer of dense to very dense (caliche) clayey sand. According to the USGS Areas of Land Subsidence in California Map, there is no groundwater pumping, peat loss, or oil extraction at or near the Project Site.[17] Nonetheless, the design of any structures on the Project Site would be designed to accommodate seismic loading, pursuant to the latest version of the CBC and the County's Building Code, and engineering design recommendations in the Geotechnical Engineering Investigation. Additionally, according to the recommendations of the Geotechnical Engineering Investigation, the spread foundations for new walls or auxiliary structures would be prepared by over-excavation of 12 inches below foundations or 24 inches below preconstruction site grade, or to the depth required to remove disturbed soils, whichever is greater; and supported by re-worked suitable Project Site soil, or import material. Soft or unstable areas, if encountered, would be remediated per the direction of the engineer. With compliance with applicable regulations, impacts from subsidence would be less than significant.

d. **Less Than Significant Impact.** As described in Threshold VII.a.iii, near-surface soils include interbedded layers of loose to very dense silty sands and clayey silty sand to a depth ranging from 0.5 to 5 feet, which are underlain by a thick layer of dense to very dense (caliche) clayey sand to the maximum depth explored of 21.5 feet bsg. Two expansion index tests indicated that the soils have very low expansion potential.

[17] United States Geologic Survey (USGS), Areas of Land Subsidence in California Map, https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html. Accessed February 7, 2024.

Nonetheless, the Project would incorporate requirements of the latest CBC and County Building Code that would address potential seismic-related effects from this soil type, which includes building foundation requirements appropriate to site-specific conditions. With compliance with applicable regulations, impacts from expansive soil would be less than significant.

e. **No Impact.** The Project would be unmanned and does not propose to use septic tanks or alternative wastewater disposal systems. Temporary sanitary systems will be brought in during construction and removed when the Project is operational. Therefore, the Project would not result in impacts related to the use of septic tanks or alternative wastewater disposal systems.

f. **Less Than Significant Impact with Mitigation Incorporated.** According to the San Bernardino Countywide Plan Environmental Impact Report, there are no unique geologic features within or near the Project Site.[18] The nearest feature to the Project Site is Rainbow Basin located approximately 32 miles east of the Project Site. This unique geologic feature is not adjacent to the Project Site, nor would their structural integrity be affected by the Project.

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. These resources are valued for the information they yield about the Earth's history and its past ecological settings. The potential for fossil occurrence depends on the rock type exposed at the surface in each area. According to the Geotechnical Engineering Investigation, the Project Site is mapped as surficial alluvial and mud flat deposits (Qa/Qc). Older alluvial deposits have a high sensitivity for paleontological resources. Therefore, there is potential for unanticipated discovery of paleontological resources during ground-disturbing activities, and impacts would be potentially significant. To address potential impacts to paleontological resources, the Project would be subject to compliance with **MM GEO-1**, which requires a qualified paleontological monitor to be on-site during Project ground-disturbing activities. Therefore, following compliance with **MM GEO-1**, the Project's potential impacts to paleontological resources would be reduced to a less than significant level.

Mitigation Measures

MM GEO-1 Prior to the start of ground disturbance, the construction crew shall participate in on-site training on the proper procedures to follow if paleontological resources are uncovered during the Project excavations, site preparation, or other related activities. This Worker Environmental Awareness Program (WEAP) should shall include a comprehensive discussion of applicable laws and penalties under the law, samples or visuals of artifacts that might be found in the vicinity of the Project Site, a discussion of what paleontological resources may look like when partially buried or wholly buried and then freshly exposed, a discussion of what paleontological resources look like when exposed during construction, and instruction that employees are to halt work in the vicinity of a discovery

[18] San Bernardino County, San Bernardino Countywide Plan Draft EIR Section 5.5 Cultural Resources, 2019, pages 5.5-20 to 5.5-29, https://countywideplan.com/wp-content/uploads/sites/68/2021/01/Ch_05-05-CUL.pdf?x23421. Accessed February 7, 2024.

(within 100 feet). This information may be provided in an informational brochure that outlines reporting procedures in the event of a discovery and should be provided to all individuals working on site.

In the event that paleontological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and a qualified paleontologist who meets the Society of Vertebrate Paleontology guidelines shall be contacted immediately to evaluate the resource. If the find is large enough to warrant further evaluation and/or extraction, then the following fossil “discovery” protocol shall be followed:

a) The paleontologist shall assess the discovered material(s) and prepare a survey, study or report evaluating the impact. The paleontologist’s survey, study, or report shall contain a recommendation(s), if necessary, for the preservation, conservation, or relocation of the resource.
b) The Applicant shall comply with the recommendations of the evaluating paleontologist, as contained in the survey, study, or report.
c) Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

Prior to the issuance of any building permit, the Applicant shall submit a letter to the County for the case file indicating what, if any, paleontological reports have been submitted, or a statement indicating that no material was discovered.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VIII. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

VIII. GREENHOUSE GAS EMISSIONS

SUBSTANTIATION: The discussion below regarding potential impacts on greenhouse gas emissions is based in part on the Greenhouse Gas Emissions Technical Memorandum (see **Appendix J**) prepared by Kimley-Horn.[19] Project-related GHG emissions are not confined to a particular air basin; instead, GHG emissions are dispersed worldwide. No single project is large enough to result in a measurable increase in global concentration of GHG emissions. Therefore, impacts identified below are not project-specific impacts to global climate change, but the Project's contribution to this cumulative impact. The Project would result in direct and indirect GHG emissions. Direct GHG emissions include emissions from construction and decommissioning activities, and mobile sources, while indirect sources include emissions from energy consumption and water demand. CalEEMod version 2022.1 and RCEM version 9.0.0 were used to estimate direct and indirect Project-related GHG emissions.

a. **Less Than Significant Impact.**

Construction

The Project would result in direct emissions of GHGs from construction. The approximate quantity of annual GHG emissions generated by Project construction equipment is depicted in **Table 8: Construction-Related Greenhouse Gas Emissions**.

Table 8: Construction-Related Greenhouse Gas Emissions

Construction Year	$MTCO_2e$
Construction	670.39
Water Usage	2.41
Total Construction	672.80
30-Year Amortized Construction	22.43

1. Construction water usage emissions are based on an anticipated consumption of 13 acre-feet (AF) during construction. During construction, water is anticipated to be supplied from off-site wells.

Source: CalEEMod version 2022.1 and RCEM version 9.0.0; see **Appendix J** for model outputs.

[19] Kimley-Horn, Greenhouse Gas Emissions Technical Memorandum, October 30, 2024. **Appendix J** of this IS/MND.

As shown in Table 8, the Project would result in the generation of approximately 672.80 million metric tons of carbon dioxide equivalent (CO_2e) ($MTCO_2e$) over the course of construction. Construction GHG emissions are typically summed and amortized over a 30-year period, then added to the operational emissions. The amortized Project construction emissions would be 22.43 $MTCO_2e$ per year. Once construction is complete the generation of these GHG emissions would cease.

Operations

Operational or long-term emissions occur over the life of the Project. Operational emissions associated with the Project would include those generated from panel washing, maintenance, and the BESS. Total GHG emissions from both construction and operation associated with the Project are summarized in **Table 9: Project Greenhouse Gas Emissions**.

Table 9: Project Greenhouse Gas Emissions

Emissions Source	Annual $MTCO_2e$
Construction	22.43
Operations	
Area Source	37.66
Energy	0.0
Mobile	0.64
Waste	0.00
Water	0.06
Decommissioning	22.43
Total Emissions	**83.22**
San Bernardino County GHG Reduction Screening Threshold	3,000
Exceeds Threshold?	No

Decommissioning

At the end of the Project's operational term, the Applicant may determine that the Project Site should be decommissioned and deconstructed. The Applicant will work with the County to ensure decommissioning of the Project after its productive lifetime complies with all applicable local, State, and federal requirements BMPs. The Project would include BMPs to ensure the collection and recycling of modules and to avoid the potential for modules to be disposed of as municipal waste.

Equipment would be de-energized prior to removal, salvaged (where possible), placed in appropriate shipping containers, and secured in a truck transport trailer for shipment off site to be recycled or disposed of at an appropriately licensed disposal facility. Site infrastructure would be removed, including the fences and the concrete pads that may support the inverters, transformers, and related equipment. The exterior fencing and gates would be removed, and materials would be recycled to the extent feasible. Project roads would be restored to their pre-construction condition to the extent feasible unless the landowner elects to retain the improved roads for access throughout the property. The area would be thoroughly cleaned, and all debris removed. A collection and recycling program would be utilized to promote recycling of Project components and minimized disposal in landfills. Decommissioning is expected to take one year or less, using similar

equipment and an equal or lower number of workers on a daily basis. As a worst-scenario analysis, it was assumed that GHG emissions related to decommissioning would be equal to the GHG emissions related to construction. This is a more conservative (higher) estimate due to GHG emissions from electricity and vehicles are likely to be much lower 30 years in the future due to the continued implementation of existing regulations, plans, and policies.

Total Project-Related Sources of Greenhouse Gas Emissions

As shown in Table 9, the Project would generate approximately 83.22 $MTCO_2e$ per year from construction, operations, and decommissioning. Therefore, the proposed Project's total annual GHG emissions would be below the County's GHG Reduction Plan Screening Thresholds of 3,000 $MTCO_2e$ per year. Thus, the Project would have a less than significant impact related to generation of GHG emissions.

b. **Less Than Significant Impact.**

Consistency with the GHG Reduction Plan

The County's GHG Reduction Plan includes a review standard of 3,000 $MTCO_2e$ per year to identify projects that require the use of Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions. The purpose of the Screening Tables is to provide guidance in measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated into development projects. As noted above, projects that do not exceed 3,000 $MTCO_2e$ per year would be consistent with the County's GHG Reduction Plan to reduce emissions to 40 percent below 2007 levels. Table 9 shows that the proposed Project would generate approximately 83.22 $MTCO_2e$ per year, which would not exceed the County's GHG Reduction Plan Screening Threshold of 3,000 $MTCO_2e$ per year. Therefore, the Project would be consistent with the County's GHG Reduction Plan.

The GHG Reduction Plan states "This determination of consistency can be used in a CEQA climate change analysis of the development, which provides a legally defensible and streamlined CEQA process for the project." As such, the additional discussion provided for the San Bernardino County Policy Plan and CARB Scoping Plan is provided optionally and further demonstrates the project's consistency with applicable plans, policies, or regulations of an agency adopted for the purpose of reducing GHG emissions.

Consistency with the 2021 Regional GHG Reduction Plan

The RGHGRP includes GHG inventories and local GHG reduction strategies for each of the 25 partnership jurisdictions including the unincorporated areas of San Bernardino County. This RGHGRP is not mandatory for the partnership jurisdictions. Instead, it provides information that can be used by partnership jurisdictions, if they choose so, to develop individual climate action plans (CAPs). The RGHGRP describes the reductions that are possible if San Bernardino Council of Governments (SBCOG) and every partnership jurisdiction were to adopt the reduction strategies as described in the document.

The RGHGRP demonstrates how unincorporated San Bernardino County could achieve its selected goal, "of reducing its community GHG emissions to a level that is 40 percent below its 2020 GHG emissions level by 2030". The majority (approximately 80 percent) of unincorporated San Bernardino County's GHG reduction goal will be achieved through

state efforts, such as the Pavley vehicle standards, the state's low carbon fuel standard, the RPS, and other state measures to reduce GHG emissions in the on-road, solid waste and building energy sectors in 2030. According to the RGHGRP, the remaining 20 percent could be achieved "primarily through the following local measures, in order of reductions achieved:

- Solar Installation for Existing Commercial/Industrial (Energy-8);
- Waste Diversion and Reduction (Waste-2); Solar Installation for Existing Housing (Energy-7)."

As shown on Table 3-75 of the RGHGRP, the County has proposed to adopt ten GHG reduction measures, including:

- Increasing the energy efficiency of and solar installation upon new and existing buildings
- Transportation Demand Management and Synchronization
- Expanded bike lanes, waste diversion and reduction, water efficient landscaping, and other measures. It should be noted that the County has not adopted its jurisdictional plan.

Of the 10 GHG reduction measures proposed, the following two apply to the County directly and not project owners or occupants: OnRoad-3 encouraging signal synchronization and OnRoad-4 encouraging bike lanes; thus, these measures are not applicable to the Project. The following six measures do not apply to the Project because they are directed towards GHG reduction measures not related to the Project: Energy-1 improving the energy efficiency of new buildings, Energy-7 encouraging solar installation for existing housing, Energy-8 encouraging solar installation for existing commercial and industrial, Energy-10 encouraging urban tree planting for shading and energy savings, Offroad-2 directed at heavy duty diesel truck idling, and PS-1 proposing a GHG performance standard for new development. The Project is designed to be consistent with GHG reduction measure Water-3, encouraging water-efficient landscaping practices, and would be operated consistent with Waste-2 encouraging increased waste diversion and reduction if adopted and as applicable.

Assuming the County is successful in adopting its plan substantively as written, the above discussion demonstrates that the Project would be consistent with the applicable portions of the draft jurisdictional GHG reduction measures contained in the RGHGRP, and impacts would be less than significant.

Consistency with the San Bernardino Countywide Plan/Policy Plan

The Policy Plan includes goals and policies that all new projects are required to comply with, as applicable. Project consistency with the Policy Plan goals and policies is discussed in **Table 10: Project Consistency with the Countywide Plan / Policy Plan**. As depicted in Table 10, the Project would be consistent with the Countywide Plan / Policy Plan, and impacts would be less than significant.

Table 10: Project Consistency with the Countywide Plan / Policy Plan

San Bernardino County Countywide Plan / Policy Plan Goal and Policy	Project Consistency
Policy IU-4.3: Waste diversion. We shall meet or exceed state waste diversion requirements, augment future landfill capacity, and reduce greenhouse gas emissions and use of natural resources through reduction, reuse, or recycling of solid waste.	**Consistent.** The Project is a solar PV and energy storage facility, which would generate limited amounts of solid waste during Project operations. At the end of the operation of the proposed Project, the Applicant may determine that the Project Site would be decommissioned and deconstructed. The area would be thoroughly cleaned, and all debris removed. A collection, reuse, and recycling program of Project components would be utilized to promote reuse and recycling of Project components and minimized disposal in landfills. Nonetheless, the Project would be required to comply with State waste diversion requirements. As such, the Project would be consistent with this policy.
Policy IU-5.5: Energy and Fuel Facilities. We encourage the development and upgrade of energy and regional fuel facilities in areas that do not pose significant environmental or public health and safety hazards, and in a manner that is compatible with military operations and local community identity**.**	**Consistent.** The Project is a solar PV and energy storage facility and would not create additional significant environmental or public health and safety hazards as it would displace fossil fuel energy production. Clean energy would be produced as a result of the Project. Therefore, the Project would not conflict with this policy.
Policy NR-1.1: Land Use. We promote compact and transit-oriented development countywide and regulate the types and locations of development in unincorporated areas to minimize vehicle miles traveled and greenhouse gas emissions.	**Consistent.** The Project would generate minimal vehicle miles traveled and associated GHG emissions. The Project would require 20 operational (one-way) trips a year and would not result in significant VMT during Project construction and operations. Therefore, the Project would be consistent with this policy.
Policy NR-1.7: Greenhouse gas reduction targets. We strive to meet the 2040 and 2050 greenhouse gas emission reduction targets in accordance with state law.	**Consistent.** The Project would indirectly reduce GHG emissions and is consistent with State goals and requirements to replace non-carbon neutral electricity source with carbon-neutral electricity sources. Therefore, the Project would be consistent with this policy.
Policy RE-1.1: Continue implementing the energy conservation and efficiency	**Consistent.** As noted above, the Project would be consistent with the GHG

San Bernardino County Countywide Plan / Policy Plan Goal and Policy	Project Consistency
measures identified in the County of San Bernardino Greenhouse Gas Emissions Reduction Plan.	Reduction Plan. Further, as a solar PV and energy storage facility, the Project would support energy conservation and efficiency. Therefore, the Project would be consistent with this policy.
Policy RE-2.1: Support solar energy generation, solar water heating, wind energy and bioenergy systems that are consistent with the orientation, siting and environmental compatibility policies of the General Plan.	**Consistent.** As a solar renewable energy facility and battery energy storage facility, the Project would support solar energy generation consistent with policies of the Countywide Plan/Policy Plan. Therefore, the Project would be consistent with this policy.
Policy RE-2.6: Encourage energy efficiency through appropriate renewable energy systems.	**Consistent.** As a solar renewable energy facility, the Project would support this policy. Therefore, the Project would be consistent with this policy.
Policy RE 6.4: State Renewable Energy Goal. Support the governor's initiative to obtain 50% of the energy consumed in the state through RE generation sources by 2040.	**Consistent.** The Project is a solar renewable energy facility that will produce clean energy through solar PV technology and not through the use of fossil fuel combustion electricity production. This would increase the amount of renewable energy produced within the State and would be consistent with this policy.
Policy RE 6.4.1: Energy Conservation Policies and Strategies. Continue to implement policies and strategies for energy conservation by the County in the Greenhouse Gas Emissions Reduction Plan, including capture and use of landfill gas, installation of renewable energy systems and use of alternative fuels.	**Consistent.** In addition to the policy above, the Project would implement energy storage systems to prevent the loss of energy production when demand is low and continue to provide energy during nighttime hours. Therefore, the Project would be consistent with this policy.
Source: San Bernardino County Countywide Plan / Policy Plan, October 2020.	

Consistency with the 2017 and 2022 Scoping Plan

The 2017 and 2022 Scoping Plan identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan (2013). Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. Provided in **Table 11: Consistency with the 2017 and 2022 Scoping Plan**, is an evaluation of applicable reduction actions/strategies by emissions source category to determine how the Project would be consistent with or exceed reduction actions/strategies outlined in the 2017 and 2022 Scoping Plan. As shown, the Project would be consistent with the 2017 and 2022 CARB Scoping Plan, and impacts would be less than significant.

Table 11: Consistency with the 2017 and 2022 Scoping Plan

Actions and Strategies	Project Consistency Analysis
2017 Scoping Plan	
SB 350	
Achieve a 50 percent Renewables Portfolio Standard (RPS) by 2030, with a doubling of energy efficiency savings by 2030.	**Consistent.** The Project includes the construction and operation of a renewable energy generation and storage facility. Therefore, the Project would help the State achieve the RPS goals. As such, the Project would be consistent with SB 350 (and SB 100).
Low Carbon Fuel Standard (LCFS)	
Increase stringency of carbon fuel standards; reduce the carbon intensity of fuels by 18 percent by 2030, which is up from 10 percent in 2020.	**Consistent**. This standard applies to all vehicle fuels sold in California including those that could be used in vehicles associated with the Project. The Project would be consistent this goal.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy	
Reduce the GHG emissions of methane and hydrofluorocarbons by 40 percent below the 2013 levels by 2030. Furthermore, reduce the emissions of black carbon by 50 percent below the 2013 levels by the year 2030.	**Consistent.** As a solar renewable energy project, the Project would not emit a large amount of methane (CH_4) emissions. Furthermore, the Project would comply with all applicable CARB and MDAQMD hydrofluorocarbon regulations. As such, the Project would be consistent with the SLCP reduction strategy.
Post-2020 Cap and Trade Programs	
The Cap-and-Trade Program will reduce greenhouse gas (GHG) emissions from major sources (covered entities) by setting a firm cap on statewide GHG emissions while employing market mechanisms to cost-effectively achieve the emission-reduction goals.	**Not Applicable.** As shown in Table 9, the Project is estimated to generate approximately 83.22 $MTCO_2e$ per year, which is below the 25,000 $MTCO_2e$ per year Cap-and-Trade screening level. Therefore, this goal is not applicable to the Project.
2022 Scoping Plan	
AB 1279	
AB 1279 establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies	**Consistent.** As a solar renewable project, the proposed Project would promote renewable energy production and would generate less than significant GHG emissions from Project construction and operations. Community and utility-scale solar projects with BESS will help the region and State meet its RPS goals and ultimately carbon neutrality. The Project would be consistent with this goal

Actions and Strategies	Project Consistency Analysis
and strategies that enable CO_2 removal solutions and carbon capture, utilization, and storage (CCUS) technologies.	
SB 1020	
SB 1020 adds interim renewable energy and zero carbon energy retail sales of electricity targets to California end-use customers set at 90 percent in 2034 and 95 percent in 2040. It accelerates the timeline required to have 100 percent renewable energy and zero carbon energy procured to serve state agencies from the original target of 2045 to 2035.	**Consistent.** As a solar renewable energy project, the Project would promote renewable energy production. The Project brings zero carbon energy to the regional supply grid. The Project would be consistent with this goal.

Conclusion

In summary, the plan consistency analysis provided above demonstrates that the Project is consistent with applicable plans, policies, regulations and GHG reduction actions/strategies, such as those outlined in the RGHGRP, Countywide Plan / Policy Plan, and the 2017 and 2022 Scoping Plan Update, including State laws listed above. Therefore, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs. Thus, the Project would not make a cumulatively considerable contribution to significant cumulative climate change impacts, and impacts would be less than significant.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
IX. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

IX. HAZARDS AND HAZARDOUS MATERIALS

SUBSTANTIATION: The discussion below regarding potential impacts on hazards and hazardous materials is based on the Phase I Environmental Site Assessment Report (Phase I ESA) prepared by HEI Corporation (**Appendix K**).[20]

a. **Less Than Significant Impact.** Construction would involve short-term use of hazardous substances such as fuels, lubricants, adhesives, and solvents. The potential risk associated with the accidental discharge during use and storage of such construction-related hazardous materials is considered low because the use, storage, transport, and disposal of hazardous materials used in construction of the facility would be carried out in

[20] HEI Corporation. Phase I Environmental Site Assessment, July 26, 2022. **Appendix K** of this IS/MND.

accordance with federal, state, and County regulations. These regulations include those set forth by the San Bernardino County Department Fire Protection District (SBCFPD) Hazardous Materials Division, California Division of Occupational Safety and Health (Cal/OSHA), the California Accidental Release Prevention (CalARP) Program, the California HSC, and the USEPA Hazardous Waste Control Act. Additionally, the Project would implement BMPs pursuant to the NPDES Construction General Permit. Safety Data Sheets (SDSs) for all applicable materials present on the Project Site would be made readily available to personnel as required by the SBCFPD Hazardous Materials Division. During construction, non-hazardous construction debris would be generated and disposed of in local landfills. Sanitary waste would be managed using portable toilets, with waste being disposed of at approved sites.

Underground electrical conductors would be installed in trenches at a depth in compliance with the National Electric Code. The conductors would be buried in either a polyvinylchloride (PVC) conduit or equivalent. This may include preparing a Business Emergency Contingency Plan and securing a Certified Unified Program Agency (CUPA) Permit for hazardous materials handling and/or hazardous waste generation, as required by the SBCFPD Hazardous Materials Division.

Operation of the Project would include limited chemical use such as lithium ion in the battery structures. The Project is designed to comply with the San Bernardino County Code of Ordinances and SBCFPD Hazardous Materials Division requirements, and all materials would be used in stable applications and contained in accordance with applicable regulatory requirements, which include the Hazardous Materials Transportation Act, International Fire Code, and California Code of Regulations Titles 22 and 27. Following compliance with the applicable regulations, impacts would be less than significant.

b. **Less Than Significant Impact.** According to the Phase I ESA, there are no recognized environmental conditions associated with the Project Site. Therefore, it is unlikely that development of the Project Site would result in the release of hazardous materials into the environment. Impacts would be less than significant.

c. **No Impact.** There are no existing or proposed schools within one-quarter mile of the Project Site. The nearest school is Boron Junior High School located approximately 1.1 miles west of the Project Site in the census-designated place of Boron in Kern County. Therefore, the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing proposed school. There would be no impact in this regard.

d. **No Impact.** According to the Phase I ESA, the Project Site is not located on a known site or in the vicinity of a known site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, the Project would result in no impacts associated with hazardous materials sites.

e. **Less Than Significant Impact.** The Project Site is not located within an airport land use plan, nor is the Project Site within a Noise Hazard Overlay District or Airport Safety Review

Area identified in the County Land Use Plan.[21] The Project is not within two miles of a public airport or public use airport. The nearest airport is the Boron Airstrip, a private runway located approximately 0.75-mile east of the Project Site. As of July 2024, Boron Airstrip has 1 single-engine, non-commercial aircraft based on the field with operations averaging approximately 58 times per month.[22] Employees would not be located on the Project Site on a daily basis. As discussed above, it is estimated that the Project would require 6 maintenance-related visits per year and up to 4 solar panel and inverter washing visits per year. Therefore, due to the limited activity non-commercial aircraft and the limited number of employees at the Project Site on an annual basis, impacts would be less than significant.

f. **Less Than Significant Impact.** The County has adopted the Multi-Hazard Functional Plan (MHFP) to address the County's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. No revisions would be required as a result of the Project.

SR 58 is identified as an evacuation route within the North Desert Region of the County.[23] The Project Site is approximately 0.5-mile south of SR 58 at their closest boundary. Project-related construction activities could temporarily impact street access and traffic flow due to roadway improvement, and potential extension of construction activities into the rights-of-way, resulting in temporary lane closures. However, Project construction would not require the complete closure of any public streets during construction. Furthermore, signage and flag crews would direct the flow of traffic with the lane closure. Temporary construction activities would not impede use of the streets for emergencies or access for emergency response vehicles. Further, the Project design and Project Site access would be reviewed by the SBCFPD and San Bernardino County Sheriff's Department (SBCSD) to ensure that emergency access would be maintained. Therefore, the Project would not conflict with the County's adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

g. **Less than Significant Impact.** According to the State of California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zone (FHSZ) Map, the Project Site is located in a Local Responsibility Area (LRA) and is not within a Very High FHSZ.[24] The Project Site is also not within a Fire Safety Overlay District designated by the County Land Use Plan.[25] Project design and Project Site access would adhere to SBCFPD regulations. Therefore, the Project would not expose people or structures, either directly or indirectly, to a significance risk of loss, injury, or death involving wildland fires, and impacts would be less than significant.

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[21] San Bernardino County, Land Use Plan General Plan Hazard Overlays, 2010, https://www.sbcounty.gov/Uploads/lus/HazMaps/CHDHB_20100309.pdf. Accessed February 7, 2024.
[22] Air Nav, 57CL Boron Airstrip, https://www.airnav.com/airport/57CL. Accessed July 31, 2024.
[23] San Bernardino County, Countywide Plan, Policy Plan, Policy Map PP-2 Evacuation Routes, 2017, https://countywideplan.com/wp-content/uploads/sites/68/2021/02/PP-2-Evacuation-Routes-201027.pdf?x23421. Accessed February 7, 2024.
[24] California Department of Forestry and Fire Protection, FHSZ Viewer, https://egis.fire.ca.gov/FHSZ/. Accessed February 7, 2024.
[25] San Bernardino County, Land Use Plan General Plan Hazard Overlays.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
X. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
(i) result in substantial erosion or siltation on-site or off-site?	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site?	☐	☐	☒	☐
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? or,	☐	☐	☒	☐
(iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

X. HYDROLOGY AND WATER QUALITY

SUBSTANTIATION: The discussion below regarding potential impacts on hydrology and water quality is based on the Preliminary Drainage Report (Drainage Report) prepared by Kimley-Horn (**Appendix L**).[26]

a. **Less Than Significant Impact.** The Project includes the construction and operation of a single-axis tracker ground-mounted PV community solar facility and BESS. Construction of the proposed Project would require grading and excavation of soils (approximately 2,000 cubic yards each of cut and fill for a net volume of 0 cubic yards), which would

[26] Kimley-Horn, Preliminary Drainage Report, October 2024. **Appendix L** of this IS/MND.

loosen sediment, and then have the potential to mix with surface water runoff and degrade water quality. Additionally, construction would require the use of heavy equipment and construction-related chemicals, such as concrete, cement, asphalt, fuels, oils, antifreeze, transmission fluid, grease, solvents and paints. These potentially harmful materials could be accidentally spilled or improperly disposed of during construction and, if mixed with surface water runoff, could wash into and pollute receiving waters.

The Project would be required to obtain a NPDES General Permit for Discharges of Storm Water Associated with Construction and Land Disturbance Activities (Construction General Permit). Compliance with the Construction General Permit requires the development of a SWPPP by a qualified SWPPP developer, the elimination or reduction of non-stormwater discharge off-site into storm drainage systems or other water bodies, and the implementation of BMPs throughout the Project construction period. Stormwater BMPs would be required to limit erosion, minimize sedimentation, and control stormwater runoff water quality during Project construction activities. The SWPPP requires a description of the Project Site; identification of sources of sediment and other pollutants that may affect the quality of stormwater discharges; and a list of BMPs to provide sediment and erosion control, waste handling measures, and non-stormwater management. The specific BMPs that would be implemented with the Project would be identified during development of the SWPPP, which would occur concurrently with final Project design and be completed prior to construction. Pursuant to Section 85.11.030 of the County's Development Code, the Project would also be required to prepare and implement an Erosion Control Plan during ground-disturbing activities; construction BMPs would also be required to be consistent with the Erosion Control Plan. All BMPs would be required to be designed in accordance with the County's Development Code and the California Stormwater Quality Association's Construction Best Management Practice Handbook. Typical construction BMPs include, but are not limited to, watering soil, soil cover of inactive areas, gravel bags, and fiber rolls. These BMPs would remain in place until construction is complete and until the Project Site is reseeded and stabilized in accordance with applicable code requirements. Compliance with the SWPPP and Erosion Control Plan would ensure that construction activities would not degrade the surface water quality of receiving waters to levels that would exceed the standards considered acceptable by the Lahontan RWQCB or other regulatory agencies.

According to the Drainage Report, under existing conditions, the Project Site has a peak runoff volume of 7,825 cubic feet for the 85th percentile storm water quality event. Under proposed conditions, the Project would increase imperviousness of the Project Site by 2.04 percent, which would increase the peak runoff volume for the 85th percentile storm water quality event up to 10,850 cubic feet. Per the California Stormwater Quality Association (CASQA) Low Impact Development (LID) Manual and the Mojave River Watershed Region Stormwater Quality Best Management Practice Design Handbook for Low Impact Development, Project development must include sufficient water quality design to mimic the predevelopment hydrology to the maximum extent practicable. Additionally, per the Construction General Permit, post-development runoff must match the pre-development runoff for the 85th percentile, 24-hour storm water quality event, and the water quality target runoff volume required to be mitigated by the Project Site is the difference between the runoff generated by the 85th percentile storm water quality event under pre- and post-development conditions. As such, the Project would be required to construct a retention basin capable of retaining 3,026 cubic feet of runoff to attenuate assumed increases to peak runoff volume. The Project would construct six retention

basins along the northern boundary of the Project Site with a combined volume of 3,030 cubic feet. As the total volume of the proposed basins is greater than the required treatment volume, the proposed retention basins would be able to accommodate the potential increase in stormwater under the 85th percentile storm event such that the development of the Project would not result in an increase of surface runoff under such conditions.

Additionally, once constructed, maintenance of the Project would include cleaning, inspections, drive motor repair, tracker repair, electrical connection repair, and panel replacement. Cleaning of the solar panels and inverters is expected to be conducted up to four times per year, and water used would not contain any cleaning agents or other additives. No on-site O&M buildings are proposed, and all facilities would be unmanned. Therefore, the Project would not violate any water quality standards or waste discharge requirements. Impacts would be less than significant.

b. **Less Than Significant Impact.** The Project would obtain construction and operational water by purchasing it from a local purveyor. The Project Site is located within the Antelope Valley Groundwater Basin, which is managed by the Antelope Valley Regional Water Management Group that includes 11 public agencies such as the Antelope Valley-East Kern Water Agency, City of Palmdale, City of Lancaster, Littlerock Creek Irrigation District, Palmdale Water District, Quartz Hill Water District, and Rosamond Community Services District. The total storage capacity is estimated at 68 million to 70 million AF.[27] Natural and anthropogenic recharge is estimated at a total of approximately 201,000 AF to 230,000 AF.[28] The primary source of recharge to the groundwater basin is runoff from surrounding mountain ranges. Water demand during construction would be temporary, which would be trucked in from a local purveyor, and operational water use would be small, estimated at approximately 0.3 AF per year or less. The majority of the Project Site would consist of gravel infill and remain pervious to allow infiltration of precipitation. The incremental amount of impervious surface that would be introduced by the Project (0.17 percent) would be minimal. Therefore, the small amount of water to be used and the large amount of permeable surface within the Project Site would not deplete groundwater supplies or interfere substantially with groundwater recharge such that a net deficit in aquifer volume or a lowering of the local groundwater table level would result. Impacts would be less than significant.

c.i. **Less Than Significant Impact.** As previously mentioned under Threshold X.a, construction of the proposed Project would require grading and excavation of soils (approximately 2,000 cubic yards each of cut and fill for a net volume of 0 cubic yards), which would loosen sediment and thereby alter the existing drainage pattern. The Project would not result in substantial erosion or siltation, as BMPs would be implemented during construction in compliance with the Erosion Control Plan, SWPPP, and the NPDES General Construction Permit issued for the Project, which would ensure that erosion and

[27] Antelope Valley Regional Water Management Group (AVRWMG), Antelope Valley Integrated Regional Water Management Plan, 2019, page 2-28, https://pw.lacounty.gov/wwd/avirwmp/docs/finalplan/2019%20Final%20AV%20IRWMP.pdf. Accessed February 7, 2024.

[28] USGS, Water-Level Studies in the Antelope Valley and Fremont Valley Groundwater Basins, https://ca.water.usgs.gov/projects/antelope-valley/antelope-valley-study-area.html. Accessed February 7, 2024.

siltation do not result in any off-site water quality impacts. San Bernardino County Development Code Chapter 85.11 requires that the Project implement measures designed to control soil erosion pollution and regulate construction of proposed structures that are subject to flood hazards due to storm events within local flood hazard areas that are not within County-designated flood districts. As substantiated above under Threshold X.a, the Project would increase the impervious area within the Project Site by 2.04 percent and thereby would increase peak surface runoff under the 85th percentile storm water quality event from 7,825 cubic feet to 10,850 cubic feet. As such, the Project would be required to accommodate a runoff volume of 3,026 cubic feet. Accordingly, the Project would construct six retention basins with a combined volume of 3,030 cubic feet. As the total volume of the proposed retention basins is greater than the proposed change in peak runoff volume, installation of the basins would accommodate the potential increase in stormwater under the 85th percentile storm event such that development of the Project would not result in an increase in surface runoff under such conditions.

The proposed drainage of the Project Site would also be required to accommodate the 100-year (3.68-inch) storm event. As detailed in the Drainage Report, under existing conditions, the Project Site has a peak discharge of 179.48 cubic feet per second (cfs). The proposed 2.04 percent increase in imperviousness would result in an unmitigated peak discharge to 183.4 cfs. Approximately 1,276 cubic feet of storage would be required for the change in runoff. As mentioned above, the Project would provide a combined volume of 3,030 cubic feet of storage with the proposed retention basins, which would mitigate the peak discharge to 163.15 cfs. As the combined volume of the proposed retention basins is greater than the required volume of storage under the 100-year storm event, the Project would not result in an increase in surface runoff under such conditions.

The incremental amount of impervious surface that would be introduced by the Project would be small and would not substantially interfere with surface runoff. As such, the Project would not substantially alter the existing drainage pattern of the Project Site or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site. Impacts would be less than significant.

c.ii. **Less Than Significant Impact.** See response to Threshold X.c.i above.

c.iii. **Less Than Significant Impact.** See response to Threshold X.c.i, above.

c.iv. **Less Than Significant Impact.** According to the Federal Emergency Management Agency (FEMA) Flood Map Service Center, the Project is located within Zone D, or Area of Undetermined Flood Hazard. Zone D is defined as Area of Undetermined Flood Hazard. According to the Drainage Report, from the hydraulic model used to determine the extent of potential flood hazards of a 100-year, 24-hour storm event for the Project Site, it is unlikely that a flood hazard would occur within the Project Site. Additionally, the Project Site is not within a Flood Plain Safety Overlay District designated by the County Land Use Plan.[29] Nevertheless, all electrical equipment would be elevated at a minimum of 12 inches above the 100-year flood elevation to protect equipment from potential ponding or overland stormwater flow and so as not to add or decrease baseline stormwater on- or off-site. With implementation of these measures, the Project would not impede or redirect flood flows, and impacts would be less than significant.

[29] San Bernardino County, Land Use Plan General Plan Hazard Overlays.

d. **Less Than Significant Impact.** The Project Site is located approximately 85 miles northeast of the Pacific Ocean and therefore is not at risk of a tsunami. As stated above in Threshold X.c.iv, the Drainage Report concluded that it is unlikely that a flood hazard will occur within the Project Site from a 100-year, 24-hour storm event. The Project Site is not within a Flood Plain Safety Overlay District designated by the County Land Use Plan. Furthermore, the Project Site is not within a dam breach inundation zone designated by the County Land Use Plan. No major water-retaining structures are located immediately up gradient from the Project Site, and flooding from seismically-induced seiche is considered unlikely. Therefore, impacts would be less than significant.

e. **Less Than Significant Impact.** The Project Site is located within the Antelope Valley Groundwater Basin, which is categorized by the Sustainable Groundwater Management Act (SGMA) as a very low priority basin.[30] The SGMA requires only medium- and high-priority basins to form groundwater sustainability agencies, develop groundwater sustainability plans, and manage groundwater for long-term sustainability. Therefore, the Antelope Valley Groundwater Basin does not require a sustainable groundwater management plan.

   Furthermore, as mentioned above in the Project Description, the Project would be unmanned during operations, with no habitable structures or restroom facilities. Any operational water that may be required for routine maintenance would be trucked in from off-site. The majority of the Project would consist of gravel infill and remain pervious to allow infiltration of precipitation. The incremental amount of impervious surface that would be introduced by the Project would be small and would not substantially interfere with groundwater recharge. As a result, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

[30] California Department of Water Resources, SGMA Data Viewer, https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#boundaries. Accessed June 25, 2024.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XI. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

XI. LAND USE AND PLANNING

SUBSTANTIATION:

a. **No Impact.** Existing development in the area includes rural access roads and rural residences. The Project Site is in an unincorporated part of the County, and the Project Site is primarily bordered by vacant land. Therefore, Project development would not divide an established community. No impact would occur.

b. **No Impact.** The Project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The current land use designation of the Project Site is RLM and zoned RC. The RLM land use designation is intended to manage, preserve, and protect natural resources; provide areas for military operations and training; and allow for rural development. Renewable energy facilities consistent with the County General Plan Renewable Energy and Conservation Element, such as the proposed Project, are a typical use under this land use designation. As described in other sections, the Project would be consistent and would not conflict with relevant policies of the County's General Plan. Pursuant to San Bernardino County Development Code Chapter 82.03 Table 82-4, renewable energy generation facilities is a permitted use within the RC zone with an approved CUP. Therefore, the Project would not conflict with the County General Plan or San Bernardino County Development Code, and no impacts would occur.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XII. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

XII. MINERAL RESOURCES

SUBSTANTIATION: (Check ☐ if project is located within the Mineral Resource Zone Overlay)

a. **No Impact.** According to Map NR-4 of the General Plan, the Project Site and vicinity is not within a Mineral Resource Zone.[31] The Project Site is also not within a Mineral Resources (MR) Overlay pursuant to San Bernardino County Development Code Section 82.17.020. According to the California Department of Conservation Mines Online map, there are no mines within or near the Project Site. The closest active mine is Boron Pit (ID 91-15-0022), an open pit borates mine that is located approximately 3.5 miles northwest of the Project Site.[32] Furthermore, according to the California Department of Conservation Well Finder map, there are no active oil or gas wells on or around the Project Site.[33] The closest well is a plugged dry hole well approximately 5 miles east of the Project Site. Additionally, the Project does not involve extensive grading or excavation that would preclude the extraction of any potential mineral resources in the future. Due to the relative distance from active mining or drilling sites, the Project would not result in the loss of availability of mineral resources that would be of value to the region and the residents of the State. No impacts to mineral resources would occur.

b. **No Impact.** See response to Threshold XII.a.

[31] San Bernardino County, Policy Map NR-4 Mineral Resources Zones, 2020, https://countywideplan.com/wp-content/uploads/sites/68/2021/02/NR-4-Mineral-Resources-Zones-201027.pdf?x23421. Accessed February 7, 2024.
[32] California Department of Conservation Division of Mine Reclamation, Mines Online, 2016, https://maps.conservation.ca.gov/mol/index.html. Accessed February 7, 2024.
[33] California Department of Conservation Geologic Energy Management Division, Well Finder, https://maps.conservation.ca.gov/doggr/wellfinder/. Accessed February 7, 2024.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XIII. NOISE: Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of a project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

XIII. NOISE

SUBSTANTIATION: (Check ☐ if project is located in the Noise Hazard Overlay District or is subject to severe noise levels according to the General Plan Noise Element) The discussion below regarding noise is based in part on the Noise Technical Memorandum (see **Appendix M**) prepared by Kimley-Horn.[34]

Impact Analysis

a. **Less Than Significant Impact.**

Construction Noise

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. During construction, exterior noise levels could affect the nearest sensitive receptors in the vicinity of the construction site. The nearest sensitive receptor is a residential use located approximately 220 feet south of the Project Site. It is acknowledged that construction activities would occur throughout the Project Site and would not be concentrated at the point closest to the sensitive receptor.

Project construction is anticipated to be completed over a period of approximately nine months. The Project involves construction activities associated with site preparation, grading, and construction/installation. **Table 12: Typical Construction Noise Levels**, reflects maximum sound levels (L_{max}) that could be expected from the equipment-types

[34] Kimley-Horn, Noise Technical Memorandum, October 30, 2024. **Appendix M** of this IS/MND.

listed at a reference distance of 50 feet from the noise source, which are the highest individual sound occurring at an individual time period.

Table 12: Typical Construction Noise Levels

Equipment	Typical Noise Level (dBA) at 50 feet from Source
Air Compressor	80
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Mobile	83
Dozer	85
Generator	82
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	80
Paver	80
Pneumatic Tool	85
Pump	77
Roller	85
Saw	76
Scraper	85
Shovel	82
Truck	84
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018.	

The Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) was used to calculate the worst-case construction noise levels at the nearest sensitive receptor in the vicinity of the Project Site during construction. The modeled receptor location represents the closest existing receiving land use to Project construction activities. Noise levels at other sensitive receptors surrounding the Project Site would be located further away and would experience lower construction noise levels than the closest receptors modeled.

The FHWA Roadway Construction Noise Model (RCNM) was used to calculate the worst-case construction noise levels at the nearest sensitive receptor in the vicinity of the Project Site during construction. The modeled receptor location represents the closest existing receiving land use to Project construction activities.

The noise levels calculated in **Table 13: Project Construction Noise Levels** show estimated noise levels for the worst-case construction noise scenario without accounting

for attenuation from intervening barriers, structures, or topography. The nearest noise sensitive receptor (residential use) is located approximately 220 feet south of the Project Site. Following Federal Transit Administration (FTA) methodology, when calculating construction noise, all equipment is assumed to operate at the center of the Project because equipment would operate throughout the Project Site and not at a fixed location for extended periods of time. Therefore, the distance used in the RCNM model for the Project Site was 1,524 feet (measured from the center of the Project Site to the property line of the nearest sensitive receptor) for the nearest sensitive receptor (i.e., residential use) to the south of the Project Site.

Noise levels at other receptors in the Project vicinity would be located further away and would experience lower construction noise levels than the closest receptor modeled. All construction equipment was assumed to operate simultaneously to represent a worst-case noise scenario as construction activities would routinely be spread throughout the construction site and would operate at different intervals.

Table 13: Project Construction Equipment Noise Levels

Construction Phase	Land Use	Receptor Location			Noise Threshold (dBA L_{eq})[2]	Exceeded?
		Direction	Distance (feet)[1]	Worst Case Modeled Exterior Noise Level (dBA L_{eq})		
Access Road	Residential	South	1,524	59.6	80	No
Demolition	Residential	South	1,524	56.8	80	No
Site Preparation	Residential	South	1,524	52.4	80	No
Grading	Residential	South	1,524	55.1	80	No
Construction/ Installation	Residential	South	1,524	68.0	80	No
PV Panel Vendor Trips	Residential	South	1,524	50.3	80	No
Paving	Residential	South	1,524	43.3	80	No

Notes:
1. Per the methodology described in the FTA Transit Noise and Vibration Impact Assessment Manual (September 2018), distances are measured from the nearby sensitive receptor property line to the center of the Project construction site.
2. The County does not have a quantitative noise threshold for construction and only limits the hours of the construction activities. Therefore, the FTA's residential construction noise threshold is conservatively used in this analysis (FTA, Transit Noise and Vibration Impact Assessment Manual, September 2018).

Source: Federal Highway Administration, Roadway Construction Noise Model, 2006. Refer to **Appendix M** for noise modeling results.

San Bernardino County Code of Ordinances Section 83.01.080 of the San Bernardino Code of Ordinances exempts construction activities from the noise standard providing that such activities take place between the hours of 7:00 a.m. to 7:00 p.m. except Sundays and Federal holidays. Construction would primarily occur during daylight hours, Monday through Saturday, between 7:00 a.m. and 7:00 p.m., as required to meet the construction schedule. The San Bernardino County Code of Ordinances does not establish quantitative exterior construction noise standards. While the San Bernardino County Code of Ordinances does not establish quantitative construction noise standards, this analysis conservatively uses the FTA's threshold of 80 dBA (8-hour L_{eq}) for residential uses to evaluate construction noise impacts at the nearest sensitive receptor.

The closest sensitive receptor could be exposed to temporary and intermittent noise levels up to 68.0 dBA, which would not exceed the FTA's residential construction noise standard of 80 dBA L_{eq}. As previously noted, noise levels presented in Table 13 are conservative, as these noise levels assume the simultaneous operation of all construction equipment at the same precise location. More likely, construction equipment would be used throughout the Project Site and would not be concentrated at one location within the Project Site. Therefore, impacts would be less than significant.

Construction Traffic: Construction activities would also cause increased noise along access routes to and from the Project Site due to movement of equipment and workers, as well as hauling trips. On-site soils are expected to balance, and no import or export of soils is anticipated. It is anticipated that construction worker trips would be a maximum of 40 total daily roundtrips (80 one-way trips), water truck trips would consistent of a maximum of 11 daily roundtrips (22 one-way trips), water trips and vendor trips would consist of 2 daily roundtrips (PV Vendor Trips). As a result, mobile source noise would increase along access routes to and from the Project Site during construction. While the San Bernardino County Code of Ordinances does not establish quantitative construction noise standards, this analysis conservatively uses the FTA's threshold of 80 dBA (8-hour L_{eq}) for residential uses to evaluate off-site construction traffic noise impacts along roadways adjacent to the Project Site.[35] A heavy-duty truck passing by a receptor is assumed to generate a noise level of 70 dBA at 50 feet.[36] Conservatively assuming that all 26 one-way truck trips would pass the same receptor within a 15-minute time period, noise levels along roadways would be approximately 64.7 dBA L_{eq}. This would not exceed the FTA's residential construction noise standard of 80 dBA $L_{eq.}$ However, mobile traffic noise from construction trips would be temporary and would cease upon completion of Project construction. Further, the San Bernardino County Code of Ordinances Section 83.01.080 exempts construction activities from the noise standard providing that such activities take place between the hours of 7:00 a.m. to 7:00 p.m. except Sundays and Federal holidays. Therefore, upon compliance with the County's allowable construction hours (San Bernardino County Code of Ordinances Section 83.01.080), short-term noise impacts from construction traffic would be less than significant.

[35] Federal Transit Administration (FTA), Transit Noise and Vibration Impact Assessment Manual, 2018, page 179.
[36] University of Washington Department of Environmental and Occupational Health Sciences, Noise Navigator Sound Level Database, 2010.

Operations

Operation and maintenance of the Project would include permanent and temporary noise sources associated with the solar PV systems, electrical collection lines, BESS, and maintenance activities.

Solar PV Systems: The solar PV arrays would include operation of single-axis tracking systems. Single-axis tracking systems employ a motor mechanism that would allow the arrays to track the path of the sun throughout the day. In the morning, the panels would face the east. Throughout the day, the panels would slowly move to the upright position at noon and on to the west at sundown. The panels would reset to the east in the evening or early morning to receive sunlight at sunrise. The Project would include solar modules which would operate simultaneously.

Noise from each tracker motor is approximately 40 dBA at 10 feet from the source. During daylight hours, the tracking system motors would operate for a short period of time (normally two seconds) and pause for a longer period of time (about five minutes) before operating again. After sunset and before sunrise the next day, the array must reset to face easterly; this reset motion occurs once daily and takes approximately three minutes. The nearest sensitive noise receptor to any tracker would be the residential use located approximately 220 feet to the south of the Project Site. At this distance, noise levels associated with solar PV array tracker would be inaudible. Impacts would be less than significant.

Inverters and Transformers: Additional permanent noise sources from the Project Site would include small-scale inverters, medium voltage transformers, and BESS. Small-scale inverters typically generate 65 dBA at 1 meter (3.28 feet) and medium voltage transformers typically generate 63 dBA at 1 meter (3.28 feet). As the nearest sensitive receptor could be located approximately 220 feet south from the Project boundary line, small-scale inverter and medium voltage transformer noise levels would be inaudible at the nearest sensitive receptor.

Electrical Collection Lines: The Project includes installation of underground electrical collection lines. Therefore, noise levels associated with electrical collection lines would be inaudible at the nearest sensitive receptor, located approximately 220 feet south of the Project Site. Impacts would be less than significant.

Battery Energy Storage System (BESS): The primary noise source associated with BESS operations would be the use of HVAC units (the BESS does not generate noise itself). The Project includes a BESS, which would require multiple HVAC units to operate simultaneously. Based on standard HVAC units for other energy storage projects, a reference level of 53.2 at a distance of 50 feet during full operation has been assumed.[37,38] The BESS would be located in the southeastern area of the Project Site. Therefore, a distance of 277 feet, measured from the southeast corner of the Project Site to the nearest sensitive receptor property line, was used for the calculated BESS HVAC noise levels. At this distance, noise levels are estimated at approximately 38.4 dBA. Therefore, the Project would not exceed the County's daytime or nighttime noise standards of 55 dBA L_{eq} and

[37] Kern County Planning and Natural Resources Department, Acoustical Assessment for the AVEP Project, 2020.

[38] The reference noise level has been adjusted to account for four HVAC units. See **Appendix M**.

45 dBA L_{eq}, respectively. Impacts would be less than significant with mitigation incorporated.

Maintenance Activities: The Project would require panel washing up to four times per year. Panel washing activities would not require power washing equipment and would consist of hand washing. Noise related to the water trucks is discussed below. Therefore, negligible noise levels from panel washing would result. Impacts would be less than significant. The Project would generate periodic operational vehicle trips internal to the Project Site for required maintenance activities that would not increase personnel daily trips external to the site when compared to existing conditions. As previously stated, the Project is expected to generate a total of approximately 10 operational roundtrips per year (20 one-way trips). These activities are not expected to occur on a daily basis and would not generate a significant amount of traffic or create a substantial increase of vehicular noise in the area. Any increase in traffic would be minimal and sporadic and only occur during daytime hours. On a worst-case day, one maintenance truck and one water truck would travel to the Project Site at the same time. Assuming that two passenger vehicles, one medium-duty truck, and one heavy-duty truck would visit the Project Site at the same time, a noise level of 36.6 dBA would be generated at approximately 100 feet. This noise level would not exceed the County's daytime threshold of 55 dBA; therefore, impacts from vehicular noise would be less than significant.

Decommissioning

When the Project is decommissioned, equipment operation and site restoration activities would result in a temporary increase in ambient noise levels in the Project vicinity. Given the fact that much of the construction equipment necessary to construct the Project would also be required for Project decommissioning, it is reasonable to assume that noise generated from decommissioning activities would be similar in nature to construction activities. Similar to the construction noise analysis above, Project decommissioning would potentially result in increased noise levels compared to existing conditions. It is assumed that decommissioning activities would be similar to construction activities. As discussed above, Project construction (and similarly, decommissioning) would not exceed the FTA's residential construction noise standard of 80 dBA L_{eq}. However, San Bernardino County Code of Ordinances Section 83.01.080 exempts construction activities from the noise standard providing that such activities take place between the hours of 7:00 a.m. to 7:00 p.m. except Sundays and Federal holidays. Therefore, upon compliance with the FTA noise standard and upon compliance with the County's allowable construction hours (Code of Ordinances 83.01.080), short-term noise impacts from decommissioning activities would be less than significant.

b. **Less Than Significant Impact.**

Construction

Project construction would include demolition, site preparation, grading, construction/installation, PV vendor trips, and paving and would not require blasting. While these construction activities would result in groundborne vibration, such groundborne vibration would attenuate rapidly from the source and would not generally be perceptible beyond the boundaries of the Project Site.

Groundborne vibration generated during construction activities is exempt between the hours of 7:00 a.m. to 7:00 p.m. (except Sundays and Federal holidays) pursuant to San

Bernardino County Code of Ordinances Section 83.01.090. However, the FTA has published standard vibration velocities for construction equipment operations. The types of construction vibration impact include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. Caltrans and the FTA have identified various vibration damage criteria for different building classes. As the closest receptor is a residential use, this evaluation uses the FTA architectural damage criterion for continuous vibrations at non-engineered timber and masonry buildings of 0.2 in/sec PPV and the human annoyance criterion of 0.04 in/sec PPV. The vibration produced by construction equipment, is illustrated in **Table 14: Typical Construction Equipment Vibration Levels**.

Table 14: Typical Construction Equipment Vibration Levels

Equipment	Reference PPV at 25 feet (in/sec)	Approximate PPV at 271 feet (in/sec)[1]
Vibratory Compactor/Roller	0.21	0.006
Large Bulldozer	0.089	0.002
Loaded Trucks	0.076	0.002
Small Bulldozer	0.003	<0.001

Note:
1. Calculated using the following formula:
   PPV equip = PPVref x $(25/D)^{1.5}$
   where: PPV (equip) = the peak particle velocity in inch-per-second of the equipment adjusted for the distance
   PPV (ref) = the reference vibration level in inch-per-second from Table 7-4 of the FTA Transit Noise and Vibration Impact Assessment Manual
   D = the distance from the equipment to the receiver

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

Groundborne noise and vibration decreases rapidly with distance. As indicated in Table 14, based on the FTA data, vibration velocities from typical heavy construction equipment operations that would be used during Project construction range from <0.001 to 0.006 inch/sec PPV) at 271 feet (measured from the Project Site to the nearest structure) south of the Project Site. At this distance, vibration velocities would be imperceptible (i.e., up to 0.006 in/sec PPV for a vibratory roller at the Project Site). Therefore, the 0.2 in/sec PPV architectural damage significance threshold and the 0.04 in/sec PPV human annoyance criteria would not be exceeded as a result of Project construction activities. Thus, no sources of groundborne vibration or groundborne noise would be expected to affect sensitive receptors in the Project vicinity, and there would not be any potential for excessive exposure of persons to or generation of groundborne vibration levels. Impacts would be less than significant.

Operations

The Project would have operation and maintenance components, such as heating, ventilation, and air conditioning systems for the BESS, maintenance vehicles, backup generator, small-scale inverters, and medium voltage transformers, that would not generate noticeable groundborne vibration levels. Project operations would not involve any sources capable of generating perceptible levels of vibration in the surrounding area. There would be no permanent source or potential to change vibration levels, except during unscheduled maintenance or repair activities, which would be similar to construction activities. According to the FTA, regular maintenance trucks generate vibration velocities of up to 0.076 in/sec PPV a distance of 25 feet (refer to Table 14). Pursuant to the San Bernardino County Code of Ordinances Section 83.01.090, groundborne vibration shall not exceed 0.2 in/sec PPV at the nearest property line within a residential, commercial, and industrial land use zoning district. Land use zoning districts surrounding the Project Site include RC which allow residential uses. Although residential land use zoning districts surround the Project Site, regular maintenance trucks would not generate groundborne vibration levels exceeding the County's 0.2 in/sec PPV vibration threshold at any structures within the Project vicinity as structures in the Project vicinity are located greater than 25 feet from the roadway centerlines. Thus, the County's 0.2 in/sec PPV vibration threshold would not be exceeded, and impacts would be less than significant.

Decommissioning

When the Project is decommissioned, equipment operation and site restoration activities could result in temporary vibration impacts at close distances. Given the fact that much of the construction equipment necessary to construct the Project would also be required for Project decommissioning, it is reasonable to assume that vibration generated from decommissioning activities would be similar in nature to construction activities. As with the construction activities described above, decommissioning activities would not be expected to generate groundborne noise that would affect sensitive receptors in the Project vicinity, and there would not be any potential for excessive exposure of persons to or generation of groundborne vibration levels. Impacts would be less than significant.

c. **Less Than Significant Impact.** The Project Site is not located within an airport land use plan, nor is the Project Site within a Noise Hazard Overlay District or Airport Safety Review Area identified in the County Land Use Plan. The Project Site is not within two miles of a public airport or public use airport. The nearest airport to the Project Site is the Boron Airstrip, a private runway located approximately 0.75 miles to the east. As of July 2024, Boron Airstrip has 1 single-engine, non-commercial aircraft based on the field with operations averaging approximately 58 times per month. Employees would not be located on the Project Site on a daily basis. As discussed above, it is estimated that the Project would require 6 maintenance-related visits per year and up to 4 solar panel and inverter washing visits per year. Therefore, due to the limited activity of a non-commercial aircraft and the limited number of employees at the Project Site on an annual basis, impacts would be less than significant.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XIV. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

XIV. POPULATION AND HOUSING

SUBSTANTIATION:

a. **Less Than Significant Impact.** The Project would develop a solar energy facility with BESS and does not include residential uses. The Project would not induce substantial population growth in the area because the Project does not propose extension of new major infrastructure or uses that would induce substantial unplanned population growth.

Project construction would temporarily increase the number of persons present at the Project Site. However, these workers would only be present at the Project Site during construction of the Project Site. Once operational, the Project Site would not require the same number of staff needed during construction. The Project Site would be unmanned and would only require minimal staff for 6 maintenance-related visits per year and would not introduce a significant amount of employment that would require additional permanent housing within the area. Impacts would be less than significant.

b. **Less Than Significant Impact.** The Project would not displace housing as the Project Site consists of undeveloped open space. The nearest residences are approximately 220 feet south of the Project Site. Impacts would be less than significant.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XV. PUBLIC SERVICES: Will the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

XV. PUBLIC SERVICES

SUBSTANTIATION:

a. **Less Than Significant Impact.** Fire protection services and prevention services are provided by SBCFPD. The nearest SBCFPD station is SBCFD Station No. 56, located approximately 14.8 miles east of the Project Site at 37284 Flower Street in the unincorporated community of Hinkley. This fire station is manned by paid-call firefighters and/or volunteers. The SBCFPD has approximately 18 paid-call firefighters, which fluctuate throughout the year. SBCFPD is staffed with a total of 97 fire engines, 40 ambulances, 51 brush engines and patrols, and numerous other specialized apparatuses.[39]

Construction

The Project would construct a solar PV facility and BESS on undeveloped land and would not involve the construction or physical alteration of a fire station. Construction activities associated with the Project may temporarily increase the demand for fire protection and emergency medical services, and may cause the occasional exposure of combustible materials, such as plastics, sawdust, covering and coatings, to heat sources including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. However, in compliance with OSHA, all construction managers and personnel would be trained in fire prevention and emergency response. Furthermore, fire suppression equipment specific to construction would be maintained on the Project Site. As applicable, construction activities would be required to comply with Area Plan Policies PP-3.1 through PP-3.14, which require implementation of fire prevention measures; as well as the 2022 California Fire Code,

[39] San Bernardino County Fire Protection District, Equipment (FY 21-22), https://sbcfire.org/annualreports/fy-21-22/equipment/. Accessed February 7, 2024.

2021 National Fire Code, and 2021 International Fire Code, which implement state-of-the-art development and performance standards that ensure the safe installation, operations, and maintenance of BESS.

Project-related construction activities could temporarily impact street access and traffic flow due to roadway improvements, and potential extension of construction activities into the rights-of-way along Twenty Mule Road construction of the proposed access road, resulting in the temporary closure of the lane closest to the Project Site. However, Project construction would not require the complete closure of any public streets during construction. Furthermore, signage and flag crews would direct the flow of traffic with the lane closure. Temporary construction activities would not impede use of the streets for emergencies or access for emergency vehicles. Further, the Project design and site access would be reviewed by SBCFPD to ensure that emergency access would be maintained. During temporary partial street closure, emergency access and traffic detours would be established in coordination with the County.

Due to the limited duration of construction activities, maintenance of emergency access, and compliance with applicable codes, Project-related construction would not be expected to adversely impact firefighting and emergency services so as to necessitate a new or expanded fire station in order to maintain acceptable service ratios, response times, or other performance objectives of the SBCFPD. Therefore, construction impacts on fire protection and emergency medical services would be less than significant and no mitigation measures are required.

Operation

The Project would not create an increase demand for fire protection services. The Project would be a solar PV facility and BESS that would not induce significant or unplanned population growth such that there would be a need for new or physically altered fire protections services. Further, pursuant to Policy PP-3.4 of the General Plan, the Project would be required to comply with the California Fire Code. Equipment associated with the Project such as transformers, capacitors, electric transmission lines, substations, vehicles, and gas- or electric-powered small hand tools may be potential sources of ignition during construction and O&M. To combat potential fire risks, the Project will be required to comply with the latest version of the California Fire Code, National Fire Code, and International Fire Code. These regulations implement state-of-the-art development and performance standards that ensure the safe installation, operations, and maintenance of utility scale BESS. The Project would also implement fire and safety features. Furthermore, pursuant to San Bernardino County Development Code Section 84.29.040.d, the Project would be required to pay an annual public safety services impact fee to mitigate potential impacts on fire protection services and facilities.

With compliance to the California Fire Code and the General Plan, the Project would not result in substantial adverse physical impacts with the provision of new or physically altered fire facilities, and impacts would be less than significant.

Module Level: The first priority in fire safety is to prevent an event from ever occurring and limit the extent of that fire if it does occur. Pursuant to the National and International Fire Codes, the voltages, currents, and temperatures of battery modules would be required to be monitored and controlled 24/7 to ensure every cell remains within its safe operating parameters. These monitoring and control systems are required to transmit an alarm

signal if potentially hazardous temperatures or other conditions such as short circuits, over voltage or under voltage, are detected. If a module-level system failure is detected, the system automatically controls and isolates individual modules from the rest of the system preventing the conditions that could lead to an event. Furthermore, battery manufacturers must prove that battery modules, if they catch fire, will not cause a fire to propagate to other modules, racks, or other enclosures. As part of this process, manufacturers must show that their batteries can pass rigorous UL 1973 and UL 9540A testing and certification. This testing includes demonstration of adequate system controls and alarms, separations between equipment, protections such as fire-retardant barriers and coatings, fire suppression systems, and ventilation systems to limit failure to a single battery module.

Container Level: The National and International Fire Codes contain safety standards for construction of battery enclosures include: mounting, elevation of enclosures from the ground, materials, fire resistant barriers as well as requirements addressing insulation, wiring, switches, transformers, spacing and grounding; safety standards for performance, such as tests for temperature, volatility, impact, overload of switches, and an impact drop test; as well as standards for manufacturing, ratings, markings, and instruction manuals. In addition to the many individual standards referenced, a Failure Mode and Effects Analysis (FMEA) must be performed for each system enclosure and requires a test to ensure safe compatibility of the system's parts. The Project would also be equipped with integrated fire and safety systems, such as air cooling/conditioning systems, deflagration, gas-ventilation, gas, heat and smoke detection and alarms, and fire extinguishing and suppression systems within each container.

Site Plan Level: The Project Site layout is designed for operational safety pursuant to California Fire Code requirements, including fire access routes, setbacks, fire hydrants, and fire-resistant perimeter walls.

Operational Level: The Project would obtain an operational permit and would be operated in accordance with the California Fire Code's standards for commissioning, inspection, repair, and decommissioning. This will include the creation and implementation of an Emergency Response Plan that will govern coordination and response to a fire emergency at the Project Site.

Compliance with the California Fire Code, National Fire Code, and International Fire Code, as well as inclusion of the Project's fire and safety features, would reduce the potential for a fire event. Therefore, the Project would maintain acceptable service ratios, response times, and other performance objectives for fire protection services. Impacts to fire protection would be less than significant.

b. **Less Than Significant Impact.** The Project Site are served by the SBCSD. The nearest SBCSD station is in the City of Barstow approximately 35 miles southeast of the Project Site at 225 East Mountain View Street in the City of Barstow.

Construction
Since the daytime population generated at the Project Site during construction (i.e., construction workers) would be temporary in nature, construction of the Project would not generate a permanent population on the Project Site that would substantially increase the demand for police services. However, construction sites can be sources of nuisances and hazards and invite theft and vandalism. When not properly secured, construction sites can

contribute to a temporary increased demand for police protection services. As such, during Project construction, the Project Site would be fenced or screened along the perimeter to minimize trespassing, vandalism, short-cut attractions and attractive nuisances.

Project-related construction activities could temporarily impact street access and traffic flow due to roadway improvements, and potential extension of construction activities into the rights-of-way along Twenty Mule Road for construction of the proposed access road, resulting in the temporary closure of the lane closest to the Project Site. However, Project construction would not require the complete closure of any public streets during construction. Furthermore, signage and flag crews would direct the flow of traffic with the lane closure. Temporary construction activities would not impede use of the streets for emergencies or access for police vehicles. Further, the Project design and site access would be reviewed by the SBCSD to ensure that emergency access would be maintained. During temporary partial street closure, emergency access and traffic detours would be established in coordination with the County.

Given the visibility of the Project Site from adjacent roadways and surrounding properties, existing police presence in the County, maintained emergency access, and construction fencing, the Project's construction activities are not expected to increase demand on existing police services to an extent that a new police facility would be required. Therefore, construction of the Project would have a less than significant temporary impact on police protection.

Operation

During Project operations, the Project would be unmanned, remotely monitored, and fenced for security. As previously stated, the Project would not introduce additional permanent residences to the Project Site that would require increased demand for public services including police protection. Furthermore, the Project Site would be served by an on-site access road, which would be accessed by O&M staff and emergency responders in the event of an emergency. Therefore, the Project would not substantially impact service ratios, response times, or other performance objectives related to police protection. Nonetheless, pursuant to San Bernardino County Development Code Section 84.29.040.d, the Project would be required to pay an annual public safety services impact fee to mitigate potential impacts on police protection services and facilities. The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services. Impacts would be less than significant.

c. **No Impact.** Project construction would introduce a temporary increase in workers, but they would not be anticipated to relocate to the area or bring their families for the construction, as the workers would be sourced from the County or surrounding counties and/or be active for only a few months. During operations, the Project Site would be unmanned and would only require minimum staff for inspection and maintenance on a bimonthly basis. Employees would be traveling from an existing area to the Project, and would not require expansion of public services, including expanding school services to the area to service new residences. The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental

facilities or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools. As such, the Project would not result in an increase in population in the area that would necessitate additional schooling services. No impacts would result from the Project.

d. **No Impact.** Project construction would introduce a temporary increase in workers, but they would not be anticipated to relocate to the area or bring their families for the construction, as the workers would be active only for the duration of the construction phase. The Project Site would be unmanned and require minimum staff on a bimonthly basis for inspection and maintenance. Staff would be traveling from an existing area to the Project. As such, the Project would not result an increase in population into the area that would necessitate additional park services. The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks. There would be no impact in this regard.

e. **No Impact.** Project construction would introduce a temporary increase in workers, but they would not be anticipated to relocate to the area. As such, the Project would not cause an increase in population in the area that would necessitate addition of other public facilities (such as libraries or hospitals). The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities. There would be no impact in this regard.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XVI. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

XVI. RECREATION

SUBSTANTIATION:

a. **No Impact.** The Project involves construction of a solar energy facility in a desert area of unincorporated San Bernardino County. No public parks, recreational facilities, or County-designated major open space areas are in the vicinity of the Project Site.[40,41] The nearest recreational area is Boron Park located approximately one mile southwest of the Project Site in the community of Boron in Kern County. The Project does not propose any residential uses that may increase the use of existing neighborhood and regional parks or other recreational facilities in the vicinity. The Project would include additional employment during construction. However, the employees would only be present during the construction phase. Once operational, the Project Site would not require the same number of staff needed during construction. The Project Site would be unmanned and would only require minimum staff for inspection and maintenance. Employees would be traveling from an existing area to the Project and therefore, would not require expansion of any parks or recreational facilities. Therefore, the construction or expansion of recreational facilities would not have an adverse physical effect on the environment. No impact would occur.

b. **No Impact.** See response to Threshold XVI.a above.

[40] San Bernardino County, Policy Map NR-2 Parks & Open Space Resources, 2020, https://countywideplan.com/wp-content/uploads/sites/68/2021/02/NR-2-Parks-Open-Space-Resources-201027.pdf?x23421. Accessed February 7, 2024.

[41] San Bernardino County, San Bernardino County Land Use Plan General Plan Open Space Element, https://www.sbcounty.gov/Uploads/lus/GeneralPlan/OpenSpaceCountywide.pdf. Accessed February 7, 2024.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XVII. TRANSPORTATION: Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

XVII. TRANSPORTATION

SUBSTANTIATION:

a. Less Than Significant Impact

Construction

Automobile and truck traffic volumes associated with Project-related construction activities would vary throughout the construction phases, as different activities occur. It is anticipated that construction worker trips would be a maximum of 40 total daily trips, water truck trips would be a maximum of 11 daily trips, and vendor trips would be a maximum of 2 daily trips (PV panel vendor trips). Construction workers, equipment delivery, and water trucks would access the Project Site from SR 58 and Twenty Mule Team Road.

Project-related construction activities could temporarily impact street access and traffic flow due to roadway improvements, and potential extension of construction activities into the rights-of-way along Twenty Mule Team Road for construction of the proposed access roads, resulting in the temporary closure of the lane closest to the Project Site. However, Project construction would not require the complete closure of any public streets during construction. Furthermore, signage and flag crews would direct the flow of traffic with the lane closure. Temporary construction activities would not impede use of the streets for emergencies or access for police vehicles. During temporary partial street closure, emergency access and traffic detours would be established in coordination with the County. Additionally, Project-related construction traffic would be temporary and cease upon construction completion. Construction traffic associated with the Project would have a less than significant impact.

The San Bernardino County General Plan's Transportation and Mobility Element discusses the County's goals to create a balanced transportation system that serves bicyclists and pedestrians as well as motor vehicles. Regional access to the Project Site is provided via SR 58 to the north of the Project Site. N San Bernardino Boulevard is an unpaved road adjacent to and west of the Project Site, while Twenty Mule Team Road is

a two-lane roadway approximately 230 feet south of the Project Site. There are no existing pedestrian sidewalks or bicycle facilities along N San Bernardino Boulevard or Twenty Mule Team Road. The Project's trips during construction would not impact the generally free-flowing traffic that characterizes the SR 58 segments north and east of the Project Site. The Project does not propose any modifications to any pedestrian or bicycle facilities and would not interfere with any future plans as none are located in the Project vicinity.

Public transit service is provided by Kern Transit (KT).[42] The Boron-Mojave Route (Route 240) goes through the census-designated place of Boron in Kern County, including the residences near the Project Site, but does not travel to the Project Site. The nearest public bus transit stop is the Senior Center/Twenty Mule Team Road stop at the intersection between Twenty Mule Team Road and James Street, approximately 0.78-mile west of the Project Site. Project construction would be temporary in nature and would not result in any road closures and therefore would not affect public transit operation. Therefore, construction of the Project would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant.

Operations

Project maintenance activities would require 6 maintenance-related visits per year and up to 4 solar panel and inverter washing visits per year, resulting in approximately 10 operational roundtrips per year (20 one-way trips). These activities are not expected to occur on a daily basis and would not generate a significant amount of traffic in the area.

Similar to Project construction, the Project's trips during operation would not impact the generally free-flowing traffic that characterizes the SR 58 segments north and east of the Project Site. The Project does not propose any modifications to any pedestrian or bicycle facilities, and would not interfere with any future plans as none are located in the Project vicinity. Additionally, as discussed above, no public transit stations are located in close proximity to the Project Site. Therefore, Project operation would not affect public transit operation. Therefore, the proposed Project would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant.

Decommissioning

At the end of the life of the Project, the Project would be decommissioned and removed from the Project Site. The Project Site would then be converted to other uses in accordance with applicable land use regulations in effect at that time. Pursuant to San Bernardino County Development Code Section 84.29.070 (Decommissioning Requirements), following the operational life of the Project, the Project owner shall perform site closure activities to meet federal, State, and local requirements for the rehabilitation and revegetation of the Project Site after decommissioning. Impacts would be less than significant.

b. **Less Than Significant Impact.** The County's Transportation Impact Study Guidelines includes thresholds for determining CEQA impacts for VMT pursuant to SB 743. The County's Transportation Impact Study Guidelines for VMT Analysis identify that projects that generate fewer than 110 daily vehicle trips are presumed to have a less than

[42] Kern Transit, Route 240, https://kerntransit.org/routes/route-240/. Accessed February 7, 2024.

significant impact absent substantial evidence to the contrary.[43] As stated above in Threshold XVII.a, the Project would generate approximately 20 trips per year during Project operations. Therefore, as the Project would meet the screening criteria, it is presumed that the Project would have a less than significant VMT impact, and no further VMT analysis is required. Impacts would be less than significant.

c. **Less Than Significant Impact.** The Project would not substantially increase driving hazards, as the on-site access road would be used only by O&M staff and emergency responders in the event of an emergency. Alterations to the immediate access roads and SR 58 are not proposed such that a geometric design feature or incompatible use would increase hazards. Project Site access would be provided via a new driveway constructed from Twenty Mule Team Road and the proposed on-site access roads. Where necessary, the access road would be upgraded using gravel and geotextile fabric and extended into the Project's fence line. The proposed access roads would encircle the entire solar array and bisect the width Project Site in a west-east orientation to accommodate maintenance vehicles. The roads would be wide enough to accommodate emergency vehicles and designed in compliance with County building and fire department standards. Approximately 11 feet of space would be maintained between each row of solar modules for O&M access. The access roads would be placed such that no panel is more than 330 feet from the center of the fire road and would connect directly to the BESS. Thus, the on-site access roads would accommodate large trucks and vehicles, including fire trucks, per County regulations and would provide a clear line of sight for merging into the adjacent roads. Therefore, the Project would not significantly increase hazards due to design features or incompatible uses, and impacts would be less than significant.

d. **Less Than Significant Impact.** As mentioned in Threshold IX.f, regional access to the Project Site would be provided via SR 58, which is identified as an evacuation route in the County. The proposed construction would be staged on-site and would have a temporary impact on circulation. The Project may require the closure of one lane on Twenty Mule Team Road closest to the Project Site for the construction of the proposed access roads. However, the Project would not result in the complete closure of existing roadways that might have an effect on emergency response or evacuation plans in the vicinity of the Project Site. Accordingly, construction of the Project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

   The Project would not generate traffic volumes that would impede emergency access to the Project Site and would not result in a significant and permanent delay for emergency vehicles accessing Twenty Mule Team Road or SR 58. The Project would comply with emergency access requirements, per the California Fire Code, including turning radius and maneuverability of large emergency vehicles such as fire trucks and ambulances. Therefore, the Project would not result in inadequate emergency access, and impacts would be less than significant.

[43] San Bernardino County, Transportation Impact Study Guidelines, 2019, pages 18 to 19, https://www.sbcounty.gov/uploads/DPW/docs/Traffic-Study-Guidelines.pdf. Accessed February 7, 2024.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XVIII. TRIBAL CULTURAL RESOURCES: Would the project:				
a) Would the project cause a substantial change in the significance of tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to the California Native American Tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

XVIII. TRIBAL CULTURAL RESOURCES

SUBSTANTIATION:

a. **Less Than Significant Impact.** As concluded in Threshold V.a, the Project Site contains undeveloped land with no historical resources. There are no national, State, or locally-designated historic resources on the Project Site. The examination of numerous historic maps was also negative for older historic cultural resources. Therefore, the Project would have a less than significant impact.

b. **Less Than Significant Impact With Mitigation Incorporated.** Chapter 532 Statutes of 2014 (AB 52) requires that lead agencies evaluate a project's potential impact on "tribal cultural resources," which include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the CRHR or included in a local register of historical resources." AB 52 also gives lead agencies the discretion to determine, based on substantial evidence, whether a resource qualifies as a "tribal cultural resource." In compliance with PRC Section 21080.3.1(b), the County provided formal notification to California Native American tribal representatives identified by the California NAHC. Native American groups may have knowledge about the area's cultural resources and may have concerns about a development's adverse effects on tribal cultural resources, as defined in PRC Section

21074. The County has contacted the tribal representatives of the tribe noted below. Correspondence to and from tribal representatives is included as **Appendix N**.

AB 52 Native American Groups Contacted:

- Kern Valley Indian Community
- Morongo Band of Mission Indians
- Quechan Tribe of the Fort Yuma Reservation
- San Fernando Band of Mission Indians
- San Manuel Band of Mission Indians
- Serrano Nation of Mission Indians
- Twenty-Nine Palms Band of Mission Indians

As stated in Threshold V.b, the NAHC's response to the SLF search request stated that the results of the SLF search were negative. A list was provided by NAHC of Native American tribes who may have knowledge of cultural resources in the area.

The County received a response from the Yuhaaviatam of San Manuel Nation (YSMN), formerly the San Manuel Band of Mission Indians, on May 15, 2024 indicating they had an interest in the Project at the time. To date, no other responses from the Native American community have been received as part of the AB 52 tribal consultation effort.

The YSMN is a sovereign American Indian tribe of Serrano people in San Bernardino County, California. During consultation with the County, and after reviewing the CRTR, Geotechnical Report, and Conceptual Site Plans prepared for the Project, the YSMN noted that due to the nature and location of the Project, and given the YSMN's Cultural Resources Management Department's knowledge, the YSMN does not have any concerns with the Project's implementation, as planned, at this time. The YSMN requested preferred tribal mitigation measures be made part of the Project and be implemented during construction of the Project. These mitigation measures are discussed below and in **Section V: Cultural Resources**.

Additionally, as discussed in the CRTR and in Threshold V.a above, the observed resources were recorded, evaluated, and recommended ineligible for listing in the NRHP and CRHR and do not qualify as a historical resource under CEQA. As discussed in Threshold V.b above, the historic-period archaeological resource was identified and was also ineligible for NRHP, CRHR, or local listing. Although the County's consultation efforts indicated that the area may be culturally sensitive, no known tribal cultural resources or tribal cultural places have been identified within the Project Site or immediate vicinity. The Project Site does not contain any existing structures or known tribal cultural resources with the potential for inclusion on the NRHP, CRHR, 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 Project construction. Therefore, as there is potential for ground-disturbing activities to encounter buried or unknown tribal cultural resources, impacts would be considered potentially significant. The Project would be required to implement **MM TCR-1** and **MM TCR-2** to reduce potential impacts to tribal cultural resources to a less than significant level.

Mitigation Measures

Please also refer to mitigation measures provided in Section V: Cultural Resources.

MM TCR-1 A Tribal monitor from a Consulting Tribe, in addition to the archaeological monitor, shall be contacted, as detailed in **MM CUL-1**, of any pre-contact and/or historic-era cultural resources 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 find be deemed significant, as defined by CEQA, a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with the Consulting Tribe, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents the Consulting Tribe for the remainder of ground-disturbing activities for the Project, should the Consulting Tribe elect to place a monitor on-site.

MM TCR-2 Any and all archaeological/cultural documents created as part of the Project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the Applicant and Lead Agency for dissemination to the Consulting Tribe. The Lead Agency and/or Applicant shall, in good faith, consult with the Consulting Tribe through the life of the Project.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XIX. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

XIX. UTILITIES AND SERVICE SYSTEMS

SUBSTANTIATION:

a. **Less Than Significant Impact.** Regarding stormwater, see Threshold X.c.iii. Regarding electric power and natural gas, see Thresholds VI.a and VI.b.

Water

The Project Site is not currently served by any water utility structures or services. Water services to the Project Site would be provided by Mojave Water Agency (MWA). According to MWA's 2020 Urban Water Management Plan Update, MWA is responsible for providing water services to its certificated water area, including the Project Site. MWA's water is sourced almost entirely from groundwater.[44] The Project would utilize water during construction for dust suppression and during operation for routine panel and inverter washing. Water would be trucked to the Project Site from an off-site source. Project construction and operation would not utilize water facilities, and no construction or

[44] Mojave Water Agency, 2020 Urban Water Management Plan, 2021, page 2-2, https://www.mojavewater.org/wp-content/uploads/2022/06/MWA2020UWMPFinal061621.pdf. Accessed February 7, 2024.

relocation of water facilities would cause a significant environmental effect. Impacts would be less than significant.

Wastewater

Temporary sanitary facilities would be placed on-site during construction. As the Project would be unmanned during operation, no wastewater facilities would be required. Therefore, the Project is not anticipated to generate additional wastewater. Project construction and operation would not utilize wastewater facilities, and no construction or relocation of wastewater facilities would cause a significant environmental effect. Impacts would be less than significant.

Telecommunications

Telecommunication equipment, including underground and overhead fiber optics, microwave, and meteorological data collection systems or supervisory control and data acquisition would be installed on the Project Site to connect the Project to remote monitoring locations and ultimately to the SCE substation. Project construction would be coordinated with any telecommunications service providers prior to installation. Therefore, installation of telecommunications infrastructure would not cause significant environmental effects. Impacts would be less than significant.

b. **Less Than Significant Impact.** Water consumption for washing solar panels and inverters during Project O&M is anticipated to be approximately 0.3 AF per year. The small amount of water to be used would not be substantial such that there would be insufficient water supplies available to serve the Project. Therefore, the Project would have sufficient water supplies available to serve the Project, and impacts would be less than significant.

c. **Less Than Significant Impact.** As described in Threshold XIX.a, the Project would not require wastewater facilities and would not generate additional wastewater. As such, the Project would not interfere with any wastewater treatment provider's service capacity. Impacts would be less than significant.

d. **Less Than Significant Impact.** Project construction would result in the generation of various waste materials including soil, vegetation, and sanitation waste from portable toilets. Soil excavated for the Project Site would be balanced on-site. Sanitation waste (i.e., human-generated waste) would be disposed of according to sanitation waste management practices. The Project would be unmanned during Project operations, and minimal solid waste would be generated and sent to a publicly owned permitted landfill/disposal site. As the Project would generate minimal construction and operational waste, the Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Impacts would be less than significant.

e. **Less Than Significant Impact.** Project construction would result in the generation of waste materials such as soil, vegetation, and sanitation waste. The Project would also be required to comply with AB 341 which requires a 75 percent diversion of construction materials. During operations, the Project would be unmanned and would generate minimal solid waste. Therefore, the Project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. Impacts would be less than significant.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XX. WILDFIRE: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

XX. WILDFIRE

SUBSTANTIATION:

a. **No Impact.** As described in Threshold IX.g, the Project Site is located in a LRA and is not within a Very High FHSZ or a Fire Safety Overlay District designated by California Department of Forestry and Fire Protection or the County Land Use Plan, respectively. Therefore, the Project Site is not located within an area prone to wildfire. There would be no impact related to wildfires.

b. **No Impact.** See response to Threshold XX.a above.

c. **No Impact.** See response to Threshold XX.a above.

d. **No Impact.** See response to Threshold XX.a above.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XXI. MANDATORY FINDINGS OF SIGNIFICANCE:				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

SUBSTANTIATION: The analysis in this Initial Study and the findings reached indicate that the proposed project can be implemented without causing any new project specific or cumulatively considerable unavoidable significant adverse environmental impacts. Mitigation is required to control potential environmental impacts of the proposed project to a less than significant impact level. The following findings are based on the detailed analysis of the Initial Study of all environmental topics and the implementation of the mitigation measures identified in the previous text and summarized in this section.

a. **Less Than Significant Impact With Mitigation Incorporated.** As discussed throughout this Initial Study, the Project does not have the potential to degrade the environment's quality or result in significant environmental impacts that cannot be reduced to less than significant following compliance with the established regulatory framework (i.e., local, State, and federal regulations) and the recommended mitigation measures.

   As concluded in **Section II: Air Quality**, following compliance with **MM AQ-1**, which addresses a Valley Fever Management Plan, the Project would not expose sensitive receptors to substantial pollutant concentrations.

As concluded in **Section IV: Biological Resources**, the Project would implement **MM BIO-1**, which requires retaining a Qualified Biologist; **MM BIO-2**, which requires construction personnel and employes responsible for Project O&M to attend a WEAP; **MM BIO-3**, which addresses BMPs related to special-status species; **MM BIO-4** and **MM BIO-5,** which address potential impacts to desert tortoise; **MM BIO-6, MM BIO-7**, **MM BIO-8,** and **MM BIO-9**, which address potential impacts to desert kit fox, American badger, and burrowing owl; **MM BIO-10**, which addresses potential impacts to nesting birds; and **MM BIO-11**, which addresses potential impacts to WJT. With compliance with **MM BIO-1** through **MM BIO-11**, the Project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

As concluded in **Section V: Cultural Resources**, following compliance with **MM CUL-1** and **MM CUL-2**, the Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

As concluded in **Section VII: Geology and Soils**, following compliance with **MM GEO-1**, the Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

As concluded in **Section XVIII: Tribal Cultural Resources**, following compliance with **MM TCR-1** and **MM TCR-2**, the Project could not cause an adverse change in the significance of a tribal cultural resource.

b. **Less Than Significant Impact.** CEQA Guidelines Section 15065(a)(3) defines "cumulatively considerable as times when "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." The proposed Project would result in significant impacts unless mitigated for the following environmental issues: air quality, biological resources, cultural resources, geology and soils, and tribal cultural resources. The impacts associated with these resource areas are localized, thus, would not result in cumulative impacts. Mitigation measures have been prepared for each of these environmental issue areas to reduce impacts to a less than significant level.

   All other Project impacts were determined either to have no impact or to be less than significant following compliance with the established regulatory framework, without the need for mitigation. Cumulatively, the proposed Project would not result in any significant impacts that would substantially combine with impacts of other current or probable future impacts. Therefore, the proposed Project would not result in any cumulatively considerable significant impacts.

c. **Less Than Significant Impact.** A significant impact may occur if the Project has the potential to result in significant environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly. All potential impacts of the Project have been identified in the respective sections of this Initial Study, and mitigation measures have been prescribed, where applicable, to reduce all potential impacts to less than significant levels. As such, upon implementation of mitigation measures identified and compliance with existing regulations, the proposed Project would not have significant

environmental effects, and the Project would not have substantial adverse effects on human beings, directly or indirectly. Therefore, impacts would be less than significant.