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 State CEQA Guidelines.

PROJECT LABEL:

APN:	160 acre portion of the 640 acres of 0449-181-07; 0449-181-32; 0449-181-33; 0449-181-40; 0449-181-41; 0449-181-30; 0449-181-31; 0449-181-38; and 0449-181-39
APPLICANT:	Lucerne Valley Solar One, LLC
COMMUNITY:	LUCERNE VALLEY/THIRD SUPERVISORIAL DISTRICT
LOCATION:	EAST OF CAMP ROCK ROAD, NORTHEAST OF STATE ROUTE (SR) 18, SOUTH OF ARROYO ROAD, AND WEST OF DALLAS AVENUE.
PROJECT NO:	P201400433/CUP
STAFF:	TRACY CREASON
REP('S):	JOHN WIELAND
PROPOSAL:	A CONDITIONAL USE PERMIT TO BUILD AND OPERATE A 20 MEGAWATT UTILITY SCALE PHOTOVOLTAIC FACILITY ON APPROXIMATELY 190 ACRES OF THE 310-ACRE SITE.

USGS Quad: Cougar Buttes

T, R, Section: T4N, R1E, N ½ of Sec. 26

Planning Area: Lucerne Valley Community Plan

Land Use Zoning: LV/AG (Agriculture)

Overlays: AR4 (Airport Safety Review Area 4)
FS2 (Fire Safety Area 2)
BIO (Biological Resources)

PROJECT CONTACT INFORMATION:

Lead agency: County of San Bernardino
Land Use Services Department
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345

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Project Sponsor: Lucerne Valley Solar One, LLC
6688 N Central Expressway
Suite 500
Dallas, Texas 75206

PROJECT DESCRIPTION:

Lucerne Valley Solar One, LLC (Applicant) proposes to construct and operate a 20 megawatt (MW) alternating current (ac) photovoltaic (PV) solar electric power generating facility ("Project") to serve a portion of the electrical load requirements of California. The Project would be developed on approximately 190 acres of a 310 acre site and connect with an existing Southern California Edison (SCE) 33-kilovolt (kV) electrical distribution line in an existing transmission corridor directly adjacent to the Project site.

The Project is designed to have a useful life of up to 30 years, although the life span may be extended by upgrades and refurbishments. In the event that the facility is decommissioned, all equipment and structures would be removed and the site reclaimed to its prior land use.

Project Location and Legal Description

The Project is located in southwestern San Bernardino County, within the Lucerne Valley Community Plan area and three miles north of the San Bernardino Mountains. The Project site is located east of Camp Rock Road and south of Arroyo Road, in an unincorporated area of the County (See Figure 1). State Highway 247 is located approximately 1.75 miles north of the site and State Highway 18 is located approximately 2.4 miles to the south of the site. The primary facility access point is from Camp Rock Road, in the southwestern corner of the Project site. A secondary access point is from Sherwood Road, just north of Woodland Street.

The preliminary title report indicates the project site includes the following County of San Bernardino Assessor Parcel Numbers (APNs): 0449-181-07; 0449-181-32; 0449-181-33; 0449-181-40; 0449-181-41; 0449-181-30; 0449-181-31; 0449-181-38; and 0449-181-39. The 310-acre Project site consists of 160 acres of a 640 acre parcel (APN 0449-181-07) and an additional 150 acres that make up the remaining eight parcels in their entirety. The Project would be developed on approximately 190 acres of the 310-acre site.

Project Layout and Construction

The solar power generation facility would be comprised of the following major components: non-reflective PV solar module arrays mounted on single-axis trackers (or, possibly, on fixed tilt racks), a racking system supported by embedded piers, up to 40 inverter stations including pad mount transformers, buried collector lines, perimeter and interior roadways, perimeter fencing, and a switching station in an enclosure measuring approximately 200 feet by 200 feet. The Project also would include an unmanned operations and maintenance shed measuring approximately 20 feet x 20 feet, an unmanned communications shed measuring approximately 20 feet x 30 feet, and a gravel parking area approximately 4,000 square feet in size. Both sheds would be made of metal. Concrete pads would be sized and installed to accommodate the associated equipment (inverters, switchgear, and transformers).

The site plan and typical elevations are illustrated in Figure 2. The layout of the single axis tracker solar panels would be aligned in rows in the north-south direction (or in an east-west direction if a fixed tilt racking system were used instead). Each solar panel would be attached to embedded piers using a support structure. The rows of solar panels would be separated by access ways. Internal site circulation would include 26 foot-wide perimeter roads consisting of crushed stone and 20-foot wide operations and maintenance roads among the solar arrays consisting of crushed stone or native soil. An AC-DC collection system would be installed along internal access roads to collect power from the rows of modules and deliver it to the switching station. This collection system would likely be installed in a subsurface trench, though due to shallow bedrock in some areas of the site, part or all of the collection system may be housed in an above-grade raceway mounted on supports approximately 24-36 inches above ground level. Collection trenches would likely be mechanically excavated, though in some cases targeted shallow trench blasting may be required as a construction technique due to near-surface bedrock. If explosives are to be used, the Applicant would be required to obtain all necessary permits and approvals through the San Bernardino County Fire

Department's Hazardous Materials Division (HMD). Upon completion of the Project, vegetation or dust palliatives or other best management practices would be used if needed to control wind and water erosion during operations. Typical site access would be 26 feet wide, accommodating 56-foot turning radii in both directions. The proposed site access would include a 75-foot-long driveway apron.

Off-site improvements are anticipated and would include the development of site access points (curb cuts for driveway access) and Southern California Edison's (SCE) installation of three 50-foot transmission poles, up to 200 feet of 33kV conductor line, pole top meters and a remote automatic recloser. SCE's improvements would be located in its existing transmission easement located along Camp Rock Road, adjacent to the southwest corner of the Project site, as well as on a small portion of the southwest corner of the Project site adjacent to the Project's switching station.

A seven foot high chain link security fence would be installed at the property setback. Signs would be installed to achieve appropriate safety and security as expected in a solar power facility. Proposed signage includes signs specifying high voltage danger, site under surveillance, caution electric shock, etc. Any signs as required by the National Electrical Code would be installed.

The Project's lighting system would provide operation and maintenance personnel with illumination for both normal and emergency conditions. Lighting would be designed to provide the minimum illumination needed to achieve safety and security objectives. Lighting would be directed downward and shielded to focus illumination on the desired areas only and to avoid light spillage on adjacent properties. Light fixtures would be mounted at the entrance and each inverter station. Lighting would be no brighter than required to meet safety and security requirements, and lamp fixtures and lumens would be selected accordingly. All project lighting would be switched and without timer.

Project Construction, Grading and Schedule

Construction of the Project is estimated to require up to 200 workers at its peak. Construction is estimated to start in the second quarter of 2016 and would take approximately seven months to complete. A total of approximately 50 acre-feet of water would be used during construction for dust suppression and ancillary construction activities. Dust suppression during construction may also involve application of palliatives.

Development of the Project would require site grading, with limited impact to existing offsite drainage patterns and overall topography of the site. Cuts may be required at the locations of inverters and other equipment to provide level foundations. The fill from these cuts would be placed around the pre-cast foundation in order to divert small, localized flows away from the foundation and prevent undermining of the same. Where grading is required, cut-and-fills are expected to be balanced on-site, resulting in minimal import or export of earthen material.

Vegetation would be cleared to allow for the construction of the solar panels and access roads. Vegetation in areas along major drainage channels outside of the developed footprint would be preserved. Grubbing would occur on all gravel access roads, and in any areas where the roots would impede the pier structures of the solar arrays. The installation of the solar panels also requires trenching along and under access roads for the installation of multiple cable systems. Under and along almost every internal roadway, trenches as deep as 48 inches would house the cables in a sand bed that would be backfilled with excavated material from the site.

Project Operations

Several part-time employees would visit the site periodically (e.g., monthly or bi-monthly) and the employees or a contractor would visit the site up to four times a year to wash the PV panels. Panel washing would require approximately 1-2 acre-feet of water per year and, based on an assumed use of medium-sized water tankers, would require approximately 59 truckloads (118 truck trips) for delivery of this water.

Water for both construction and operations would be purchased from a local purveyor and/or obtained from an existing on-site well. Candidate water purveyors include: S.S. Hert Trucking, the Big Bear Area Regional Wastewater Agency (BBARWA), and the Mojave Water Agency (MWA). Water delivery to the project site from the selected purveyor would be up to 32 miles round trip.

ENVIRONMENTAL/EXISTING SITE CONDITIONS:

Environmental Setting and Surrounding Uses

The Mojave Desert is a subsection of the Basin and Range Physiographic Province, which is characterized by long, north-south-trending mountain ranges separated by broad valleys. The site is located on a broad, gently sloping bajada of alluvial material originating from the San Bernardino Mountains to the south. Elevation of the Project site ranges from approximately 3,300 feet above sea level (asl) at its southern boundary to 3200 asl at its northern boundary. The topography is generally flat, with an average slope ranging from 1 percent to 4 percent from the south to north. The primary vegetation on-site is creosote bush-white burr sage scrub.

The Project site is bordered to the north by vacant undeveloped land and a rural residence, to the east by undeveloped land, to the south by undeveloped land and a rural residence, and to the west, opposite Camp Rock Road, by a vacant property, partially developed with a wastewater reclamation facility operated by the Big Bear Area Regional Wastewater Agency, and an existing solar electric power generating facility. The nearest residence to the Project site is located approximately 625 feet to the north of the site boundary.

Existing Land Uses

The Project site is currently vacant. The property is zoned LV/AG (Lucerne Valley Community Plan/Agriculture), which has a minimum 10-acre lot size and is intended for commercial agricultural operations, agriculture support services, rural residential uses and similar and compatible uses. County Code Chapter 84.29, allows solar renewable energy facilities in the AG zone upon approval of a Conditional Use Permit (CUP).

AREA	EXISTING LAND USE	OFFICIAL LAND USE DISTRICT
SITE	Vacant, Partially Disturbed Land	Lucerne Valley Community Plan LV/AG
North	Vacant/Rural residential	Lucerne Valley Community Plan LV/AG
South	Vacant/Rural residential	Lucerne Valley Community Plan LV/AG
East	Vacant	Lucerne Valley Community Plan LV/AG and BLM
West	Vacant/Solar Development/Wastewater Reclamation Facility	Lucerne Valley Community Plan LV/AG and BLM

Other public agencies whose review or approval may be required (e.g., permits, financing approval, or participation agreement):

Federal: Federal Aviation Administration (FAA); United States Fish & Wildlife Service (USFWS)

State of California: Colorado River Basin Regional Water Quality Control Board (CRBRWQCB), Mojave Desert Air Quality Management District (MDAQMD), California Department of Fish and Wildlife

County of San Bernardino: Land Use Services – Planning, Code Enforcement, Building and Safety, Land Development, Public Health – Environmental Health Services, Public Works – Traffic, Solid Waste, Fire

Figure 1. Site Location Map

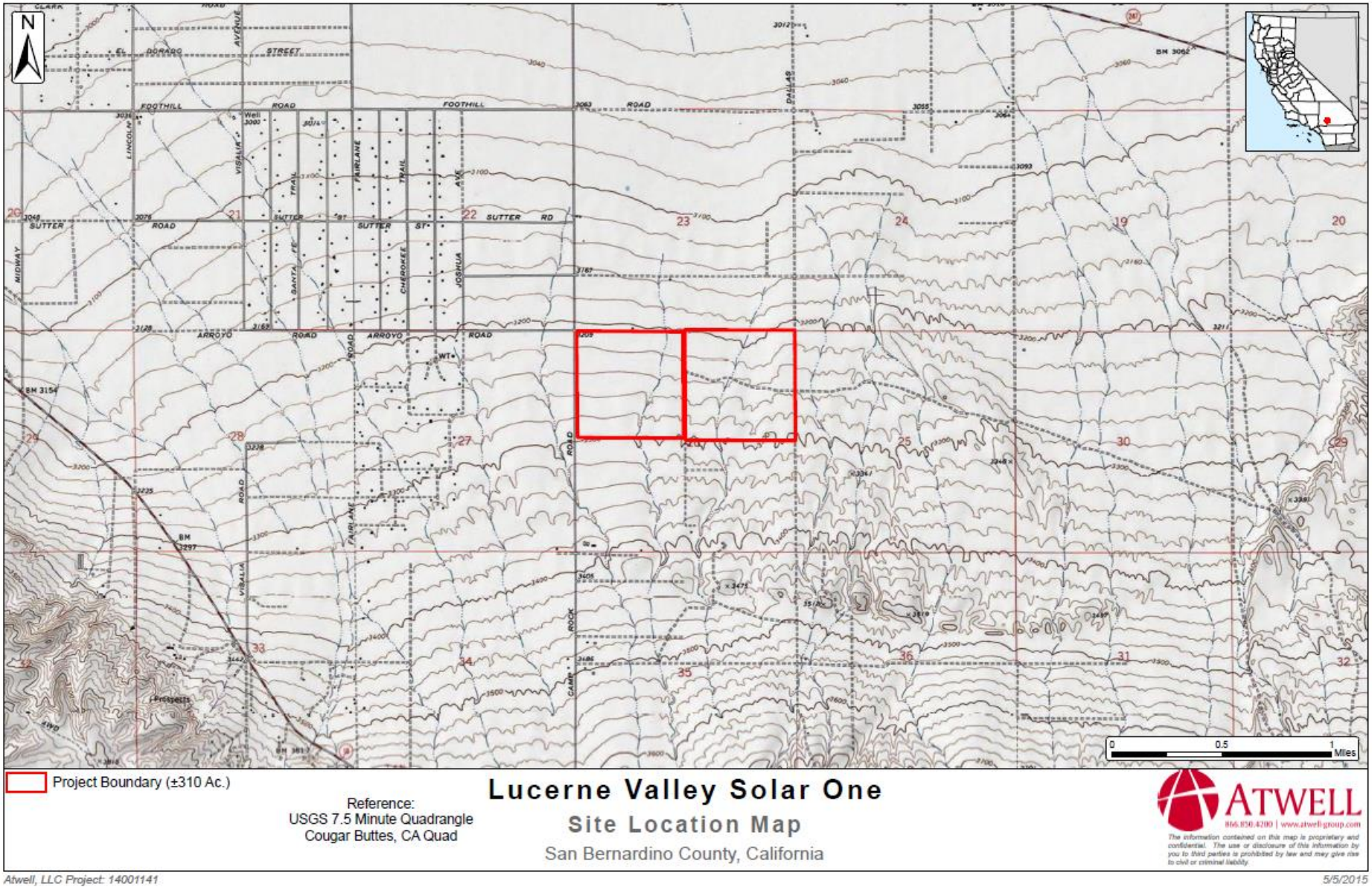

Figure 2. Site Plan

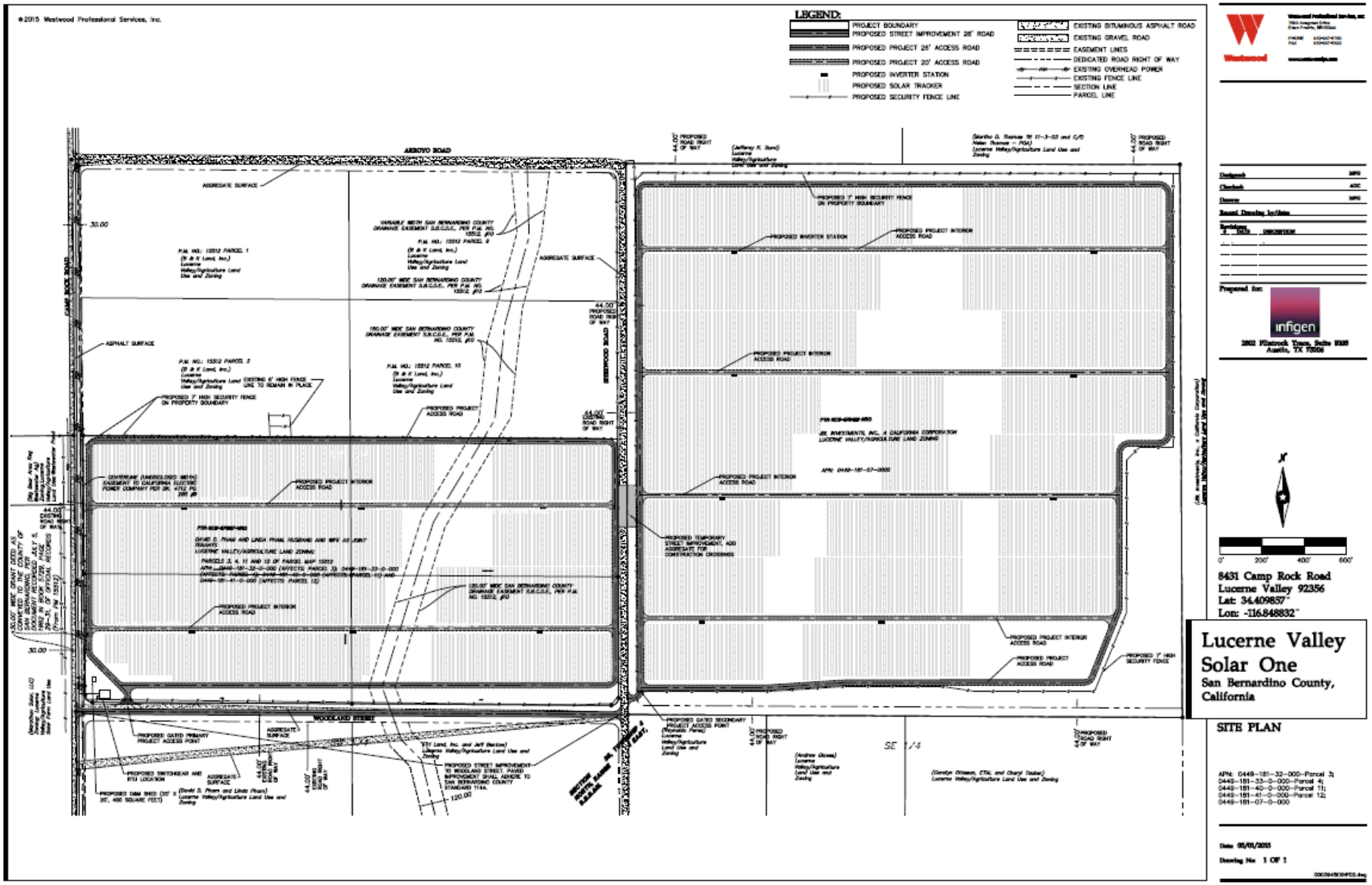

Figure 3. Site Photos

1) Southwest-facing view from the northeast corner of the Project site.

2) Northeast-facing view from the southwest corner of the Project site.

3) Southwest-facing view of existing solar development across Camp Rock Road.

4) Southeast-facing view of the Project site.

EVALUATION FORMAT:

This initial study is prepared in compliance with the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21000, et seq. and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an Initial Study is guided by Section 15063 of the State CEQA Guidelines. This format of the study is presented as follows. The project is evaluated based upon its effect on 18 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 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 Impact	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).

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would 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.

X	Aesthetics		Agriculture and Forestry Resources	X	Air Quality
X	Biological Resources	X	Cultural Resources		Geology/Soils
	Greenhouse Gas Emissions		Hazards & Hazardous Materials	X	Hydrogeology/Water Quality
	Land Use/Planning		Mineral Resources		Noise
	Population/Housing		Public Service		Recreation
X	Transportation/Traffic	X	Utilities/ Service Systems	X	Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)
On the basis of this initial evaluation, the following finding is made:

☐	The proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION shall be prepared.
☐	Although the proposed Project could have a significant effect on the environment, there shall 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 shall be prepared.
X	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 impact" or "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.

Michael R. Perry — May 11/2015

Signature: prepared by Michael Perry, Lilburn Corporation

5/11/2015

Signature: Supervising Planner HEIDI DURON
Planning Division

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Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
I. AESTHETICS - 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) Substantially degrade the existing visual character or quality of the site and its surroundings?	☒	☐	☐	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

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

a) The County General Plan Open Space Element, Policy OS 5.1 states that a feature or vista can be considered scenic if it:

- Provides a vista of undisturbed natural areas;
- Includes a unique or unusual feature that comprises an important or dominant portion of the view shed; or,
- Offers a distant vista that provides relief from less attractive views of nearby features such as views of mountain backdrops from urban areas).

The Project site is zoned LV/AG and is relatively flat. The Project site has views of low-lying foothills in the background. The solar equipment proposed to be constructed on-site, consisting of PV modules mounted on fixed-tilt foundations or tracker units and associated electrical equipment, would maintain a low profile. The Project would also include access roads and a seven-foot chain link perimeter fence. The Project site would be visible for several minutes by motorists traveling along SR-247 and SR-18, which are both County-designated Scenic Roads, as well as along Camp Rock Road. Less than significant impacts on scenic vistas are expected to occur; however, further discussion is warranted in the EIR.

b) SR-18 and SR-247 are both eligible for listing as state scenic highways, although they have not been officially designated scenic highways. The Project would not dominate the motorist view shed from SR-18 or SR-247 nor would it be likely to attract particular attention. Additionally, the motorists' overall view toward the Project while traveling along SR-18 and SR-247 would be temporary and limited to a few minutes. This impact is potentially significant and further discussion is warranted in the EIR.

c) The existing visual character of the site and surrounding area is generally of undeveloped or agricultural desert landscapes in a rural setting and existing utility-scale solar facility uses. The Project site consists of vacant and disturbed desert land. The Project's potential to impact the existing visual character or quality of the site and its surroundings could be significant and will be further evaluated in the EIR.

d) The facility would be unmanned and therefore limited nighttime lighting would be used to the extent needed to maintain safety and security objectives. Lighting fixtures would be hooded and directed downward to avoid spillage on adjacent properties. The Project's solar modules are designed to absorb as much sunlight as possible while reflecting as little sunlight as possible. Standard photovoltaic solar modules produce less glare and reflectance than standard window glass. Additionally, the Project would comply with San Bernardino County Ordinance

No. 84.29.040 which regulates glare, outdoor lighting, and night sky protection. However, these impacts are potentially significant, and the specific lighting required and the effects of nighttime light and glare will be further evaluated in the EIR.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
II.	**AGRICULTURE 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. Would 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?	☐	☐	☐	☒

SUBSTANTIATION: *(Check ☐ if project is located in Important Farms Overlay):*

a) The Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use. According to the California Department of Conservation County of San Bernardino Important Farmland Finder web application (California Department of Conservation 2014), the site is located within land mapped as Grazing Land. No further analysis is warranted.

b) The Project does not conflict with any existing agricultural zoning or with a Williamson Act land conservation contract. The site is vacant and has not been used for agricultural purposes since 1901 according to historical aerial photographs reviewed during the Phase I Environmental Site Assessment conducted in October 2014.. The property is zoned LV/AG (Agriculture), which has a minimum 10-acre lot size and is intended for

commercial agricultural operations, agriculture support services, rural residential uses and similar and compatible uses. County Code Chapter 84.29 allows solar renewable energy facilities in the AG zone upon approval of a Conditional Use Permit (CUP). The Project site is not under a Williamson Act contract. No further analysis is warranted.

c) The Project would not 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)). The Project site is currently vacant land, which has not been designated as forest land or timberland. No rezoning of the Project site would be required as the proposed Project is compatible with the current zoning designation of LV/AG, upon approval of a Conditional Use Permit (CUP). No further analysis is warranted.

d) The Project would not result in the loss of forest land or conversion of forest land to non- forest use. The Project site is currently vacant land and has not been designated as forest land or timberland. No further analysis is warranted.

e) The Project would not involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to a non-agricultural use or conversion of forest land to non-forest use, because the Project site has not been designated as forest land, is not classified as Farmland, is not used for agricultural purposes, and no off-site improvements are proposed. No further analysis is warranted.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
III.	**AIR QUALITY -** Where available, the significance criteria established by the applicable air quality management or air pollution control district might be relied upon to make the following determinations. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c)	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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

SUBSTANTIATION: *(Discuss conformity with the Mojave Desert Air Quality Management Plan, if applicable):*

a),b),c) The Project site falls under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD) and is located in the Mojave Desert Air Basin (MDAB). The Air Quality Management Plan (AQMP) provides a program for obtaining attainment status for key monitored air pollution standards, based on existing and future air pollution emissions resulting from employment and residential growth projections. The AQMP is developed using input from various agencies' General Plans and other projections for population and employment growth. The MDAB in which the Project site is located is classified as "nonattainment" for national 8-hour ozone and PM_{10} standards, and the state 1-hour ozone, 8-hour ozone, $PM_{2.5}$, and PM_{10} standards. . Equipment usage and activities during construction of the proposed Project would result in emission of PM_{10}, PM $_{2.5}$ and ozone precursors, including NO_x and volatile organic compounds (VOC), which could result in significant impacts to air quality in the area. The sources of emissions include heavy equipment used to excavate and grade the array pads and access areas, cranes, and on-road motor vehicles for equipment and material deliveries and workers commuting to and from the site. Activity on unpaved roads and lay-down areas and grading would contribute to PM_{10} emissions. This impact is potentially significant. Further analysis of air quality impacts are warranted to determine whether the project would conflict with or obstruct implementation of the applicable plans for attainment and if so, to determine the reasonable and feasible mitigation measures that could be imposed. This will be evaluated in the EIR.

Short-term construction emissions could significantly contribute to an existing or projected air quality violation, requiring consideration of mitigation measures. This impact is potentially significant and will be evaluated further in the EIR.

Construction of the Project could cumulatively contribute to the existing nonattainment status. These impacts are expected to be less than significant; however, further analysis is warranted. Construction and operational emissions will be evaluated in the EIR.

d) The closest residence to the Project site is located approximately 600 feet north of the Project site. The next nearest residence is located approximately 1,725 south of the Project site. No schools or hospitals are located within one mile of the project site. The closest school is Lucerne Valley Elementary School, located approximately 5.5 miles to the northwest. Potential mitigation measures for diesel equipment and dust control that are recommended by MDAQMD will be evaluated as part of the EIR to avoid or reduce the impacts to sensitive receptors. Impacts associated with sensitive receptors are less than significant; however further analysis is warranted. Potential exposure of sensitive receptors to substantial pollutants will be analyzed in the EIR.

e) The Project would not create objectionable odors that would affect a substantial number of people. Electricity generation via the use of photovoltaic systems does not generate chemical emissions that would negatively affect air quality or produce objectionable odors. Potential odor generation associated with the Project would be limited to construction sources such as diesel exhaust and dust but these would be temporary and would not be substantial. No significant odor impacts related to project implementation are anticipated due to the nature and short-term extent of potential sources, as well as the intervening distance to sensitive receptors. No further analysis is warranted.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
IV.	**BIOLOGICAL RESOURCES -** Would the project:				
a)	Have substantial adverse effects, 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 Game 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, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☒	☐	☐	☐
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (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?	☐	☐	☒	☐

SUBSTANTIATION: *(Check if project is located in the Biological Resources Overlay or contains habitat for any species listed in the California Natural Diversity Database ☒): Burrowing Owl and Desert Tortoise*

a) The site consists primarily of vacant and disturbed desert land and is a fairly representative sample of the western Mojave Desert from a biological perspective. The creosote bush-white bursage scrub vegetation community that comprises the site's vegetative cover supports an assemblage of common desert plants and wildlife. Field survey results for special-status plant and animal species, riparian and sensitive natural communities, and species listed as either threatened or endangered by either the state or federal government will be documented in the technical reports and included in the EIR. Impacts to biological resources and sensitive plant communities are potentially significant and will be analyzed in the EIR.

b) Access roads and collector lines associated with the Project may cross streams and washes that require evaluation for riparian habitat and may also require a Lake and Streambed Alteration Agreement from the

California Department of Fish and Wildlife (CDFW). Potential impacts to riparian habitat or other sensitive natural communities will be further evaluated in the EIR.

c) Federally protected wetlands are unlikely to be present on the Project site based on data review and site observations. Impacts to federally protected wetlands are less than significant; however findings of the field surveys will be evaluated in the EIR.

d) The Project site is not within an identified wildlife movement corridor. Development of the Project is unlikely to result in obstruction or elimination of important wildlife movement routes. Additionally, the two primary washes on the site would be retained. The Project would have less than significant impacts on important wildlife movement routes. However, the Project site and surrounding area may be used for migration or dispersal by some species. This impact is potentially significant and will be evaluated in the EIR.

e) Section 88.01.050 of the San Bernardino County Development Code requires that where removal of Joshua trees is proposed, all trees to be removed shall be transplanted or stockpiled for future transplanting wherever possible. Section 88.01.050(f)(3)(C) of the San Bernardino County Development Code requires that the removal of "specimen" size Joshua trees cannot be allowed unless there is no reasonable alternative means to develop the land. Development of the Project would require the removal of Joshua trees. The Project's impact on Joshua trees is potentially significant and will be evaluated in the EIR.

f) The Project site is within the boundaries of the West Mojave Plan (BLM, 2005). The West Mojave Plan is a federal land use plan amendment to the Bureau of Land Management's California Desert Conservation Area (CDCA) Plan that presents a comprehensive strategy to conserve and protect sensitive plants and animals and the natural communities of which they are a part. The West Mojave Plan is applicable only to BLM-administered public lands within the West Mojave Plan area. The Project site is within the planning area of the Desert Renewable Energy Conservation Plan (DRECP); however, this Habitat Conservation Plan and Natural Community Conservation Plan is still in development and has not been adopted. The Project would not conflict with the provisions of an adopted habitat conservation plan, impacts are considered less than significant; however, this will be further evaluated in the EIR.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
V.	**CULTURAL RESOURCES** - Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☒	☐	☐	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

SUBSTANTIATION: *(Check if the project is located in the Cultural ☐ or Paleontological ☐ Resources overlays or cite results of cultural resource review):*

a) The site generally consists of vacant and previously disturbed land. A cultural resources survey and an archaeological survey are being completed to determine the absence or presence of resources. The survey findings may document potentially significant impacts. The findings and any mitigation measures recommended will be presented in the EIR.

b) The site generally consists of vacant and previously disturbed land. A cultural resources survey and an archaeological survey are being completed to determine the absence or presence of resources. The survey findings may document potentially significant impacts. The findings and any mitigation measures recommended will be presented in the EIR.

c) A paleontological records search within the Project area will be completed. Potential impacts to paleontological resources and proposed mitigation measures will be evaluated in the EIR.

d) There is no evidence that the Project site is located within an area that is likely to contain human remains, and the discovery of human remains during earthmoving activities is not anticipated. Therefore, impacts would be less than significant. However, mitigation measures to address the potential impact of human remains to be encountered will be presented in the EIR.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
VI. GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to 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 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 California Building Code (2001) creating substantial 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?	☐	☐	☐	☒

SUBSTANTIATION: *(Check ☐ if project is located in the Geologic Hazards Overlay District):*

a) i. A review of California Geological Survey – Alquist-Priolo Earthquake Fault Zones maps indicates that the Project is located approximately 2-3 miles north of the Helendale-South Lockhart fault zone, which locally trends along State Highway 18. Due to the absence of known faults within the Project site and the historic activity of the nearest active fault, the likelihood of surface rupture at the Project site is considered low. Although it is anticipated that the Project site would not be adversely affected and impacts are considered less than significant, the potential for fault rupture impacts will be evaluated in the EIR.

ii. Seismic ground shaking could occur on the Project site as a result of an earthquake. Few people would be exposed to adverse effects resulting from ground shaking because habitable structures are not proposed for the Project and the facility would be unmanned. Structures proposed for the Project would be required by State law to be constructed in accordance with the International Code Council's (ICC) 2007 California Building Code

(CBC). The proposed structures would be designed to resist structural collapse through incorporation of California Building Standards Code design guidelines. Adherence to all applicable regulations would mitigate any potential impacts associated with seismic ground shaking at the Project site. Therefore, impacts regarding seismic ground shaking would be less than significant; however, further analysis of this issue is warranted in the EIR.

iii. The Project site is expected to experience earthquake activity that is typical of the Southern California area. Liquefaction can occur during a seismic event when sediments temporarily lose their shear strength during strong ground shaking. This phenomenon is a function of the sediment density, water content, depth, and the peak ground acceleration, and is generally limited to unconsolidated, clean to silty sand lying below the ground water table. Due to the anticipated depth to groundwater (approximately 380 feet) and the characteristics of the soils on-site, potential for liquefaction at this site is considered to be low. Furthermore, the Project design and construction would incorporate requirements of the California Building Code that would address potential seismic-related effects such as liquefaction, settlement, and lateral spreading, and soil characteristics. Adherence to all applicable regulations would mitigate any potential impacts to structures resulting from liquefaction. Therefore, impacts related to seismic related ground failure are considered less than significant; however, further analysis of this issue is warranted in the EIR.

iv. The Project site is relatively level within the relatively flat-lying plain of the valley floor, an area where landslides would not be expected to occur. Therefore, no impacts related to landslides are anticipated to occur or pose a hazard for the project or surrounding area. Further analysis of this issue is not warranted in the EIR.

b) Grading and limited site contouring are proposed for the Project and would include the use of equipment such as graders, scrapers, tractors, backhoes, dump trucks, end loaders, support pickups, and water trucks. Erosion control plans would be required to be submitted, approved and implemented. Measures to reduce and control erosion of soil during construction and long-term operation are required by MDAQMD through its Rule 403 for control of fugitive dust, the Colorado River Basin Regional Water Quality Control Board (RWQCB) under its administration of the State's General Construction Permit, and the County of San Bernardino Public Works Department through its Storm Water Management Program. Implementation of requirements under MDAQMD Rule 403 for control of fugitive dust would reduce or eliminate the potential for soil erosion due to wind. Implementation of Best Management Practices (BMPs) that would be included in the applicant's Storm Water Pollution Prevention Plan (SWPPP) would be adapted to site conditions and employed to avoid soil erosion and off-site impacts during construction. Although impacts are considered less than significant with implementation of the above requirements, analysis of potential impacts will be included in the EIR.

c) Mapped soil types—primarily well-drained alluvial soils—appear to be conducive to the development of the Project. The proposed Project design and construction methods, including use of embedded pier foundations and re-compaction of surface soils where needed, would stabilize project components, thereby reducing potential impacts of the mapped soils to a less than significant level. As mentioned above, construction of the project would be in accordance with all applicable CBC construction standards, including those related to soil characteristics.

Potential liquefaction (and related settlement and lateral spreading effects) and landslide impacts are discussed above in Sections VI.a.iii and VI.a.iv, respectively. Based on the described site conditions and adherence to all applicable construction regulations, impacts associated with lateral spreading, subsidence, liquefaction, or collapse are considered less than significant. As discussed above, the site is in a relatively flat-lying plain where landslides are not expected to occur. Therefore, impacts related to landslides are not anticipated to occur or pose a hazard for the Project or surrounding area, and further analysis of this issue is not warranted in the EIR. Also, as discussed above, the potential for liquefaction at the Project site is considered low. Although impacts related to liquefaction are anticipated to be less than significant, further analysis of this issue will be included in the EIR. Collapsible soils are those that undergo settlement upon wetting, even without the application of additional load. The process of collapse with the addition of water is known as hydrocompaction. Hydrocompaction occurs when water weakens or destroys the bonds between soil particles and severely reduces the bearing capacity of the soil.

Typical collapsible soils are lightly colored and low in plasticity. They also have relatively low densities. Collapsible soils are typically associated with alluvial fans, windblown materials, or colluvium. Because the site is located on alluvium, there is some potential for collapsible soils. However, the Project would be designed to comply with applicable building codes and structural improvement requirements to withstand the effects of collapsible soils. Although impacts related to collapsible soils are anticipated to be less than significant, further analysis of this issue is warranted in the EIR. The extraction of water from sedimentary source rocks can cause the pore space to collapse. The compaction of subsurface sediments as a result of fluid withdrawal can cause subsidence on the surface. This potential impact, while considered less than significant due to the relatively small amount of water that would be required by the Project, will be further evaluated in the EIR because the Project may use water from an on-site well.

d) Expansive soils generally result from specific clay minerals that expand when saturated and shrink in volume when dry. Project site soils are well-drained to excessively well-drained and are not considered expansive soils. Therefore, impacts resulting from expansion of soils at the site would be less than significant and no further analysis is warranted.

e) The Project is an unmanned facility. No septic or other wastewater disposal systems would be utilized as part of the Project. No further analysis is warranted.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
VII	**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 any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

SUBSTANTIATION:

a) The Project's construction activities associated with heavy equipment operation, truck deliveries, and construction worker commute trips would temporarily generate greenhouse gases (GHGs). The principal GHGs are CO_2, CH_4, NO_x, ozone, water vapor, and fluorinated gases. However, operation of the Project is intended to offset greenhouse gas emissions generated by traditional sources of electricity. Impacts from greenhouse gas emissions would be less than significant; however, potential impacts will be further evaluated in the EIR.

b) The EIR will evaluate the Project's compliance with the County's Greenhouse Gas Emissions Reduction Plan, adopted on 6 December 2011 and effective 6 January 2012 (GHG Plan). The GHG Plan establishes a GHG emissions reduction target for the year 2020 that is 15 percent below 2007 emissions. The GHG Plan is consistent with AB 32 and sets the County on a path to achieve more substantial long-term reduction in the post-2020 period. Implementation of the County's GHG Plan is achieved through the Development Review Process by applying appropriate reduction requirements to projects, which reduce GHG emissions. All new development is required to quantify the project's GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance. A review standard of 3,000 metric tons (MT) of CO2e per year is used to identify and mitigate project emissions. For projects exceeding 3,000 MT CO2e per year of GHG emissions, the developer may use the GHG Plan Screening Tables as a tool to assist with calculating GHG reduction measures and the determination of a significance finding. According to the GHG Plan, small projects that do not exceed 3,000 MTCO2e per year are considered to be consistent with the GHG Plan and have a less than significant individual and cumulative impact for GHG emissions. The Project's GHG impacts would be less than significant; however, potential impacts will be further evaluated in the EIR.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
VIII.	**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 for people residing or working in the project area?	☐	☐	☒	☐
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

SUBSTANTIATION:

a) The Project is not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during construction, operation, and decommissioning. The Project would not involve the routine transport, use, or disposal of hazardous materials as defined by the Hazardous

Materials Transportation Uniform Safety Act. Construction would involve minimal, short-term use of hazardous substances such as fuels, lubricants, adhesives, solvents, paints, drilling muds, and asphalt waste. However, the quantities and concentrations of these hazardous substances are not expected to reach regulated levels, and substances that are listed as extremely hazardous are not anticipated to be used, produced, stored, or disposed of for the proposed Project.

The potential risk associated with the accidental discharge during use and storage of such construction-related hazardous materials is considered low because the handling of any such materials would be addressed through the implementation of Best Management Practices (BMPs) pursuant to the National Pollutant Discharge Elimination System (NPDES) General Construction Permit. The Client would store and handle all hazardous materials in the manner specified by the manufacturer and in accordance with local, state, and federal regulations. All employees would receive training in the proper use, storage, and handling of hazardous materials; equipment and materials storage would be routinely inspected for leaks and records maintained documenting compliance with regulations for the storage and handling of hazardous materials, as required by the BMP plan. Impacts from the transport, use, or disposal of hazardous materials during the construction of the Project will be evaluated further in the EIR.

Operation of the Project would not require the routine transport of hazardous material to or from the Project site. The PV solar panels would primarily consist of materials that are not hazardous. However, PV panels may include small amounts of solid materials that are considered to be hazardous. Because such materials are in a solid and non-leachable state, broken PV panels would not have the potential to release hazardous materials into the environment and would not be a source of pollution to surface, storm or groundwater. On occasion, maintenance activities may require the use of certain chemicals such as solvents, cleaners, or paints; however, these chemicals would be used in limited quantities and are not considered to be acutely hazardous. Impacts from hazardous materials used during the operation of the Project would be less than significant but nevertheless, will be evaluated further in the EIR.

b) See discussion of Item a), above. With adherence to all applicable local, state, and federal laws pertaining to the use and storage of hazardous materials and the use of safety protocols on-site, potential impacts from upset and accident conditions involving the release of hazardous would be considered less than significant. Nevertheless, this impact will be analyzed further in the EIR.

c) There are no existing or proposed schools within one-quarter mile of the Project site. No further analysis is required.

d) The Project site is not located on a known site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment in this regard. No further analysis is required.

e) The Project site is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest public use airport, Big Bear City Airport (L35) is located approximately ten miles to the south in Big Bear City, California. The project is located within the County's Airport (AR-4) Overlay. AR-4 includes the low-altitude/high speed corridors designated for military aircraft use. Military training routes VR-1214, -1215, -1217 and -1218 occur in this area and pilots can fly as low as 100 feet above ground level (AGL) along VR-1214, -1215, -1217 and 200 feet along VR-1218. San Bernardino Development code 82.09.060 (b) states that "Proposed structures and the normal mature height of any vegetation shall not exceed the height limitations established in Federal Aviation Regulations (FAR) Part 77, unless Form 7460-1 (Notice of Proposed Construction or Alteration) has been filed with and approved by the FAA before the issuance of a Building Permit." The Project would not involve construction or operational equipment that would be tall enough to affect military flights, and impacts would be considered less than significant. However, further analysis in the EIR is warranted due to the potential glare effects associated with some solar projects on aircraft pilots.

f) The Project site is not located within the vicinity of a private airstrip; therefore, the Project would not result in a safety hazard for people residing or working in the Project area. The nearest private airstrip is the Rabbit Ranch Airport located approximately 10 miles to the northwest. No further analysis is required.

g) The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan because the project is located along Camp Rock Road with adequate access from two or more directions via State Highway 18 to the south and State Highway 247 (Old Woman Springs Road) to the north, both of which San Bernardino County has designated as emergency evacuation routes. Impacts associated with impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan are considered less than significant, but will be evaluated further in the EIR.

h) Any development, along with the associated human activity, in previously undeveloped areas increases the potential of the occurrence of wildfires in the region. The Project site is located within an area categorized as Fire Safety Area 2, which has gentle to moderate sloping terrain with light to moderate fuel loading. Although Fire Safety Area 2 is not within an area considered to have high fire hazard conditions, this zone occurs just to the north and east of Fire Safety Area 1, which consists of areas with moderate and steep terrain and moderate to heavy fuel loading contributing to high fire hazard conditions. In order to reduce the risk of fire, the Applicant would comply with all applicable development standards for Fire Safety Area 2 described in Section 82.13.060 of the San Bernardino County Development Code, including but not limited to two points of vehicular ingress and egress designed to County road standards, fencing constructed of noncombustible materials, access to adequate water supplies, fuel modification areas, setback requirements, and erosion and sediment control. Comprehensive safety measures that comply with federal, state, and local worker safety and fire protection codes and regulations would be implemented for the Project and the 310-acre Project site consists of would minimize the occurrences of fire due to on-site activities during construction and for the life of the Project. Less than significant impacts are anticipated, but further evaluation in the EIR is warranted.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
IX.	**HYDROLOGY AND WATER QUALITY -** Would the project:				
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite?	☒	☐	☐	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	☒	☐	☐	☐
e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☒	☐
g)	Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structure which would impede or redirect flood flows?	☐	☐	☐	☒
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

SUBSTANTIATION:

a) Construction activities have the potential to result in erosion, sedimentation, and the discharge of construction debris from the Project site. The applicant would obtain a NPDES General Construction Permit because the Project would disturb more than one acre of soil. In order to conform to the requirements of the NPDES Construction General Permit, a SWPPP would be prepared that specifies BMPs to prevent construction pollutants, including eroded soils, from causing a violation of any water quality standards. Impacts are considered less than significant for construction related impacts.

Construction of the Project would result in minimal development of impervious areas. Impervious surfaces at the Project site would be limited to pier supports for module racking/tracking systems, concrete transformer and inverter pads, inverters, transformers, communications shed, operations and maintenance shed, and fencing around the entire site. The applicant would identify post-construction treatment, control, and design measures that minimize surface water pollution to be approved by the County to ensure that operational surface water quality meets applicable water quality standards. The PV panels would not introduce pollutants into stormwater. Transformers, which would contain insulating mineral oil, could present a potential for introducing pollutants to stormwater. In order to eliminate such a potential, each transformer would be provided with secondary equipment.

It is anticipated that appropriate BMPs and compliance with applicable regulations would reduce potential water quality impacts to a less than significant level. Nevertheless, this impact will be discussed further in the EIR.

b) During construction, potable water would be brought to the site for drinking and domestic needs, while construction water would be trucked to the site for dust suppression and auxiliary activities. There are two on-site wells currently on the property. These wells are being evaluated for their design and capacity to meet operational water demands.

It is anticipated that approximately 50 acre-feet (af) of water would be required during the construction phase of the Project and approximately 2 af per year would be necessary for operational use, which would be trucked to the site by a local purveyor or provided by the on-site well if determined to have capacity to meet the demands required. The maximum volume of water needed for panel washing (2 afy) is approximately 0.03 percent of the Production Safe Yield (PSY) of the area and the maximum volume of water needed for construction (50 af) is approximately 0.7 percent of the PSY. The PSY in each subarea of the Mojave Groundwater Basin is assumed to equal the average net natural water supply plus the expected return flow from the previous year's water production. Several water companies that deliver water supplies to homes and businesses throughout the Este Subarea, in which the Project site is located, are currently pumping less than 50 percent of their allowed volume of water each year as established by the Watermaster for the Mojave Basin Area. Therefore, water used for construction and operation of the Project is not expected to substantially deplete groundwater supplies. The Project would not interfere substantially with water percolation and groundwater recharge since there are no paved roads, parking, or buildings proposed. Although anticipated water use would be minimal both during construction and operation, impacts to groundwater and water supply will be evaluated in the EIR.

c) The Project site is generally flat and contains soils that typically provide for a rapid rate of groundwater percolation. The panels would not require the construction of concrete pads for each array (the posts would be pile driven into the ground). Minimal impervious surfaces would be required for construction of concrete transformer pads, inverters, and fencing around the entire site. However, several washes that traverse the Project site could be affected; impacts would be potentially significant and evaluation of impacts to drainage patterns of the site, as well as the potential for increased erosion and/or siltation, will be evaluated in the EIR.

d) The Project does not include impacts to streams or rivers during construction and operation, although several desert washes that traverse the Project site could be affected. The preliminary drainage plan for the Project includes a conceptual drainage plan that would maintain the primary washes across the site. One and two foot deep detention basins would be constructed and local runoff routed to the detention basins. The Project would result in a negligible effect to the current runoff rates, offsite drainage patterns, or quantity of runoff.

Furthermore, potential erosion/sedimentation and hazardous materials impacts would be avoided or reduced to a level of less than significant through conformance with applicable elements of the NPDES Municipal Stormwater General Construction Permit. As part of the permit requirements, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared for the Project. The evaluation of potentially significant impacts to drainage patterns of the Project site will be evaluated in the EIR.

e) The Project is expected to result in a negligible increase in runoff compared to existing conditions and thus would not create or contribute runoff water which would provide substantial additional sources of polluted runoff. There are no existing or planned stormwater drainage systems in the area. The design of the solar arrays is such that stormwater would flow off the panels to the pervious ground surface and infiltration would occur similar to existing conditions. The two washes on-site would be preserved and there are no constructed drainage features in the vicinity of the site. In order to reduce impact to areas downstream of the Project site, 1 foot and 2 foot deep detention basins would be constructed and local runoff routed to the basins. Impacts are anticipated to be less than significant. Nevertheless, impacts will be discussed further in the EIR.

f) Construction activities (such as grading) could potentially degrade water quality through erosion and subsequent sedimentation of streams. Additionally, accidental release of materials such as engine oil, diesel fuel, and cement slurry could degrade the water quality of nearby streams. Implementation of a Spill Prevention, Containment and Countermeasure Plan would include BMPs for construction activities which would be designed to reduce the impact of project activities on surrounding water quality. Therefore, construction and operation of the Project is not expected to substantially degrade water quality. Nevertheless, this impact will be discussed further in the EIR.

g) The Project does not include housing, nor would the project alter surface conditions such that existing housing would be placed within a new flood zone. Therefore, no housing-related impacts would occur. No further analysis is warranted.

h) The Project would not place within a 100-year flood hazard area structures which would impede or redirect flood flows, because the site is not located within a 100-year flood hazard area. No further analysis is warranted.

i) The project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, because the Project site is not within any identified path of a potential inundation flow that might result in the event of a dam or levee failure or that might occur from a river, stream, lake or sheet flow situation. No further analysis is warranted.

j) The Project would not be impacted by inundation by seiche, tsunami, or mudflow, because the project is not adjacent to any body of water that has the potential of seiche or tsunami nor is the project site in the path of any potential mudflow. No further analysis is warranted.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
X.	**LAND USE AND PLANNING** - Would the project:				
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒	☐

SUBSTANTIATION:

a) The Project would not physically divide an established community, because there are no established residential communities directly adjacent to the Project site. The nearest residential area is located approximately ½ mile to the west. The closest habitable structure is located more than 600 feet to the north of the Project boundary. The Project site is located in an unincorporated part of the County that has sparse residential development in the immediate area. The Project site is primarily bordered by undeveloped land. An existing solar electricity generating facility is located directly to the west of the Project site across Camp Rock Road. Therefore, the Project would not divide an established community. No impact is expected and further analysis is not warranted.

b) The Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. The current General Plan land use designation for the proposed Project area is Lucerne Valley/Agriculture (LV/AG), which allows development of electrical power generation facilities with a Conditional Use Permit (CUP). The Project would be required to comply with all CUP conditions of approval. Impacts are anticipated to be less than significant however consistency with applicable land use plans will be analyzed further in the EIR.

c) The Project site is within the boundaries of the West Mojave Plan (BLM, 2005). The West Mojave Plan is a federal land use plan amendment to the Bureau of Land Management's California Desert Conservation Area (CDCA) Plan that presents a comprehensive strategy to conserve and protect sensitive plants and animals and the natural communities of which they are a part. The West Mojave Plan is applicable only to BLM-administered public lands within the West Mojave Plan area. The Project site is within the planning area of the Desert Renewable Energy Conservation Plan (DRECP); however, this Habitat Conservation Plan and Natural Community Conservation Plan is still in development and has not been adopted. The Project would not conflict with the provisions of an adopted habitat conservation plan or natural community conservation plan and impacts are considered less than significant; however, this will be further evaluated in the EIR.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XI.	**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?	☐	☐	☐	☒

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

a) The Project would not 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, because there are no identified important mineral resources on the Project site. The Project site is not within a Mineral Resource Zone established by the State Department of Conservation, or within the County General Plan Mineral Resource Zone Overlay. No further analysis is warranted.

b) The Project would not 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, because there are no identified important mineral resources on the Project site and the site is not within a Mineral Resource Zone established by the State Department of Conservation, or within the County General Plan Mineral Resource Zone Overlay. No further analysis is warranted.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XII. NOISE - Would the Project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

SUBSTANTIATION: *(Check if the project is located in the Noise Hazard Overlay District ☐ or is subject to severe noise levels according to the General Plan Noise Element ☐):*

a) With the exception of a few scattered residences, the Project is adjacent to undeveloped and vacant land. Construction of the Project would create short-term construction noise impacts that could impact existing residents in the area; however these activities would be limited to day time hours and would comply with the noise and vibration standards of the San Bernardino County Development Code. Construction noise and vibration is exempt from 7:00 A.M. to 7:00 P.M. Monday through Saturday (Development Code Chapter 83.01.080 and 83.01.090.). Blasting of shallow bedrock during construction may be required. The local noise ordinance does not specify a maximum dBA for construction noise sources during the time period indicated above; therefore noise from required targeted shallow trench blasting of bedrock would be considered less than significant. Operation of the Project would not generate noise in the surrounding area that is anticipated to be significant. During operations, some noise is produced by the inverter/transformers. This typically is around 60 to 70 dBA at 50 feet, depending on the design and vendor for the equipment. For residential land uses, the exterior standard is 55 dBA during the daytime hours of 7:00 A.M. and 10:00 P.M. and 45 dBA during the nighttime hours of 10:00 P.M. to 7:00 A.M, according to the San Bernardino County Development Code (Chapter 83.01.080, Noise). At the location of the nearest residence, approximately 625 feet north of the Project site boundary, the noise from the inverters/transformers would be reduced to levels less than the exterior standard for both daytime and nighttime. The Project does not include the inverters operating at nighttime. Approximately20 vehicle trips per year generated by maintenance and security after construction are estimated for the Project. Additionally,

approximately 40 worker vehicle trips per year and approximately 59 water truck trips per year are estimated for the Project for panel washing activities. Although impacts from noise levels in excess of the County's General Plan are anticipated to be less than significant, noise impacts to nearby land uses will be further analyzed in the EIR.

b) Construction of the Project would generate short-term construction vibration impacts that could impact existing residents in the area; however these activities would be limited to day time hours and would comply with the noise and vibration standards of the San Bernardino Development Code. Construction noise and vibration is exempt from 7:00 A.M. to 7:00 P.M. Monday through Saturday (County of San Bernardino, CA, County Development Code Chapter 83.01.080 and 83.01.090.). Some blasting of shallow bedrock may be needed. The local noise ordinance does not specify a maximum dBA for construction noise sources during working times indicated above; therefore noise and vibration from required targeted shallow trench blasting of bedrock would be considered less than significant. Operation of the Project would not generate perceptible levels of vibration in the surrounding area. There would be no permanent substantial change in vibration levels. No vibration is expected as a result of operations except occasional unscheduled maintenance activities. Although Project impacts from vibration levels in excess of the County's General Plan are anticipated to be less than significant, this impact will be further analyzed in the EIR.

c) During operation, inverters and transformers would generate noise. Noise from these project components typically attenuates quickly. The Project would be conditioned to comply with the noise standards of the County Development Code and no noise exceeding these standards is anticipated to be generated. Although operational noise impacts are anticipated to be less than significant, this will be further analyzed in the EIR.

d) The Project would not generate a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing or allowed without the Project because construction equipment would not operate during evening hours and construction noise and vibration is exempt from noise/vibration standards from 7:00 a.m. to 7:00 p.m. Monday-Saturday. Additionally, and the Project would be conditioned to comply with the noise standards of the County Development Code. Although impacts from construction and operational noise are anticipated to be less than significant, this will be further analyzed in the EIR.

e) The Project site is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest public airport, Big Bear City Airport, is located approximately 10 miles south of the site. Further analysis is not warranted.

f) The Project site is not located within the vicinity of a private airstrip. The nearest private airstrip, Rabbit Ranch Airport, is located approximately 10 miles northeast of the site. Further analysis is not warranted.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XIII.	**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 housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

SUBSTANTIATION:

a) Although the Project would provide new employment consistent with adopted San Bernardino County General Plan goals, plans, and policies, long-term employment opportunities would be minimal. The proposed 7-month construction schedule would require an estimated 200 workers at its peak. Construction workers will likely be from various locations throughout Southern California. The number of workers expected to relocate to the surrounding area is not expected to be substantial because of the limited 7-month schedule. Operation of the Project would not require permanent full-time staff. Therefore, the Project would not directly or indirectly induce the development of any new housing or businesses. Typical established local thresholds of significance for housing and population growth pursuant to the CEQA Guidelines, Section 15064.7, include effects that would induce substantial growth or concentration of a population beyond County projections; alter the location, distribution, density, or growth rate of the population beyond that projected in the San Bernardino County General Plan Housing Element; result in a substantial increase in demand for additional housing; or create a development that significantly reduces the ability of the County to meet housing objectives set forth in the Housing Element. The potential impacts of the Project in relation to these local thresholds are minimal. Although the Project would produce additional electricity, it is intended to meet a portion of the demand for energy that is already projected based on growth projections for communities throughout California. As such, the generation of electricity by the Project would be considered growth accommodating, rather than growth inducing. The Project's electricity would replace electricity generated by fossil fuels, thereby contributing to California's renewable energy goals. The production of additional electricity by the Project would not be growth-inducing and no further analysis is warranted.

b) The Project is located in a sparsely developed area of the Community of Lucerne Valley. There are no residences located at the Project site that could be displaced. Implementation of the Project would not displace existing housing or require construction of replacement housing. Therefore, no potential impact is identified for this issue area and no further analysis is warranted.

c) The Project is located in a sparsely developed area of the Community of Lucerne Valley. There are no residences located at the Project site. Implementation of the Project would not displace substantial numbers of people or require construction of replacement housing. Therefore, no impact is identified for this issue area and no further analysis is warranted.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XIV. PUBLIC SERVICES				
a) Would 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:				
Fire Protection?	☐	☐	☒	☐
Police Protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other Public Facilities?	☐	☐	☐	☒

a) The Project is not expected to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, any 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, including fire and police protection, schools, parks or other public facilities.

Fire Protection - The Project is not expected to result in the need for additional fire protection services that would require construction of new facilities. As described in the San Bernardino County Development Code Solar Energy Development Standards (Chapter 84.29.040), the developer of an approved commercial solar energy generation facility is required to pay an annual public safety services impact fee to ensure that a Project will not affect fire and police service ratios, response times, etc. According to the Lucerne Valley Community Plan, the Project site is located in the Lucerne Valley Fire Protection District. The San Bernardino County Fire Department provides administration and support for this district. The district has two fire stations, County Fire Station #7, located approximately two miles to the north of the Project site and County Fire Station #8, located approximately five miles to the northwest of the Project site. The California Department of Forestry and Fire Protection (CDF) also has a fire station located within the district and provides seasonal fire protection services. Any development in previously undeveloped areas increases human presence and the potential for fire. The fire threat is considered moderate at the Project site, while the foothills three miles south of the project site are considered very high. Comprehensive safety measures that comply with federal, state, and local worker safety and fire protection codes and regulation would be implemented for the Project. Although impacts are anticipated to be less than significant, this will be further analyzed in the EIR.

Police Protection – The Project is not expected to result in the need for additional police protection services that would require construction of new facilities. As described in the San Bernardino County Development Code Solar Energy Development Standards (Chapter 84.29.040), the developer of an approved commercial solar energy generation facility is required to pay an annual public safety services impact fee, which would ensure that the Project would not affect fire and police service ratios, response times, etc. The Project site is within the area served by the San Bernardino County Sheriff's Department. The Lucerne Valley Substation is located approximately 6 miles to the northwest of the Project site. The substation has one sergeant, one detective

and six deputies. The Lucerne Valley Substation is supported by the Victor Valley Station located 33 miles northwest of the Project site. Due to the large expanse that the substation covers, deputies are regularly assisted by California Highway Patrol, Big Bear Lake, Hesperia, Victorville and the Town of Apple Valley police, and BLM Rangers. The Project would not impact service ratios, response times, or other performance objectives related to police protection. During construction, some public services including police protection may be required but these would be short-term and would not result in a need for new facilities or an increase in the level of service offered or effect these agencies' response times. The Project would include a seven-foot high chain link security fence installed along the property perimeter. Lighting would be designed to provide the minimum illumination needed to achieve the Project's security objectives. Although impacts are anticipated to be less than significant, this will be further analyzed in the EIR.

Schools – The Project does not include the development of residential land uses that would result in an increase in population or student generation. Construction of the Project would not result in an increase in local student populations since it is anticipated that construction workers would commute to the Project site during construction. Operation of the Project would not require full-time staff and only minimal part-time staff (for security, maintenance, etc.) No further analysis is warranted.

Parks and Other Public Facilities – Operation of the Project would not require full-time staff and only minimal part-time staff (for security, maintenance, etc.), as the Project could be operated and monitored remotely. Therefore, substantial permanent increases in population that would adversely affect local parks, libraries and other public facilities (such as post offices) are not expected. The Project is not expected to have an impact on public services such as post offices, libraries, parks. Therefore, no further analysis of these issue areas is warranted.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XV. 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?	☐	☐	☐	☒

SUBSTANTIATION:

a) The Project would not 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 because the Project would be unmanned and does not include construction of any new residential units or infrastructure extensions that would induce population growth. No further analysis is warranted.

b) The Project would be unmanned and does not include recreational facilities or require the construction or expansion of recreational facilities. No further analysis is warranted.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XVI.	**TRANSPORTATION/TRAFFIC -** Would the project:				
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and greenways, pedestrian and bicycle paths, and mass transit.	☐	☐	☒	☐
b)	Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.	☐	☐	☒	☐
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒	☐
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐
e)	Result in inadequate emergency access?	☐	☐	☒	☐
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

SUBSTANTIATION:

a) The Project is an unmanned facility that would be visited periodically by part-time employees or contractors for maintenance, panel washing and security. Approximately 20 vehicle trips per year generated by maintenance and security after construction are estimated for the Project. Additionally, approximately 40 worker vehicle trips per year and approximately 59 water truck trips per year are estimated for the Project for panel washing activities. The low volume of operational traffic would not create significant traffic impacts to the surrounding roadway circulation system per the thresholds of significance specified by the San Bernardino Associated Government's Congestion Management Plan (CMP). The CMP states "If a project is forecast to generate 100 to 250 peak hour trips and expects to add at least 50 peak hour trips to a State highway facility, the jurisdiction should consult with Caltrans to determine the need for a Traffic Impact Assessment [TIA] report."(Pp. 4.5, 2007).

Approximately 200 construction workers are expected to travel to the site during peak construction months. Typically, on-site work hours would be 7 AM to 3:30 PM. Under this scenario, most workers (e.g., 95%) would arrive before the 7-9 AM peak hours and leave before the 4-6 PM peak hours. If 10-hour days are scheduled, workers would still arrive before 7 AM but all would leave at approximately 5:30 PM. This could

temporarily generate up to 200 trips in the PM peak hour during construction. Traffic conditions on roadway segments and intersections of SR-18 between SR-247 to the north and Marble Canyon Road to the south are anticipated to be a level of service B until 2030, per the County's Lucerne Valley Community Plan (Pp. 31, 2007). A LOS of C or better is required by the County General Plan. The unmanned solar facility would not result in operational traffic that would reduce LOS. In addition, the Project is not expected to exceed any applicable level of service, either individually or cumulatively, based on the short-term construction timetable. Impacts are considered less than significant however; impacts to the local circulation system will be further analyzed in the EIR.

b) See discussion of Item a) above. This will be further analyzed in the EIR.

c) The Project would not affect air traffic patterns. Operation of the Project is not dependent upon air transport related material, labor force, or service and would not result in an increase to air traffic levels. Therefore, no change in air traffic patterns, volume and safety are anticipated. Further analysis is not warranted.

d) The Project would not introduce design features, such as sharp curves or dangerous intersections within the vicinity of the Project site. The Project site is adjacent to an established road that is accessed at points with good site distances. There are no incompatible uses proposed by the Project that would impact surrounding land uses. Impacts are considered less than significant and no further analysis is warranted.

e) The Project would not result in inadequate emergency access. The unmanned facility would be accessed from Camp Rock Road via SR-18 to the south and SR-247 to the north. Both Camp SR-18 and SR-247 are designated as emergency evacuation routes by both San Bernardino County and the community of Lucerne Valley. The primary facility access point is from Camp Rock Road, in the southwestern corner of the Project site. A secondary access point is from Sherwood Road, just north of Woodland Street. Further analysis is not warranted.

f) No alternative transportation plans or programs have been designated for the area that includes the Project site. The Lucerne Valley Community Plan includes a goal and policies for inclusion of alternative transportation with road widening and other improvements (San Bernardino County 2007). The Project would not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) and/or decrease the performance of facilities as no offsite improvements are proposed, construction travel would be temporary, and operations travel would be minimal. Further analysis is not warranted.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XVII.	**UTILITIES AND SERVICE SYSTEMS - Would** the Project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded, entitlements needed?	☒	☐	☐	☐
e)	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?	☐	☐	☐	☒
f)	Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

SUBSTANTIATION:

a) The Project does not involve construction of facilities that would generate wastewater; therefore it would not exceed applicable wastewater treatment requirements. Portable toilets would be provided on-site during construction, as well as during operation. Septic waste would therefore be trucked off-site for disposal at a licensed or government wastewater treatment facility. The Project would use uncontaminated water to clean the solar panels. The Project's water discharge would not exceed any wastewater treatment requirements of the Colorado River Regional Water Quality Control Board (RWQCB). Further analysis is not warranted.

b) The Project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. Approximately 50 acre-feet of water would be used during construction for dust suppression and ancillary construction activities. Operational panel washing would require approximately 2 acre-feet of water per year. Water demands for the Project would be met by purchasing water to be trucked to the site, or by an existing on-site well. Portable toilets would be provided during construction, as well as during operation. Septic waste would therefore be trucked off-site for disposal at a licensed or government wastewater treatment facility. Based on the projected amount of water demand and septic waste generated during construction and operations, the Project would not require construction of new water or wastewater treatment facilities or expansion of existing facilities. No further analysis is required.

c) The Project is not expected to require the construction or expansion of storm water drainage facilities. Most (89 percent) of the Project site would remain pervious and existing soils are predominantly well drained. Minor washes on- site would be filled and their stormwater flows re-directed to other existing washes on-site via perimeter swales. The Project is expected to result in only a negligible effect to the existing runoff rates, offsite drainage patterns, or quantity of runoff. Furthermore, potential erosion/sedimentation and hazardous materials impacts would be avoided or reduced below a level of significance through conformance with applicable elements of the NPDES Municipal Stormwater General Construction Permit. As part of the permit requirements, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared for the project. Impacts are anticipated to be less than significant; however, this topic will be evaluated further in the EIR.

d) Construction and operational water demands of the Project would be trucked from an off-site source and/or pumped from an existing on- -site well. An estimate of approximately 50 acre-feet of water would be required during construction for dust suppression. The Project's operational water demand is estimated at 2 acre-feet per year for panel washing. The unmanned facility would not require connection to any off-site water system. Water supply impacts are potentially significant and further analysis in the EIR is warranted.

e) The Project would not require or result in the construction of new wastewater treatment facilities or the expansion of existing wastewater treatment facilities. There is no wastewater treatment provider in the area; the Lucerne Valley community has been developed with septic tanks and leachfield systems. A local portable toilet contractor would meet the wastewater needs of workers during construction. Further analysis is not warranted.

f) Less than significant impacts related to landfill capacity are anticipated from the Project. The Project is an unmanned solar electricity generating facility generating no process waste and only small amounts of solid waste requiring disposal. Solid waste generated during short-term construction activities would include minor quantities of construction debris. Solid wastes associated with the Project would be disposed of as appropriate in one of two regional landfills or at a recycling facility.

The Project site area is served by the two regional Class III landfills. The Landers Sanitary Landfill (Class III) is located approximately 31 miles southeast of the Project site. The County of San Bernardino is currently processing a Solid Waste Facilities Permit Revision to increase the Landers landfill capacity by approximately 10.9 million cubic yards (cy), which would allow disposal at the landfill to continue until approximately 2072. The Victorville Sanitary Landfill is located approximately 25 miles northwest of the Project site and has a remaining capacity of 81.5 million cy These landfills would be capable of accommodating the Project's solid waste disposal needs.

The panels and tracking system may eventually need to be decommissioned or recycled. Most parts of the proposed PV system are recyclable. Panels typically consist of silicon, glass, and an aluminum frame. Tracking systems (not counting the motors and control systems) typically consist of steel and concrete. All of these materials can be recycled. Demolished concrete shall be recycled through local recyclers. Metal and scrap equipment and parts that do not have free flowing oil would be sent for salvage. Equipment containing any free flowing oil shall be managed as hazardous waste and shall be evaluated before disposal at a properly permitted disposal facility. Oil and lubricants removed from equipment shall be managed as used oil and disposed in accordance with applicable State hazardous waste disposal requirements. Impacts are anticipated to be less than significant; however, this topic will be evaluated further in the EIR.

g) The Project would comply with all federal, state, and local statutes and regulation related to solid waste. Accordingly, no significant impacts related to landfill capacity are anticipated from the Project. No further analysis is required.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XVIII.	**MANDATORY FINDINGS OF SIGNIFICANCE:**				
a)	Does the project have the potential to 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, 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 shall cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

SUBSTANTIATION:

a) The Project has the potential to 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, 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. The County, as Lead Agency has determined the need for preparation of an Environmental Impact Report. The EIR's biological resources section will discuss direct impacts on plants and wildlife. The document will also evaluate the Project's contribution to cumulative biological resources impacts and include mitigation measures intended to reduce the impacts to less than significant levels where feasible. The EIR's cultural resources section will discuss whether significant impacts would occur to historic or pre-historic resources.

b) The Project has the potential to contribute to cumulative impacts to aesthetics, air quality, biological resources, hydrology, and traffic/transportation impacts. The EIR will evaluate the Project's contribution to cumulative impacts in these and other areas as further impacts are identified.

c) The potential for the Project to have environmental effects, which could cause substantial adverse effects on human beings, either directly or indirectly will be determined in the EIR.

PROJECT SPECIFIC STUDIES

Phase I Environmental Site Assessment, Atwell, LLC, October 3, 2014 – This report is available through the County of San Bernardino Land Use Services Department and will be included in the EIR.