

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 (Ord.3040) and State CEQA Guidelines (Section 15063).

PROJECT LABEL:

APN:	0433-014-54
APPLICANT:	Aikyum, Inc.
COMMUNITY:	Apple Valley / 1 st Supervisorial District
LOCATION:	Northwest corner of Deep Creek Rd & Hinton Rd
PROJECT NO:	P201100391/CUP
STAFF:	Tracy Creason
REP(S):	Harina Kapoor
PROPOSAL:	Conditional Use Permit to establish a 2 MW solar power generating facility on a 26-acre portion of 40 acres

USGS Quad: Apple Valley South

T, R, Section: T4N R3W Sec. 30 SW¼

Planning Area: Desert Region

Zoning: AG/FW

Overlays: Biological, Fire Safety, Flood Plain, Dam Inundation

PROJECT CONTACT INFORMATION:

Lead agency: County of San Bernardino
Land Use Services - Planning
15900 Smoke Tree St.
Hesperia, CA 92345

Contact person: TRACY CREASON, Senior Planner
Phone No: (760) 995-8140 **Fax No:** (760) 995-8167
E-mail: tcreason@lusd.sbcounty.gov

Project Sponsor: Aikyum, Inc. – Harina Kapoor
34 Cassidy
Irvine, CA 92620
(949) 275-1654
harinakapoor@gmail.com

PROJECT DESCRIPTION:

Aikyum, Inc. (applicant) proposes to develop and operate a utility scale 2 MW solar generating facility on a 26-acre portion of a 40-acre parcel of land. The proposed facility will include 246 dual-axis trackers supporting approximately 8200 crystalline photovoltaic (PV) modules, and a 480V transformer and switchgear pad. Electrical energy generated on the site would connect to the existing regional transmission system via an underground interconnection run to the existing power pole at the southeast corner of the property. The project site is in unincorporated San Bernardino County approximately ½ mile east of the City of Hesperia and approximately 2.4 miles southwest of the Town of Apple Valley on the northwest corner of Deep Creek and Hinton Roads. The project is in the First Supervisorial District, within the sphere of influence of the Town of Apple Valley. The Land Use Zoning designation for the site is AG (Agriculture) and FW (Floodway). The Biological Resource, Fire Safety (FS-2), Flood Plain (FP-1), and Dam Inundation overlays regulate the site.

ENVIRONMENTAL/EXISTING SITE CONDITIONS:

The site of the proposed project lies within the Mojave Desert region, within which mountain ranges, broad alluvial fans, terraces, and playas are characteristic. With elevations on-site ranging from 2915 to 2910 feet above mean sea level, the site slopes from the east to the west. The site contains no structures. Surrounding properties to the west and north are vacant. Scattered residential development exists to the east and south. The *Focused Survey for Desert Tortoise & Western Burrowing Owl, Habitat Assessment for Mohave Ground Squirrel, General Biological Resource Assessment, & Jurisdictional Delineation Report* prepared by Tom Dodson & Associates concludes that “MGS, DT, and BUOW are absent from the site....”

AREA	EXISTING LAND USE	ZONING/OVERLAY DISTRICTS
Site	Vacant	AG/FW – Agriculture/Floodway / Fire Safety, Flood Plain, Dam Inundation
North	Vacant	AG/FW – Agriculture/Floodway / Fire Safety, Flood Plain, Dam Inundation
South	Scattered Residential / Vacant	AG/FW – Agriculture/Floodway / Fire Safety, Flood Plain, Dam Inundation
East	Scattered Residential / Vacant	AG – Agriculture / Fire Safety, Dam Inundation
West	Vacant	FW – Floodway / Fire Safety, Flood Plain, Dam Inundation

PROJECT SUMMARY:

The proposed project is for the development of a 2 MW solar generation facility. The solar arrays will be on a dual-axis tracking system. The foundations are helical pier anchors driven into the soil using a pneumatic technique similar to hydraulic driving. The height of the panels will be approximately sixteen and a half feet, with an approximate two-foot ground clearance. The site design contains appropriate access roads for emergency vehicles. The project does not include the construction of any buildings.

The construction of the project through commencement of commercial operations will occur over approximately eight to ten weeks. Typically, there will be five to ten workers and a project manager on the site. Construction crews will be on site from 7:30AM to 5:00PM, Monday through Friday. Once construction is over, the solar plant will go online and monitoring will occur remotely. After construction, workers will perform maintenance on a regular basis, which will include the mowing of grasses and shrubs and PV panel and electrical upkeep. Workers will truck water in from off-site for this periodic maintenance. This Project is an unmanned installation, with only monthly accesses for maintenance.

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

Federal: U.S. Army Corps of Engineers, U.S. Fish and Wildlife

State of California: Fish and Game, Caltrans, Regional Water Quality Control Board (Lahontan Region), Mojave Desert Air Quality Management District

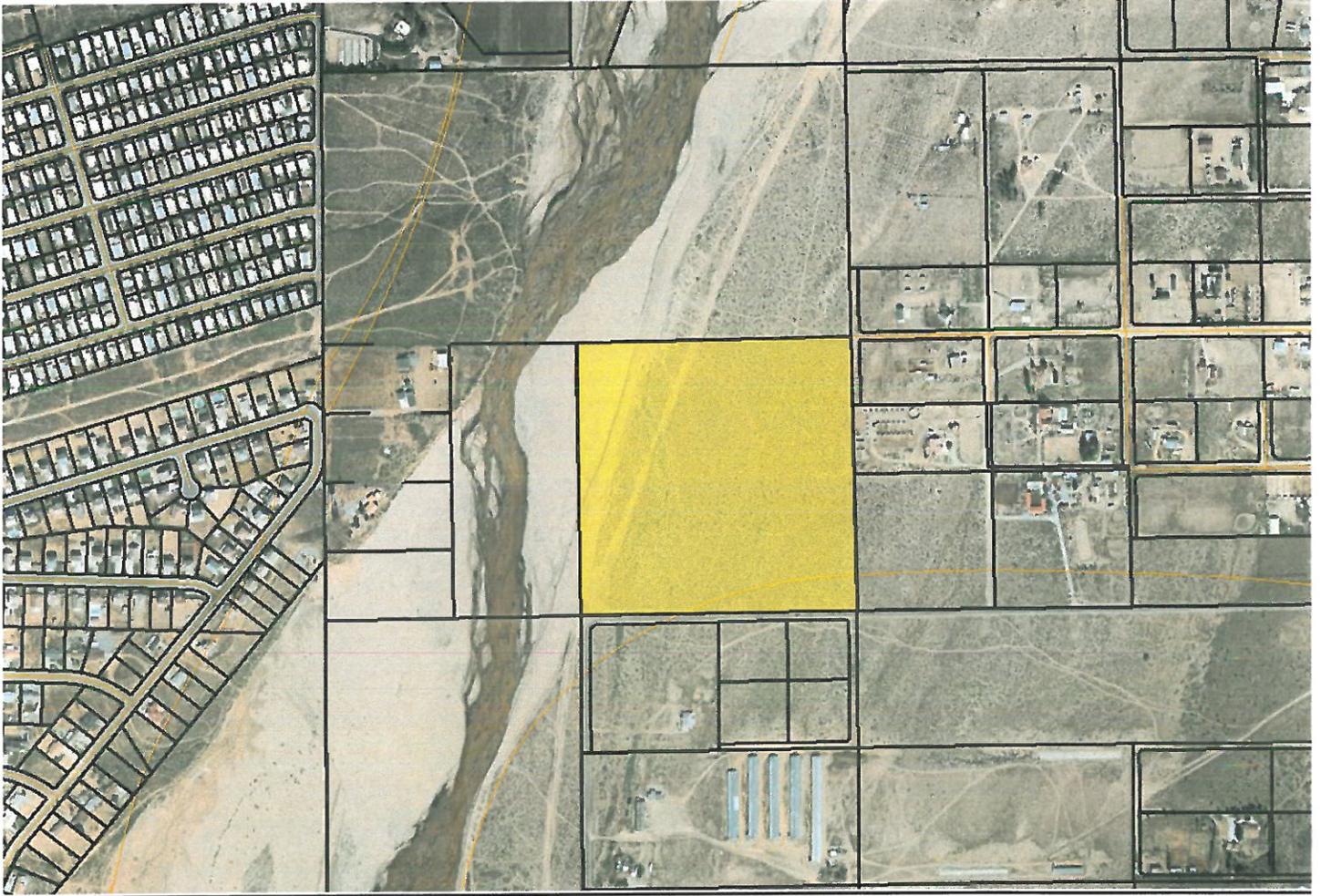
County of San Bernardino: Land Use Services – Code Enforcement, Building and Safety; Public Health – Environmental Health Services; Public Works – Land Development, Solid Waste, Traffic; and

Local: Town of Apple Valley, Apple Valley Fire Protection District

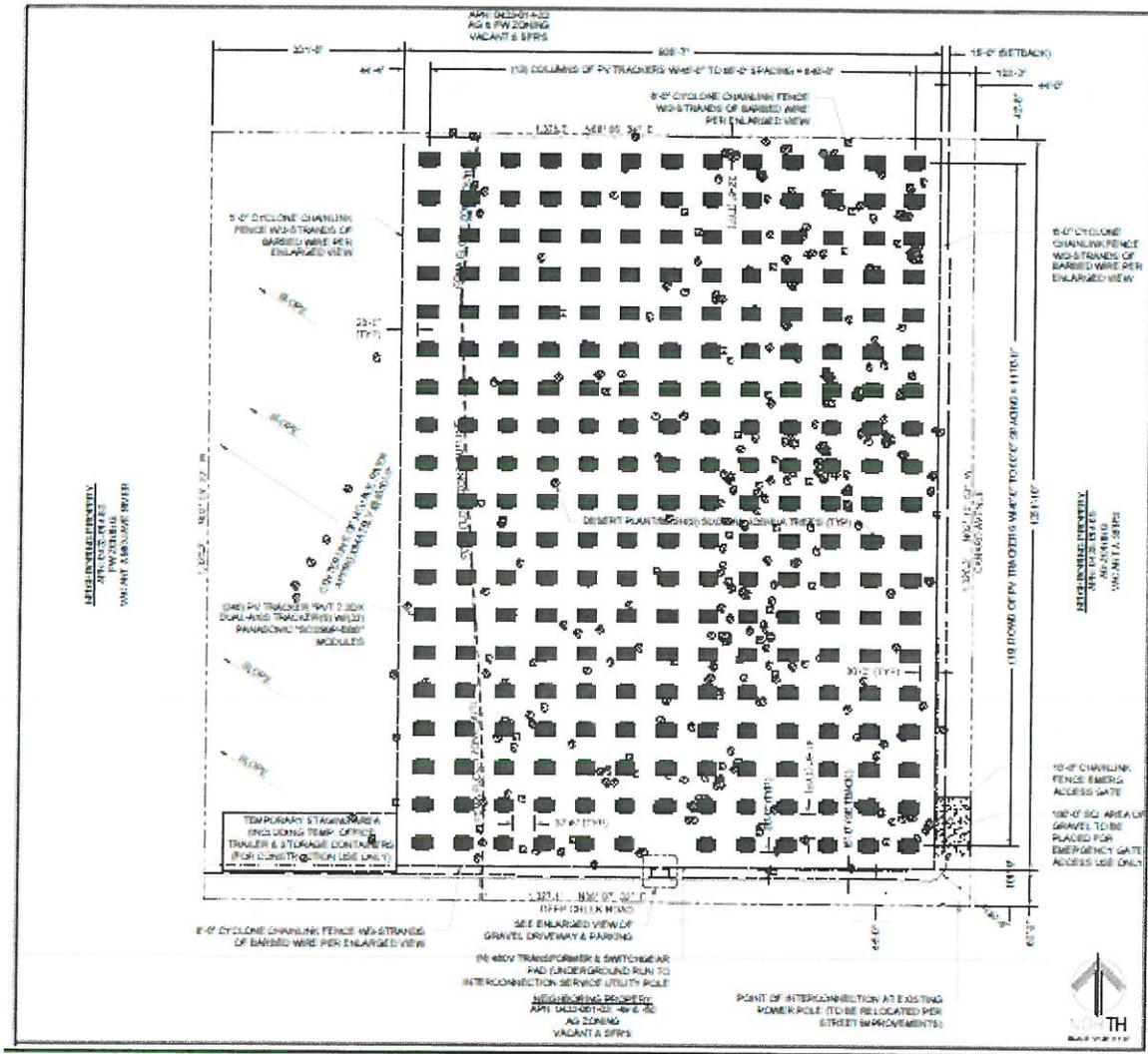
VICINITY MAP



LOCATION MAP



SITE PLAN



EVALUATION FORMAT

The County of San Bernardino prepared this initial study in compliance with the California Environmental Quality Act (CEQA) Guidelines. The format of the study is as follows. Staff evaluated the project based upon its effect on 18 major categories of environmental factors. Staff reviewed each factor 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. Staff categorizes the effect of the project into one of the following four categories of possible determinations:

Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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Staff provides substantiation to justify each determination and one of the four following conclusions as a summary of the analysis for each of the major environmental factors.

1. Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are (Listing the impacts requiring analysis within the EIR).
2. 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 mitigation measures)
3. No significant adverse impacts are identified or anticipated and no mitigation measures are required. (Optional mitigation may be added by stating: “As a precautionary measure to further reduce any potential for impacts, the following requirement shall apply”):
4. No impacts are identified or anticipated and no mitigation measures are required.

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

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

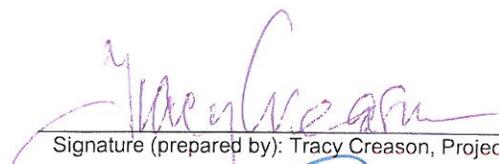
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|---|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology /Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality |
| <input type="checkbox"/> Land Use/ Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

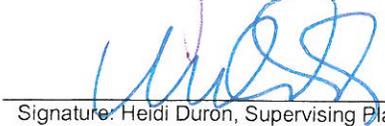
- The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- The proposed project MAY have a "potentially significant 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.



Signature (prepared by): Tracy Creason, Project Planner

20 Aug 2012

Date



Signature: Heidi Duron, Supervising Planner

10/1/2012

Date

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

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

The proposed project is not located within a Scenic Corridor, as designated by the Scenic Corridor Overlay District of the General Plan. The proposed project will have a low profile. It will not substantially degrade the existing visual character of the site and its surroundings.

- I a) **Less than Significant Impact.** The proposed project is approximately 7.8 miles southeast of Interstate 15 and 9.5 miles southwest of State Route 18, designated scenic corridors in the area. However, due to the distance from the Highway, the project will not impact the scenic integrity of the area.
- I b) **Less than Significant Impact.** A scenic highway is designated officially as a state scenic highway when the local jurisdiction adopts a scenic corridor protection program, applies for the California Department of Transportation for scenic highway approval, and receives notification from Caltrans that the highway has been designated as an official scenic highway. The proposed project will not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway, because the site is not adjacent to a state scenic highway. As stated above in I a), State Route 18 is approximately 9.5 miles northeast and Interstate 15 is approximately 7.8 miles northwest of the proposed site. The applicant intends to transplant any Joshua trees within the proposed solar field elsewhere on the property or place them for adoption as required by the San Bernardino County Code (SBCC). There are no rock outcroppings or historic buildings on the project site – it is adjacent to the Mojave River, as well as vacant or large residential parcels of land.
- I c) **Less than Significant Impact.** The proposed project will have a low profile (approximately sixteen and a half feet high) and will utilize motion sensors for security. It will not substantially degrade the existing visual character or quality of the site and its surroundings. The current visual character of the site includes the Mojave River, desert wilderness, hills, ridges, and scattered residences. As a precautionary measure, a condition of approval to maintain native landscaping buffers between the solar panel field and the adjacent properties will be required.

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- I d) **Less than Significant Impact.** The project could be a new source of glare with the potential to adversely impact daytime views of the desert. However, the applicant proposes to use dark photovoltaic solar panels, which produce much less glare than other solar panel technologies. The photovoltaic panels will emit no light. As mentioned previously, the site will use motion sensors of security; there will be no on-site nighttime lighting. In addition, the project must comply with San Bernardino County Ordinance No. 3900 that regulates glare, outdoor lighting, and night sky protection in the desert region. Therefore, the proposed facility would not have a significant impact on daytime or nighttime views in the area.

No significant adverse impacts are identified or anticipated and no mitigation measures are required. As a precautionary measure, a condition of approval to maintain native landscaping buffers between the solar panel field and the adjacent properties will be required.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
<p>II. AGRICULTURE AND FOREST 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 Department 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 the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
<p>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?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>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))?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>d) Result in the loss of forestland or conversion of forestland to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>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 forestland to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

The proposed project is not located on Important Farmland, as mapped by the State of California. The site is adjacent to the Mojave River and within a portion of the floodplain. The primary vegetation communities within the parcel are Joshua tree woodland and dry desert wash. The site is not located within an Agricultural Preserve area.

II a-e) **No Impact.** The proposed project will not 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. Although the proposed project is located in an agriculture land use zoning district, it is designated “grazing” land on the maps prepared pursuant to the Farmland Mapping and Monitoring Program due to the area having mainly low density rural development. According to the California Department of Conservation Map entitled *San Bernardino County North Desert Region, Parcels Under Agriculture Contract* the project site is within a large area having “unique soils”. It does not contain “prime soils” or “statewide soils”, nor is it under an agriculture contract. Furthermore, a portion of the project site is zoned Floodway because of its location adjacent to the Mojave River and within a portion of the floodplain. The City of Hesperia is within ½ mile to the west, while the Town of Apple Valley is approximately 2.4 miles to the northeast and 2.25 miles to the north. Parcel sizes in the general vicinity range from 2.5 acres to 160 acres. Zoning on the adjacent and nearby properties includes RL, RL-10, RL-20 (Rural Living, 2.5-acre minimum, 10-acre minimum, and 20-acre minimum parcel sizes), AG (Agriculture), FW (Floodway), and RC (Resource Conservation). The proposed project site is in the high desert of Southern California, an area of extreme high and low temperatures, extremely low humidity, and water scarcity. The proposed Project will have no impact on forest resources.

No impacts are identified or anticipated and no mitigation measures are required.

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 may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

The development of renewable energy sources is expected to produce cumulative and regional environmental benefits. Because of this, the Mojave Desert Air Quality Management District supports this project and did not require an Air Quality Impact Analysis.

III a) **Less than Significant Impact.** The Project site is located within the jurisdiction of the MDAQMP. The MDAQMD adopted the Mojave Desert Planning Area-Federal Particulate Matter Attainment Plan (Plan) in 1995 and the Ozone Attainment Plan in 2004. Air quality impacts would include construction exhaust emissions generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. These activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants such as Carbon Monoxide (CO), Nitrogen Oxides (NO_x), Reactive Organic Gases (ROG) or Volatile Organic Compounds (VOC), Sulfur Oxides (SO_x), Particulate Matter less than 10 microns (PM₁₀), and Particulate Matter less than 2.5 microns (PM_{2.5}). The project construction activities also represent sources of vehicle re-entrained fugitive dust (which includes PM₁₀), a potential concern because the proposed project is in a non-attainment area for ozone and PM₁₀. However, construction-related increases in emissions of fugitive dust and exhaust from construction equipment and employee commute vehicles would be temporary and limited to the time required to construct the project. Potential impacts will be less than significant.

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- III b) **Less than Significant Impact with Mitigation Incorporated.** The project would contribute criteria pollutants in the area during the short-term project construction period. None of the activities associated with the proposed project would create a substantial permanent increase in the emissions of criteria pollutants that would be cumulatively considerable. The project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation, because the proposed use(s) do not exceed established thresholds of concern as established by the District. The MDAQMD provided a response to the project notice indicating their support for “the development of renewable energy sources”, stating “such development is expected to produce cumulative and regional environmental benefits.” The MDAQMD’s letter recommended “the County require that a fugitive dust best management practices (including but not limited to applicable provisions of District Rule 403.2) be implemented in the grading and construction phases of the project.” As a mitigation measure to regulate construction activities that could create windblown dust and to control emissions of fugitive dust and exhaust during construction, the proposed project will be required to implement an approved Dust Control Plan (DCP).
- III c) **No Impact.** Occasional patrolling and routine maintenance and repairs of the facilities will have no impact on the emissions of criteria pollutants that would be cumulatively considerable. There are no sources of potential long-term air impacts associated with the implementation of the proposed project. After construction, the amount of air pollutants are expected to be reduced considerably as photovoltaic energy production systems do not generate emissions that would cause reduction of air quality or produce objectionable odors.
- III d) **Less than Significant Impact.** The MDAQMD defines sensitive receptors as residences, schools, daycare centers, playgrounds, and medical facilities. There are scattered residences in the area, but no sensitive receptors in close proximity to the project area. The nearest residence to the proposed project is approximately 350 feet east. In addition, electricity generation via the use of photovoltaic systems does not generate chemical emissions that would negatively contribute to air quality. Furthermore, the County’s general conditions and standards as well as project-specific design and construction features incorporated into the proposed project such as dust suppression techniques per MDAQMD’s Rule 403 would reduce any potential impacts from the project. No significant adverse impacts are identified or anticipated and no additional mitigation measures are required.
- III e) **Less than Significant Impact.** Electricity generation via the use of photovoltaic systems does not generate chemical emissions that would negatively contribute to air quality or produce objectionable odors. Potential odor generation associated with the proposed project would be limited to construction sources such as diesel exhaust and dust. 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. Therefore, the operation of the project would have a less than significant impact associated with the creation of objectionable odors affecting a substantial number of people.
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Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significant.

Mitigation Measure

AQ – Construction Mitigation. Developer shall submit written verification that all construction contracts and sub-contracts for the project contain provisions that require adherence to the following standards to reduce impacts to air quality: During construction, each contractor and subcontractor shall implement the following, whenever feasible:

- MDAQMD-approved Dust Control Plan (DCP) submitted with the Grading Plans. The DCP shall include these elements to reduce dust production:
 - Exposed soil shall be kept continually moist through a minimum of twice daily waterings to reduce fugitive dust during all grading and construction activities
 - Street sweeping shall be conducted when visible soil accumulations occur along site access roadways to remove dirt dropped by construction vehicles.
 - Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday.
 - Tires of vehicles will be washed before the vehicle leaves the project site and enters a paved road.
 - All trucks hauling dirt away from the site shall be covered
 - During high wind conditions (i.e., wind speeds exceeding 25 mph), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall be terminated until wind speeds no longer exceed 25 mph.
 - Storage piles that are to be left in place for more than three working days shall either be:
 - Sprayed with a non-toxic soil binder, or
 - Covered with plastic, or
 - Re-vegetated until placed in use.
 - Provide documentation prior to beginning construction demonstrating that the project proponents will comply with all MDAQMD regulations.
 - Suspend use of all construction equipment operations during second stage smog alerts. For daily forecast, call (800) 367-4710 (San Bernardino and Riverside counties).
 - Trucks/equipment shall not be left idling on site for periods in excess of ten minutes.
 - Provide temporary traffic control during all phases of construction.
 - Provide on-site food service for construction workers.
 - Use reformulated low-sulfur diesel fuel in equipment and use low-NO_x engines, alternative fuels and electrification. Apply 4-6 degree injection timing retard to diesel IC engines. Use catalytic converters on gasoline-powered equipment.
 - Minimize concurrent use of equipment through equipment phasing.
 - Substitute electric and gasoline-powered equipment for diesel-powered equipment.
 - Onsite electrical power hook-ups shall be provided for electric construction tools to eliminate the need for diesel-powered electronic generators.
 - Maintain construction equipment engines in good order to reduce emissions. The developer shall have each contractor certify that all construction equipment is properly serviced and maintained in good operating condition.
 - Install storm water control systems to prevent mud deposition onto paved areas.
 - Contractors shall use low sulfur fuel for stationary construction equipment as required by AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions.
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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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Tom Dodson & Associates prepared a *Focused Survey for Desert Tortoise & Western Burrowing Owl, Habitat Assessment for Mohave Ground Squirrel, General Biological Resource Assessment, & Jurisdictional Delineation Report* in May 2012.

IV a) **Less Than Significant with Mitigation Incorporated.** According to the *Focused Survey for Desert Tortoise & Western Burrowing Owl, Habitat Assessment for Mohave Ground Squirrel, General Biological Resource Assessment, & Jurisdictional Delineation Report* (May 2012) prepared by Tom Dodson & Associates, the primary vegetation communities within the parcel are Joshua tree woodland and dry desert wash. Plants observed included Joshua tree (*Yucca brevifolia*), creosote bush (*Larrea tridentate*), allscale (*Atriplex polycarpa*), cheese bush (*Hymenoclea salsola*), linear-leaf goldenbush (*Ericameria linearifolius*), rubber rabbitbush (*Chrysothamnus nauseosus*),

California buckwheat (*Eriogonum fasciculatum*), and desert needlegrass (*Achnatherum speciosum*). The surveys detected many native wildflower species (i.e., sticky nama, Mojave sun-cups, little gold-poppy, purple desert lupine, Golden linanthus, sand blossoms, California coreopsis, Pringle's woolly daisy, common tidy tips, and desert dandelion), several exotic annuals (i.e., sprit grass, shortpod mustard, tumble mustard, sisymbrium, hare barley, red brome, and cheat grass), and native plants adapted to disturbance, such as red-stemmed filaree, Lemmon's lessingia, and fiddleneck.

The only reptiles observed were western fence lizard (*Sceloporus occidentalis*) and western whiptail (*Cnemidophorus tigris*), although other reptiles expected to occur include the San Diego horned lizard (*Phrynosoma coronatum blainvillei*), red racer (*Masticophis flagellum*), gopher snake (*Pituophis melanoleucus*), and various rattlesnake species (*Crotalus* spp.).

Common resident birds species included California quail (*Callipepla californica*), California towhee (*Pipilo crissalis*), mourning dove (*Zenaida macroura*), wrentit (*Chamaea fasciata*), bushtit (*Psaltriparus minimus*), black-throated sparrow (*Anthispize bilineata*), sage sparrow (*Amphispiza belli*), and black-chinned sparrow (*Spizella atrogularis*). Raptors included red-tailed hawk (*Buteo jamaicensis*). Species typically associated with urbanizing areas were common and included rock dove (*Columba livia*), common raven (*Corvus corax*), northern mockingbird (*Mimus polyglottos*), house finch (*Carpodacus mexicanus*), and house sparrow (*Passer domesticus*).

According to the report, "all detected mammals are common to the region. Small burrowing mammals included California ground squirrel (*Otospermophilus beecheyi*), Botta pocket gopher (*Thomomys bottae*), kangaroo rat (*Dipodomys* sp.), and several *Peromyscus* species. Medium-sized mammals included black-tailed jack rabbit (*Lepus californicus*) and Audubon cottontail (*Sylvilagus audubonii*). Coyote (*Canis latrans*) was the only predator detected."

No distinct wildlife corridors were identified on the site or in the immediate surrounding area, nor does the site support any critical or sensitive habitats (e.g., wetlands, streams, etc.). Approximately seven acres of the westerly boundary of the 40-acre site occur within the Mojave River floodplain. The project will occupy 26 acres of the site, leaving 14 acres at the western boundary, including the seven within the Mojave River floodplain, undisturbed.

The Biological Resources Report concludes that Mohave ground squirrel (MGS), desert tortoise (DT), and western burrowing owl (BUOW) are absent from the site. Further, the report states that although approximately seven acres along the westerly boundary of the site occur within the Mojave River floodplain, the proposed project intends to avoid the westerly 14 acres. No impacts to the jurisdictional waters will occur.

The Report recommends Minimization and Avoidance Measures to lessen any potential impact further, which the conditions of approval will include as mitigation measures.

Furthermore, the County designates the Joshua tree as a protected plant. Removal or relocation of any Joshua trees existing on site must comply with Development Code Section 88.01.060. A preconstruction inspection, tree removal plan, and permit in compliance with the Plant Protection and Management Ordinance must occur prior to any land disturbance and/or removal of any trees or plants.

- IV b) **Less Than Significant Impact.** This project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or
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regulations or by the California Department of Fish and Game or US Fish and Wildlife Service. As discussed in IV a), the Mojave River floodplain traverses the westerly seven acres of the site. Although the habitat assessment detected no wildlife corridors on the site, the project proponent intends to avoid the westerly 14 acres of the site, allowing the continuation of any wildlife trespass. The applicant does not intend to place any fencing, solar trackers, or other permanent facilities within that area.

- IV c) **No Impact.** This project will not 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, because the project is not within an identified protected wetland. As discussed in IV a), the Mojave River floodplain traverses the westerly seven acres of the site. The project proponent intends to avoid the westerly 14 acres of the site and any impact on waters of the United States.
- IV d) **Less Than Significant Impact.** This project will not 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. The biological assessment identified no distinct wildlife corridors or nursery sites within or near the project site. Retention of the 14 acres on the westerly property boundary as undeveloped will permit migration.
- IV e) **Less Than Significant Impact.** The County designates the Joshua tree as a protected plant. Removal or relocation of any Joshua trees existing on site must comply with Development Code Section 88.01.060. A preconstruction inspection, tree removal plan, and permit in compliance with the Plant Protection and Management Ordinance must occur prior to any land disturbance and/or removal of any trees or plants.
- IV f) **Less Than Significant Impact.** This project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, because no such plan has been adopted in the area of the project site. The site is within the proposed boundary of the West Mojave Plan, which covers 9.3 million acres in the western portion of the Mojave Desert. This interagency habitat conservation plan remains under review.

Possible significant adverse impacts have been identified and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significant:

Mitigation Measures:

Pre-construction Survey. As a standard operating procedure for projects located in native habitat, a qualified biologist shall conduct a 30-day preconstruction survey to determine if DT, MGS, and/or BUOW have migrated onto the site. If the biologist encounters any of these species during the pre-construction survey, then the project proponent must contact the appropriate regulatory authority (USFWS and/or CDFG) to obtain the required take authorization for the project.

Nesting Birds. The State of California prohibits the “take” of active bird nests. To avoid an illegal take of active bird nests, any grubbing, brushing or tree removal shall be conducted outside of the State identified nesting season (February 15 through September 1). Alternatively, a qualified biologist shall evaluate the site prior to initiation of ground disturbance to determine the presence or absence of nesting birds. Avoidance of active bird nests **MUST** occur during the nesting season. If an active nest is located in the project construction area it will be flagged and a 300-foot avoidance

buffer placed around it. No activity will occur within the 300-foot buffer until the young have fledged the nest.

Delineation of Project Boundary. All project activities shall be limited to a well-defined and visually delineated area. Prior to grading and construction activities, a qualified professional shall clearly mark the limits of disturbance with flagging, stakes, or fencing. A qualified professional shall install a clear visual delineation (i.e. signs, silt fencing, or construction fencing) along the western boundary of the project site to prevent encroachment beyond the work zone to the west into the CDFG and/or Corps jurisdictional limits of the Mojave River.

Environmental Awareness Training. A qualified biologist shall prepare and provide environmental awareness training to all construction personnel associated with the project. The environmental awareness class shall include information regarding the MGS, DT, and BUOW, relevant Federal and State laws, and worker responsibilities when working in Mojave Desert habitat.

Joshua tree relocation. A qualified biologist shall be onsite to monitor the Joshua tree relocation, clearing, and grubbing, and shall remain on-call for the remainder of construction.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Although the proposed project is within a Cultural or Paleontological Resources Overlay area due to its proximity to the Mojave River, the County Museum conducted a records search. The search concluded that previous surveys included this parcel. All potential impacts were mitigated previously. The Museum recommended no further archaeological work.

- V a) **Less Than Significant Impact.** The Archaeological Information Center of the San Bernardino County Museum conducted a Historical Resources Review for the project site. The review indicated that there are no known previously inventoried historical resources within or adjacent to the project area. There are three historic archaeological resources and one prehistoric archaeological resource reported to exist within or adjacent to the project area. These previous surveys resulted in site mitigation. Based on available information, the Museum recommended no further archaeological work.
- V b) **Less Than Significant Impact.** As stated in V a) above, the Museum recommends no further archaeological.
- V c) **Less Than Significant Impact.** This project will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, because no such resources have been identified on the site. To reduce the potential for impacts further, a condition shall be added to the project that requires the developer to contact the County Museum for determination of appropriate mitigation measures, if any finds are made during project construction.
- V d) **Less Than Significant Impact.** This project will not disturb any human remains, including those interred outside of formal cemeteries, because no such burial grounds are identified on this project site. If discovery of any human remains occurs during construction of this project, the developer must contact the County Coroner, County Museum for determination of appropriate mitigation measures, and a Native American representative, if the remains are determined to be of Native American origin.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

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

This project is not located in a Geologic Hazard (GH) Overlay District, as defined in the County General Plan.

VI a) **Less Than Significant Impact.** (i-iv) The entire San Bernardino County area is particularly susceptible to strong ground shaking and other geologic hazards. However, the proposed project site is not located within an Alquist-Priolo Special Studies Zone, meaning that the site is not within 500 feet of major active faults, nor is the site within 200 to 300 feet of a trough created by minor faults. The nearest earthquake fault is the North Frontal thrust system, Western Section, which is approximately 1.5 miles east of the site. With adherence to the California Building Code and the incorporation of applicable measures into project design and construction, potential project impacts associated with strong seismic ground shaking will be less than significant. County Building and Safety will review and approve the project and impose appropriate seismic standards. The potential for liquefaction typically occurs in strong ground shaking within fine-grained loose sediments where

the groundwater is less than 50 feet below the surface. Because the western one-third of the site is within the outer edge of the Mojave River floodplain, it has the potential for liquefaction to occur during seismic events. Current building standards, the 1.5-mile distance from the nearest known fault, and the non-residential nature of the proposed development will result in the potential impact being less than significant. Due to the relative lack of slope on the site, there is no potential for landslide to occur.

- VI b) **Less Than Significant Impact.** No substantial grading or vegetation removal will occur for the installation of the proposed project. The retention of the vegetation onsite would reduce wind speeds near ground level to the extent that erosion, if it occurs, will be minor. Building and Safety will require erosion control plans be submitted, approved, and implemented.
- VI c) **Less Than Significant Impact.** The project is not identified as being located on a geologic unit or soil that has been identified as being unstable or having the potential to result in on or off site landslide, lateral spreading, subsidence, liquefaction, or collapse. Potential project impacts associated with landslides or liquefaction will be less than significant.
- VI d) **Less Than Significant Impact.** The project site is not located in an area that the County Building and Safety Geologist has identified as having the potential for expansive soils. As a standard condition of approval, the project applicant will submit a soils report to the County Building and Safety Geologist for review and approval.
- VI e) **No Impact.** When the proponent implements the proposed project, it will be an unmanned facility and will not use septic tanks or alternative wastewater disposal systems; therefore, no impacts are anticipated.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION:

Because construction of this project will result in a cleaner, greener source of energy, it will not contribute to GHG emissions.

VII a, b) **Less than Significant Impact.** As discussed in Section III of this document, the proposed project’s primary contribution to air emissions is attributable to construction activities. Project construction shall result in GHG emissions from the following construction related sources: (1) construction equipment emissions and (2) emissions from construction workers personal vehicles traveling to and from the construction site. Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel.

The primary emissions that would result from the proposed project occur as carbon dioxide (CO₂) from gasoline and diesel combustion, with more limited vehicle tailpipe emissions of nitrous oxide (N₂O) and methane (CH₄), as well as other GHG emissions related to vehicle cooling systems. Although construction emissions are a one-time event, GHG emissions such as CO₂ can persist in the atmosphere for decades.

On December 6, 2011, the San Bernardino County Board of Supervisors adopted the County Greenhouse Gas (GHG) Emissions Reduction Plan. Although once built and operational this project will provide a “clean” source of energy that will not contribute to GHG emissions, the project must adhere to the Air Quality mitigation measures contained in section III of this document and the performance standards of the GHG Emissions Reduction Plan in effect at the time of development.

GHGs and criteria pollutants would realize co-beneficial emissions reduction from the implementation of mitigation measures discussed in Section III, Air Quality, in this document. Furthermore, the construction of this project would result in “green” electric power generation that otherwise would be produced at a traditional fossil fuel burning plant, which generate considerably more GHG emissions. For these reasons, it is unlikely that this project would impede the state’s ability to meet the reduction targets of AB32.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

The proposed project site lies within the Mojave Desert region. The site contains no structures, but shows signs of off-road vehicle use, dogs, and trash dumping. A portion on the westerly boundary of the site is within the Mojave River floodplain. The project, which intends to avoid the westerly 14 acres, will not impact the floodplain.

VIII a) **Less Than Significant Impact.** The project will not create a significant hazard to the public or the

environment through the routine transport, use, or disposal of hazardous materials, because no use approved on the site is anticipated to be involved in such activities. Implementation of the proposed project will not entail the routine transport, use, or disposal of hazardous materials, with the potential exception of short-term construction-related substances such as fuels, lubricants, adhesives, and solvents. The potential risk associated with the accidental discharge during use and storage of such construction-related hazardous materials during project construction is considered low because the handling of any such materials would be addressed through the implementation of Best Management Practices (BMPs) pursuant to the intent of the NPDES General Construction Permit. Operation of the proposed project would require the use or storage of insignificant quantities of hazardous substances, such as glycol-based coolant and lubricants for any moving parts. These materials are mildly toxic; they will not present a major risk to the handlers or the environment. The photovoltaic panels used in the proposed project are environmentally sealed collections of photovoltaic cells that require no chemicals and produce no waste materials. There is not a battery backup component, thus minimizing the need for transporting, using, or disposing of the hazardous materials that may be associated with the project. Furthermore, standard operating procedures will prevent the use of these materials from causing a significant hazard to the public or environment.

- VIII b) **Less Than Significant Impact.** The project will not 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, because any proposed use or construction activity that might use hazardous materials is subject to permit and inspection by the Hazardous Materials Division of the County Fire Department.
- VIII c) **Less Than Significant Impact.** There are no existing or proposed schools within ¼ mile of the proposed project site. The nearest school, Carmel Elementary School, is located approximately 1.3 miles northwest of the project site in the City of Hesperia. Additionally, operation and maintenance of the project would not produce hazardous emissions.
- VIII d) **Less Than Significant Impact.** The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The proposed project will not create a significant hazard to the public or the environment. No impacts related to this topic will occur because of the proposed project and, therefore, no mitigation measures are required.
- VIII e) **Less Than Significant Impact.** The project site is not within the vicinity or approach/departure flight path of a public airport. The nearest public airport, Hesperia Airport, is approximately 4.9 miles southwest of the project site.
- VIII f) **Less Than Significant Impact.** The project site is not within the vicinity or approach/departure flight path of a private airstrip. The nearest private airstrip, Rabbit Ranch Airport, is approximately 12.4 miles northeast of the project site.
- VIII g) **No Impact.** Activities associated with the proposed project will not impede existing emergency response plans for the project site and/or other land uses in the project vicinity. All vehicles and stationary equipment will stage off public roads and will not block emergency access routes. Accordingly, implementation of the proposed project will not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.
- VIII h) **Less Than Significant Impact.** The project will not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. The proposed project includes installation of non-combustible poles and panels. On-site soil compaction and periodic vegetation trimming will reduce available fuel. Other than an external source, the only risk of on-site wildfire ignition is due to electrical malfunctions resulting from poor installation. As long as the electrical equipment is
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installed properly and follows all state and county safety codes, the risk of onsite ignition is minimal.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structure that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

On January 27, 2012, Vikram Bapna prepared and submitted a preliminary Water Quality Management Plan (WQMP) to County Public Works, which they found acceptable. Due to its proximity to the Mojave River, the site is within a Flood Plain 1 Overlay, it is within FEMA Flood Zones A and X-unshaded, and within a Dam Inundation area.

- IX a, b, e, f) **Less than Significant Impact.** Potential water quality impacts from the proposed project are associated with short-term (construction-related) erosion/sedimentation and hazardous material use/discharge. The contractor must adhere to the Best Management Practices (BMPs) contained in the Water Quality Management Plan (WQMP) prepared for the project and approved by the Department of Public Works. Conformance with applicable elements of the required NPDES Construction Permit, use of site design BMPs, and control BMPs will avoid or reduce below a level of significance any potential erosion/sedimentation and hazardous materials impacts. During construction and operation, the Apple Valley Ranchos Water District will provide a temporary hydrant connection from the hydrant at the intersection of Deep Creek Road and Wren Street, a point approximately 3.3 miles northeast of the site. The contractor will haul water from this point for dust suppression during construction and for monthly cleaning of panels during operation. The expectation is that any discharged water will be absorbed into the soils onsite. Most of the ground within the proposed project area will remain permeable, so water percolation and groundwater recharge will remain unchanged by the implementation of the project.
- IX c, d) **Less than Significant Impact.** The project will not substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site. The footprint of the solar arrays is small. The proposed project does not include any impervious surfaces that will divert any drainage pattern. During construction, the contractor will place a silt fence along the down slope edge of the property to reduce any flow of sediments into the Mojave River or off-site. This silt fence will also assist in filtering any stormwater runoff in the event of precipitation during construction. Adherence with the County Public Works Best Management Practices (BMPs) is a standard condition of approval. Furthermore, as part of this project, the applicant will delineate and avoid the westernmost 14 acres of the property. There will be no development or disturbance within those 14 acres.
- IX g) **No Impact.** The proposed project will not create or result in housing within a 100-year flood hazard area. The project proposes to develop a renewable energy facility. It proposes no housing.
- IX h) **Less Than Significant Impact.** The proposed project will not place any structures that would impede or redirect flood flows within a 100-year flood hazard area. As mentioned previously, the renewable energy facility proposes to use helical pier anchors to eliminate the need for concrete foundations. Smaller structure footprints results in smaller redirection of flood flows. Furthermore, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Panel Number 6515H, dated 08/28/2008 indicates that the proposed project area is within Flood Zones A and X-unshaded. In compliance with FEMA and San Bernardino County Zone A regulations, any building pad must be elevated a minimum of two feet above the highest adjacent ground. The applicant must submit an Elevation Certificate confirming that they met this condition.
- IX i) **Less Than Significant Impact.** Although the project site is located within the inundation
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overlay relative to failure of the dam at Silverwood Lake, the unmanned facility will not expose people or structures to a significant risk of loss, injury, or death. The proposed project will not impact any evacuation routes. The County General Plan prohibits only critical, essential, and high-risk land uses within the inundation overlay.

- IX j) **No Impact.** The project site will 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 significant adverse impacts are identified or anticipated and no mitigation measures are required.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

- X a) **No Impact.** The project will not physically divide an established community, because the site is within an area of widely scattered residential uses. The City of Hesperia boundary is approximately ½-mile west, while the Town of Apple Valley boundary is approximately 2.4 miles to the northeast.
- X b) **Less Than Significant Impact.** The current General Plan land use designation for the proposed project area is Agriculture (AG), which allows development of electrical power generation facilities with a Conditional Use Permit (CUP). The proposed project site is mapped within a Biotic Resources (BR) overlay, with the potential for desert tortoise, western burrowing owl, and Mohave ground squirrel in the area. As required by the BR overlay, the proponent submitted a report with the project application that identifies all biotic resources located on and adjacent to the site. The report concluded that with appropriate Biological Resources mitigation measures as contained in section IV of this document, the existence of the biotic resources did not constitute an incompatible land use with the proposed project.
- X c) **No Impact.** The project will not conflict with any applicable habitat conservation plan or natural community conservation plan, because there is no habitat conservation plan or natural community conservation plan within the area surrounding the project site. No habitat conservation lands are required to be purchased as mitigation for the proposed project.

No significant adverse impacts are identified or anticipated and no mitigation measures are required

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

The project site is within the MRZ-3a, an area of undetermined mineral resource significance, but with known mineral occurrence.

XI a, b) **No Impact.** The project will 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, although the site is within a Mineral Resource Zone Overlay.

No impacts are identified or anticipated and no mitigation measures are required

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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):

The project site is not located in a Noise Hazard (NH) Overlay District and is not subject to severe noise levels according to the County General Plan Noise Element.

XII a-d) **Less Than Significant Impact.** The proposed project is adjacent to undeveloped, vacant, or scattered residential land; therefore, noise and vibration generated from the proposed project could potentially exceed ambient noise standards. Based on studies done for previous projects within the general area, ambient noise levels average between 40 and 45 dBA. Levels adjacent to Deep Creek Road may increase when traffic exists. Specifically, construction of the proposed project may potentially create some elevated short-term construction noise and vibration impacts from construction equipment; however, these activities will be limited to daytime hours and will comply with the noise and vibration standards of the San Bernardino County Development Code. Noise generation from construction equipment/vehicle operation will be localized, temporary, and transitory in nature; therefore, significant impacts are unanticipated.

A Burlington Northern Santa Fe railroad track exists approximately 0.8 miles north of the project site. The use of this track is minimal, averaging approximately one train trip per day.

Subsection 83.01.080 of the County Development Code establishes acceptable noise level

standards. Measurement of noise is at the property line of the nearest site occupied by, zoned, or designated to allow noise-sensitive land uses. The noise standard for stationary noise sources affecting residential land uses for a cumulative period of more than 30 minutes in any hour is 55dBA between 7AM and 10PM. The standard drops to 45dBA between 10PM and 7AM. According to information obtained from www.calendar-updates.com, sunrise times in Apple Valley (zip code 92307) range from approximately 5:35 to 6:55AM throughout the year. The noise emission for a cumulative period of more than 15 minutes in any hour is the standard plus 5dBA.

Based on these standards, operation of the proposed project will not generate audible levels of noise or perceptible levels of vibration in the surrounding area. As mentioned in the project description section of this document, the project includes dual-axis tracking systems. Information obtained from PV Trackers, the manufacturer of the PVT 7.2DX tracker, indicates that the estimated sound pressure level for each motor at a distance of 100 feet ranges from 18dBA to 22dBA. The decibel level of rustling leaves is 20dBA. At a distance of 500 feet, the decibel levels are less than 10dBA. The maximum cumulative decibel level generated by the 246 trackers at a distance of 100 feet ranges from 41.9dBA to 45.9dBA. At a distance of 500 feet, the cumulative decibel levels range from 33.9dBA to 35.9dBA. The total time the trackers will cumulatively generate these levels is 30 minutes each day, once at sunrise and once during sunset for 15 minutes each time. Due to available adjustable programming, PV Trackers can reduce the decibel output by operating the motors at a lower revolution per minute.

The renewable energy facility will include an Aurora 480V inverter from Power One Renewable Energy Solutions. Its proposed location is on a concrete pad, close to the main entrance gate near the midpoint of the southerly property line. It will be set back a minimum of 100 feet from the nearest off-site property. The General Specifications from Power One Renewable Energy Solutions state the noise emission from the Aurora 480V inverter is <62dBA at 1 meter. Using the Inverse-square, Inverse distance, or 1/r law as found at www.sengpielaudio.com, the approximate noise emission will be 32.32dBA at 30.48 meters or 100 feet.

Forty to 44-foot road rights-of-way exist or the project proponent will dedicate them as part of this project on the south and east property boundaries. The trackers and arrays are setback 45 feet on the south, 30 feet on the east, 32.5 feet on the north, and 359.5 feet on the west from the ultimate property boundaries.

The nearest residence exists 350 feet east of the proposed project. Other residences exist approximately 440 feet northeast, 450 feet south, and 470 feet east.

Maintenance activities (including periodic cleaning, electrical connection repair, and panel replacement) will result in minimal noise. Further, the project will not include dwellings or other development, nor will it have the potential to generate any additional vehicle trips or associated noise after construction is completed.

- XII e, f) **No Impact.** The project is not located within an airport land use plan area or within two miles of a public/public use airport or a private airstrip. The nearest public airport, Hesperia Airport is approximately 4.9 miles, southwest of the project site. The nearest private airstrip, Rabbit Ranch Airport, is approximately 12.4 miles northeast of the project site.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

XIII a-c) **No Impact.** The project is located in a sparsely populated area of San Bernardino County. The project proponent and County staff expect workers needed for construction and operation of the project to come from the local employment base. The site is vacant. Therefore, displacement of housing or people will not occur. No impacts associated with population increase and housing are anticipated to occur from the proposed project

No impacts are identified or anticipated and no mitigation measures are required.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

XIV a) **Fire Protection – Less than Significant Impact.** Apple Valley Fire Protection District (AVFPD) provides protection at the site. In order to provide adequate protection, AVFPD requires two points of vehicular access, a minimum 28-foot wide access gate and perimeter access road, a minimum 20-foot wide access road between the arrays, compaction of the access roads on the site to a 95 percent compaction rate, and asphalt paved or all weather surface access roads to the site. These will be conditions of approval for the project. The AVFPD may require regular trimming of on-site vegetation to reduce fire fuel. The project will not result in the need for additional fire protection services. Any development, along with the associated human activity, in previously undeveloped areas increases the potential of the occurrence of wildfires. AVFPD will implement comprehensive safety measures that comply with federal, state, and local worker safety and fire protection codes and regulations for the proposed project that will minimize the occurrences of fire due to project activities during construction and for the life of the project. Because of the low probability and short-term nature of potential fire protection needs during construction, the proposed project will not result in associated significant impacts.

Police Protection – Less than Significant Impact. The San Bernardino County Sheriff's Department serves the proposed project area and other unincorporated portions of the County. The Apple Valley Sheriff's Station is located approximately 8.5 miles to the northeast of the project site. Due to the large expanse that the station covers, deputies regularly assist and are assisted by the California Highway Patrol and the BLM Rangers. The proposed project will not impact service ratios, response times, or other performance objectives related to police protection. The project's short-term service requirements will not result in decreases to the level of public service offered or affect these agencies' response times. The facility may include installation of infrared security cameras with remote notification to an outside security firm to provide security in addition to the chain link perimeter fence.

Schools – No Impact. Long-term operation of the proposed facilities will place no demand on school services because it will not involve the construction of facilities that require such services (e.g., residences) and will not involve the introduction of a temporary or permanent human population into this area.

Parks – No Impact. Long-term operation of the proposed facilities will place no demand on parks because it will not involve the construction of facilities that require such services (e.g., residences) and will not involve the introduction of a temporary or permanent human population into this area.

Other Public Facilities – No Impact. The proposed project will not result in the introduction and/or an increase in new residential homes and the proposed project will not involve the introduction of a temporary or permanent human population into this area. Based on these factors, the proposed project will not result in any long-term impacts to other public facilities.

No significant adverse impacts are identified or anticipated and no mitigation measures are required

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

XV a, b) **No Impact.** No new residences or recreational facilities will result as part of the proposed project. The proposed project will not induce population growth in adjacent areas and will not increase the use of recreational facilities in surrounding neighborhoods.

No impacts are identified or anticipated and no mitigation measures are required.

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 freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

Due to the minimal number of trips associated with the project, the Public Works Traffic Division determined a Traffic Impact Analysis was unnecessary.

XVI a) **Less Than Significant Impact.** The County Traffic Division found that there would be no adverse impacts on the surrounding roadway circulation system per the thresholds of significance specified by the San Bernardino County Congestion Management Plan due to the proposed project. Project construction will occur Monday through Friday between 7:30AM and 5:00PM, over an eight to ten week period. Typically, there will be five to ten workers and one project manager daily. Additionally, there will be an average of two material delivery trucks weekly during the construction phase. Table 2-4 in the Circulation and Infrastructure Background Report associated with the 2007 County General Plan update indicates that the level of service (LOS) on Interstate 15 between US 395 and SR 18 is LOS A in the AM Peak Hour and ranges between LOS A & LOS C in the PM Peak Hour. Table 2-7 in the background report indicates that the LOS on Main Street between US 395 and Rock Springs Road ranges between LOS A & LOS D in both the AM & PM Peak Hour. The County standard is LOS C or better. Due to the small increase in vehicle trips associated with the proposed project, the project will not degrade the existing LOS

on Interstate 15, Main Street, Rock Springs Road, or Deep Creek Road.

After construction, periodic maintenance vehicles will arrive at the site via Main Street, Rock Springs Road, and Deep Creek Road.

The Victor Valley Transit Authority (VVTA) provides bus service throughout the area. Route 46 provides transportation along a portion of western Main Street; there are no bus routes on Rock Springs Road or Deep Creek Road.

- XVI b) **No Impact.** The project would not exceed, either individually or cumulatively, a LOS standard established by the County congestion management agency for designated roads or highways. The County Public Works – Traffic Division reviewed the traffic generation of the proposed project. Traffic service will remain at a LOS of C or better, as required by the County General Plan.
- XVI c) **No Impact.** The project would not 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. There are no airports in the vicinity of the project. As discussed in the Noise section of this document, the Hesperia Airport is approximately 4.9 miles southwest of the project site and the Rabbit Ranch Airport is approximately 12.4 miles northeast of the site. There is no anticipated notable impact on air traffic volumes by passengers or freight generated by the proposed use.
- XVI d) **No Impact.** The project will not substantially increase hazards due to a design feature or incompatible uses. The project site is adjacent to an established road accessed at points with good site distance and properly controlled intersections. There are no incompatible uses proposed by the project that would impact surrounding land uses.
- XVI e) **No Impact.** The project will not result in inadequate emergency access. Deep Creek Road provides paved access to the site, while Hinton Drive, Cornelian Road, and Sunset View Road provide unpaved access.
- XVI f) **No Impact.** As mentioned in XVI a), the public transit provider within the area is the VVTA, which provides bus service to the cities of Adelanto, Apple Valley, Hesperia, and Victorville, as well as portions of San Bernardino County. Route 46 serves portions of western Hesperia. This renewable energy project will not adversely affect this existing service.

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- XVII a) **No Impact.** The proposed project does not involve the construction of facilities that would generate sewage; therefore, it would not exceed applicable wastewater treatment requirements. The proposed project's water discharge does not require treatment or permitting according to the regulations of the Lahontan RWQCB.
- XVII b) **No Impact.** The project will not require new water or wastewater treatment facilities or expansion of existing facilities. As mentioned previously, trucks will bring water to clean the panels periodically from an off-site source, a fire hydrant at the corner of Wren and Deep Creek. This equates to a negligible amount due to maintenance occurring monthly.
- XVII c) **No Impact.** The proposed project would not require the construction or expansion of storm water drainage facilities. It is assumed that the insubstantial quantity of discharged water generated on the site will be absorbed into the soils. On-site soil types are well drained and suitable for most types of development. Accordingly, no impacts are anticipated from implementation of the proposed project.
- XVII d) **No Impact.** Water needed for activities associated with the proposed project will be trucked in

from an offsite fire hydrant, which is part of the Apple Valley Ranchos Water District system. The solar power generation process does not need water. Accordingly, no impacts are anticipated from implementation of the project.

- XVII e) **No Impact.** The proposed project will not require or result in the construction of new wastewater treatment facilities or the expansion of existing wastewater treatment facilities. No impacts are anticipated from implementation of the proposed project.
- XVII f, g) **Less than Significant Impact.** The proposed project will be an unmanned solar power generating facility, generating no process waste and only small quantities of solid waste requiring disposal. During construction, the proponent will provide trash and recycling dumpsters on site. The proponent must complete the Solid Waste Management Division's Construction Waste Management Recycling Plan, Parts 1 and 2. The project is required to comply with federal, state, and local statutes and regulations related to solid waste disposal.

No significant adverse impacts are identified or anticipated and no mitigation measures are 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

XVIII a) **Less than Significant Impact with Mitigation Incorporated.** Mitigation Measures have been included to address potential impacts to Air Quality and Biological Resources. However, implementation of the proposed project will not degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, or 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 with adherence to the required mitigation measures discussed within this Initial Study.

XVIII b) **Less than Significant Impact.** Cumulative impacts are defined as two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor, but collectively significant, developments taking place over a period. The *CEQA Guidelines*, Section 15130 (a) and (b), states:

(a) Cumulative impacts shall be discussed when the project’s incremental effect is cumulatively considerable.

(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

At present, there are scattered residential and agricultural developments near the project site.

Other solar generating facilities within the High Desert Region of San Bernardino County are in process or conditionally approved. Each of these projects will implement mitigation measures and adhere to conditions of approval to ensure there are no significant impacts. By doing so, Staff expects no significant cumulative impacts.

The project will use a 26-acre portion of a 40-acre vacant parcel for a green-energy-producing facility. The presumption is that this cleaner energy will replace energy produced with fossil fuels, but not increase residential, commercial, or industrial development. Based on this, the project will not have impacts that are individually limited, but cumulatively considerable. The facility will be unmanned upon completion of construction. Trips generated by periodic maintenance workers will be minimal in comparison to the overall traffic in the area. Compliance with the conditions of approval issued for the proposed development will further assure that the potential for cumulative impacts will remain below the level of significant. The project can be served adequately by all existing services and infrastructure.

- XVIII c) **Less than Significant Impact.** The incorporation of design measures, County of San Bernardino policies, standards, and guidelines will ensure that there will be no substantial adverse effects on human beings, either directly or indirectly. Impacts of the proposed project will be less than significant.
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XVIII. MITIGATION MEASURES

(Any mitigation measures, which are not “self-monitoring,” shall have a Mitigation Monitoring and Reporting Program prepared and adopted at time of project approval)

CONDITION COMPLIANCE RELEASE FORM (CCRF) MITIGATION MEASURES: (Condition compliance will be verified by existing procedure)

AQ – Construction Mitigation. Developer shall submit written verification that all construction contracts and sub-contracts for the project contain provisions that require adherence to the following standards to reduce impacts to air quality: During construction, each contractor and subcontractor shall implement the following, whenever feasible:

- MDAQMD-approved Dust Control Plan (DCP) submitted with the Grading Plans. The DCP shall include these elements to reduce dust production:
 - Exposed soil shall be kept continually moist through a minimum of twice daily waterings to reduce fugitive dust during all grading and construction activities
 - Street sweeping shall be conducted when visible soil accumulations occur along site access roadways to remove dirt dropped by construction vehicles.
 - Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday.
 - Tires of vehicles will be washed before the vehicle leaves the project site and enters a paved road.
 - All trucks hauling dirt away from the site shall be covered
 - During high wind conditions (i.e., wind speeds exceeding 25 mph), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall be terminated until wind speeds no longer exceed 25 mph.
 - Storage piles that are to be left in place for more than three working days shall either be:
 - Sprayed with a non-toxic soil binder, or
 - Covered with plastic, or
 - Re-vegetated until placed in use.
 - Provide documentation prior to beginning construction demonstrating that the project proponents will comply with all MDAQMD regulations.
 - Suspend use of all construction equipment operations during second stage smog alerts. For daily forecast, call (800) 367-4710 (San Bernardino and Riverside counties).
 - Trucks/equipment shall not be left idling on site for periods in excess of ten minutes.
 - Provide temporary traffic control during all phases of construction.
 - Provide on-site food service for construction workers.
 - Use reformulated low-sulfur diesel fuel in equipment and use low-NO_x engines, alternative fuels, and electrification. Apply 4-6 degree injection timing retard to diesel IC engines. Use catalytic converters on gasoline-powered equipment.
 - Minimize concurrent use of equipment through equipment phasing.
 - Substitute electric and gasoline-powered equipment for diesel-powered equipment.
 - Onsite electrical power hook-ups shall be provided for electric construction tools to eliminate the need for diesel-powered electronic generators.
 - Maintain construction equipment engines in good order to reduce emissions. The developer shall have each contractor certify that all construction equipment is properly serviced and maintained in good operating condition.
 - Install storm water control systems to prevent mud deposition onto paved areas.
 - Contractors shall use low sulfur fuel for stationary construction equipment as required by AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions.
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Pre-construction Survey. As a standard operating procedure for projects located in native habitat, a qualified biologist shall conduct a 30-day preconstruction survey to determine if DT, MGS, and/or BUOW have migrated onto the site. If the biologist encounters any of these species during the pre-construction survey, then the project proponent must contact the appropriate regulatory authority (USFWS and/or CDFG) to obtain the required take authorization for the project.

Nesting Birds. The State of California prohibits the “take” of active bird nests. To avoid an illegal take of active bird nests, any grubbing, brushing or tree removal shall be conducted outside of the State identified nesting season (February 15 through September 1). Alternatively, a qualified biologist shall evaluate the site prior to initiation of ground disturbance to determine the presence or absence of nesting birds. Avoidance of active bird nests MUST occur during the nesting season. If an active nest is located in the project construction area it will be flagged and a 300-foot avoidance buffer placed around it. No activity will occur within the 300-foot buffer until the young have fledged the nest.

Delineation of Project Boundary. All project activities shall be limited to a well-defined and visually delineated area. Prior to grading and construction activities, a qualified professional shall clearly mark the limits of disturbance with flagging, stakes, or fencing. A qualified professional shall install a clear visual delineation (i.e. signs, silt fencing, or construction fencing) along the western boundary of the project site to prevent encroachment beyond the work zone to the west into the CDFG and/or Corps jurisdictional limits of the Mojave River.

Environmental Awareness Training. A qualified biologist shall prepare and provide environmental awareness training to all construction personnel associated with the project. The environmental awareness class shall include information regarding the MGS, DT, and BUOW, relevant Federal and State laws, and worker responsibilities when working in Mojave Desert habitat.

Joshua tree relocation. A qualified biologist shall be onsite to monitor the Joshua tree relocation, clearing, and grubbing, and shall remain on-call for the remainder of construction.

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