



# LAND USE SERVICES DEPARTMENT PLANNING COMMISSION STAFF REPORT

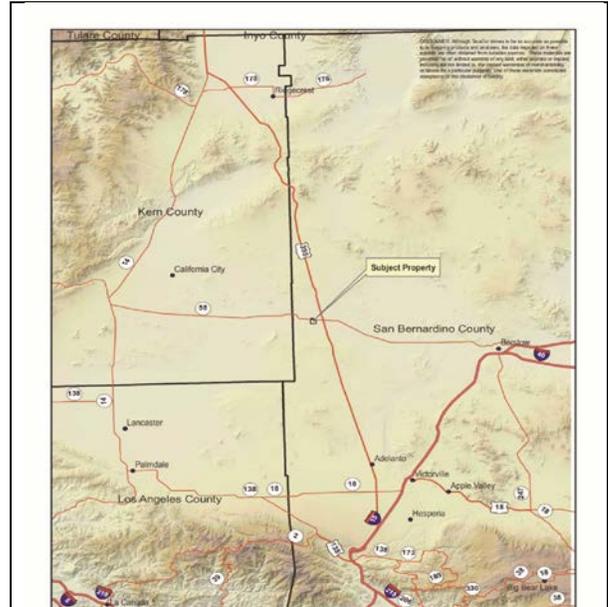
**HEARING DATE: June 4, 2020**

**AGENDA ITEM # 2**

**Project Description**

**Vicinity Map -**

**APN:** 0492-221-22  
**Applicant:** 37BF 8ME, LLC c/o 8Minutenergy Renewables  
**Community:** Kramer Junction /1<sup>st</sup> Supervisorial District  
**Location:** State Route 58, west of US Highway 395  
**Project No:** P201700466  
**Staff:** Tom Nieves, Contract Planner  
**Rep:** Rafik Albert, EPD Solutions, Inc.  
**Proposal:** Conditional Use Permit for the construction and operation of a 130-megawatt photovoltaic solar energy generating and battery storage facility on approximately 342 acres of a 386-acre parcel.



**79 Hearing Notices Sent on: May 22, 2020**

**Report Prepared By: Tom Nieves**

**SITE INFORMATION:**

Parcel Size: 386 Acres  
 Terrain: Vacant desert land on a gradually sloping alluvial plain.  
 Vegetation: Barstow wooly sunflower, sagebrush loeflingia, white pygmy-poppy and desert cymopterus

**TABLE 1 – SITE AND SURROUNDING LAND USES AND ZONING:**

AREA	EXISTING LAND USE	LAND USE ZONING DISTRICT
SITE	Vacant Land	Resource Conservation (RC)
North	Vacant Land, State Route 58, Burlington Northern Santa Fe Railway railroad lines	Resource Conservation (RC)
South	Vacant Land	Resource Conservation (RC)
East	Edwards AFB Precision Impact Range Area (PIRA)	Rural Living (RL), Resource Conservation (RC)
West	Vacant Land	Resource Conservation (RC)

	<u>Agency</u>	<u>Comment</u>
City Sphere of Influence:	None	N/A
Water Service:	Not Required	Periodic washing of solar arrays only
Sewer Service:	Not Required	N/A

**STAFF RECOMMENDATION:** That the Planning Commission **ADOPT** the Addendum to the Mitigated Negative Declaration, **APPROVE** the Conditional Use Permit, subject to the Conditions of Approval, **ADOPT** the Findings as contained in the staff report, and **DIRECT** staff to file a Notice of Determination.<sup>1</sup>

<sup>1</sup> In accordance with Section 86.08.010 of the Development Code, the Planning Commission action may be appealed to the Board of Supervisors

VICINITY MAP AND OFFICIAL LAND USE DISTRICT MAP



Figure 1: Vicinity Map

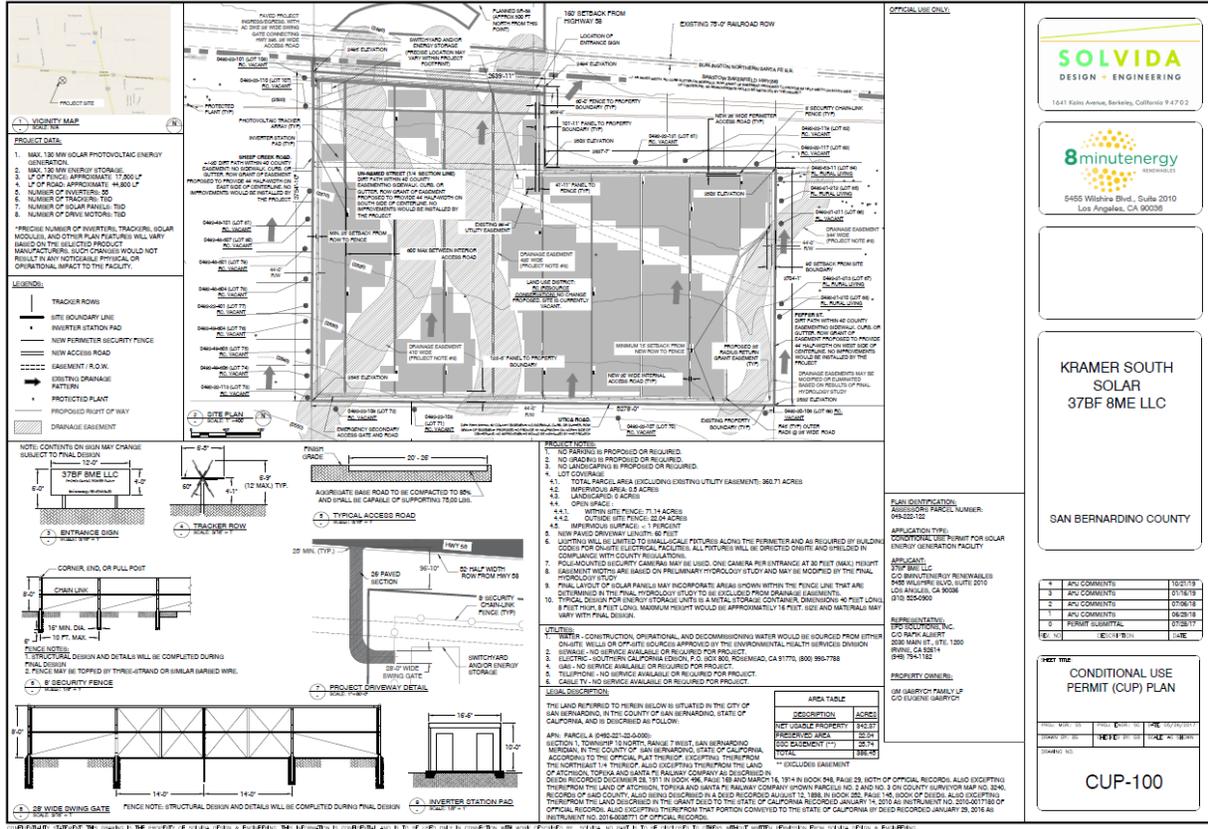


Figure 1.  
Regional  
Location





Figure 4: Proposed Site Plan



**SOLVIDA**  
DESIGN + ENGINEERING  
1641 Folsom Avenue, Berkeley, California 94702

**8minutenergy**  
RENEWABLES  
5455 Wilshire Blvd., Suite 2010  
Los Angeles, CA 90038

**KRAMER SOUTH SOLAR 37BF 8ME LLC**

**SAN BERNARDINO COUNTY**

**APPLICATION TITLE:**  
CONDITIONAL USE PERMIT FOR SOLAR ENERGY GENERATION FACILITY

**APPLICANT:**  
37BF 8ME LLC  
C/O MINUTENERGY RENEWABLES  
5455 WILSHIRE BLVD., SUITE 2010  
LOS ANGELES, CA 90038  
910-525-0000

**APPROPRIATELY:**  
CITY OF SAN BERNARDINO  
C/O SAN BERNARDINO COUNTY  
300 MAIN ST., STE. 1200  
SAN BERNARDINO, CA 92410  
951-78-1122

**PROPERTY OWNER:**  
88 (SANTOS) FAMILY LP  
C/O LUISIANA STREET

NO.	DATE	REVISION
1	06/23/19	ISSUE FOR PERMIT
2	07/16/19	REVISED PER PERMIT
3	07/26/19	REVISED PER PERMIT
4	08/28/19	REVISED PER PERMIT
5	09/25/19	REVISED PER PERMIT
6	11/26/19	REVISED PER PERMIT

**PERMIT TYPE:**  
CONDITIONAL USE PERMIT (CUP) PLAN

**CUP-100**

## SITE PHOTOS



Looking east/southeast on State Route 58 along northern border of Project site.

## SITE PHOTOS



Looking north on existing road on west end of Project site at Highway 58. Railroad tracks north of Highway 58.



## **PROJECT DESCRIPTION:**

The Applicant is requesting approval of a Conditional Use Permit (CUP) for the construction and operation of a 130-megawatt photovoltaic solar energy generating facility with up to 130-megawatts of energy storage on approximately 342 acres of a 386-acre parcel in the Kramer Junction community (referred to herein as the “Project” or “Modified Project”). The Project site is located on the south side of State Route 58 approximately one mile west of the intersection of State Route 58 and US Highway 395. The Project site is located in the Resource Conservation (RC) land use designation, which allows electrical energy generation facilities subject to approval of a CUP.

## **BACKGROUND:**

On February 8, 2011, a CUP was approved on this property by the San Bernardino County Board of Supervisors (Board) for the 40-megawatt (MW) Kramer Junction Solar Farm (Original Project). The Original Project consisted of a photovoltaic power system that utilizes sunlight to generate electricity and other related equipment and was designed to include the arrangement of photovoltaic modules, inverters, and other items into 1-MW blocks that would achieve the full plant capacity of 40 MW. This approved CUP has expired and requires a new entitlement approval prior to being developed for the proposed use.

The proposed Modified Project is substantially the same as the previously approved Original Project with the following exceptions:

1. The solar energy generating capacity of the facility has increased from the Original Project’s output of 40-megawatts to 130-megawatts. This increase is due to technical advancements and the enhanced efficiency of the solar panels and the associated equipment. The increased power generating capacity does not require an increased development footprint for the facility, however, the number of inverter stations on the site would increase from 40 to up to 55.
2. Energy storage capacity of up to 130-megawatts may occur on the Project site. The area required for energy storage would be approximately 7 acres, entirely within the previously development footprint analyzed for the Original Project. The energy storage unit design varies and can take many forms. The storage unit design features typically consist of storage structures similar in size to a typical metal cargo container, being 40 feet long, 8 feet wide, and 8 feet high.

The environmental impacts of the Original Project were analyzed in 2011 pursuant to California Environmental Quality Act (CEQA). An Initial Study was prepared and a Mitigated Negative Declaration (MND) (State Clearinghouse No. 2010031123) was adopted in conjunction with the Original Project approval.

## **ENVIRONMENTAL SETTING:**

The Project site is vacant, relatively flat and has typical Mojave Desert habitats existing on-site. Three ephemeral desert washes enter the Project site from the south and dissipate before reaching State Route 58 at the north portion of the property. The Project site contains a number of existing easements for various entities including California Department of Transportation (Caltrans), Burlington Northern Santa Fe Railway, California Electric Power Company, Nevada-California Electric Corporation, Pacific Gas and Electric Company, All American Pipeline, Pacific Properties, and Kern River Gas Transmission Company.

The Kramer Junction community is comprised of a number of commercial establishments, including gas stations, convenience stores, restaurants, motels, and a trucking travel center. The Southern California Edison Kramer Substation as well as the Edwards Air Force Base Precision Impact Range Area are also located in the Kramer Junction community. Additionally, The Kramer Junction Solar Electric Generating

System (SEGS), occupying almost one thousand acres, is located less than a mile to the northeast of the proposed Project site along U.S. Highway 395.

## **PROJECT ANALYSIS:**

**Renewable Energy Regulation:** Over the last decade or more, the state has mandated that public utilities acquire more renewable energy, including solar-generated electricity. The resulting influx of applications to the County of San Bernardino (County) for commercial solar energy generation projects, coupled with concerns about the adequacy of the County's land use regulation of such projects, prompted the Board to enact a temporary moratorium on June 12, 2013 (Item 12). On December 17, 2013 (Item No. 103), the Board adopted an ordinance amending Chapter 84.29, Renewable Energy Generation Facilities, of the Development Code and terminating the moratorium. These amendments established 31 specific findings that must be made for approval of a commercial solar energy generation project.

On August 8, 2017 (Item 51), the Board adopted the Renewable Energy and Conservation Element of the General Plan (RECE), defining County goals and policies related to renewable energy and energy conservation, including policies governing siting and development of renewable energy generation projects. As proposed by staff, RECE contained Policy 4.10, which prohibited utility-oriented renewable energy (RE) project (10 MW and greater) in areas zoned Rural Living (RL) or areas within defined community plans. The Board adoption of the RECE excluded Policy 4.10, but staff was directed to return the siting issue to the Planning Commission for further study.

The Planning Commission conducted a public hearing on May 24, 2018, recommending that the Board (1) amend the RECE by adopting Policy 4.10<sup>2</sup>, (2) amend Policy 5.2 to add existing energy generation sites to those identified as suitable for utility-oriented renewable energy generation projects, and (3) add Policy 5.9 (collaborating with utilities, the California Energy Commission, and the Bureau of Land Management to plan for renewable energy generation facilities to be located on public lands, apart from existing unincorporated communities). Thereafter, on February 28, 2019 (Item 1), the Board considered and adopted the Planning Commission recommendation.

In order to approve a commercial solar facility, in addition to making the findings required under Section 85.06.040(a) of the County Development Code relative to a CUP, the Project must meet the Required Findings for Approval of a Commercial Solar Energy Facility Section 84.29.035. Exhibit B "Findings" discusses in detail the Project's consistency with the RECE and Development Code Section 84.29.065 pertaining to the development of commercial solar facilities.

**Aesthetics/Visual Impacts:** The Project is not located on or in proximity to any roadways designated by the State or the County as a scenic route. Primary viewers of the Project will consist of motorists traveling on State Route 58 along the northern boundary of the Project site. Although SR 58 is currently being realigned approximately ¼ mile to the north and construction is anticipated to be completed by the end of this year, the proposed Project will not have a significant adverse affect on any scenic vista nor adversely change the visual character of the area.

The internal roadway system proposed for the Project will consist of perimeter roads surrounding the facility, providing separation from the surrounding community. An eight-foot high security fence will secure the solar field area as well as the Project site perimeter. Lighting proposed along the perimeter and at key intersections within the Project site will be shielded so as to minimize light intrusion into the surrounding area.

The County Development Code regulates glare, outdoor lighting and night sky protection. Compliance with the requirements and standards of the Development Code will ensure that Project impacts associated with glare and light intrusion will be less than significant. The primary component of the Project, the photovoltaic modules, are composed of non-reflective materials.

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<sup>2</sup> With the suggestion that the Board, under its purview, consider moderating the policy so as to avoid a blanket prohibition of utility-oriented renewable energy generation projects in Rural Living zoning districts.

**Biological Resources:** The proposed Project may have an impact a number of threatened species as well as sensitive vegetation communities. In all instances, implementation of proposed mitigation measures identified in the MND as well as the Conditions of Approval (COA) will reduce impacts to a less than significant level.

It has been determined that the desert tortoise is present on the Project site. Additionally, it is assumed that the Mojave Ground Squirrel is present on the Project site. The proposed Project would directly impact 86 specimen-sized Joshua Trees and 146 non-specimen-sized Joshua Trees existing on the Project site. One Desert Cymopterus, listed by the California Native Plant Society, was identified on the Project site and will be impacted by the proposed Project, as will 347.3 acres of suitable habitat for this species.

**Cultural Resources:** A records search indicated that portions of the Project site have been previously surveyed and that two historic resources were recorded on the property, consisting of one historic railway grade and one historic railroad. Additionally, field surveys located an additional nine unrecorded sites and 28 isolates were located. Nine of the sites identified in the surveys are considered historic and represent refuse deposits that date from the late 1800s to the mid-1900s.

Two minor paleontological finds from surface scatter have been documented within the Project boundaries, neither of which were sufficiently complete or well enough preserved to be identified to the genus or species level.

The excavation of the Project site has a low potential to have an impact on significant nonrenewable fossil sources. In the event Pleistocene or older alluvium is encountered in the subsurface, or if significant vertebrate fossils are exposed during construction of the proposed Project, implementation of proposed mitigation measures will reduce impacts to a less than significant level.

**Traffic:** The proposed Project will generate temporary, short-term traffic during construction. Approximately 40 vehicular round trips per day are expected from commuting construction workers. Vehicular traffic resulting from construction activities would be temporary and limited to two construction phases of approximately one year in duration each. The expected increase in traffic associated with the construction of the proposed Project would not result in significant traffic congestion on the area roadway system. As evaluated within the environmental documentation for the Project, traffic impacts associated with construction would be less than significant.

Traffic generated during the on-going operation of the solar facility would consist of intermittent truck traffic delivering machinery and parts to be utilized during the lifetime of the proposed Project. Additionally, washing of the photovoltaic modules would be conducted two to four times a year, with water being delivered to the site via 4,000-gallon water trucks. This would generate approximately 250 round trips spread over the duration of the washing activity. As evaluated within the environmental documentation for the Project, traffic impacts associated with ongoing operation of the Project would be less than significant.

**Water Usage:** Water usage during grading and construction would be temporary and would not significantly impact the availability of domestic water resources. During the ongoing operation of the facility, the only water that would be utilized would be for the washing of the photovoltaic modules, expected to take place two to four times per year. Each wash cycle would consume approximately 100,000 gallons of water (0.30 acre-feet). Water usage during ongoing Project operation would not significantly impact the availability of domestic water resources.

**Noise:** Noise generated during construction activities would be localized, temporary and transitory in nature and no significant impacts are anticipated. Operation of the facility would not generate audible levels of noise or perceptible levels of vibration in the surrounding community and impacts are expected to be less than significant.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT:**

The County has reviewed the Modified Project and has determined that, pursuant to CEQA Guidelines Sections 15162 and 15164, the previous environmental analysis and documentation prepared for the Original Project remains applicable to the Modified Project. As discussed in the Background section of this Staff Report, the development footprint of the Modified Project is the same as the previously approved Original Project. No change or increase in grading or land alteration is proposed and thus there is no increased environmental impacts resulting from the Modified Project. An Addendum to the MND (Addendum) has been prepared that addresses the impacts associated with the Modified Project in relation to those impacts and mitigation measures approved with the Original Project (Exhibit A). Staff is recommending that the Planning Commission adopt the Addendum to the MND.

As discussed in the proposed Addendum, CEQA and the CEQA Guidelines establish the type of environmental documentation that is required when only minor changes or no changes occur to a Project after the adoption of a MND. CEQA Guideline Section 15164(b) states that “[a]n addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.”

Section 15162(a) of the CEQA Guidelines state that a Subsequent EIR or MND need only be prepared if:

- (1) Substantial changes are proposed in the Project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the Project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
  - A. The Project will have one or more significant effects not discussed in the previous EIR or negative declaration;
  - B. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the Project proponents decline to adopt the mitigation measure or alternative; or
  - D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the Project proponents decline to adopt the mitigation measure or alternative.

Section 15162(b) of the CEQA Guidelines states, “If changes to a Project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.”

The Addendum evaluated whether changes in circumstances surrounding the Modified Project or new information of substantial importance would cause new significant environmental effects or a substantial increase in the severity of such effects beyond what was identified in the previous MND approved in 2011. The evaluation of changes in circumstances and new information focused on whether changes of substantial importance have occurred to environmental conditions in the Project area, or to applicable plans, policies or regulations.

The analysis determined that the environmental impacts from the Modified Project would be no more severe than those projected to result from implementation of the Original Project, and no new significant

environmental impacts would occur. Thus, pursuant to CEQA, the proposed Addendum provides the appropriate level of environmental review to address the changes, if any, to the implementation of the Modified Project.

**PUBLIC NOTICES AND COMMENTS:**

An MND was prepared for the Original Project pursuant to CEQA. A total of 131 Notices of Availability (NOA) were mailed out to affected parties and neighboring property owners. No comments were received from members of the general public. Comments were received from the following public agencies pertaining to biological resources, traffic, railway crossing safety and water usage: California Department of Fish and Wildlife, U.S Fish and Wildlife Service, Mojave Desert Air Quality Management District, California Public Utilities Commission, and Caltrans District 8 (Exhibit C). Staff addressed said comments via minor revisions to the mitigation measures and/or as Conditions of Approval associated with the adoption and approval of the Original Project. Pursuant to the CEQA Guidelines, an Addendum to an adopted MND does not require recirculation.

The Notice of Hearing for the Modified Project was sent out on May 22, 2020, advertising the Planning Commission hearing to be held on June 4, 2020. No additional comments were received.

**RECOMMENDATION:** That the Planning Commission:

1. **ADOPT** the Addendum to the Mitigated Negative Declaration (Exhibit A);
2. **APPROVE** the Conditional Use Permit for the construction and operation of a 130-megawatt photovoltaic solar energy generating and battery storage facility on approximately 342 acres of a 386-acre parcel, subject to the Conditions of Approval (Exhibit D);
3. **ADOPT** the recommended Findings as contained in the Staff Report (Exhibit B); and
4. **DIRECT** staff to file the Notice of Determination.

**ATTACHMENTS:**

- EXHIBIT A: Addendum to the Mitigated Negative Declaration
- EXHIBIT B: Findings
- EXHIBIT C: Correspondence
- EXHIBIT D: Conditions of Approval
- EXHIBIT E: Site Plan
- EXHIBIT F: Mitigated Negative Declaration (SCH No. 2010031123)

# EXHIBIT A

## Addendum to the Mitigated Negative Declaration

## **Kramer South Solar Farm**

### **Addendum to the Mitigated Negative Declaration for 37BF 8ME, LLC c/o 8Minutenergy Renewables**

APN 0492-221-22 and 26

SCH No. 2010031123

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

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## 1.0 Project Description

The proposed Kramer South Solar Farm is a 130-megawatt (MW) photovoltaic solar energy generating facility that includes 130 MW of energy storage located on approximately 342 acres located in the Mojave Desert near Kramer Junction (Project). More specifically, the site is about one mile west of the intersection of State Route 58 and US Highway 395 (**Figure 1**, Regional Location). The property consists of 386 acres, of which a portion has been previously disturbed for uses such as natural gas pipelines, communications lines, power lines and roads. The project site has relatively flat terrain and is situated less than a mile west of the existing Southern California Edison (SCE) Kramer Substation. Both a 33-kilovolt (kV) and 115kV transmission line pass through the site, and the project anticipates connecting via the 33kV line without major upgrades. The project is estimated to generate 309,000 megawatt hours (MWh) in the first year of operation, providing enough energy for approximately 39,000 people.

## 2.0 Project Background

The proposed Project re-establishes a Conditional Use Permit (CUP) that was previously approved for a substantially similar project, which was approved by the San Bernardino County Board of Supervisors on February 8, 2011. The prior CUP has expired and a new entitlement is therefore required. The 2011 CUP approval was analyzed in an Initial Study Environmental Checklist, with a Mitigated Negative Declaration (IS/MND) adopted in conjunction with the project approval (State Clearinghouse No. 2010031123). The current Project proposal requires only minor technical adjustments to the adopted IS/MND. Specifically, the following changes to the project description are proposed:

1. The capacity of the solar field is increased from 40 MW to 130 MW. This is a result of the enhanced efficiency of solar panels and associated equipment, and would not require an expanded footprint for the facility. The number of inverter stations on the site would increase from 40 to up to 55.
2. Energy storage of up to 130 MW may occur on site. Energy storage units may take many forms, but a typical design consists of storage structures the same size as a typical cargo container—approximately 40 feet in length, 8 feet in width, and 8 feet in height. The area required for energy storage would be up to approximately 7 acres, entirely within the previously analyzed and approved footprint of the Kramer Junction Solar Farm. Energy storage units would be about the height of a single-story building (up to approximately 16 feet in height) and below the height limit of 35 feet in the RC land use zone.

The current Project proposal would be constructed on a 386-acre parcel, the same parcel included in the previously approved project. (**Figure 2**, Project Area). Therefore, the boundaries of the current Project are identical to those of the previously approved project. As in the previously approved project, a wash feature and associated buffer lands on the southeast border of the project site would also be avoided and conserved. A 342-acre portion of the parcel would be developed as a solar photovoltaic facility and is the focus of this analysis. The project applicant will acquire California Department of Fish and Wildlife (CDFW)-approved land to mitigate development on 342 acres

## 3.0 Project Setting

The site is vacant and is zoned Resource Conservation (RC), the most rural zoning designation, allowing land to be subdivided into parcels at least 40 acres in size. Electrical generation is allowed in the RC zone subject to a CUP.

The relatively flat, vacant project site and surrounding areas have typical Mojave Desert habitats. Three ephemeral desert washes enter the project site from the south and dissipate before they get to State Route 58 (**Figure 3**, Aerial and APNs). Human presence is apparent on site as evidenced by trash piles composed of wood, metal, tires, plastic beverage containers, and an abandoned truck. The project site includes six dirt roads,

which judging by their smoothness and the height of the berms on their sides, appear to be graded periodically. Eight easements and/or rights-of-way cross the property on the north and south) and include the following:

Burlington Northern Santa Fe Railway	Pacific Gas and Electric Company
State Route 58 rights-of-way for Caltrans	All American Pipeline
California Electric Power Company	Pacific Properties
Nevada-California Electric Corporation	Kern River Gas Transmission Company

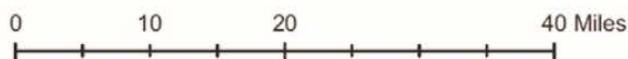
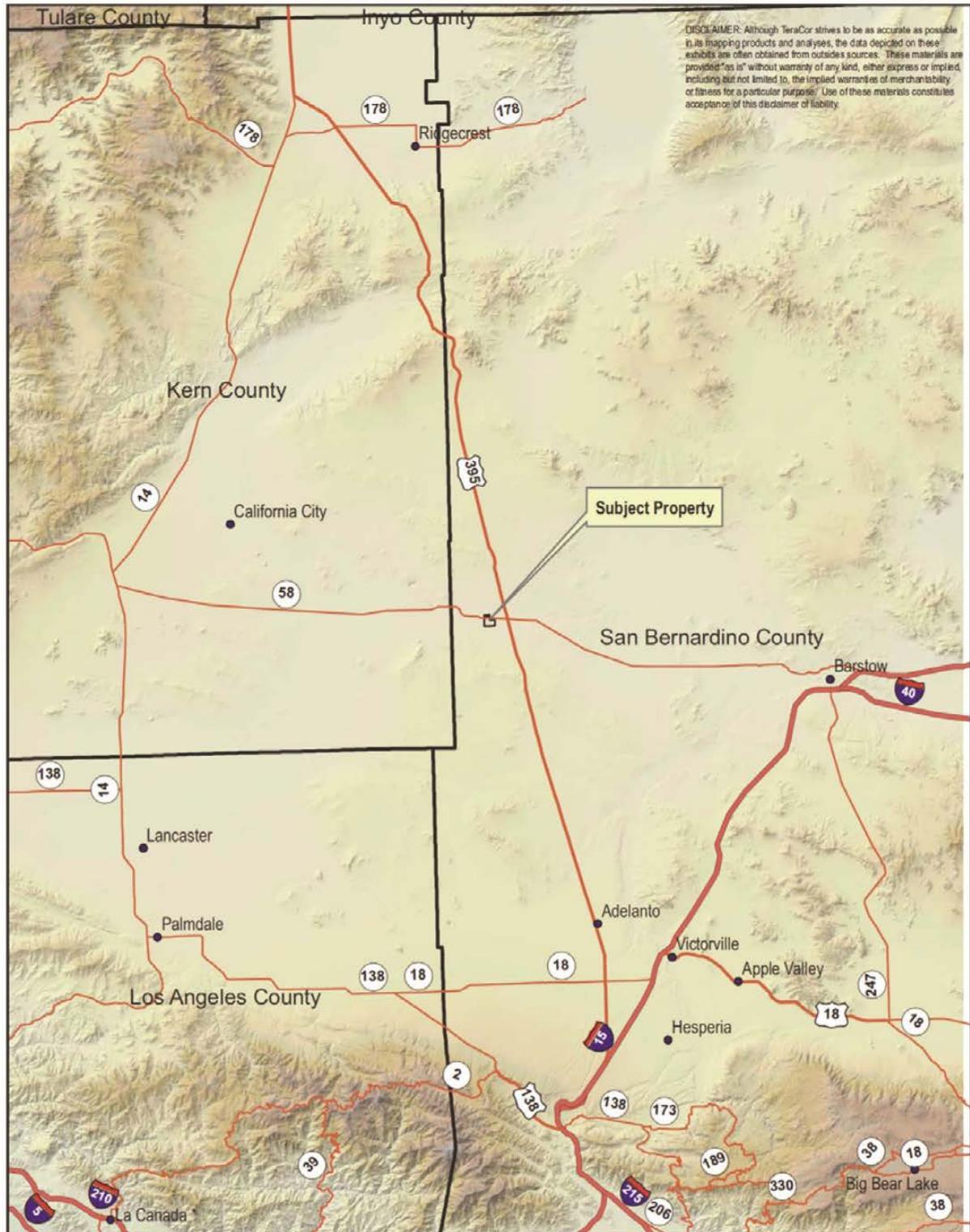
State Route 58 and the Burlington Northern Santa Fe Railway line parallel each other and divide the property into north and south. The site can presently be accessed from dirt roads that meet State Route 58 and Sheep Creek Road (an existing 40-foot-wide County easement dirt road) along the western border.

The Kramer Junction Solar Electric Generating System (SEGS), a series of solar thermal (not photovoltaic) electric power plants with turbines, is spread across almost 1,000 acres nearly a mile to the northeast across State Route 58 directly west of US 395. On cloudy days or early evenings, an auxiliary natural gas fired heater operates to supplement sources of power. The solar power eventually heats water, which boils and drives a steam turbine, thereby generating electricity.

To the east, about 0.45 mile away, is a bus repair yard. The unincorporated community of Kramer Junction is generally located near the intersection of State Route 58 and US 395. Along the highway are several commercial establishments, including restaurants, a trucking travel center, gas stations, a restaurant, motels, and a gift shop. The SCE Kramer Substation is also located there. To the south is Federal land, Edwards Air Force Base (AFB), where the Precision Impact Range Area (PIRA) is located. The PIRA is a test site for aircraft systems, equipment, and ground activities, and makes up 60,800 acres, or 20 percent, of the area of Edwards AFB. Of those 60,800 PIRA acres, 1,800 acres are cleared for target use. This cleared area was not observed from the project site. Between the bus repair yard and Kramer Junction is another part of Edwards AFB.

Existing land uses and Land Use Zones on and adjacent to the project site are listed in **Table 1**.

<b>Table 1: Existing Land Use and Land Use Zoning Districts</b>		
Location	Land Use Zoning District	Existing Land Use
<b>Project Site</b>	Resource Conservation (RC)	Vacant
North	RC	Vacant, State Route 58, railroad tracks; farther north is the Kramer Junction Solar Electric Generating System (SEGS)
East	Rural Living (RL), portion is RC	Vacant; farther east 0.45 mile is bus repair yard, then jutting portion of Edwards AFB, then Kramer Junction and the Southern California Edison (SCE) Kramer Substation one mile east of the site boundary.
South	RC	Edwards AFB Precision Impact Range Area (PIRA)
West	RC	Vacant



**Figure 1.  
Regional  
Location**

#### 4.0 CEQA Authority for an Addendum

CEQA and the CEQA Guidelines establish the type of environmental documentation that is required when only minor changes or no changes occur to a project occur after the adoption of a Mitigated Negative Declaration. CEQA Guideline Section 15164(b) states that “[a]n addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.”

Section 15162(a) of the CEQA Guidelines state that a subsequent EIR or MND need only be prepared if:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
  - A. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
  - B. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Section 15162(b) of the CEQA Guidelines states, “If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.”

This addendum evaluates whether changes in circumstances surrounding the approved project or new information of substantial importance would cause new significant environmental effects or a substantial increase in the severity of such effects beyond what was identified in the previous MND approved in 2011. The evaluation of changes in circumstances and new information is focused on whether changes of substantial importance have occurred to environmental conditions in the project area, or to applicable plans, policies or regulations.

As described and analyzed in detail herein, environmental impacts from the modified project would be no more severe than those projected to result from implementation of the modified project, and no new significant environmental impacts would occur. Thus, pursuant to CEQA, this Addendum provides the appropriate level of environmental review to address the changes, if any, to the implementation of the modified project.

#### 5.0 Original Approved Project

The original project, approved in 2011, consisted of a 40 megawatt (MW) photovoltaic solar energy generating facility located on approximately 350 acres in the Mojave Desert within San Bernardino County about one (1) mile west of the intersection of State Route 58 and US Highway 395. The original project was estimated to generate 95,000 megawatt hours (MWh) in the first year of operation, providing enough energy for approximately 12,000 people. The original project consisted of a photovoltaic power system that utilizes sunlight to generate electricity and other related equipment.

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Photovoltaic power systems convert sunlight solar energy into direct current (DC), and inverters convert the DC to alternating current (AC), which is eventually used by households and businesses. The process starts with photovoltaic cells, which make up photovoltaic modules, also referred to as solar panels (environmentally sealed collections of photovoltaic cells). Several photovoltaic modules make up photovoltaic arrays.

The original project design included the arrangement of photovoltaic modules, inverters, and other items into 1-MW blocks that, would achieve the full plant capacity of 40 MW.

## **6.0 New Modified Project**

The new modified Project requires a new Conditional Use Permit (CUP) to accommodate, within the previously approved project footprint, a total of up to 130 MW of solar power generation. The increased power is accomplished through the use of more efficient panels and inverters and updated technology (e.g., bifacial panels). Bifacial panels add a second layer of glass on the bottom of the solar panels to absorb light which would reflect off of the ground. This would increase energy generation from PV panels without increasing the height, dimensions, site layout, noise generation, or other attributes of the panels from the solar panels that were previously approved for this site. With the use of new technology, the precise number of arrays, modules, trackers, and other features within the solar field would vary from the approved project, subject to the constraints of the approved project footprint, the approved maximum panel height of 15 feet, and other applicable development standards.

The project inverters and transformers, as well as other electrical equipment, would be located within up to 55 protected electrical equipment enclosures, an increase from the 40 enclosures included in the approved project. Energy storage of up to 130 MW may occur on site. Energy storage units may take many forms, but a typical design consists of storage structures the same size as a typical cargo container—approximately 40 feet in length, 8 feet in width, and 8 feet in height. The area required for energy storage would be up to approximately 7 acres within the previously analyzed and approved footprint of the Kramer Junction Solar Farm. Energy storage units would be consistent in height with a single-story building (up to about 16 feet).



**Figure 2.**  
**Aerial and APNs**





## 7.0 Evaluation Overview

### **Summary of Conclusions**

This document states the basis for the County of San Bernardino's determination that the Kramer South Solar Farm project proposed by 37BF 8ME LLC falls within the scope of the previously-adopted Kramer Junction Solar Farm Initial Study/Mitigated Negative Declaration (SCH #2010031123) (Adopted MND).

This Initial Study has been prepared in accordance with the following:

- California Environmental Quality Act (CEQA) of 1970 (Public Resources Code Sections 21000 et seq.);
- California Code of Regulations, Title 14, Division 6, Chapter 3 (State CEQA Guidelines, Sections 15000 et seq.); and

Pursuant to CEQA, this Initial Study has been prepared to analyze the potential for significant impacts on the environment resulting from implementation of the proposed building. This Initial Study informs County decision-makers, affected agencies, and the public of potentially significant environmental impacts associated with the implementation of the project.

Pursuant to Sections 15051 and 15367 of the CEQA Guidelines, the County of San Bernardino is the Lead Agency for CEQA compliance associated with the project because it will approve, carry out, and implement the project and will be the first agency to approve the project. An agency may prepare an addendum to a CEQA document pursuant to CEQA Guidelines Section 15164 that states, in pertinent part, that: "The lead agency [...] shall prepare an addendum to a previously certified [CEQA document] if some changes or additions are necessary but none of the conditions described in Section 15162 calling for the preparation of a subsequent [CEQA document] have occurred." An agency may prepare an addendum to document its decision that a subsequent CEQA document is not required. (CEQA Guidelines Section 15164, subdivisions (a) and (e) and Section 15162, subdivision (a)).

Based on the analysis in this Initial Study and Addendum, the County of San Bernardino determined that the potential impacts of the modified project were previously analyzed in or are substantially similar to the impacts analyzed in the Adopted MND prepared for the previously approved Kramer Junction Solar Farm project and that none of the conditions identified in Public Resources Code Section 21166 or Section 15162 of the CEQA Guidelines apply. The County of San Bernardino determined that they would prepare this Addendum to: (1) evaluate whether the project's environmental impacts were already analyzed in the prior Negative Declaration; (2) document County's findings with respect to the project and its environmental determinations; and, (3) evaluate and document that a new, supplemental or subsequent EIR, Negative Declaration, or other CEQA document was not warranted.

This Addendum is the appropriate CEQA documentation for the project because:

- the project would not lead to increased environmental impacts beyond those that are already identified in the MND;
- the project does not modify previously-analyzed impacts or findings in any substantive way;

- no new mitigation measures are required;
- none of the conditions identified in Public Resources Code Section 21166 or Section 15162 of the CEQA Guidelines apply; and,
- no new significant adverse project-specific or cumulative impacts in any environmental areas were identified, nor would any project-specific or cumulative impacts in any environmental areas be made worse as a result of implementing the project.

None of the conditions described in Section 15162 of the CEQA Guidelines have occurred. Specifically, there have not been: (1) changes to the project that require major revisions to the Adopted MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the project is undertaken that require major revisions to the Adopted MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the Adopted MND was completed.

### ***Evaluation of Environmental Impacts***

This section is intended to provide evidence to substantiate the conclusions set forth in the Environmental Checklist. The section briefly summarizes the conclusions in the Adopted MND, and discusses the consistency of the new modified Project with the findings contained in the Adopted MND. Mitigation measures referenced are from the Mitigation Monitoring and Reporting Program adopted in conjunction with the project.

The Environmental Checklist identifies the environmental effects of the modified project in comparison with the development contemplated in the Adopted MND. This comparative analysis has been undertaken, pursuant to the provisions of the CEQA, to provide the factual basis for determining whether any changes in the modified project, any changes in the circumstances, or any new information requires additional environmental review or preparation of a subsequent MND. Some changes and additions to the Adopted MND and related Findings are required for the modified project, but such changes and additions do not involve new significant environmental impacts, a substantial increase in severity of significant impacts previously identified, substantial changes to the circumstances under which the modified project is undertaken involving such new impacts or such a substantial increase in the severity of significant impacts, or new information of substantial importance as meant by CEQA Guidelines Section 15162. As such this Addendum is the appropriate means to document these textual changes.

### ***Terminology Used in the Checklist***

For each question listed in the Environmental Checklist, a determination of the level of significance of the impact is provided. Impacts are categorized in the following categories:

1. **Substantial Change in Project or Circumstances Resulting in New Significant Effects.** A Subsequent MND is required when 1) substantial project changes are proposed or substantial changes to the circumstances under which the project is undertaken, and 2) those changes result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects, and 3) project changes require major revisions of the Adopted MND.<sup>1</sup>

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<sup>1</sup> CEQA Guidelines. California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, § 15162, as amended.

2. **New Information Showing Greater Significant Effects than Previous MND.** A Subsequent MND is required if new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the MND was certified, shows 1) the project will have one or more significant effects not discussed in the MND; or 2) significant effects previously examined will be substantially more severe than shown in the MND.<sup>2</sup>
3. **Minor Technical Changes or Additions.** An Addendum to the Adopted MND is required if only minor technical changes or additions are necessary and none of the criteria for a Subsequent MND is met.<sup>3</sup>
4. **No Impact/No New Impact.** A designation of *no impact* is given when the modified project would have no changes in the environment as compared to the original project analyzed in the Adopted MND.

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<sup>2</sup> CEQA Guidelines. § 15162.

<sup>3</sup> CEQA Guidelines. § 15164.

## 8.0 Environmental Factors Potentially Affected

The subject areas checked below were determined to be new significant environmental effects or to be previously identified effects that have a substantial increase in severity either due to a change in project, change in circumstances or new information of substantial importance, as indicated by the checklist and discussion 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"/> Tribal Cultural Resources          | <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:

- No substantial changes are proposed in the project and there are no substantial changes in the circumstances under which the project will be undertaken that will require major revisions to the previous approved ND or MND or certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Also, there is no "new information of substantial importance" as that term is used in CEQA Guidelines Section 15162(a)(3). Therefore, the previously adopted ND or MND or previously certified EIR adequately discusses the potential impacts of the project without modification.
- No substantial changes are proposed in the project and there are no substantial changes in the circumstances under which the project will be undertaken that will require major revisions to the previous approved ND or MND or certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Also, there is no "new information of substantial importance" as that term is used in CEQA Guidelines Section 15162(a)(3). Therefore, the previously adopted ND, MND or previously certified EIR adequately discusses the potential impacts of the project; however, minor changes require the preparation of an ADDENDUM.

- Substantial changes are proposed in the project or there are substantial changes in the circumstances under which the project will be undertaken that will require major revisions to the previous ND, MND or EIR due to the involvement of significant new environmental effects or a substantial increase in the severity of previously identified significant effects. Or, there is "new information of substantial importance," as that term is used in CEQA Guidelines Section 15162(a)(3). However, all new potentially significant environmental effects or substantial increases in the severity of previously identified significant effects are clearly reduced to below a level of significance through the incorporation of mitigation measures agreed to by the project applicant. Therefore, a SUBSEQUENT MND is required.
- Substantial changes are proposed in the project or there are substantial changes in the circumstances under which the project will be undertaken that will require major revisions to the previous environmental document due to the involvement of significant new environmental effects or a substantial increase in the severity of previously identified significant effects. Or, there is "new information of substantial importance," as that term is used in CEQA Guidelines Section 15162(a)(3). However, only minor changes or additions or changes would be necessary to make the previous EIR adequate for the project in the changed situation. Therefore, a SUPPLEMENTAL EIR is required.
- Substantial changes are proposed in the project or there are substantial changes in the circumstances under which the project will be undertaken that will require major revisions to the previous environmental document due to the involvement of significant new environmental effects or a substantial increase in the severity of previously identified significant effects. Or, there is "new information of substantial importance," as that term is used in CEQA Guidelines Section 15162(a)(3) such as one or more significant effects not discussed in the previous EIR. Therefore, a SUBSEQUENT EIR is required.

(signed document on file)  
\_\_\_\_\_  
Signature (prepared by Tom Nieves, Contract Planner

\_\_\_\_\_  
Date

(signed document on file)  
\_\_\_\_\_  
Signature: Chris Warrick, Supervising Planner

\_\_\_\_\_  
Date

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact
<b>I. AESTHETICS - Will the project:</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 will adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

a - d) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not have a substantial adverse effect on a scenic vista; substantially damage scenic resources within a state scenic highway; substantially degrade the existing visual character or quality of the site and its surroundings; or create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area. No mitigation measures were required.

Impacts Associated with the Modified Project

**No New Impact.** The modified project increases the facility electrical generation capacity from 40 MW to 130 MW. This increase is a result of more efficient solar panels and other electrical equipment. The revision to the total capacity does not expand or intensify the uses on the site. The physical footprint of the site is not modified as a result of the capacity increase. The size and type of the facility remains similar to the one analyzed under the Adopted MND.

The modified project also includes an energy storage component. Energy storage would occur on approximately 7 acres, comprising 2 percent of the previously-approved 350-acre development area on the site. Energy storage would occur entirely within the previously analyzed footprint of the project and would not require an expansion of the facility beyond the area analyzed in the Adopted MND. The maximum height of the energy storage units (approximately 16 feet) is consistent with the height of a single-story building, slightly taller than the 12 feet analyzed for electrical equipment in the Adopted MND, and below the 35-foot height limit in the RC land use zone. Energy storage would be subject to County

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Ordinance No. 3900, regulating glare, outdoor lighting, and night sky protection. For these reasons, the energy storage component would not result in any new significant impacts. The modified project would not result in any new or substantially more severe impacts to aesthetics than anticipated in the Adopted MND.

Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

- Ordinance No. 3900

Mitigation/Monitoring Required

No new nor substantially more severe aesthetic impacts would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for aesthetics.

Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This substantiates the conclusions that no additional CEQA documentation is required for the modified project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to aesthetics. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

<i>Issues</i>	<b>Subsequent MND</b>		<b>Addendum to MND</b>	
	<i>Substantial Change in Project Circumstances Resulting in New Significant Effects</i>	<i>New Information Showing Greater Significant Effects than Previous MND</i>	<i>Minor Technical Changes or Additions</i>	<i>No New Impact or No Impact</i>
<b>II. AGRICULTURE AND FORESTRY RESOURCES -</b>				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Will the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

a - e) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not convert Farmland to non-agricultural use, conflict with agricultural zoning or a Williamson Act contract, or involve other changes that could result in conversion of Farmland to non-agricultural use. No mitigation measures were required.

Forest land impacts were not analyzed in the Adopted MND because existing CEQA criteria and thresholds for analyzing forest land, timberland, or timberland zoned Timberland Production did not exist at the time the MND was prepared. However, at the time of the Adopted MND, the project site did not contain 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 Govt. Code section 51104(g)).

Impacts Associated with the Modified Project

**No New Impact.** The modified project has the same footprint as the approved project, and contains no agricultural or forest resources, agricultural or forest zoning, or Williamson Act contracts. The modified project would not result in any new or substantially more severe impacts related to agriculture and forest resources than anticipated in the Adopted MND.

Project Design Features (PDF) & Standard Conditions/Existing Plans, Programs, or Policies

There are no PDFs or Standard Conditions of Approval related to agriculture or forest resources.

Mitigation/Monitoring Required

No new nor substantially more severe agriculture and forest resources impacts would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for agriculture and forest resources.

Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to agriculture and forestry resources. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact
<b>III. AIR QUALITY</b> - Where available, the significance criteria established by the applicable air quality management or air pollution control district might be relied upon to make the following determinations. Will the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

a - e) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not conflict with or obstruct implementation of the Mojave Desert Air Quality Management District's Air Quality Management Plan, result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment, expose sensitive receptors to substantial pollutant concentrations, or create objectionable odors affecting a substantial number of people. The approved project was found to result in a potentially significant impact related to the violation of an air quality standard due to construction-period emissions of particulate matter 10 microns or less in diameter (PM10). This was mitigated to below a level of significance with Mitigation Measure AIR-1. Minor technical adjustments to this mitigation measure are shown below in underline and ~~strikeout~~ format to indicate changes made in compliance with Chapter 84.29 of the Development Code (Ordinance No. 4213, adopted on December 17, 2013):

**AIR-1:** *The project applicant shall ensure that the following dust suppression measures are implemented as part of the project's mitigation:*

1. Disturbed areas of the site shall be watered a minimum of three times daily, unless dust is controlled by rainfall or use of a dust palliative, or other approved dust control measure.
2. *All excavating and grading operations shall be suspended when wind speeds (as instantaneous gusts) exceed 25-20 mph.*
3. *Wheel washers shall be installed where vehicles enter and exit unpaved roads onto paved roads; trucks and any equipment shall be washed down before leaving the site.*
4. *All on-site roads and other areas that have no vegetation shall be paved, watered, or chemically stabilized.*
5. On-site vehicle speeds will be limited to 15 miles per hour

#### Impacts Associated with the Proposed Project

**No New Impact.** The modified project would not increase the physical area of impact evaluated in the Adopted MND, require any additional construction equipment, or require a longer construction period. There would no increase in construction-period emissions, including emissions of PM10.

The modified project would not require any increase in the number of emissions-generating equipment or vehicles during operations. The added energy storage component of the project would not generate emissions. The modified project would have a beneficial impact to statewide air pollutant emissions as the project would generate substantially more clean energy than previously approved (130 MW vs. 40 MW) and the energy storage component would allow for energy created during the daytime using solar panels to be used during non-daytime hours, thereby displacing non-renewable energy sources such as natural gas.

The project would continue to be subject to existing policies, including Mojave Desert Air Quality Management District Rules 403 and 403.2 for fugitive dust control, as well as Mitigation Measure AIR-1.

Based on these factors, the modified project would not result in any new or substantially more severe impacts to air quality than anticipated in the Adopted MND.

#### Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

- MDAQMD Rules 403 and 403.2

#### Mitigation/Monitoring Required

Mitigation Measure AIR-1 applies. No new nor substantially more severe air quality impacts would result from the adoption and implementation of the proposed project; therefore, no new or revised mitigation measures are required for air quality.

#### Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This substantiates the conclusions that no additional CEQA documentation is required for the

project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to air quality. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact
<b>IV. BIOLOGICAL RESOURCES - Will the project:</b>				
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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 ):

a - f) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not have a substantial adverse effect on federally protected wetlands, 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 approved project was found to have potentially substantial adverse effects on candidate, sensitive, or special status species and on riparian habitat or other sensitive natural communities; to conflict with local

policies or ordinances protecting biological resources; and to conflict with the provisions of an adopted Habitat Conservation Plan. These impacts were mitigated to below a level of significance with Mitigation Measures BIO-1 through BIO-11. Minor technical adjustments to these mitigation measures are shown below in underline and ~~strikeout~~ format:

- BIO-1:** *Prior to the issuance of the project grading permit, the project applicant shall purchase California Department of Fish and Wildlife~~Game~~ (CDFW~~G~~) approved land for offsite conservation. The purchased land shall provide offsite mitigation of project impacts at a mitigation impact ratio ranging from a minimum of 1.5:1 through 5:1 and will be refined through the Incidental Take Permit Process.*
- BIO-2:** *Prior to the issuance of the project grading permit, the project applicant shall dedicate as open space the northern parcel of the project site and the large desert wash and a wash buffer zone in the southeastern portion of the site and parcel 0492-221-26, or an area of similar size with similar vegetation characteristics, ~~as open space.~~ No manmade disturbance shall occur in these areas.*
- BIO-3:** *Prior to the start of construction activities, the project applicant shall install orange safety fencing around the perimeter of the work area to discourage entry into natural areas. All construction personnel shall be advised to stay out of fenced areas. Fencing shall remain in place until the completion of construction activities.*
- BIO-4:** *Prior to the start of equipment placement or construction activities at the project site, the project applicant shall ensure that all workers that will be present on the site during grading and/or construction activities are given literature and a brief instruction seminar to advise the workers on identifying sensitive organisms and habitats and how to best avoid these organisms and areas.*
- BIO-5:** *In accordance with the Migratory Bird Treaty Act (MBTA), if vegetation removal must occur during the bird-nesting season, a qualified ornithologist will examine the site to avoid impacts to nesting birds. If active bird nest(s) are detected during the pre-construction nesting surveys, the qualified ornithologist will establish an adequate buffer around the active nest(s) to ensure the nesting birds are not disturbed until the young birds have fledged. The ornithologist will remain onsite to actively monitor the birds and/or nests during construction.*
- BIO-6:** *Prior to the issuance of the project grading permit, the project applicant shall secure “take” permits for the State endangered Mohave ground squirrel and the State and Federally threatened Desert Tortoise from the California Department of Fish and Wildlife~~Game~~ and U.S. Fish and Wildlife Service or a letter from these agencies indicating that such a permit is not required.*
- BIO-7:** *Prior to the issuance of grading permits, the project applicant shall apply for a tree removal permit from the County. Trees meeting the specimen size requirements of the County shall be removed and relocated around the perimeter of the project, if possible, or at another County-approved location. Any specimen size trees that are not relocated shall be stockpiled for future transplanting. Any stockpiling of trees shall occur through coordination with the County to ensure the plants are well cared for and the root systems are kept watered on a regular basis until the trees are*

relocated. The project applicant and the County shall develop a Joshua Tree Management Program to preserve as many Joshua trees as possible.

**BIO-8:** Joshua tree relocation shall be avoided during the nesting season to avoid affecting migratory bird species. If Joshua tree removals are conducted during the nesting season (generally February 1 to August 1), a survey shall be conducted by a qualified biologist/ecologist to confirm whether active nests are present. If eggs or nestlings are present, removal of vegetation must be postponed under provisions of the Migration Bird Treaty Act (MBTA) until nestlings have fledged.

If burrowing owls are observed during the pre-construction surveys, the following measures will apply:

**BIO-9:** As compensation for the direct loss of burrowing owl nesting and foraging habitat, the project applicant shall be mitigated by acquiring and permanently protecting known burrowing owl nesting and foraging habitat at the following ratio:

- i. Replacement of occupied habitat with occupied habitat at 1.5 times 6.5 acres per pair or single bird;
- ii. Replacement of occupied habitat with habitat contiguous with occupied habitat at 2 times 6.5 acres per pair or single bird; and/or
- iii. Replacement of occupied habitat with suitable unoccupied habitat at 3 times 6.5 acres per pair or single bird.

The project applicant shall establish a non-wasting endowment account for the long-term management of the preservation site for burrowing owls. The site shall be managed for the benefit of burrowing owls. The preservation site, site management, and endowment shall be approved by the CDFWG.

**BIO-10:** All burrowing owls associated with occupied burrows, that will be directly impacted (temporarily or permanently) by the project, shall be relocated and the following measures shall be implemented to avoid take of owls:

- i. Occupied burrows shall not be disturbed during the nesting season of February 1 through August 31, unless a qualified biologist can verify through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.
- ii. Owls must be relocated by a qualified biologist from any occupied burrows that will be impacted by project activities. Suitable habitat must be available adjacent to or near the disturbance site or artificial burrows will need to be provided nearby. Once the biologist has confirmed that owls have left the burrow, burrows should be excavated using hand tools and refilled to prevent reoccupation.
- iii. All relocation shall be approved by the CDFWG. The permitted biologist shall monitor the relocated owls a minimum of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and

*monitoring shall be submitted to the CDFWG within 30 days following completion of the relocation and monitoring of the owls.*

**BIO-11:** *A Burrowing Owl Mitigation Monitoring Plan shall be submitted to the CDFWG for review and approval prior to relocation of owls. The Burrowing Owl Mitigation and Monitoring Plan shall describe proposed relocation and monitoring plans. The plan shall include the number and location of occupied burrow sites and details on adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation of artificial burrows (numbers, location and type of burrows) shall also be included in the plan. The plan shall also describe the proposed offsite areas to preserve to compensate for impacts to burrowing owls/occupied burrows at the project site as required in BIO-9.*

#### Impacts Associated with the Proposed Project

**No New Impact.** The modified project would not increase the physical area of impact evaluated in the Adopted MND or introduce new construction methods or operational activities that could create new impacts to biological resources. The project would continue to be subject to Mitigation Measures BIO-1 through BIO-11. With implementation of existing Mitigation Measures, the modified project would not result in any new or substantially more severe impacts to biological resources than anticipated in the Adopted MND.

#### Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

There are no PDFs or Standard Conditions of Approval related to biological resources.

#### Mitigation/Monitoring Required

Mitigation Measures BIO-1 through BIO-11 apply. No new nor substantially more severe biological resources impacts would result from the adoption and implementation of the proposed project; therefore, no new or revised mitigation measures are required for biological resources.

#### Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to biological resources. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact
<b>V. CULTURAL RESOURCES - Will the project:</b>				
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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

a - d) Summary of Impacts from Adopted MND

The Adopted MND determined that, with the implementation of existing Health and Safety Code and Public Resources Code requirements, the approved project would not result in significant impacts related to the disturbing of human remains, including those interred outside of formal cemeteries. The approved project was found to result in potentially significant impacts related to historical, archaeological, and paleontological resources and unique geologic features. These impacts were mitigated to below a level of significance with Mitigation Measures CUL-1 through CUL-5. Minor technical adjustments to these mitigation measures are shown below in underline and ~~strikeout~~ format:

**CUL-1:** *As a condition of approval, the project applicant shall dedicate the area north of Highway 58, or an equivalent area on another parcel, as an open space easement and segregate it from any construction activity. Land acquired in compliance with Mitigation Measure BIO-2 shall be deemed to also meet the requirements of this mitigation measure.*

**CUL-2:** *Prior to the start of construction activity, a qualified archaeologist shall be retained by the applicant to identify and stake the archaeological site boundaries for Sites Temp 7 and Temp 8. As a condition for the grading permit of the project, the project applicant shall place temporary fencing around the western boundaries of Sites Temp 7 and Temp 8 to avoid any intrusion or construction impacts to the sites.*

**CUL-3:** *Prior to the start of construction activity, the project applicant shall retain a qualified archaeologist to conduct cultural resource significance evaluations for Sites Temp 6 and Temp 9. These evaluations may require subsurface investigations and*

surface collection for formal determinations of significance. Based upon the evaluations, resources identified as significant must be subjected to additional data recovery mitigation efforts. The mitigation program for significant sites shall be carried out following consultation with the reviewing agency.

**CUL-4:** *Prior to the start of construction activity, the project applicant shall retain a qualified archaeologist to implement the cultural resource mitigation monitoring plan (MMRP). The archaeologist shall establish procedures (monitoring plan) for archaeological resource surveillance, and procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of cultural resources as appropriate. The archaeologist shall also be present at the pregrading conference to explain the established procedures based on a preapproved monitoring plan. If additional or unexpected archaeological resources are discovered, a qualified archaeologist shall determine appropriate actions, in cooperation with the implementing agency/agencies, for testing and/or data recovery.*

**CUL-5:** *In the event that Pleistocene older alluvium or significant vertebrate fossils are encountered during project construction activities, work in the immediate area of the find shall be halted. The project applicant shall retain a qualified vertebrate paleontologist (as defined by the County Development Code 82.20.040) to develop a program to mitigate impacts to nonrenewable paleontological resources, including full curation of all recovered resources. The mitigation program shall be consistent with the provisions of the California Environmental Quality Act as well as regulations currently implemented by the County and the proposed guidelines of the Society of Vertebrate Paleontology.*

#### Impacts Associated with the Proposed Project

**No New Impact.** The modified project would not increase the physical area of impact evaluated in the Adopted MND. The project would continue to be subject to Mitigation Measures CUL-1 through CUL-5. Therefore, the modified project would not result in any new or substantially more severe impacts to cultural resources than anticipated in the Adopted MND.

#### Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

- California Health and Safety Code Section 7050.5
- California Public Resources Code Section 5097.98

#### Mitigation/Monitoring Required

Mitigation Measures CUL-1 through CUL-5 apply. No new nor substantially more severe cultural resources impacts would result from the adoption and implementation of the proposed project; therefore, no new or revised mitigation measures are required for cultural resources.

#### Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This

Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to cultural resources. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact
<b>VI. GEOLOGY AND SOILS - Will the project:</b>				

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
  - ii. Strong seismic ground shaking?
  - iii. Seismic-related ground failure, including liquefaction?
  - iv. Landslides?
- b) Result in substantial soil erosion or the loss of topsoil?
- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse?
- d) Be located on expansive soil, as defined in Table 181-B of the California Building Code (2001) creating substantial risks to life or property?
- e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

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

a - e) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not expose people or structures to potential substantial adverse effects involving rupture of a known fault, strong seismic ground shaking, seismic-related ground failure, or landslides; result in substantial soil erosion or the loss of topsoil; be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, potentially resulting in landslides, lateral spreading, subsidence, liquefaction, or collapse; be located on expansive soil; or have soils

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incapable of supporting the use of septic tanks or alternative wastewater disposal systems. No mitigation measures were required.

Impacts Associated with the Modified Project

**No New Impact.** The modified project has the same footprint as the approved project and would employ the same construction process as the approved project. The modified project would not be exposed to or generate any additional impacts related to geology and soils than anticipated in the Adopted MND.

Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

- National Pollutant Discharge Elimination System – Stormwater Pollution Prevention Plan

Mitigation/Monitoring Required

No new nor substantially more severe geology and soils impacts would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for geology and soils.

Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to geology and soils. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact
<b>VII. GREENHOUSE GAS EMISSIONS - Will the project:</b>				
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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION:**

a - b) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not generate greenhouse gas emissions that may have a significant impact on the environment or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. No mitigation measures were required.

Impacts Associated with the Modified Project

**No New Impact.** The modified project has the same footprint, would employ the same construction process and timeline, and have the same maintenance requirements as the approved project. The modified project would not generate any additional impacts related to greenhouse gas emissions during construction than anticipated in the Adopted MND. During operations, the increase in the facility’s capacity from 40 MW to 130 MW would result in a substantial positive impact to regional greenhouse gas emissions, as the facility would generate electricity from a clean, renewable source and would displace fossil-fuel powered generation.

Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

There are no PDFs or Standard Conditions of Approval related to greenhouse gas emissions.

Mitigation/Monitoring Required

No new nor substantially more severe greenhouse gas emissions impacts would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for greenhouse gas emissions.

Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164

and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to greenhouse gas emissions. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact

**VIII. HAZARDS AND HAZARDOUS MATERIALS - Will 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 type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" 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, will it create a significant hazard to the public or the environment?                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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, will the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" type="checkbox"/> |

**SUBSTANTIATION:**

a - h) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the

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release of hazardous materials; emit hazardous emissions or handle hazardous materials within one-quarter mile of a school; be located on a hazardous materials site; result in a safety hazard for people residing or working near an airport or airstrip; impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or expose people or structures to a significant risk of loss, injury, or death involving wildland fires. No mitigation measures were required.

#### Impacts Associated with the Modified Project

**No New Impact.** The modified project has the same footprint as the approved project, would utilize similar inert materials for solar panels, and would similarly not generate any liquids, gases, or reactive materials. The construction process would be similar to that analyzed in the Adopted MND and would not result in any significant increase in the use of hazardous materials such as fuels or lubricants. Any such materials would continue to be managed in compliance with federal and State regulations. Therefore, the project would not generate or be exposed to hazards and hazardous materials to any degree greater than anticipated in the Adopted MND.

#### Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

- San Bernardino County Code, Title 3: Fire Protection and Explosives and Hazardous Materials
- Hazardous Materials Business Plan

#### Mitigation/Monitoring Required

No new nor substantially more severe hazards and hazardous materials impacts would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for hazards and hazardous materials.

#### Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to hazards and hazardous materials. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

<i>Issues</i>	<i>Subsequent MND</i>		<i>Addendum to MND</i>	
	<i>Substantial Change in Project Circumstances Resulting in New Significant Effects</i>	<i>New Information Showing Greater Significant Effects than Previous MND</i>	<i>Minor Technical Changes or Additions</i>	<i>No New Impact or No Impact</i>
<b>IX. HYDROLOGY AND WATER QUALITY - Will the project:</b>				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will 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 will not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 will result in substantial erosion or siltation on- or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 which will result in flooding on- or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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## **SUBSTANTIATION:**

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### a - j) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not violate any water quality standards or waste discharge requirements; substantially deplete groundwater supplies or interfere substantially with groundwater recharge; substantially alter the existing drainage pattern of the site or area resulting in substantial erosion, siltation, or flooding; create or contribute runoff water that would exceed the capacity of storm drainage systems; otherwise substantially degrade water quality; place housing within a flood hazard area; place within a flood hazard area structures that would impede or redirect flood flows; or result in property damage, injury, or death resulting from flooding, levee or dam failure, seiche, tsunami, or mudflow. No mitigation measures were required.

#### Impacts Associated with the Modified Project

**No New Impact.** The modified project has the same footprint as the approved project and would incorporate similar construction methods, structures and equipment, and operational plans. The project would continue to be subject to standard conditions of development approval which include a grading plan, erosion and sedimentation control plan, and Stormwater Pollution Prevention Plan developed to the County's standards and in compliance with National Pollutant Discharge Elimination System requirements. With the implementation of these standard measures, the project would not generate or be exposed to hydrology and water quality impacts to any degree greater than anticipated in the Adopted MND.

#### Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

- San Bernardino County Code, Title 6: Building Regulations and Title 8: Development Code
- National Pollutant Discharge Elimination System – Stormwater Pollution Prevention Plan

#### Mitigation/Monitoring Required

No new nor substantially more severe hydrology and water quality impacts would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for hazards and hydrology and water quality.

#### Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to hydrology and water quality. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact
<b>X. LAND USE AND PLANNING - Will the project:</b>				
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 type="checkbox"/>	<input checked="" 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:**

a - c) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not physically divide an established community; conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The Adopted MND did identify a potential conflict with an applicable habitat conservation plan or natural community conservation plan and instituted mitigation measures (BIO-1 through BIO-11) which would reduce impacts to a less than significant level.

Impacts Associated with the Modified Project

**No New Impact.** The modified project is substantially the same as the approved project, with an identical land use, the same footprint, and very similar facilities. Since completion of the Adopted MND, the County of San Bernardino has adopted new findings for the approval of commercial solar energy facilities (Development Code Section 84.29.035). The modified project’s consistency with these findings is analyzed below:

1. The proposed commercial solar energy generation facility is either (a) sufficiently separated from existing communities and existing/developing rural residential areas so as to avoid adverse effects, or (b) of a sufficiently small size, provided with adequate setbacks, designed to be lower profile than otherwise permitted and sufficiently screened from public view so as to not adversely affect the desirability and future development of communities, neighborhoods, and rural residential use.

*Project Consistency:* The modified project is located over 3 miles east of Boron; there is no other nearby area with a substantial cluster of residential land uses. This separation, combined with the low height of project facilities, avoids the potential for

adverse effects on the desirability and future development of communities, neighborhoods, and rural residential use.

2. Proposed fencing, walls, landscaping and other perimeter features of the proposed commercial solar energy generation facility will minimize the visual impact of the project so as to blend with and be subordinate to the environment and character of the area where the facility is to be located.

*Project Consistency:* The key perimeter features for the project are buffers from surrounding areas, which will retain existing landforms and vegetation. Combined with the low height of project facilities, the visual impact of the project would be limited. Proposed chain link fencing would be placed behind the buffers and vegetation in the setbacks. Chain link fencing is a common fence type on other rural properties in the area.

3. The siting and design of the proposed commercial solar energy generation facility will be either: (a) unobtrusive and not detract from the natural features, open space and visual qualities of the area as viewed from communities, rural residential uses, and major roadways and highways, or (b) located in such proximity to already disturbed lands, such as electrical substations, surface mining operations, landfills, wastewater treatment facilities, etc., that it will not further detract from the natural features, open space and visual qualities of the area as viewed from communities, rural residential uses, and major roadways and highways.

*Project Consistency:* The project is sited and designed to be minimally obtrusive to the surrounding community through the incorporation of setbacks and relatively low facility heights. Setbacks allow existing vegetation to be preserved and screen a substantial portion of the facility. The relatively low height of panels results in project equipment not being highly visible beyond the immediate site vicinity.

4. The siting and design of project site access and maintenance roads have been incorporated in the visual analysis for the project and shall minimize visibility from public view points while providing needed access to the development site.

*Project Consistency:* The site is located adjacent to State Route 58 and is adjacent to various existing unpaved roadways. No new roadway extensions that could produce negative visual impacts are proposed.

5. The proposed commercial solar energy generation facility will not adversely affect the feasibility of financing infrastructure development in areas planned for infrastructure development or is within an area where investment in infrastructure for future development or communities and rural residential use has not been made (e.g., areas outside of water agencies).

*Project Consistency:* No element of the project is expected to impact the feasibility of financing infrastructure development for the local area.

6. The proposed commercial solar energy generation facility will not adversely affect to a significant degree the availability of groundwater supplies for existing communities and existing/developing rural residential areas.

*Project Consistency:* The project will not be connected to the local water system and will not require any significant, regular water use during operations. Construction water use would be limited in terms of the amount and timeframe, and would be trucked to the site.

7. The proposed commercial solar energy generation facility will minimize site grading, excavating, and filling activities by locating development on land where the existing grade does not exceed an average of five percent across the developed portion of the project site, and by utilizing construction methods that minimize ground disturbance.

*Project Consistency:* The project site has an average grade of less than 5 percent, and construction activities would be designed to minimize grading.

8. The proposed commercial solar energy generation facility is located in proximity to existing electrical infrastructure such as transmission lines, utility corridors, and roads so that: (a) minimal ground disturbance and above ground infrastructure will be required to connect to the existing transmission grid, considering the location of the project site and the location and capacity of the transmission grid, (b) new electrical generation tie lines will be co-located on existing power poles whenever possible, and (c) existing rights-of-way and designated utility corridors will be utilized to the extent practicable.

*Project Consistency:* The project site is located adjacent to powerlines on State Route 58. A number of other powerline corridors are present in the Kramer Junction area. The required gen-tie line would not require a significant powerline extension.

9. The proposed commercial solar energy generation facility will be sited so as to avoid or minimize impacts to the habitat of special status species, including threatened, endangered or rare species, Critical Habitat Areas as designated by the U.S. Fish and Wildlife Service, designated important habitat/wildlife linkages or areas of connectivity, areas of Habitat Conservation Plans or Natural Community Conservation Plans that discourage or preclude development, and protect wildlife movement corridors.

*Project Consistency:* As described in Section IV, the modified project, as mitigated, would not result in any significant biological impacts. The site is not within a Critical Habitat Area, a designated important habitat/wildlife linkage or area of connectivity, or within a Habitat Conservation Plan or Natural Community Conservation Plan area.

10. Adequate provision has been made to maintain and promote native vegetation and avoid the proliferation of invasive weeds during and following construction.

*Project Consistency:* The project will not cause or encourage the growth of invasive weeds during and following construction. The project will involve grubbing, which will remove and destroy existing invasive species on the site. Native plants will be transplanted during construction in compliance with the Desert Native Plants Act and Development Code Chapter 88.01.

11. The proposed commercial solar energy generation facility will be located to avoid or mitigate impacts to significant cultural and historic resources, as well as sacred landscapes.

*Project Consistency:* As described in Section V, the modified project, as mitigated, would not result in any significant cultural resources impacts.

12. The proposed commercial solar energy generation facility will be designed in a manner that does not impede flood flows, avoids substantial modification of natural water courses, and will not result in erosion or substantially affect area water quality.

*Project Consistency:* The project site minimizes impacts to stormwater flows by preserving existing grades and avoiding the creation of significant impervious areas.

13. The proposed commercial solar energy generation facility will not be located within a floodway designated by the Federal Emergency Management Agency (FEMA), has been evaluated for flood hazard impacts pursuant to Chapter 82.14 of the Development Code, and will not result in increased flood hazards to upstream or downstream properties.

*Project Consistency:* The project site is not located within a mapped 100-year floodplain or in a floodway. The project would not incorporate features that would notably increase imperviousness or result in the redirection of stormwater flows.

14. All on-site solar panels, switches, inverters, transformers and substations are located at least one foot above the base flood elevation as shown on the Flood Insurance Rate Maps.

*Project Consistency:* No portion of the site is within a mapped 100-year flood zone, and there are therefore no established base flood elevations for the area. The project site minimizes impacts to annual stormwater flows by preserving the existing on-site grades and minimizing imperviousness.

15. For development sites proposed on or adjacent to undeveloped alluvial fans, the commercial solar energy generation facility has been designed to avoid potential channel migration zones as demonstrated by a geomorphic assessment of the risk of existing channels migrating into the proposed development footprint, resulting in erosion impacts.

*Project Consistency:* The project site is not located within or adjacent to an alluvial fan.

16. For proposed facilities located on prime agricultural soils or land designated by the California Farmland Mapping and Monitoring Program as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, where use of the land for agricultural purposes is feasible, the proposed commercial solar energy generation facility will not substantially affect the agricultural viability of surrounding lands.

*Project Consistency:* The modified project is not located on Important Farmland, as mapped by the State. Surrounding lands are similarly not mapped as Important Farmland, and the project will not affect the viability of future agricultural activities (if any) that could occur on these parcels.

17. If the proposed site is subject to a Williamson Act contract, the proposed commercial solar energy generation facility is consistent with the principles of compatibility set forth in California Government Code Section 51238.1.

*Project Consistency:* The project site is not subject to a Williamson Act contract.

18. The proposed commercial solar energy generation facility will not preclude access to significant mineral resources.

*Project Consistency:* The project site is not located in an area of known, significant mineral resources.

19. The proposed commercial solar energy generation facility will avoid modification of scenic natural formations.

*Project Consistency:* The project site is located on flat land, and will not result in the modification of any recognized scenic natural formations.

20. The proposed commercial solar energy generation facility will be designed, constructed, and operated so as to minimize dust generation, including provision of sufficient watering of excavated or graded soil during construction to prevent excessive dust. Watering will occur at a minimum of three times daily on disturbed soil areas with active operations, unless dust is otherwise controlled by rainfall or use of a dust palliative, or other approved dust control measure.

*Project Consistency:* The modified project will apply dust control measures in compliance with Mojave Desert Air Quality Management District (MDAQMD) regulations. Mitigation Measure AIR-1 requires watering of disturbed areas a minimum of three times daily or other effective dust control methods.

21. All clearing, grading, earth moving, and excavation activities will cease during period of winds greater than 20 miles per hour (averaged over one hour), or when dust plumes of percent or greater opacity impact public roads, occupied structures, or neighboring property, and in conformance with Air Quality Management District (AQMD) regulations.

*Project Consistency:* The modified project will apply dust control measures in compliance with MDAQMD regulations. Mitigation Measure AIR-1 require activities on unpaved surfaces cease when wind speeds exceed 20 miles per hour.

22. For sites where the boundary of a new commercial solar energy generation facility is located within one-quarter mile of a primary residential structure, an adequate wind barrier will be provided to reduce potentially blowing dust in the direction of the residence during construction and ongoing operation of the commercial solar energy generation facility.

*Project Consistency:* The modified project is not located within one-quarter mile of any residential structure.

23. Any unpaved roads and access ways will be treated and maintained with a dust palliative or graveled or treated by another approved dust control method to prevent excessive dust and paving requirements will be applied pursuant to Chapter 83.09 of the Development Code.

*Project Consistency:* The modified project will apply dust control measures in compliance with MDAQMD regulations. Mitigation Measure AIR-1 requires disturbed areas be treated using effective dust control methods.

24. On-site vehicle speed will be limited to 15 miles per hour.

*Project Consistency:* Mitigation Measure AIR-1 has been revised to incorporate a speed limit of 15 miles per hour for on-site vehicles.

25. For proposed commercial solar energy generation facilities within two miles of the Joshua Tree National Park boundaries, the location, design, and operation of the proposed commercial solar energy generation facility will not be a predominant visual feature along the main access roads to the park (Park Boulevard and Utah Trail), nor will it substantially impair views from hiking/nature trails, campgrounds, and backcountry camping areas within the National Park.

*Project Consistency:* The project site is not within two miles of Joshua Tree National Park.

26. For proposed facilities within two miles of the Mojave National Preserve boundaries, the location, design, and operation of the proposed commercial solar energy facility will not be a predominant visual feature of, nor substantially impair views from, hiking and backcountry camping areas within the National Preserve.

*Project Consistency:* The project site is not within two miles of Mojave National Preserve.

27. For proposed facilities within two miles of Death Valley National Park boundaries, the location, design, and operation of the proposed commercial solar energy facility will not be a predominant visual feature of, nor substantially impair views from, hiking and backcountry camping areas within the National Park.

*Project Consistency:* The project site is not within two miles of Death Valley National Park.

28. For proposed facilities within two miles of the boundaries of a County, State or Federal agency designated wilderness area, the location, design, and operation of the proposed commercial solar energy facility will not be a predominant visual feature of, nor substantially impair views from, the designated wilderness area.

*Project Consistency:* The project site is not within two miles of any designated wilderness area.

29. For proposed facilities within two miles of the boundaries of any active military base, the location, design, and operation of the proposed commercial solar energy facility will not substantially impair the mission of the facility.

*Project Consistency:* The project site is not within two miles of any active military base.

30. When located within a City's sphere of influence, the proposed commercial solar energy facility is consistent with relevant City requirements that would be applied to similar facilities within the City.

*Project Consistency:* The project site is not within the sphere of influence of any City.

31. On terms and in an amount acceptable to the Director, adequate surety is provided for reclamation of commercial solar energy generation facility sites should energy production cease for a continuous period of 180 days and/or if the site is abandoned.

*Project Consistency:* Decommissioning of the site will occur in compliance with Development Code Section 84.29.070, which requires removal of most site facilities when operations cease.

There are no other applicable plans adopted for the purpose of avoiding or mitigating an environmental effect that govern land use at the site. As described above, the modified project would not result in any land use and planning impacts to any degree greater than anticipated in the Adopted MND.

#### Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

There are no PDFs or Standard Conditions of Approval related to land use and planning.

#### Mitigation/Monitoring Required

No new nor substantially more severe land use and planning impacts would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for land use and planning.

#### Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to land use and planning. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact

**XI. MINERAL RESOURCES - Will the project:**

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Result in the loss of availability of a known mineral resource that will 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):

a - b) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not result in the loss of availability of a known mineral resource or of a locally important mineral resource recovery site. No mitigation measures were required.

Impacts Associated with the Modified Project

**No New Impact.** The modified project has the same footprint as the approved project, and would not have the potential to prevent mineral resources development beyond the area analyzed in the Adopted MND. The project would not result in any greater mineral resources impacts than anticipated in the Adopted MND.

Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

There are no PDFs or Standard Conditions of Approval related to mineral resources.

Mitigation/Monitoring Required

No new nor substantially more severe impacts to mineral resources would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for hazards and mineral resources.

Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to mineral resources. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to

State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact

**XII. NOISE - Will the project result in:**

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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 type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" 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, will 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, will 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 ):

a - f) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not result in the exposure of persons to or generation of noise levels in excess of established standards; excessive groundborne vibration or groundborne noise levels; excessive noise from an airport or airstrip; or a substantial temporary, periodic, or permanent increase in ambient noise levels. No mitigation measures were required.

Impacts Associated with the Modified Project

**No New Impact.** The modified project has the same footprint as the approved project and would incorporate the same construction methods and operational plans as the approved project. No change in the surrounding community has occurred; there are no new sensitive receptors in the vicinity of the project site. The project would not result in any greater noise impacts than anticipated in the Adopted MND.

Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

- San Bernardino County Code, Title 8: Development Code

Mitigation/Monitoring Required

No new nor substantially more severe noise impacts would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for noise.

Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to noise. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact
<b>XIII. POPULATION AND HOUSING - Will the project:</b>				
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:**

a - c) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not induce substantial population growth in the area or displace substantial numbers of existing housing or people. No mitigation measures were required.

Impacts Associated with the Modified Project

**No New Impact.** The modified project has the same footprint as the approved project and similar operational plans; the modified project would not add a significant number of employees, and the added employment would not be sufficient to induce substantial population growth. There continue to be no existing residents or housing on the site, and there would therefore be no displacement of residents or housing. The project would not result in any greater population and housing impacts than anticipated in the Adopted MND.

Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

There are no PDFs or Standard Conditions of Approval related to population and housing.

Mitigation/Monitoring Required

No new nor substantially more severe population and housing impacts would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for population and housing.

Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This

Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to population and housing. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

<i>Issues</i>	<i>Subsequent MND</i>		<i>Addendum to MND</i>	
	<i>Substantial Change in Project Circumstances Resulting in New Significant Effects</i>	<i>New Information Showing Greater Significant Effects than Previous MND</i>	<i>Minor Technical Changes or Additions</i>	<i>No New Impact or No Impact</i>

**XIV. PUBLIC SERVICES**

a) Will the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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:**

a) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts. No mitigation measures were required.

Impacts Associated with the Modified Project

**No New Impact.** The modified project has the same footprint as the approved project and similar operational plans; the modified project would not create the need for added fire or police services than was analyzed in the Adopted MND. Like the approved project, the modified project would be fenced and private security patrols would be provided. The facility would be designed to meet the development standards of the San Bernardino County Fire Department. The project is an energy generation facility and will not create the need for schools, parks, or other public facilities. The project would not result in any greater population and housing impacts than anticipated in the Adopted MND.

Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

There are no PDFs or Standard Conditions of Approval related to public services.

Mitigation/Monitoring Required

No new nor substantially more severe public services impacts would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for public services.

Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to public services. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact
<b>XV. RECREATION</b>				
a) Will the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will 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:**

a) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur. The approved project did not include any recreational facilities or require the construction or expansion of recreational facilities. No mitigation measures were required.

Impacts Associated with the Modified Project

**No New Impact.** The modified project is an energy generation facility and would not result in any impacts to existing recreational facilities, nor does it involve the construction or expansion of new facilities. The project would not result in any greater recreation impacts than anticipated in the Adopted MND.

Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

There are no PDFs or Standard Conditions of Approval related to recreation.

Mitigation/Monitoring Required

No new nor substantially more severe recreation impacts would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for recreation.

Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially

different impacts from those previously considered and addressed in the Adopted MND pertaining to recreation. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact
<b>XVI. TRANSPORTATION/TRAFFIC – Will the project:</b>				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and greenways, pedestrian and bicycle paths, and mass transit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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:**

a - f) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not conflict any applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system; conflict with the applicable congestion management program; result in a change in air traffic patterns; substantially increase hazards due to a design feature or incompatible uses; result in inadequate emergency access; or conflict with adopted policies, plans, or programs regarding public transit, bicycled, or pedestrian facilities. The approved project was estimated to generate 40 roundtrips per day for commuting

construction workers, which was determined to not significantly impact the level of service of State Route 58. No mitigation measures were required.

#### Impacts Associated with the Modified Project

**No New Impact.** The modified project increases the planned capacity of the facility by utilizing more efficient solar panels and other equipment; this improvement would not require additional construction labor and would therefore not increase construction traffic. The addition of an energy storage component would require a negligible number of additional employees and vehicle trips, estimated to be approximately 2 to 3 additional round trips per day. During operations, the facility would not require any more employees or vehicle trips than evaluated in the Adopted MND. For these reasons, the project would not result in any greater transportation/traffic impacts than anticipated in the Adopted MND.

#### Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

There are no PDFs or Standard Conditions of Approval related to transportation/traffic.

#### Mitigation/Monitoring Required

No new nor substantially more severe transportation/traffic impacts would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for transportation/traffic.

#### Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to transportation/traffic. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact
<b>XVII. TRIBAL CULTURAL RESOURCES</b> – Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION:**

a) Summary of Impacts from Adopted MND

Impacts related to tribal cultural resources were analyzed as part of the Cultural Resources section of the Adopted MND. The Native American Heritage Commission (NAHC) received notification of the project. The site was surveyed for cultural resources; the survey identified only historic trash scatters, with no finds of significance from prior to the late 1800s. The implementation of Mitigation Measures CUL-1 through CUL-5 were determined to reduce to below a level of significance any potential impacts to tribal cultural resources.

Impacts Associated with the Modified Project

**No New Impact.** The modified project has the same footprint as the approved project. The implementation of Mitigation Measures CUL-1 through CUL-5 is required. As part of Mitigation Measure CUL-4, an archaeologist is required to establish a monitoring plan for archaeological resource surveillance and procedures for temporarily halting or redirecting work in the vicinity of identified resources. As the modified project would not increase the area of impact and would continue to be subject to mitigation measures to protect tribal

cultural resources, there would be no potential to increase impacts to tribal cultural resources beyond those anticipated in the Adopted MND.

Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

There are no PDFs or Standard Conditions of Approval related to tribal cultural resources.

Mitigation/Monitoring Required

No new nor substantially more severe impacts to tribal cultural resources would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for tribal cultural resources.

Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to tribal cultural resources. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact
<b>XVIII. UTILITIES AND SERVICE SYSTEMS - Will the project:</b>				
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 type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION:**

a - g) Summary of Impacts from Adopted MND

The Adopted MND determined the approved project would not exceed the wastewater treatment requirements of the Lahontan Regional Water Quality Control Board; require or result in the construction of new or expanded water, wastewater, or stormwater drainage facilities, the construction of which could cause significant environmental effects; have insufficient water supplies to serve the project from existing entitlements and resources; result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project's projected needs; be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or otherwise fail to comply with statutes and regulations related to solid waste. No mitigation measures were required.

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### Impacts Associated with the Modified Project

**No New Impact.** The modified project would not require more water supplies or generate more wastewater or solid waste than the approved project during either construction or operations. The modified project would not require any additional stormwater drainage infrastructure than the approved project. In compliance with NPDES requirements, preparation of a SWPPP would be required prior to initiation of construction in order to minimize impacts related to polluted stormwater flows. Construction of the project would be subject to the construction and demolition waste recycling requirements of the California Green Building Standards Code. With the implementation of these standard regulations, the project would not result in any greater utilities and service systems impacts than anticipated in the Adopted MND.

### Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

- California Green Building Standards Code – Construction and Demolition Waste Management Plan
- National Pollutant Discharge Elimination System – Stormwater Pollution Prevention Plan

### Mitigation/Monitoring Required

No new nor substantially more severe utilities and service systems impacts would result from the adoption and implementation of the modified project; therefore, no new or revised mitigation measures are required for utilities and service systems.

### Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND pertaining to utilities and service systems. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

Issues	Subsequent MND		Addendum to MND	
	Substantial Change in Project Circumstances Resulting in New Significant Effects	New Information Showing Greater Significant Effects than Previous MND	Minor Technical Changes or Additions	No New Impact or No Impact

**XIX. 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 type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Does the project have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**SUBSTANTIATION:**

a - c) Summary of Impacts from Adopted MND

As discussed in Sections IV and V, without mitigation, the approved project was determined to result in potentially significant impacts to biological and cultural resources. Mitigation Measures BIO-1 through BIO-11 and CUL-1 through CUL-5 were incorporated in the Adopted MND to reduce impacts to biological and cultural resources on the project site to below a level of significance. The modified project has been determined to not result in any increase in impacts to biological and cultural resources above those analyzed in the Adopted MND; therefore, the implementation of the above-referenced mitigation measures would be adequate to reduce impacts from the modified project to below a level of significance. With the implementation of these mitigation measures, the proposed project would not degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife populations 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.

Impacts Associated with the Modified Project

As described in Sections I through XVIII, with implementation of Mitigation Measures AIR-1, BIO-1 through BIO-11, and CUL-1 through CUL-5, the modified project would not result in any

cumulatively considerable impacts or substantial adverse effects on human beings, either directly or indirectly.

### Conclusion

With the proposed minor technical changes, the conclusions and mitigation measures identified in the Adopted MND remain accurate and applicable to the modified project. This Initial Study substantiates the conclusions that no additional CEQA documentation is required for the project. Based on the findings and information contained in the Adopted MND, the analysis above, and the CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the modified project would not result in any new, increased, or substantially different impacts from those previously considered and addressed in the Adopted MND. No changes or additions to the Adopted MND analyses are necessary, nor is there a need for any additional mitigation measures. Therefore, pursuant to State CEQA Guidelines, Section 15164, the County hereby adopts these 15162 and 15164 findings as it relates to the modified project and the Adopted MND.

# EXHIBIT B

## Findings

The following sets of Findings relate to a Conditional Use Permit (CUP) (P201700466) proposed for the construction and operation of a 130 megawatts (MW) photovoltaic (PV) solar power generating facility, including 130 MW of battery storage, on a 386-acre site within the Resource Conservation (RC) Land Use Zoning District in the unincorporated community of Kramer (Project). The Project will replace, within the same development footprint, the previously approved 40 MW Kramer Junction Solar Farm (Original Project). The environmental impacts of the Original Project were analyzed pursuant to the California Environmental Quality Act (CEQA), resulting in adoption of a Mitigated Negative Declaration (MND) (State Clearinghouse No. 2010031123).

### **CONDITIONAL USE PERMIT FINDINGS:**

The following are the required findings, per the San Bernardino County Development Code (Development Code) Section 85.06.040, and supporting facts for CUPs:

- 1. The site for the proposed use is adequate in terms of shape and size to accommodate the proposed use and all landscaping, loading areas, open spaces, parking areas, setbacks, walls and fences, yards, and other required features pertaining to the application.** The approximately 386-acre Project site can accommodate the proposed Project. The design features of the PV array panels and equipment are relatively small and can be located in irregularly shaped properties. The Project is designed to include use of existing transmission and access infrastructure in the area. Chain-link fencing with one foot of barbed wire is proposed along the perimeter of the Project site or set back a minimum of 15 feet along existing or proposed County right-of-way. Access gates would be provided at each site entry road. Within the Project site, a minimum of 20-foot-wide perimeter access route would be constructed along the Project site's fence line. All interior access routes would be a minimum of 20 feet wide.
- 2. The site for the proposed use has adequate legal and physical access which means that the site design incorporates appropriate street and highway characteristics to serve the proposed use.** The Project site is located in an area that is relatively flat with an existing traffic circulation system, resulting in conditions that allow easy access to the Project site without radical changes to the existing circulation patterns.
- 3. The proposed use will not have a substantial adverse effect on abutting property or the allowed use of the abutting property, which means that the use will not generate excessive noise, traffic, vibration, or other disturbance.** The proposed Project will not generate excessive noise, traffic, vibration, light, glare, odors or other disturbances to the existing community. The Addendum to an adopted Mitigated Negative Declaration (SCH No. 20100031123) evaluating the potential Project impacts finds that the impacts are less than significant or include mitigation measures that reduce the impacts to a less-than-significant level. The Mitigation Measures have been incorporated in the COAs.
- 4. The proposed use and manner of development are consistent with the goals, maps, policies, and standards of the County General Plan, Renewable Energy and Conservation Element (RECE) and any applicable Community or Specific Plan.** The proposed Project, together with the provisions for its design and improvement, is consistent with the County General Plan and RECE. The Project specifically implements the following goals, policies and objectives from the General Plan and RECE adopted August 8, 2017 (amended February 2019):

Goal LU 1: The County will have a compatible and harmonious arrangement of land uses by providing a type and mix of functionally well-integrated land uses that are fiscally viable and meet general social and economic needs of the residents.

**Project Consistency:** The Project is sufficiently separated from existing communities and rural residential areas such that adverse effects are avoided. The Project is not located within a quarter of a mile of any residential developments or single residence. The Project design includes setbacks from roads as well as fencing to shield the facility from public view. Decommissioning of the site will occur in compliance with Development Code Section 84.29.060, which requires removal of site facilities when operations cease. The requirement for a removal surety bond will be included in the COAs to be adopted for the Project.

Goal CO 8: The County will minimize energy consumption and promote safe energy extraction, uses and systems to benefit local regional and global environmental goals.

**Project Consistency:** The Project will include a new PV solar facility and associated infrastructure necessary to generate up to a combined 130 MW AC of renewable electrical energy and/or energy storage capacity on 342 acres. The use of clean air technologies on the Project site will ensure good air quality for the County residents, businesses, and visitors by way of safe energy extraction, uses and systems.

RE Goal 5: Renewable energy facilities will be located in areas that meet County standards, local values, community needs and environmental and cultural resource protection priorities.

**Project Consistency:** The Project is located within the RC Land Use Zoning District. The site and design meets County standards, preserves the character of the Project area and surrounding communities, and protects environmental and cultural resources.

5. **There is supporting infrastructure, existing or available, consistent with the intensity of development, to accommodate the proposed development without significantly lowering service levels.** During construction, the primary community infrastructure utilized by the Project will be the public road system. Existing roadways that serve the Project site include State Route 58. A Congestion Management Plan is required prior to any grading activities which will ensure that all public roadways utilized during construction will be maintained. The operation of the proposed Project utilizes very little water and generates very little vehicular traffic and thus can be fully supported by existing community infrastructure.
6. **The lawful conditions stated in the approval are deemed reasonable and necessary to protect the public health, safety and general welfare.** Implementation of and compliance with the COAs will ensure that the objectives of the Development Code to protect the overall public health, safety and general welfare will be achieved. These COAs are based on established legal requirements and are applicable to all similar projects. Consequently, they are considered reasonable and necessary to protect the public health, safety, and general welfare
7. **The design of the site has considered the potential for the use of solar energy systems and passive or natural heating and cooling opportunities.** The sole purpose of the proposed Project is to construct and operate a PV solar generating facility that will contribute significant quantities of renewable energy for use by the larger public.

## **FINDINGS: COMMERCIAL SOLAR FACILITY**

The following are the required findings, per the San Bernardino County Development Code (Development Code) Section 84.29.035, and supporting facts for approval of the Project as a Commercial Solar Facility. In making these findings, the review authority has considered (1) the characteristics of the Project's commercial solar energy facility development site and its physical and environmental setting, as well as the physical layout and design of the Project in relation to nearby communities, neighborhoods, and rural residential uses; and (2) the location of other commercial solar energy generation facilities that have been constructed, approved, or applied for in the vicinity, whether within a city or unincorporated territory, or on State or Federal land. The findings of fact for Development Code Section 84.29.035, subdivision (c), are as follows:

- 1. The proposed commercial solar energy generation facility is either (a) sufficiently separated from existing communities and existing/developing rural residential areas so as to avoid adverse effects, or (b) of a sufficiently small size, provided with adequate setbacks, designed to be lower profile than otherwise permitted and sufficiently screened from public view so as to not adversely affect the desirability and future development of communities, neighborhoods, and rural residential use.**

**Project Consistency:** The Project is located over three miles east of Boron; there are no other nearby areas with a substantial cluster of residential land uses. This separation, combined with the low height of Project facilities, avoids the potential for adverse effects on the desirability and future development of communities, neighborhoods, and rural residential use.

- 2. Proposed fencing, walls, landscaping and other perimeter features of the proposed commercial solar energy generation facility will minimize the visual impact of the project so as to blend with and be subordinate to the environment and character of the area where the facility is to be located.**

**Project Consistency:** The key perimeter features for the Project are buffers from surrounding areas, which will retain existing landforms and vegetation. Combined with the low height of Project facilities, the visual impact of the Project would be limited. Proposed chain link fencing would be placed behind the buffers and vegetation in the setbacks. Chain link fencing is a common fence type on other rural properties in the area.

- 3. The siting and design of the proposed commercial solar energy generation facility will be either: (a) unobtrusive and not detract from the natural features, open space and visual qualities of the area as viewed from communities, rural residential uses, and major roadways and highways, or (b) located in such proximity to already disturbed lands, such as electrical substations, surface mining operations, landfills, wastewater treatment facilities, etc., that it will not further detract from the natural features, open space and visual qualities of the area as viewed from communities, rural residential uses, and major roadways and highways.**

**Project Consistency:** The Project is sited and designed to be minimally obtrusive to the surrounding community through the incorporation of setbacks and relatively low facility heights. Setbacks allow existing vegetation to be preserved and it will screen a substantial portion of the facility. The relatively low height of panels results in Project equipment not being highly visible beyond the immediate site vicinity.

- 4. The siting and design of project site access and maintenance roads have been incorporated in the visual analysis for the project and shall minimize visibility from public view points while providing needed access to the development site.**

**Project Consistency:** The site is located adjacent to State Route 58 and is adjacent to various existing unpaved roadways. No new roadway extensions are proposed that could produce negative visual impacts.

- 5. The proposed commercial solar energy generation facility will not adversely affect the feasibility of financing infrastructure development in areas planned for infrastructure development or is within an area where investment in infrastructure for future development or communities and rural residential use has not been made (e.g., areas outside of water agencies).**

**Project Consistency:** No element of the Project is expected to impact the feasibility of financing infrastructure development for the local area.

- 6. The proposed commercial solar energy generation facility will not adversely affect to a significant degree the availability of groundwater supplies for existing communities and existing/developing rural residential areas.**

**Project Consistency:** The Project will not be connected to the local water system and will not require any significant, regular water use during operations. Construction water use would be limited in terms of the amount and timeframe, and would be trucked to the site.

- 7. The proposed commercial solar energy generation facility will minimize site grading, excavating, and filling activities by locating development on land where the existing grade does not exceed an average of five percent across the developed portion of the project site, and by utilizing construction methods that minimize ground disturbance.**

**Project Consistency:** The Project site has an average grade of less than five percent, and construction activities would be designed to minimize grading.

- 8. The proposed commercial solar energy generation facility is located in proximity to existing electrical infrastructure such as transmission lines, utility corridors, and roads so that: (a) minimal ground disturbance and above ground infrastructure will be required to connect to the existing transmission grid, considering the location of the project site and the location and capacity of the transmission grid, (b) new electrical generation tie lines will be co-located on existing power poles whenever possible, and (c) existing rights-of-way and designated utility corridors will be utilized to the extent practicable.**

**Project Consistency:** The Project site is located adjacent to power lines on State Route 58. A number of other power line corridors are present in the Kramer Junction area. The required gen-tie line would not require a significant power line extension.

- 9. The proposed commercial solar energy generation facility will be sited so as to avoid or minimize impacts to the habitat of special status species, including threatened, endangered or rare species, Critical Habitat Areas as designated by the U.S. Fish and Wildlife Service, designated important habitat/wildlife linkages or areas of connectivity, areas of Habitat Conservation Plans or Natural Community Conservation Plans that discourage or preclude development, and protect wildlife movement corridors.**

**Project Consistency:** As described in Section IV of the addendum to the Mitigated Negative Declaration, the Project, as mitigated, would not result in any significant biological impacts. The site is not within a Critical Habitat Area, a designated important habitat/wildlife linkage or area of connectivity, or within a Habitat Conservation Plan or Natural Community Conservation Plan area.

**10. Adequate provision has been made to maintain and promote native vegetation and avoid the proliferation of invasive weeds during and following construction.**

**Project Consistency:** The Project will not cause or encourage the growth of invasive weeds during and following construction. The Project will involve grubbing, which will remove and destroy existing invasive species on the site. Native plants will be transplanted during construction in compliance with the Desert Native Plants Act and Development Code Chapter 88.01.

**11. The proposed commercial solar energy generation facility will be located to avoid or mitigate impacts to significant cultural and historic resources, as well as sacred landscapes.**

**Project Consistency:** As described in Section V of the addendum to the Mitigated Negative Declaration, the Project, as mitigated, would not result in any significant cultural resources impacts.

**12. The proposed commercial solar energy generation facility will be designed in a manner that does not impede flood flows, avoids substantial modification of natural water courses, and will not result in erosion or substantially affect area water quality.**

**Project Consistency:** The Project site minimizes impacts to stormwater flows by preserving existing grades and avoiding the creation of significant impervious areas.

**13. The proposed commercial solar energy generation facility will not be located within a floodway designated by the Federal Emergency Management Agency (FEMA), has been evaluated for flood hazard impacts pursuant to Chapter 82.14 of the Development Code, and will not result in increased flood hazards to upstream or downstream properties.**

**Project Consistency:** The Project site is not located within a mapped 100-year floodplain or in a floodway. The Project would not incorporate features that would notably increase imperviousness or result in the redirection of stormwater flows.

**14. All on-site solar panels, switches, inverters, transformers and substations are located at least one foot above the base flood elevation as shown on the Flood Insurance Rate Maps.**

**Project Consistency:** The Project minimizes impacts to annual stormwater flows by preserving the existing on-site grades and natural drainage courses through the site, and minimizing imperviousness.

**15. For development sites proposed on or adjacent to undeveloped alluvial fans, the commercial solar energy generation facility has been designed to avoid potential channel migration zones as demonstrated by a geomorphic assessment of the risk of existing channels migrating into the proposed development footprint, resulting in erosion impacts.**

**Project Consistency:** The Project site is not located within or adjacent to an alluvial fan.

16. For proposed facilities located on prime agricultural soils or land designated by the California Farmland Mapping and Monitoring Program as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, where use of the land for agricultural purposes is feasible, the proposed commercial solar energy generation facility will not substantially affect the agricultural viability of surrounding lands.

**Project Consistency:** The Project is not located on Important Farmland, as mapped by the State. Surrounding lands are similarly not mapped as Important Farmland, and the Project will not affect the viability of future agricultural activities (if any) that could occur on these parcels.

17. If the proposed site is subject to a Williamson Act contract, the proposed commercial solar energy generation facility is consistent with the principles of compatibility set forth in California Government Code Section 51238.1.

**Project Consistency:** The Project site is not subject to a Williamson Act contract.

18. The proposed commercial solar energy generation facility will not preclude access to significant mineral resources.

**Project Consistency:** The Project site is not located in an area of known, significant mineral resources.

19. The proposed commercial solar energy generation facility will avoid modification of scenic natural formations.

**Project Consistency:** The Project site is located on flat land, and will not result in the modification of any recognized scenic natural formations.

20. The proposed commercial solar energy generation facility will be designed, constructed, and operated so as to minimize dust generation, including provision of sufficient watering of excavated or graded soil during construction to prevent excessive dust. Watering will occur at a minimum of three times daily on disturbed soil areas with active operations, unless dust is otherwise controlled by rainfall or use of a dust palliative, or other approved dust control measure.

**Project Consistency:** The Project will apply dust control measures in compliance with Mojave Desert Air Quality Management District (MDAQMD) regulations. Mitigation Measure AIR-1 requires watering of disturbed areas a minimum of three times daily or other effective dust control methods.

21. All clearing, grading, earth moving, and excavation activities will cease during period of winds greater than 20 miles per hour (averaged over one hour), or when dust plumes of percent or greater opacity impact public roads, occupied structures, or neighboring property, and in conformance with Air Quality Management District (AQMD) regulations.

**Project Consistency:** The Project will apply dust control measures in compliance with MDAQMD regulations. Mitigation Measure AIR-1 require activities on unpaved surfaces cease when wind speeds exceed 20 miles per hour.

22. For sites where the boundary of a new commercial solar energy generation facility is located within one-quarter mile of a primary residential structure, an adequate wind barrier will be provided to reduce potentially blowing dust in the direction of the

**residence during construction and ongoing operation of the commercial solar energy generation facility.**

**Project Consistency:** The Project is not located within one-quarter mile of any residential structure.

- 23. Any unpaved roads and access ways will be treated and maintained with a dust palliative or graveled or treated by another approved dust control method to prevent excessive dust and paving requirements will be applied pursuant to Chapter 83.09 of the Development Code.**

**Project Consistency:** The Project will apply dust control measures in compliance with MDAQMD regulations. Mitigation Measure AIR-1 requires disturbed areas be treated using effective dust control methods.

- 24. On-site vehicle speed will be limited to 15 miles per hour.**

**Project Consistency:** Mitigation Measure AIR-1 has been revised to incorporate a speed limit of 15 miles per hour for on-site vehicles.

- 25. For proposed commercial solar energy generation facilities within two miles of the Joshua Tree National Park boundaries, the location, design, and operation of the proposed commercial solar energy generation facility will not be a predominant visual feature along the main access roads to the park (Park Boulevard and Utah Trail), nor will it substantially impair views from hiking/nature trails, campgrounds, and backcountry camping areas within the National Park.**

**Project Consistency:** The Project site is not within two miles of Joshua Tree National Park.

- 26. For proposed facilities within two miles of the Mojave National Preserve boundaries, the location, design, and operation of the proposed commercial solar energy facility will not be a predominant visual feature of, nor substantially impair views from, hiking and backcountry camping areas within the National Preserve.**

**Project Consistency:** The Project site is not within two miles of Mojave National Preserve.

- 27. For proposed facilities within two miles of Death Valley National Park boundaries, the location, design, and operation of the proposed commercial solar energy facility will not be a predominant visual feature of, nor substantially impair views from, hiking and backcountry camping areas within the National Park.**

**Project Consistency:** The Project site is not within two miles of Death Valley National Park.

- 28. For proposed facilities within two miles of the boundaries of a County, State or Federal agency designated wilderness area, the location, design, and operation of the proposed commercial solar energy facility will not be a predominant visual feature of, nor substantially impair views from, the designated wilderness area.**

**Project Consistency:** The Project site is not within two miles of any designated wilderness area.

- 29. For proposed facilities within two miles of the boundaries of any active military base, the location, design, and operation of the proposed commercial solar energy facility will not substantially impair the mission of the facility.**

**Project Consistency:** The Project site is not within two miles of any active military base.

- 30. When located within a City's sphere of influence, the proposed commercial solar energy facility is consistent with relevant City requirements that would be applied to similar facilities within the City.**

**Project Consistency:** The Project site is not within the sphere of influence of any City.

- 31. On terms and in an amount acceptable to the Director, adequate surety is provided for reclamation of commercial solar energy generation facility sites should energy production cease for a continuous period of 180 days and/or if the site is abandoned.**

**Project Consistency:** Decommissioning of the site will occur in compliance with Development Code Section 84.29.070, which requires removal of most site facilities when operations cease.

#### **FINDINGS: CALIFORNIA ENVIRONMENTAL QUALITY ACT**

The County of San Bernardino has determined that, pursuant to CEQA Guidelines Sections 15162 and 15164, the previous environmental analysis and documentation remains applicable with the new proposed Project. No substantial changes are proposed in the Project and there are no substantial changes in the circumstances under which the Project will be undertaken that will require major revisions to the previous approved MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Also, there is no "new information of substantial importance" as that term is used in CEQA Guidelines Section 15162(a)(3). Therefore, the previously adopted MND adequately discusses the potential impacts of the Project; however, minor changes require the preparation of an Addendum. An Addendum to the MND has been prepared that addresses the impacts associated with the Project in relation to those impacts and mitigation measures approved with the Original Project. The determination for this Project reflects the County's independent judgment in making this determination.

# EXHIBIT C

## Correspondence

## ADAMS BROADWELL JOSEPH & CARDOZO

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June 16, 2010

### VIA EMAIL

Doug Feremenga, Senior Planner  
San Bernardino County  
Land Use Services Department  
385 North Arrowhead Avenue, First Floor  
San Bernardino, CA 92415-0182  
Email: dferemenga@lusd.sbcounty.gov

Re: Comments on the Mitigated Negative Declaration and Initial Study for the 40-MW Kramer Junction Solar Farm Proposed by LightSource Renewables, LLC

Dear Mr. Feremenga:

We are writing on behalf of the International Brotherhood of Electrical Workers, Local 477, as well as individual members, Perry Brown and Kenney Felts, to comment on the Mitigated Negative Declaration ("MND") prepared by San Bernardino County, pursuant to the California Environmental Quality Act ("CEQA"),<sup>1</sup> for LightSource Renewables, LLC's ("Applicant") proposed 40-MW Kramer Junction Solar Farm ("Project"). The Project requires a Conditional Use Permit to develop a power plant on a 401.6-acre property.

The members of Local 477 build, maintain and operate conventional and renewable energy power plants in San Bernardino County. Members live in and use areas that will suffer the impacts of poorly designed power plant development, including noise and visual intrusion, water and soil pollution and destruction of archaeological or wildlife areas. Individual members also work in areas affected by environmental degradation. Environmental degradation jeopardizes future jobs by causing construction moratoriums, eliminating protected species and habitat, using limited fresh water and putting added stresses on the environmental carrying

<sup>1</sup> Pub. Resources Code, §§ 21000 et seq.  
2453-003d

Doug Feremenga, Senior Planner  
San Bernardino County  
June 16, 2010  
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capacity of the State. This reduces future employment opportunities. In contrast, well-designed projects that truly reduce the environmental impacts of electrical generation improve long-term economic prospects. Based on these concerns, Local 477 and its members have a strong interest in ensuring that projects comply with CEQA and all applicable federal, State and local laws and regulations.

## I. CEQA'S PURPOSE AND GOALS

CEQA has two basic purposes, neither of which the MND satisfies. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project.<sup>2</sup> CEQA requires that an agency analyze the potential environmental impacts in an environmental impact report ("EIR").<sup>3</sup> "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR protects not only the environment but also informed self-government."<sup>4</sup> The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."<sup>5</sup>

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures.<sup>6</sup> The EIR serves to provide public agencies and the public in general with information about the effect a proposed project is likely to have on the environment and to "identify ways that environmental damage can be avoided or significantly reduced."<sup>7</sup> If the project has a significant effect on the environment, the agency may approve the project only upon a finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns" specified in CEQA section 21081.<sup>8</sup>

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<sup>2</sup> Cal. Code Regs., tit. 14, § 15002, subd. (a)(1) (hereafter CEQA Guidelines).

<sup>3</sup> See generally Pub. Resources Code, § 21000 (discussing Legislature's intent behind CEQA).

<sup>4</sup> *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 564 (citations omitted).

<sup>5</sup> *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810; see also *Berkeley Keep Jets Over the Bay Com. v. Bd. of Port Comrs.* (2001) 91 Cal.App.4th 1344, 1354 (hereafter *Berkeley Keep Jets*).

<sup>6</sup> CEQA Guidelines, § 15002, subd. (a)(2)-(3); see also *Berkeley Keep Jets, supra*, 91 Cal.App.4th at 1354.

<sup>7</sup> CEQA Guidelines, § 15002, subd. (a)(2).

<sup>8</sup> *Id.* at § 15092, subd. (b)(2)(A)-(B).

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CEQA's purpose and goals must be met through the preparation of an EIR except in certain *limited circumstances*.<sup>9</sup> For example, a negative declaration may be prepared instead of an EIR when, after preparing an initial study, a lead agency determines that a project "would not have a significant effect on the environment."<sup>10</sup> However, such a determination may be made only if "[t]here is *no* substantial evidence, in light of the whole record before the lead agency" that such an impact *may occur*.<sup>11</sup>

CEQA's strong presumption favoring preparation of an EIR is reflected in its standard of review. Under the "fair argument" standard, a negative declaration is improper, and an EIR is required, whenever substantial evidence in the record supports a "fair argument" that significant impacts may occur, even if other substantial evidence supports the opposite conclusion.<sup>12</sup> The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR, rather than through issuance of a negative declaration or notices of exemption from CEQA.<sup>13</sup> Substantial evidence can be provided by technical experts or members of the public.<sup>14</sup>

In this case, the MND fails to satisfy the basic purposes of CEQA. Specifically, the County failed to: (1) assess the Project's water needs through preparation of a Water Supply Assessment ("WSA"); (2) adequately describe the Project; and (3) provide substantial evidence to conclude that impacts will be mitigated to a less-than-significant level. The failure of the County to assess the Project's water needs and describe the Project adequately is a failure to inform decision makers and the public of the Project's potentially significant environmental effects. The public cannot evaluate and comment on the Project and its potentially significant impacts without this basic information. In addition, because the MND

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<sup>9</sup> See, e.g., Pub. Resources Code, § 21100 (emphasis added).

<sup>10</sup> *Id.* at § 21080, subd. (c).

<sup>11</sup> *Id.* at § 21080, subd. (c)(1) (emphasis added).

<sup>12</sup> *Id.* at § 21082.2; *Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal.* (1993) 6 Cal.4th 1112, 1123 (hereafter *Laurel Heights*); *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-51 (hereafter *Stanislaus Audubon Society*); *Quail Botanical Gardens Foundation, Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1601-02 (hereafter *Quail Botanical Gardens*).

<sup>13</sup> *Citizens Action to Serve All Students v. Thornley* (1990) 222 Cal.App.3d 748, 754.

<sup>14</sup> CEQA Guidelines, § 15063, subd. (a)(3); *Gabric v. City of Rancho Palos Verdes* (1977) 73 Cal.App.3d 183, 199.  
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lacks basic information regarding the Project, there is no evidence to support the MND's conclusion that the Project will have a less-than-significant impact on the environment. Because the County failed to gather the relevant data to support its finding of no significant impacts, and a fair argument can be made that the Project may result in a significant impact, the County must prepare a draft EIR and circulate it for public review.

We reviewed the MND with the assistance of technical experts, David Marcus, James Cornett, M.S. and Matt Hagemann, P.G. These experts' comments and qualifications are attached to this letter as Attachments A through C, respectively, and incorporated herein.

## II. THE COUNTY FAILED TO PREPARE A WATER SUPPLY ASSESSMENT AS REQUIRED BY CEQA AND THE WATER CODE

State law requires the County, or applicable water system, to prepare a WSA for the Project, which was not done in this case. The Fourth District Court of Appeal admonished San Bernardino County for failing to prepare a WSA for a composting facility in *Center for Biological Diversity v. County of San Bernardino*.<sup>15</sup> The court vacated the County's EIR and mandated that the County prepare a WSA. Despite the court's decision and the applicability of the Water Code to the proposed Project, the County failed to prepare a WSA again.

The County, or applicable public water system, must prepare a WSA for any project that meets the definition of "project" under Water Code section 10912.<sup>16</sup> Subsection 10912(a)(5) defines a "project" as an industrial plant occupying more than 40 acres of land.<sup>17</sup> Interpreting subsection 10912(a)(5), the court in *Center for Biological Diversity* required preparation of a WSA for a composting facility. It rejected the Applicant's assertion that section 10912 only applies to "large scale buildings located on large square footage or plots of land."<sup>18</sup> The open-air composting facility qualified as a project ***because it met the acreage threshold***, even if the structures on the site were small.<sup>19</sup>

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<sup>15</sup> See *Center for Biological Diversity v. County of San Bernardino* (May 25, 2010, D056652, D056648) \_\_ Cal.App.4th \_\_ (hereafter *Center for Biological Diversity*).

<sup>16</sup> See Wat. Code, § 10912, subd. (a).

<sup>17</sup> Wat. Code, § 10912, subd. (a)(5).

<sup>18</sup> *Center for Biological Diversity, supra*, \_\_ Cal.App.4th.

<sup>19</sup> *Ibid.*  
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When a WSA is required for a project, the County or applicable public water system must assess the project's water demand and supply. This information must be specific enough to "assist local governments in deciding whether to approve the projects."<sup>20</sup> In *Center for Biological Diversity*, the court found that the information about the availability of water for the proposed composting facility was "pure speculation."<sup>21</sup> Specifically, the EIR stated that the project would either use well water, water trucked onto the site or a combination of these sources.<sup>22</sup> There was no indication that the County had determined a water source was actually available.<sup>23</sup>

The proposed Project is an industrial solar energy plant on an alleged 350-acre portion of a 401.6-acre property.<sup>24</sup> Thus, it meets the definition of a project under the plain language of the Water Code. The County or public water system must prepare a WSA before the Project is approved. The Water Code requires the County to include the WSA in the environmental review document.<sup>25</sup> CEQA also requires compliance with the Water Code.<sup>26</sup>

The County, or identified public water system, must describe and discuss the Project's proposed water demand and supply in a WSA.<sup>27</sup> Determining a project's water demand is essential to an adequate analysis of a project's impacts.<sup>28</sup> In addition, determining a project's water supply allows the County or public water system to assess what water supply entitlements, water rights or water service contracts are necessary for the project to receive the water.<sup>29</sup> If groundwater will serve as a project's water supply, the WSA must describe the basin and disclose how much water would be pumped, where the pumping would occur and the sufficiency of the aquifer as a resource.<sup>30</sup>

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<sup>20</sup> See *O.W.L. Foundation v. City of Rohnert Park* (2008) 168 Cal.App.4th 568, 576.

<sup>21</sup> *Center for Biological Diversity, supra*, \_\_ Cal.App.4th.

<sup>22</sup> *Ibid.*

<sup>23</sup> *Ibid.*

<sup>24</sup> San Bernardino County, Initial Study Kramer Junction Solar Farm, March, 26, 2010, p. 1 (hereafter MND).

<sup>25</sup> Wat. Code, § 10911, subd. (b).

<sup>26</sup> Pub. Resources Code, § 21151.9.

<sup>27</sup> See Wat. Code, § 10910.

<sup>28</sup> See *ibid.*

<sup>29</sup> *Id.* at § 10910, subd. (d).

<sup>30</sup> *Id.* at § 10910, subd. (f).

## **A. The Project's water demand**

The Water Code's requirements for a WSA requires specific information regarding the amount of water the Project will need for: (1) construction; (2) maintenance (i.e. solar panel cleaning); and (3) fire control. While the County has provided *some* information about how much water the Project may need for maintenance, this information is incomplete, inaccurate and inconsistent with available information. In addition, the County completely failed to provide *any* specific water amount for the Project's construction and fire control needs.

### **1. The amount of water the Project will need during construction**

The Mojave Desert Air Quality Management District's ("MDAQMD") Rule 403.2 "Fugitive Dust Control for the Mojave Desert Planning Area," requires projects to use periodic watering to minimize visible fugitive dust emissions.<sup>31</sup> The Rule does not specify the amount of water that must be used to mitigate fugitive dust emissions. Rather, it simply requires that projects utilize water during construction to minimize emissions of fugitive dust on portions of the earth's surface that have been physically moved, uncovered, destabilized or otherwise modified from the disturbed natural condition.<sup>32</sup>

The MND stated that the Project would use water to minimize fugitive dust emissions during Project construction.<sup>33</sup> The MND did not specify, however, how much water the Project would use during construction. The amount of water necessary to reduce fugitive dust emissions can be substantial in a desert environment. For example, the Lucerne Valley Solar Project, proposed by Chevron Energy Solutions, states that during the first 20-MW phase of construction approximately 1.75 million gallons (5.4 acre feet) of water will be used.<sup>34</sup>

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<sup>31</sup> Rule 403.2 (C)(2)(a).

<sup>32</sup> Rule 403.2 (B)(8).

<sup>33</sup> MND, pp. 15, 26, 75.

<sup>34</sup> Bureau of Land Management, Draft Environmental Impact Statement and California Desert Conservation Area Plan Amendment for the Proposed Chevron Energy Solutions Lucerne Valley Solar Project, January 2010, pp. ES-8, 2-19, 4.5-3.  
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The County must specify the amount of water needed for construction to comply with CEQA and the Water Code. The use of large amounts of water to control dust emissions may significantly impact the environment. Moreover, it is feasible to estimate the amount of water that will be required for construction of the proposed Project. There is no excuse not to specify the amount of construction water. The County's total failure to identify how much water the Project proposes to use during construction and to analyze the impacts from such use renders the MND inadequate *as a matter of law*.

**2. The amount of water the Project will need for maintenance (i.e. solar panel cleaning)**

The County must accurately describe the amount of water the Project will need. The MND does not contain any evidence, discussion, or information to support the determination that the Project would only require 100,000 gallons of water (0.30 acre feet) *per wash*.<sup>35</sup> The County must revise the MND to indicate that the Project may require 400,000 gallons of water *per year* for maintenance and must support its finding with evidence, or acknowledge that the Project will likely require much more water.

To maintain sufficient electric generation, photovoltaic ("PV") solar panels must be washed to remove dust and debris that may accumulate over time. The amount of water needed for cleaning depends on a variety of factors, such as dust fall, dust compaction, water waste etc. The Applicant expects to use 100,000 gallons of water (0.30 acre feet) to wash the panels two to four times a year.<sup>36</sup> This means that *the Project would require 400,000 gallons of water (1.22 acre feet) per year*.

It is likely, however, that the Project will require more. For example, the Mitigated Negative Declaration for the Boulevard Associates Kramer Junction Project states that the 20-MW PV solar facility "shall consume a 'minimal amount' of water for the occasional cleaning of panels as they become dusty throughout the year."<sup>37</sup> This "minimal amount" is approximately 150,000 gallons of water per wash

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<sup>35</sup> MND, p. 14.

<sup>36</sup> *Ibid.*

<sup>37</sup> San Bernardino County, Kramer Junction Solar Energy Center Boulevard Associates, LLC, March 2010, p. 6.  
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- 50,000 gallons of water more than what the MND estimates the Project will use. Because the 20-MW solar facility's estimated water use is more than what the MND estimates for the proposed Project, and because the proposed Project is twice as big as the 20-MW solar facility, it is likely that the MND underestimated the Project's water use.

In addition, Stephanie Tavares, an environmental reporter for the *Las Vegas Sun*, compared the proposed operational water use for various PV solar projects.<sup>38</sup> She determined that 16,689 gallons of water per MW was required yearly to clean PV solar plants. Based on this assumption, the proposed Project would need approximately 667,560 gallons of water (2.04 acre feet) per year for maintenance.<sup>39</sup>

As this factual evidence indicates, the MND likely underestimates the Project's proposed maintenance water use. The County must identify the actual amount of water the Project will require for maintenance, base its conclusion on substantial evidence and include that information in a WSA and EIR for the proposed Project.

### **3. The amount of water the Project will need to maintain onsite for fire protection**

The MND does not provide any information regarding whether water will be stored onsite for fire protection. The County must disclose whether the County Fire Department, North Desert Division requires industrial facilities to store water onsite for fire suppression. If water is required to be stored onsite, the County must also disclose how much water is needed, and include the information in a WSA and revised EIR.

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<sup>38</sup> Tavares, *Dirty detail: Solar Panels Need Water* (Sept. 18, 2009) *The Las Vegas Sun* (Attachment D).

<sup>39</sup>  $16,689 \times 40 = 667,560$  gallons per year. 1 gallon =  $3.06888328 \times 10^{-6}$  acre feet.  $667,560$  gallons  $\times 3.06888328 \times 10^{-6} = 2.04$ .  
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### **B. The Project's water supply**

The MND simply states that water would be delivered to the site via 4,000-gallon water trucks.<sup>40</sup> As discussed above, a water description that merely states that water will be trucked onto a project site is speculative and inadequate as a matter of law. The public is not required to guess the source of water for construction and operation and what the potentially significant impacts may be on water resources. The County is required, by law, to provide this information. The County must identify a public water system to serve the Project or groundwater aquifer if groundwater will be pumped. The County must include this information in a revised EIR and WSA.

### **C. A Water Supply Assessment must be prepared**

As set forth above, a WSA must identify existing water supply entitlements, water rights or water service contracts relevant to the identified water supply, as well as the quantities of water received in prior years. A WSA must also describe what additional entitlements are necessary for the proposed Project to receive the water. Because the water supply for the proposed Project may also include groundwater, the WSA must describe the groundwater basin, where the water may be pumped and how much water may be pumped. The WSA must also analyze the sufficiency of the groundwater from the basin to meet the proposed water demand. This information is especially important because the use of groundwater during construction of the nearby SEGS Units III and IV caused depletions and drawdown of the groundwater aquifer that affected adjacent well owners.<sup>41</sup>

## **III. THE MND IS INTERNALLY INCONSISTENT AND FAILS TO ADEQUATELY DESCRIBE THE PROJECT**

The MND fails to describe the Project and hence, does not comply with CEQA. Under CEQA, a negative declaration is legally defective if it fails to describe the proposed project accurately.<sup>42</sup> CEQA provides that before a negative declaration can be issued, the initial study must "[p]rovide documentation of the factual basis for

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<sup>40</sup> MND, p. 14.

<sup>41</sup> Commission Decision, Application for Certification for Luz Engineering Corporation SEGS Project Units III-VII, May 1988, p. 13.

<sup>42</sup> CEQA Guidelines, § 15071, subd. (a); *Christward Ministry v. Superior Court* (1986) 184 Cal.App.3d 180, 197.  
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the finding in a negative declaration that a project will not have a significant effect on the environment.”<sup>43</sup> The courts have repeatedly held that “[a]n accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient [CEQA document].”<sup>44</sup>

The project description must be accurate and consistent throughout an environmental review document.<sup>45</sup> It is impossible for the public to make informed comments on a project of unknown or ever-changing proportions. “A curtailed or distorted project description may stultify the objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal’s benefit against its environmental costs...”<sup>46</sup> In *County of Inyo*, the lead agency first defined the project to include only the extraction of groundwater from Owens Valley for export and use on city-owned land in Inyo and Mono Counties. Then, the project was defined as “one part of the larger operation of the Los Angeles Aqueduct System.” And in yet another part of the document, the project included the entire Los Angeles Aqueduct System.<sup>47</sup> The Court found the inconsistent project descriptions to be harmful because the inconsistency confused the public and commenting agencies, thus vitiating the usefulness of the process “as a vehicle for intelligent public participation. . . . A curtailed, enigmatic or unstable project description draws a red herring across the path of public input.”<sup>48</sup>

**A. The description of the Project’s entire water demand and supply is inadequate**

As discussed above, the MND does not contain a sufficient description of the Project’s proposed water demand and supply. The County’s failure to describe the Project’s water demand and supply does not only violate the Water Code, but also violates CEQA’s requirement that an MND contain a complete and consistent project description. To facilitate meaningful public participation, the County must provide this information in an EIR that is circulated for public review.

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<sup>43</sup> CEQA Guidelines, § 15063, subd. (c)(5).

<sup>44</sup> *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193.

<sup>45</sup> *Id.* at 192.

<sup>46</sup> *Id.* at 192-193.

<sup>47</sup> *Id.* at 190.

<sup>48</sup> *Id.* at 197-198.

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**B. The description of new transmission lines is inadequate**

The County must describe any new transmission lines the Project may need. The California, Independent Service Operator (“CAISO”) has determined that new generation facilities in the Kramer Junction area may require the construction of new transmission lines.<sup>49</sup> There is no discussion in the MND, however, about whether new transmission lines may be required, and, if so, where new transmission lines will be located. The County must provide this information to assess all of the Project’s potential environmental impacts.

**C. The description of past, present and reasonably foreseeable future projects is inadequate**

A significant cumulative impact may result from an incremental impact caused by the proposed Project that is added to other closely related past, present and reasonably foreseeable, probable future projects.<sup>50</sup> The MND admits that the Project may result in significant impacts on air quality, biological resources, cultural resources and land use and planning that requires mitigation. Therefore, there may be a cumulative impact on air quality, biological resources, cultural resources and land use and planning. As discussed above, there may also be a significant impact on water resources.

While other lead agencies customarily provide a list of closely related projects so that the public and decision makers can understand the cumulative impacts analysis,<sup>51</sup> the County has not done so in this case. The County must provide a list of past, present and reasonably foreseeable future projects so that the public and decision makers can evaluate the findings in the MND.

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<sup>49</sup> David Marcus, letter to Robyn C. Purchia, Attorney, Adams Broadwell Joseph & Cardozo, April 13, 2010, pp. 1-2 (hereafter Marcus comments) (Attachment A).

<sup>50</sup> CEQA Guidelines, § 15355, subd. (b).

<sup>51</sup> See Kern County, Alta-Oak Creek Mojave Project Draft Environmental Impact Report, August 2009 (see excerpts as Attachment E); Bureau of Land Management, Draft Environmental Impact Statement and California Desert Conservation Area Plan Amendment for the Proposed Chevron Energy Solutions Lucerne Valley Solar Project, January 2010 (see excerpts as Attachment F).  
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**D. The description of the workers and visitor awareness and training program is inadequate**

To mitigate impacts to sensitive species, the MND states that the Applicant will ensure that all workers will be given a brief instruction seminar on identifying sensitive organisms.<sup>52</sup> The MND does not describe who will administer the Program, however, and what their qualifications will be. Without this information it is impossible for the public to assess the adequacy of this mitigation measure. There is no assurance that this “seminar” will actually provide construction crews with the training they need to prevent significant impacts to the species.

**IV. AN EIR IS REQUIRED BECAUSE SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THAT THE PROJECT MAY RESULT IN A SIGNIFICANT IMPACT ON THE ENVIRONMENT**

CEQA contains a strong presumption in favor of requiring a lead agency to prepare an EIR. This presumption is reflected in the “fair argument” standard of review. Under that standard, a lead agency must prepare an EIR whenever substantial evidence in the whole record before the agency supports a fair argument that a project may have a significant effect on the environment.<sup>53</sup>

Under the “fair argument” standard, a negative declaration is improper, and an EIR is required, whenever substantial evidence in the record supports a “fair argument” that significant impacts may occur, even if other substantial evidence supports the opposite conclusion.<sup>54</sup> The “fair argument” standard creates a “low threshold” favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA.<sup>55</sup> As a matter of law, “substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.”<sup>56</sup> An agency’s decision not to require an EIR can be upheld only when there is no credible evidence to the

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<sup>52</sup> MND, pp. 33, 76.

<sup>53</sup> Pub. Resources Code, § 21082.2; *Laurel Heights, supra*, 6 Cal.4th at 1123; *Stanislaus Audubon Society, supra*, 33 Cal.App.4th at 150-51; *Quail Botanical Gardens, supra*, 29 Cal.App.4th at 1602.

<sup>54</sup> *Stanislaus Audubon Society, supra*, 33 Cal.App.4th at 150-51; *Quail Botanical Gardens, supra*, 29 Cal.App.4th at 1602.

<sup>55</sup> *Stanislaus Audubon Society, supra*, 33 Cal.App.4th at 151.

<sup>56</sup> Pub. Resources Code, § 21080, subd. (e)(1); CEQA Guidelines, § 15064, subd. (f)(5).  
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contrary.<sup>57</sup> Substantial evidence supporting a fair argument that a project may have significant environmental impacts can be provided by technical experts or members of the public.<sup>58</sup>

Here, substantial evidence presented in this comment letter, and the supporting technical comments, supports a fair argument that the Project will have significant Project and cumulative environmental impacts on biological resources, exposure to hazardous materials, energy transmission and water resources. For these reasons, the County should withdraw the MND and prepare a draft EIR for the Project.

**A. Substantial evidence supports a fair argument that the Project may result in significant unmitigated impacts to biological resources**

James Cornett, a certified wildlife biologist, reviewed the MND and technical appendices' analyses of impacts on biological resources and special-status species. Mr. Cornett determined that a fair argument still exists that the Project could cause a significant impact to biological resources.<sup>59</sup> In fact, in Mr. Cornett's opinion, the conclusions in the Biological Assessment are so undermined by serious and frequent errors in the surveys and assessments that he doubts the entire credibility of the report's findings.<sup>60</sup> While he has focused his comments on a few key issues, he recommends that the County reassess the Project's impacts with more qualified biologists. As proposed, a fair argument exists that the Project will impact biological resources.

**1. The Project may have a significant unmitigated impact on the desert tortoise**

As described, the Project may have a significant, unmitigated impact on desert tortoises. According to Mr. Cornett, unidentified active tortoises may be

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<sup>57</sup> *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1318.

<sup>58</sup> CEQA Guidelines, § 15063, subd. (a)(3); *Gabric v. City of Rancho Palos Verdes*, *supra*, 73 Cal.App.3d at 199.

<sup>59</sup> James W. Cornett, M.S., James W. Cornett Ecological Consultants, letter to Robyn C. Purchia, Attorney, Adams Broadwell Joseph & Cardozo, June 16, 2010, pp. 1-6 (hereafter Cornett comments) (Attachment B).

<sup>60</sup> *Id.* at pp. 1-3.  
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present on the Project site and in the action area.<sup>61</sup> The MND states that impacts to desert tortoises would be reduced to a less-than-significant level with the proposed mitigation measures. However, if active desert tortoises are indeed present on the Project site, implementation of the mitigation measures may cause additional impacts to the species that were not discussed and mitigated. The County must revise its analysis of Project impacts to the desert tortoise so that proper mitigation measures will be imposed to reduce impacts to the species.

Unidentified active tortoises may be present on the Project site. The surveys and MND do not discuss the presence of this species in the area around the Project site. Tortoises can travel at least twenty miles in one direction over the course of two years.<sup>62</sup> Thus, desert tortoises that were in the area surrounding the Project site during the survey may have simply walked onto the Project site.<sup>63</sup> The surveys and the MND also do not disclose the lower temperature limit at which the surveys were conducted. If the temperatures were too low during the surveys, active tortoises may have been hidden in their burrows.<sup>64</sup> Finally, the surveys should have included an assessment of tortoises that occur offsite on access roads and transmission corridors.<sup>65</sup> These areas will be actively used during Project development. The failure of the County to identify the presence of desert tortoises on the Project site and in areas actively used during Project development may cause significant, unmitigated impacts to the species.

To mitigate impacts to tortoises, the MND states that the Applicant will provide offsite mitigation lands, install safety fencing, educate workers and secure a take permit.<sup>66</sup> The MND did not disclose, however, what will be done with tortoises that occur on the Project site, but were missed during the surveys. The MND must state whether the tortoises will be relocated or killed onsite. If tortoises will be relocated, the County must prepare a Translocation Plan that is circulated for public review.<sup>67</sup> Information in the Translocation Plan would include a description of mitigation lands, whether tortoises occur on the mitigation lands already and

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<sup>61</sup> *Id.* at pp. 3-4.

<sup>62</sup> *Id.* at p. 4

<sup>63</sup> *Ibid.*

<sup>64</sup> *Ibid.*

<sup>65</sup> *Ibid.*

<sup>66</sup> MND, pp. 33-34.

<sup>67</sup> Cornett comments, p. 4.  
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who will oversee the translocation.<sup>68</sup> It would also disclose impacts that may be associated with translocation, such as territorial disputes with tortoises already present on mitigation lands.<sup>69</sup>

The County must disclose and evaluate all of the Project's potentially significant impacts on the desert tortoise. The MND fails to recognize these impacts. An adequate impacts analysis must be included in a draft EIR that is circulated for public review.

**2. The Project may have a significant unmitigated impact on the Mohave ground squirrel**

The MND assumes that Mohave ground squirrels are present on the site.<sup>70</sup> To mitigate impacts the Applicant will purchase California Department of Fish and Game ("CDFG") approved land for offsite conservation, dedicate large portions of the Project site to open space and secure a "take" permit.<sup>71</sup> As described, however, these mitigation measures are not sufficient to ensure that Project impacts will be reduced to a less-than-significant level.

If Mohave ground squirrels are indeed present on the site, the MND must disclose the Project's direct impacts to them. Specifically, the MND must describe whether the squirrels will be captured and relocated or crushed and asphyxiated.<sup>72</sup> If the Mohave ground squirrels will be captured and relocated, the MND must describe the mitigation land. Relocating squirrels to an area already occupied by the Mohave ground squirrel may lead to territorial disputes.<sup>73</sup> If there are no Mohave ground squirrels on the mitigation land, it may mean that the mitigation land is not adequate habitat for the species.<sup>74</sup>

The County must assess the impacts associated with mitigation measures proposed for the Mohave ground squirrel. Failure to do so leaves significant, unmitigated impacts to a State-listed species unchecked.

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<sup>68</sup> *Ibid.*

<sup>69</sup> *Ibid.*

<sup>70</sup> MND, pp. 32-33.

<sup>71</sup> *Id.* at pp. 33-34.

<sup>72</sup> Cornett comments, p. 3.

<sup>73</sup> *Ibid.*

<sup>74</sup> *Ibid.*

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**3. The Project may have a significant, unmitigated impact on the Western burrowing owl**

The Western burrowing owl is protected by the Migratory Bird Treaty Act, considered a Bird of Conservation Concern by the United States Fish and Wildlife Service and a Species of Concern in California.<sup>75</sup> The burrowing owl's special status both federally and within the State mandates that the County adequately identify and discuss any potential impacts the Project may have on the species. The County has failed to do so in the MND.

The MND states that no burrowing owls were detected during the biological surveys that were conducted on the Project site.<sup>76</sup> As discussed above, however, the surveys contained such egregious errors that Mr. Cornett doubts the credibility of their findings.<sup>77</sup> The property contains suitable habitat for the Western burrowing owl, and the owls have been observed in this general area.<sup>78</sup> Moreover, according to the CDFG, if burrowing owls have used the Project site within the past three years, the site should be assumed occupied.<sup>79</sup> The MND does not disclose the historical use of the site by the species. Thus, unidentified burrowing owls may be present on the Project site.

The County must revise its analysis to contain more credible information and disclose the historical use of the site by burrowing owls. Currently, there is no substantial evidence to support the MND's conclusion that impacts to burrowing owls will be less than significant. Moreover, Mr. Cornett provides substantial evidence supporting a fair argument that significant unmitigated impacts may occur. The County must revise its analysis and include the revised analysis in a draft EIR that is circulated for public review.

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<sup>75</sup> U.S. Fish & Wildlife Serv., Status Assessment & Conservation Plan for the Western Burrowing Owl in the United States, 2003, pp. 4-5.

<sup>76</sup> MND, p. 30.

<sup>77</sup> Cornett comments, pp. 1-3.

<sup>78</sup> MND, p. 30.

<sup>79</sup> Dept. of Fish and Game, Staff Report on Burrowing Owl Mitigation, Oct. 17, 1995, p. 2. 2453-003d

**4. The Project may have a significant unmitigated impact on native plant species**

As the MND recognizes, Joshua trees are regulated under the County of San Bernardino Development Code.<sup>80</sup> Project development would require the removal of 224 Joshua trees.<sup>81</sup> To mitigate impacts, the MND states that trees meeting the specimen size requirements will be removed and relocated.<sup>82</sup> However, the MND fails to disclose impacts associated with removal and relocation.

According to Mr. Cornett, digging up Joshua trees destroys much of their root system causing direct mortality to the species in most circumstances.<sup>83</sup> In Mr. Cornett's experience, more than 50 percent of Joshua trees die during the relocation process.<sup>84</sup> The MND does not disclose this significant impact or provide any mitigation measures. The County must assess all of the Project's potentially significant impacts, including significant impacts to Joshua trees, in a draft EIR.

**B. Substantial evidence supports a fair argument that the Project may result in significant unmitigated impacts from exposure to hazardous materials**

Matt Hagemann, an expert in hazardous materials, reviewed the MND with respect to the number of trash piles that were found on the Project site. In his comments, he concluded that the MND failed to evaluate potential hazards associated with the trash and debris that have been observed onsite.<sup>85</sup>

The MND states that a number of trash piles consisting of wood, metal, tires, various plastics and an abandoned truck were found onsite.<sup>86</sup> The abandoned truck may have contaminated the site with lead and other heavy metals, as well as

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<sup>80</sup> MND, p. 36.

<sup>81</sup> *Id.* at p. 37.

<sup>82</sup> *Id.* at p. 38.

<sup>83</sup> Cornett comments, p. 5

<sup>84</sup> *Ibid.*

<sup>85</sup> Matt Hagemann, P.G., SWAPE, letter to Robyn C. Purchia, Attorney, Adams Broadwell Joseph & Cardozo, June 15, 2010, p. 1 (hereafter Hagemann comments) (Attachment C).

<sup>86</sup> MND, p. 51.  
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petroleum hydrocarbons.<sup>87</sup> The visual examination relied on by the County in the MND is insufficient, in Mr. Hagemann's opinion, to determine that the Project will not result in impacts from hazardous materials.<sup>88</sup>

He recommends that the County, at a minimum, require a Phase I Environmental Site Assessment to evaluate the potential presence of hazardous materials in the areas where the trash piles were observed.<sup>89</sup> If hazardous materials are detected, a Phase II Environmental Site Assessment must be conducted. The County must include the findings from the Environmental Site Assessments in an EIR that is recirculated for public review.

**C. Substantial evidence supports a fair argument that the Project may result in impacts from potential transmission upgrades**

The MND states that energy will be transported to the regional grid via an interconnect to the existing Kramer Substation 33 kV overhead transmission line owned and operated by Southern California Edison ("SCE").<sup>90</sup> In order for the Project to connect to the SCE transmission line, however, any reliability impacts on the transmission system must be assessed and mitigated.<sup>91</sup> The CAISO has identified transmission constraints in the Kramer Junction area.<sup>92</sup> Specifically, CAISO found that any new generation added at or near Kramer Junction may require the construction of new transmission lines.<sup>93</sup>

Because the Project will add new generation at the Kramer Junction transmission line, the Applicant may be required to construct new transmission lines as part of the Project.<sup>94</sup> The construction of new transmission lines or an upgrade to the transmission system would be part of the whole of the Project under CEQA.<sup>95</sup> There is no doubt that the construction of new transmission lines may

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<sup>87</sup> Hagemann comments, p. 1.

<sup>88</sup> *Ibid.*

<sup>89</sup> *Ibid.*

<sup>90</sup> MND, pp. 3, 11.

<sup>91</sup> Marcus Comments, p. 1.

<sup>92</sup> *Id.* at pp. 1-2.

<sup>93</sup> *Id.* at p. 2.

<sup>94</sup> *Id.* at pp. 1-2.

<sup>95</sup> Pub. Resources Code, § 21065; CEQA Guidelines, § 15378, subd. (a); *Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal.* (1988) 47 Cal.3d 376, 396.  
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cause a significant impact on the environment that has not been analyzed or mitigated in the MND. The County must determine whether the Applicant must construct new transmission lines and whether the Project will require an upgrade to the transmission system, and evaluate all reasonably foreseeable, potentially significant impacts in an EIR that is circulated for public review.

**D. Substantial evidence supports a fair argument that the Project may substantially affect water resources**

The MND states that water would be delivered to the site via 4,000-gallon water trucks.<sup>96</sup> The MND does not state who or what entity will supply the water.

The California Energy Commission has acknowledged that reliance on onsite wells in the Kramer Junction area may deplete groundwater resources.<sup>97</sup> Local water purveyors only have a limited amount of water available for use in the region.<sup>98</sup> The County must analyze and acknowledge potentially significant impacts on groundwater supplies, State water project water and any other potential water source and propose mitigation measures.

**E. Substantial evidence supports a fair argument that the Project may result in cumulative impacts**

CEQA requires that agencies base their conclusions on “substantial evidence.”<sup>99</sup> Substantial evidence includes “facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.”<sup>100</sup> Substantial evidence does not include “[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment.”<sup>101</sup>

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<sup>96</sup> MND, p. 14.

<sup>97</sup> Commission Decision, Application for Certification for Luz Engineering Corporation SEGS Project Units III-VII Appendix A, May 1988, pp. 182-84.

<sup>98</sup> Final Staff Assessment, Luz Engineering Corporation’s Solar Energy Generating Systems, Feb. 1988, p. 553.

<sup>99</sup> See, e.g., *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435; *Citizens of Goleta Valley v. Bd. of Supervisors*, supra, 52 Cal.3d at pp. 566, 575.

<sup>100</sup> CEQA Guidelines, § 15384, subd. (b).

<sup>101</sup> *Id.* at § 15384, subd. (a).  
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The MND's conclusion that the Project will result in a less-than-significant cumulative impact is not based on substantial evidence. The MND states that "[i]t is *assumed* that developments near the project site were constructed after completing an environmental review and that all environmental impacts were mitigated to levels that were less than significant."<sup>102</sup> The County's "assumption" is nothing more than mere speculation that closely related projects will undergo environmental review, and that the environmental review will be adequate to reduce impacts to a less-than-significant level. As discussed above, speculation is not substantial evidence. The County may not rely on this assumption to conclude that the Project will have a less-than-significant cumulative impact.

The County must revise its cumulative impacts analysis. The revised analysis must include a list of past, present and reasonably foreseeable closely related projects. This information and analysis must be provided in a draft EIR that is circulated for public review.

## V. CONCLUSION

Substantial evidence in the record supports a fair argument that the Project may result in significant unmitigated impacts that have not been analyzed. For the foregoing reasons, the County must prepare an EIR to analyze all of the Project's significant impacts and to develop feasible mitigation measures to reduce those impacts to a less-than-significant level.

Sincerely,



Robyn C. Purchia

RCP:cnh  
Attachments

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<sup>102</sup> MND, p. 73.  
2453-003d

Robyn Purchia  
Adams, Broadwell, Joseph, and Cardozo  
520 Capitol Mall, Suite 350  
Sacramento, Ca 95814

4/13/10

Re: Interconnections at Kramer substation

Dear Ms. Purchia,

Transmission interconnections require approval by either the CAISO (for interconnections to the CAISO-controlled grid) or the owner of the transmission lines being connected to. At Kramer, the 220 kV system is CAISO-controlled, while the lower voltages are controlled by SCE. A review of the interconnection queue for the CAISO shows five projects that propose to interconnect at Kramer substation or on a line connected to Kramer substation.<sup>1</sup> Three are from 2006, each with a completed system impact study (SIS).<sup>2</sup> The projects in ISO queue positions #125 (250 Mw) and #142 (80 Mw) have been publicly identified as the Abengoa and SEGS X projects.<sup>3</sup> For SCE, there are two interconnection queues, one for projects larger than 20 Mw<sup>4</sup> and the other for projects of 20 Mw and below.<sup>5</sup> The large project queue has no projects listed that would interconnect to either Kramer substation or a line from Kramer substation. The small project queue shows one 20 Mw project (WDT325, queue date 11/17/08) that could interconnect to the SCE 33 kV bus at Kramer substation, and is currently in the system impact study (SIS) phase of evaluation.

In order for a project to interconnect to either SCE or the CAISO, any reliability impacts on the transmission system must be mitigated. In addition, if the project is intended to provide firm capacity to the grid, and not just energy when available, it must include grid reinforcements as needed to be "deliverable." The CAISO regularly studies deliverability for projects in its queue. Its most recent public study shows that neither the Abengoa project (queue position 125) nor the SEGS X project (queue position 142) are deliverable without transmission upgrades. Specifically, they would require construction of new transmission lines and reinforcement of existing transmission lines so as to create a new 220 KV transmission line from the Coolwater substation to the Lugo substation,<sup>6</sup> bypassing the current Coolwater-Kramer-Lugo 220 KV transmission lines. In the particular case of the proposed SEGS X

<sup>1</sup> <http://www.caiso.com/14e9/14e9dddalebf0.pdf> queue positions 125, 142, 154, 391, and 515.

<sup>2</sup> <http://www.caiso.com/14e9/14e9dddalebf0.pdf> queue positions 125, 142, and 154.

<sup>3</sup> [http://www.energy.ca.gov/sitingcases/abengoa/documents/applicant/2010-02-24\\_Interconnection\\_Optional\\_Study\\_by\\_California\\_ISO-January\\_2010\\_TN-55679.PDF](http://www.energy.ca.gov/sitingcases/abengoa/documents/applicant/2010-02-24_Interconnection_Optional_Study_by_California_ISO-January_2010_TN-55679.PDF), p. 1 of 26 (2/24/10).

<sup>4</sup> [http://www.sce.com/nrc/aboutsce/regulatory/openaccess/wdat/SCE\\_WDAT\\_LGIP\\_Generator\\_Interconnection\\_Requests.pdf](http://www.sce.com/nrc/aboutsce/regulatory/openaccess/wdat/SCE_WDAT_LGIP_Generator_Interconnection_Requests.pdf), updated 3/28/10.

<sup>5</sup> [http://www.sce.com/nrc/aboutsce/regulatory/openaccess/wdat/SCE\\_WDAT\\_SGIP\\_Generator\\_Interconnection\\_Requests.pdf](http://www.sce.com/nrc/aboutsce/regulatory/openaccess/wdat/SCE_WDAT_SGIP_Generator_Interconnection_Requests.pdf), updated 4/6/10.

<sup>6</sup> See link to the deliverability spreadsheet at <http://www.caiso.com/2470/2470c2395ee30ex.html>. In the deliverability spreadsheet itself, see lines 67-70 (project 125 only partially deliverable without new lines), lines 86-93 (project 142 at Kramer substation completely undeliverable without new lines). The deliverability spreadsheet was posted on line on 11/24/09, per <http://www.caiso.com/1c44/1c44b5c31ccee0.html>. It studied projects in the "serial group" but not those like #s 154, 391, and 515 in the SGIP or transition cluster groups.

project at Kramer, the CAISO's deliverability study shows that it would be completely undeliverable even under base case conditions, with all existing transmission lines in service.<sup>7</sup>

The CAISO's deliverability study is not the only publicly available document showing transmission constraints in the Kramer area. While system impact studies are generally confidential, the SIS for the Abengoa project has been publicly disclosed.<sup>8</sup> That SIS confirms that the Abengoa project will not be deliverable for purposes of providing firm capacity to the CAISO grid, and would cause overloads of the existing Kramer-Lugo 230 kV lines. Mitigation of those overloads would require, as also reported in the CAISO's 11/09 deliverability study, a new 230 kV line from Coolwater to Lugo.<sup>9</sup> The SIS suggests that those overloads could also be mitigated by adding the Abengoa project to an existing special protection scheme (SPS),<sup>10</sup> and Abengoa has subsequently elected to do that.<sup>11</sup> The result will be an increase in the number of Mw subject to curtailment under that SPS to 1113 MW.<sup>12</sup> This is perilously close to the CAISO's maximum allowable limit of 1150 Mw of generation that can trip because of a single contingency.<sup>13</sup>

Based on the above discussion, new generation added at or near Kramer over and above that already in the ISO or SCE queues since 2006 will trigger the construction of new transmission lines. Simply adding the Abengoa project will increase the amount of generation participating in the SPS to protect against overloads on the Kramer-Lugo lines to 113 Mw, leaving room for only 37 Mw of additional generation to join the SPS. ISO queue project 142, also from 2006, would use up all of that 37 Mw if it were built and joined the SPS. SCE SGIP project WDT325 from 2008 would use up 20 Mw of the 37 Mw if it were built and joined the SPS. ISO queue projects 154,391, and 515 may also be competing to join the SPS. Once the SPS reaches its maximum size limit, additional generation in the Kramer area would require the construction of new transmission lines, as already identified in the CAISO's deliverability study and the Abengoa SIS.

Please contact me if you have any further questions,

Sincerely,



David Marcus, Energy Consultant  
P.O. Box 1287  
Berkeley, CA 94701-1287

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<sup>7</sup> Ibid, lines 86-87 (Lugo Kramer #1 and #2230 kV lines each overload under base case conditions).

<sup>8</sup>

[http://www.energy.ca.gov/sitingcases/abengoa/documents/appl\\_kant/afc/vo\\_lume\\_03/Appendix\\_N\\_Interconnection\\_System\\_Impact\\_Study/Appendix\\_N\\_Interconnection\\_System\\_Impact\\_Study\\_final.pdf](http://www.energy.ca.gov/sitingcases/abengoa/documents/appl_kant/afc/vo_lume_03/Appendix_N_Interconnection_System_Impact_Study/Appendix_N_Interconnection_System_Impact_Study_final.pdf), 6/27/08.

<sup>9</sup> Ibid., p. 6 of 118.

<sup>10</sup> Ibid., pp. 6-7 of 118.

<sup>11</sup> [http://www.energy.ca.gov/sitingcases/abengoa/documents/applicant/2010-02-05\\_Facility\\_Transmission\\_System\\_Upgrade\\_TN-55215.pdf](http://www.energy.ca.gov/sitingcases/abengoa/documents/applicant/2010-02-05_Facility_Transmission_System_Upgrade_TN-55215.pdf), 2/5/10.

<sup>12</sup>

[http://www.energy.ca.gov/sitingcases/abengoa/documents/app\\_kant/afc/vo\\_lume\\_03/Appendix\\_N\\_Interconnection\\_System\\_Impact\\_Study/Appendix\\_N\\_Interconnection\\_System\\_Impact\\_Study\\_final.pdf](http://www.energy.ca.gov/sitingcases/abengoa/documents/app_kant/afc/vo_lume_03/Appendix_N_Interconnection_System_Impact_Study/Appendix_N_Interconnection_System_Impact_Study_final.pdf), pp. 6-7 of 118.

<sup>13</sup> See CPUC D.08-12-058, pp. 74-75. Generation tripped due to a transmission outage (e.g., via an SPS) cannot exceed the maximum generation tripped due to an outage of a single generator, which for SCE would be one nuclear unit of 1150 Mw at SONGS.

## RESUME

DAVID I. MARCUS  
P.O. Box 1287  
Berkeley, CA 94701-1287

August 2009

### Employment

#### **Self-employed, March 1981 - Present**

Consultant on energy and electricity issues. Clients have included Imperial Irrigation District, the cities of Albuquerque and Boulder, the Rural Electrification Administration (REA), BPA, EPA, the Attorney Generals of California and New Mexico, alternative energy and cogeneration developers, environmental groups, labor unions, other energy consultants, and the Navajo Nation. Projects have included economic analyses of utility resource options and power contracts, utility restructuring, utility bankruptcy, nuclear power plants, non-utility cogeneration plants, and offshore oil and hydroelectric projects. Experienced user of production cost models to evaluate utility economics. Very familiar with western U.S. grid (WSCC) electric resources and transmission systems and their operation and economics. Have also performed EIS reviews, need analyses of proposed coal, gas and hydro powerplants, transmission lines, and coal mines. Have presented expert testimony before FERC, the California Energy Commission, the Public Utility Commissions of California, New Mexico, and Colorado, the Interstate Commerce Commission, and the U.S. Congress.

#### **Environmental Defense Fund (EDF), October 1983 - April 1985**

Economic analyst, employed half time at EDF's Berkeley, CA office. Analyzed nuclear power plant economics and coal plant sulfur emissions in New York state, using ELFIN model. Wrote critique of Federal coal leasing proposals for New Mexico and analysis of southwest U.S. markets for proposed New Mexico coal-fired power plants.

#### **California Energy Commission (CEC), January 1980 - February 1981**

Advisor to Commissioner. Wrote "California Electricity Needs," Chapter 1 of Electricity Tomorrow, part of the CEC's 1980 Biennial Report. Testified before California PUC and coauthored CEC staff brief on alternatives to the proposed 2500 megawatt Allen-Warner Valley coal project.

#### **CEC, October 1977 - December 1979**

Worked for CEC's Policy and Program Evaluation Office. Analyzed supply-side alternatives to the proposed Sundesert nuclear power plant and the proposed Point Concepcion LNG terminal. Was the CEC's technical expert in PG&E et. al. vs. CEC lawsuit, in which the U.S. Supreme Court ultimately upheld the CEC's authority to regulate nuclear powerplant siting.

**Energy and Resources Group, U.C. Berkeley, Summer 1976**

Developed a computer program to estimate the number of fatalities in the first month after a major meltdown accident at a nuclear power plant.

**Federal Energy Agency (FEA), April- May 1976**

Consultant on North Slope Crude. Where To? How?, a study by FEA's San Francisco office on the disposition of Alaskan oil.

**Angeles Chapter, Sierra Club, September 1974 - August 1975**

Reviewed EIRs and EISs. Chaired EIR Subcommittee of the Conservation Committee of the Angeles Chapter, January - August 1975.

**Bechtel Power Corporation (BPC), June 1973 - April 1974**

Planning and Scheduling Engineer at BPC's Norwalk, California office. Worked on construction planning for the Vogtle nuclear power plant (in Georgia).

**Education**

**Energy and Resources Group, U.C. Berkeley, 1975 - 1977**

M.A. in Energy and Resources. Two year master's degree program, with course work ranging from economics to engineering, law to public policy. Master's thesis on the causes of the 1972-77 boom in the price of yellowcake (uranium ore). Fully supported by scholarship from National Science Foundation.

**University of California, San Diego, 1969 - 1973**

B.A. in Mathematics. Graduated with honors. Junior year abroad at Trinity College, Dublin, Ireland.

**Professional Publications**

"Rate Making for Sales of Power to Public Utilities," with Michael D. Yokell, in Public Utilities Fortnightly, August 2, 1984.



JAMES W. CORNETT  
ECOLOGICAL CONSULTANTS  
(760) 320-8135 FAX (760) 320-6182

June 15, 2010

Ms. Robyn C. Purchia  
Adams Broadwell Joseph & Cardozo  
520 Capitol Mall, Suite 350  
Sacramento, California 95814

Subject: **Biological Issues with regards to LightSource Renewables Solar Facility near Kramer Junction, San Bernardino County, California.**

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Dear Ms. Purchia:

This letter contains my comments and concerns with regard to the biological resource information and findings provided in the Mitigated Negative Declaration, General Biological Assessment, Protocol Survey Desert Tortoise report and Desert Native Plant Assessment of the LightSource Renewables Solar Facility located just west of Kramer Junction in San Bernardino County, California.

#### **ISSUES WITH THE GENERAL BIOLOGICAL ASSESSMENT**

The biologists conducting the field surveys and writing the report show a serious lack of familiarity with the Mojave Desert and its biological resources. Ironically, they state on page 1 of the General Biological Assessment that “The assessment is based on our knowledge of high desert biological resources in the Mojave Desert.” The report, however, indicates a serious lack of knowledge concerning these resources. **In fact, errors are so egregious and abundant that the findings and conclusions, in my opinion, make the biological report invalid.**

The evidence for this conclusion includes, but is in no way limited to, the following errors in the General Biological Assessment.

##### *Issues with the Floral Compendium*

In Appendix A, within the Floral Compendium on page A-2, *Cylindropuntia bigelovii*, a cactus with the common name of teddy-bear cholla, is listed as being common on the project site. This species is essentially a Sonoran Desert, not a Mojave Desert, cactus species. There are a few locations in the southern Mojave Desert where it occurs but the nearest location is more than 100 miles east of the project site. The biologists are likely confusing the teddy-bear cholla, with the golden cholla, *Opuntia echinocarpa*. The latter species is a common Mojave Desert cactus that

page 1 of 6

can be expected to occur within the project boundaries. **This is a serious error and undermines the reliability of the report and the credibility of the biologists conducting the field surveys.**

Also in Appendix A and in the Floral Compendium (page A-3) are listed only two species of grass that were recorded from the project site. My 30 years of experience conducting floral surveys in the California deserts, particularly on project sites that are hundreds of acres in size and where the vegetation has been disturbed, indicates there should be more than a dozen grass species on the site, not two. Although it is highly unlikely that there would be any sensitive grass species, **the inability to find not more than two species within the project boundaries undermines the expertise of the biologists conducting the surveys and the credibility of the report.**

#### *Issues with the Faunal Compendium*

As a preliminary matter, the Biological Assessment's inadequate floral compendium adversely affects species identified and assessed in the faunal compendium. For example, different bird species depend on golden cholla and not on teddy-bear cholla. If the teddy-bear cholla is, indeed, present on the project site, breeding birds (such as Le Conte's Thrasher, a sensitive species) would probably not be breeding on the project site. The failure to classify and identify plant species limits the biologist's ability to accurately identify wildlife species on the project site.

In addition, in the Bird Compendium beginning on page B-1, only eight species were recorded in spite of four surveyors being on the site at the peak of the bird migration season. Normally one biologist on a site with more than a hundred Joshua trees would observe at least three times that many avian species in spring. Observing only eight species is a clear indication to me that there was little effort made to identify birds or that the surveyors lacked experience in bird identification.

Perhaps to compensate for this deficiency the report author(s) elected to list all possible resident avian species as well as all species known to migrate through the interior of the western U.S. The introduction to the Birds section states that "Bird species not observed but with the potential to occur on the Property during the breeding season, non-breeding season, or as a migratory stopover have also been included." This is a ridiculously broad category that essentially includes every bird species that migrates through the interior of the western United States. However, the report author fails to deliver on the description of the bird compendium and lists only a token number of migrants.

The criteria should have been confined to only those birds actually observed and those species that might be expected to breed on the project site. Confining the list to only those birds with the potential to occur on the project site, would allow the report authors to discuss impacts to those species in a complete and focused manner. In short, both the field work and the report analysis

are a mess and need to be redone. **These errors undermines the credibility of the report authors and validity of the report findings.**

Also in the faunal compendium are listed a bizarre number of species that have never been recorded in the region or types of habitat described in the General Biological Assessment. These include but are not limited to: the California legless lizard (*Anniella pulchra*), southern alligator lizard (*Elgaria multicarinata*), rosy boa (*Charina trivirgata*), western lyre snake (*Trimorphodon biscutatus*), speckled rattlesnake (*Crotalus mitchellii*), southern pacific rattlesnake (*Crotalus oreganus*), gray fox (*Urocyon cinereoargenteus*), mule deer (*Odocoileus hemionus*), striped skunk (*Mephitis mephitis*), and western spotted skunk (*Spilogale gracilis*). **These errors are so egregious and frequent that the credibility of the entire report is further undermined.**

In my opinion, the conclusions in the Biological Assessment are so undermined by the serious and frequent errors in the surveys and assessments that I have no way of determining whether or not the project will have significant adverse impacts on the environment.

#### **ISSUES WITH MOHAVE GROUND SQUIRREL MITIGATION**

The Mohave ground squirrel is considered Threatened by the State of California. The general biological assessment indicates that the squirrel is assumed to be present. Mitigation consists of the acquisition of a 640-acre parcel in the general region of the project site.

If Mohave ground squirrels are indeed present on the site, the MND must describe how the Project will affect them directly. Will they be captured and relocated or will they be crushed and asphyxiated in their burrows when grading begins? If they are to be relocated where will the unoccupied habitat suitable for the ground squirrels be found?

The County must describe the 640 acres of mitigation land. If squirrels occur on the mitigation land, relocating squirrels to this area may have an indirect impact on the species through territorial disputes. If squirrels do not occur on the mitigation lands the MND should explain why and evaluate the suitability of the land as Mohave ground squirrel habitat. If the squirrels do not occur on the mitigation site then it should be assumed that the site is unsuitable for the squirrel. In such a scenario acquiring the site serves no purpose and there is no mitigation for a state listed Threatened species.

#### **ISSUES WITH DESERT TORTOISE SURVEYS AND REPORT**

##### *Surveys*

No attempt was made to determine the “action area” as defined by the United States Fish & Wildlife Service in their 2009 protocols for desert tortoise surveys. The action area is the area

beyond the site boundaries where either direct or indirect impacts may occur, i.e., access roads, utility corridors to the site, changes in area drainage patterns as a result of site grading, etc. Without action area surveys it is difficult if not impossible to determine adverse impacts to desert tortoises since there is no information on the numbers of tortoises that live immediately adjacent to the project site.

It is also difficult to assess the probability that tortoises may be present on the project site. Tortoises can travel at least 20 miles in one direction over the course of two years (Cecil Schwalbe, University of Arizona, personal communication) and so could simply walk onto the project site and take up residence. A gravid female tortoise could also move onto a site after a biological assessment has been completed and lay eggs with the result that a dozen or more tortoises could suddenly occupy the project site. There is no indication in the Biological Assessment or MND that such events could occur on the project site or have not already occurred. Thus, there may be significant, unmitigated impacts.

In addition, on page 6 of the report there is no mention of a lower temperature limit at which surveys can be conducted. Tortoises are less likely to be detected at low temperatures than at high temperatures. At high temperatures tortoises can still be in evidence in the shade of shrubs but not at low temperatures when they will be hidden in burrows. Were some tortoises present on site but not detected during the surveys because it was too cold? The Biological Assessment and MND must disclose the lower temperature limit at the time the surveys were conducted.

### *Mitigation Measures*

There is no discussion of what will be done with tortoises that occur on site but were missed during the tortoise surveys. Additionally, what will be done with tortoises that wander onto the site after the tortoise surveys but before grading begins? Evidence from the project site indicates that tortoises have been on the site in the past and can be assumed to currently occupy areas surrounding the project site.

Though mitigation habitat has apparently been identified, there is no mention of whether or not tortoises occur on the habitat to be acquired for mitigation. Have tortoise surveys been conducted on the mitigation habitat? If there is no evidence of tortoise presence then the initial assumption must be that it is unsuitable habitat and, therefore, provides no mitigation for impacts to the tortoise and its habitat.

If tortoises must be relocated, the County must prepare a Translocation Plan that is circulated for public review. Information contained in the Translocation Plan would include a description of the mitigation lands, whether tortoises already occur on the mitigation lands, and who will oversee the translocation. The County should also disclose any impacts that would be associated with translocation. For example, relocating tortoises to a site that is already inhabited by other tortoises may lead to territorial disputes.

If the tortoises that are present on site will be killed or harmed by project development, the County must disclose this. Often desert tortoises are buried alive on project sites and suffocate. If this will happen on the project site, the County needs to disclose this information.

#### *Biological Assessment Relies on Faulty Information*

There were several issues and errors with regard to the information provided in the Protocol Survey for Desert Tortoise (*Gopherus agassizii*) report. On page 4 of the report the first-listed reference with regard to determining habitat preferences of the desert tortoise is Robert Stebbin's *A Field Guide to Western Reptiles and Amphibians* published in 2003. There are numerous excellent references on desert tortoise habitat preferences but Stebbin's field guide is not one of them. Stebbin's simply lists habitats in which tortoises have been found, not where they "frequently reside" as stated in the report. Tortoises are rare to nonexistent in oases and dunes yet the report says they are frequently found in such habitats. Furthermore neither I nor anyone else has ever found desert tortoises in habitats where the average annual precipitation is less than three inches much less two inches as is stated in the report.

On page 9 the statement is made that "the range of common ravens has extended into the Mojave Desert as humans have spread into desert areas . . ." Ravens have occurred in the Mojave Desert prior to the arrival of European settlers. The statement should have read that raven numbers have increased in desert areas with the arrival of increased human developments.

Although the names of persons conducting the tortoise surveys were provided, nothing is presented as to their education or experience. Must I assume that the surveyors have no education and no experience? The desert tortoise is an officially threatened species. Persons conducting surveys should be able to demonstrate training and experience in conducting surveys for any threatened species.

#### **ISSUES INVOLVING NATIVE PLANT ASSESSMENT REPORT**

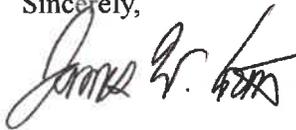
One of the purposes of the Native Plant Assessment is to provide the information necessary to determine which Joshua trees can be relocated, which trees can be stored and which trees should remain in place. The report does not provide any of this information and so the project applicant has not been given with the information necessary to obtain a County permit.

Digging up Joshua trees destroys much of their root system which causes direct mortality in most circumstances. Considering that very high percentages of stored or relocated Joshua tree die (more than 50%), how will this mitigation compensate for the loss of this plant icon of the Mojave Desert? A better mitigation for the long-term presence of Joshua trees is to establish a nursery, grow the trees to a height of 14 inches and then plant them. At the very least, this should be done in conjunction with any relocation effort.

Finally, none of the individuals listed on the title page of the Native Plant Assessment have been placed on San Bernardino County's current (2010) list of consultants approved to conduct native plant assessments or rare plant surveys. No mention is made of the education and experience of the persons evaluating the Joshua trees. Have any of the field workers ever seen a Joshua tree?

Should you require additional information or have questions regarding these issues please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James W. Cornett". The signature is written in a cursive style with a large, sweeping initial "J".

James W. Cornett

## **JAMES W. CORNETT - CURRICULUM VITAE - 2010**

### **Personal Data**

**Name**---James W. Cornett

**Mailing Address**---3745 Bogert Trails, Palm Springs, California 92263

**Telephone Number**---760-320-8135; Fax 760-320-6182

**Place of Birth**---South Gate, California, U.S.A.

### **Education**

B.A., Biology, University of California at Riverside, 1976

M.S., Biology, California State University at San Bernardino, 1980

### **Positions Held**

**January, 1974 - Present**

**Owner-principal, JWC Ecological Consultants, P.O. Box 846, Palm Springs, California 92263**

January, 1996 – June, 2004

Director of Natural Sciences, Palm Springs Desert Museum, 101 Museum Drive, Palm Springs, California 92263, 760-325-7186.

January, 1980 – December, 1995

Curator of Natural Sciences, Palm Springs Desert Museum

September, 1976 - December, 1979

Assistant Curator of Natural Science, Palm Springs Desert Museum

September, 1975 - June, 1976

Natural Science Instructor, Palm Springs Desert Museum

January, 1973 - Present

Environmental Columnist (weekly), Desert Sun-Gannett Newspapers, P.O. Box 2734, Palm Springs, California 92263.

## **JAMES W. CORNETT - CURRICULUM VITAE (continued)**

January, 1981 - Present

Biology Instructor, University of California Extension, Riverside, California 92521, 909-787-4105. Courses taught include: Mammals of the Colorado Desert, Endangered Species of the California Deserts, The Desert Tortoise, Desert Bighorn Sheep, Ecology of Joshua Tree National Park, Ecology of The North American Deserts, Ecology of The Colorado Desert and Ecology of the Coachella Valley.

October, 1975 - June, 1983

Biology and Natural Resources Instructor (part-time), College of The Desert, 43500 Monterey Road, Palm Desert, California 92260, 760-346-8041.

January, 1973 - June, 1974

Assistant Naturalist (part-time), The Living Desert, 47900 Portola Avenue, Palm Desert, California 92260, 760-346-5694.

### **Professional Affiliations**

American Society of Mammalogists  
Bureau of Land Management Colorado Desert Advisory Committee  
California Botanical Society  
California Native Plant Society  
Ecological Society of America  
Herpetologists League  
International Palm Society  
Joshua Tree National Park Association, Board Member  
Southern California Academy of Sciences  
Southern California Botanists  
Southwestern Naturalists' Society  
Western Field Ornithologists



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## **Matthew F. Hagemann**

**Geologic and Hydrogeologic Characterization  
Investigation and Remediation Strategies  
Regulatory Compliance  
CEQA Review  
Expert Witness**

### **Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

### **Professional Certification:**

California Professional Geologist, License Number 8571.

### **Professional Experience:**

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Senior Environmental Analyst, Komex H2O Science, Inc (2000 -- 2003);
- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);

- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

**Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt’s responsibilities have included:

- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Lead analyst in the review of numerous environmental impact reports under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions and geologic hazards.
- Lead analyst in the review of environmental issues in applications before the California Energy Commission.
- Technical assistance and litigation support for TCE vapor intrusion concerns.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.

With Komex H2O Science Inc., Matt’s duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.
- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

**Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection

of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

**Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.
- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.

- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nationwide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

#### Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

#### Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.

- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

**Teaching:**

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

**Invited Testimony, Reports, Papers and Presentations:**

**Hagemann, M.F., 2008.** Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F., 2008.** Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann, M.F., 2005.** Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

**Hagemann, M.F., 2004.** Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F., 2004.** Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

**Brown, A., Farrow, J., Gray, A. and Hagemann, M., 2004.** An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F., 2004.** Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

**Hagemann, M.F., 2003.** Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

**Hagemann, M.F., 2003.** Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

**Hagemann, M.F., 2003.** Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

**Hagemann, M.F., 2003.** Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F., 2003.** The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F., 2003.** A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F., 2003.** Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F., 2002.** From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F., 2002.** A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

**Hagemann, M.F., 2002.** An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F., 2002.** An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

**Hagemann, M.F., 2001.** From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

**Hagemann, M.F., 2001.** Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

**Hagemann, M.F., 2001.** Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

**Hagemann, M.F., and VanMouwerik, M., 1999.** Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

**Hagemann, M.F., 1999,** Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

**Hagemann, M.F., 1997,** The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

**Hagemann, M.F., and Gill, M., 1996,** Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

**Hagemann, M.F., Fukunaga, G.L., 1996,** The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

**Hagemann, M. F., Fukunaga, G. L., 1996,** Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

**Hagemann, M.F., 1994.** Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

**Hagemann, M.F. and Sabol, M.A., 1993.** Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

**Hagemann, M.F., 1993.** U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

**Hagemann, M.F., 1992.** Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.



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Matt Hagemann  
Tel: (949) 887-9013  
Email: [mhagemann@swape.com](mailto:mhagemann@swape.com)

June 15, 2010

Robyn C. Purchia  
Adams Broadwell Joseph & Cardozo  
520 Capitol Mall, Suite 350  
Sacramento, CA 95814

**Subject: Comments on the Initial Study and Mitigated Negative Declaration for  
LightSource Renewables, Kramer Junction Solar Farm**

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Dear Ms. Purchia:

I have reviewed the Initial Study and Mitigated Negative Declaration (IS/MND) for the March 26, 2010 LightSource Renewables, Kramer Junction Solar Farm, a 40 megawatt, photovoltaic solar energy generating facility located on approximately 350 acres in the Mojave located near Kramer Junction, California. The focus of my review was hazardous materials and waste. I have concluded that the IS/MND fails to evaluate potential hazards associated with the trash and debris that have been observed on the site.

The IS/MND describes "a number of illegally dumped trash piles" that currently exist on the project site (p. 20). The IS/MND further describes the piles to consist of "wood, metal, tires, various plastics, and an abandoned truck" (p. 51). The IS/MND states that the truck was examined for spills and that none were found (p. 51).

The limited evaluation of the trash piles in the Initial Study is inadequate. The abandoned truck may be the source of lead and other heavy metals in the underlying soil. Spillage of petroleum hydrocarbons may also have resulted from the abandonment of the truck. A visual examination is insufficient to determine if spillage from the truck has occurred.

A Phase I Environmental Assessment should be conducted under the guidelines of the American Society for Testing and Materials to evaluate the potential presence of spills in the areas where the trash piles have been observed. If evidence of spills is observed in the course of the Phase I, a Phase II Environmental Site Assessment, to include the collection of soil samples, should be conducted to determine if a release of hazardous materials has occurred.

In my professional opinion, the presence of the trash piles at the project site warrants further investigation. Without further investigation, workers involved in earthmoving activities may be exposed to contamination that would pose a risk to their health. A Draft Environmental Impact Report should be prepared to include the results of a Phase I Environmental Site Assessment and a Phase II as necessary.

Sincerely,



Matt Hagemann, P.G.

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Las Vegas Sun

# Dirty detail: Solar panels need water

## How much is the question, as developers downplay frequency of cleanings

By ***Stephanie Tavares*** (contact)

Friday, Sept. 18, 2009 | 2 a.m.

Southern Nevada may pose more of a dirty little problem for some solar plant developers than they realize or are letting on.

Solar photovoltaic developers say not to worry about how much water their plants will use because they need only enough water to run the office bathrooms and wash the arrays of panels a couple of times a year.

But people who live near proposed plants or maintain solar panels in the desert guffaw at that last bit and are willing to bet the panels will need to be hosed down more frequently.

Dust on solar panels can decrease their efficiency by about 3 percent, solar photovoltaic experts said. The larger the solar array, the more electricity lost.

“On a home that doesn’t mean much of anything, but on a huge solar power plant that could mean real money,” said Nevada solar panel installer Chris Brooks, director of renewable energy for Bombard Electric.

Most photovoltaic arrays are cleaned with tap water sprayed with a hose or from a water truck. So solar array managers have to add in the cost of labor, truck rental and gasoline. In a water-starved desert, the additional consideration is how much of the region’s most critical natural resource will wind up evaporating or dripping into the desert.

Solar photovoltaic developers say their plants don’t use much water, but “much” is relative. True, they use a fraction of what a water-cooled solar thermal power plant consumes annually — about a 16,689 gallons per megawatt for photovoltaics compared with 2.61 million gallons per megawatt for wet-cooled solar thermal — but a large photovoltaic array can still easily use more water in a year than an entire residential block.

The array planned for Primm, for example, is expected to annually require at least as much water as 10.5 average Las Vegas households. NexLight North and NexLight South, which have been combined in the first industrial-scale solar photovoltaic array planned the Bureau of Land Management land in Nevada, would need to truck in about 6.8 million gallons of water a year, developers reported in planning documents. That’s enough, they say, to clean the thousands of acres of solar panels about twice a year.

Although that is the industry standard for washing large arrays of solar panels, few large solar arrays in the Mojave get away with so few cleanings.

UNLV's photovoltaic arrays are washed about monthly. NV Energy washes the panels at the Clark Generating Station about four times a year. Other NV Energy owned solar panels are washed three times a year.

When NexLight disclosed plans for biannual cleanings at BLM scoping meetings, locals scoffed. If the dust on the cars in the parking lot was any indication, the developers would be cleaning those panels a lot more than twice a year. The dust in the Ivanpah Valley can be brutal under normal circumstances, residents said. But the area is also a popular spot for large multiday off-road races that can stir up even more dust.

The NexLight plants are planned smack dab in the middle of a popular off-road raceway, which the company proposes rerouting around the solar plant.

Just washing the panels more often is not the easy solution it sounds like. If the increase in electrical output won't generate more money than it costs to wash the panels, they can just stay dirty.

"Efficiency does drop off with time," said Bob Boehm, director of UNLV's Center for Energy Research. "But you really have to balance the loss in efficiency from the dust with the cost of the water and labor."

So solar array managers try to keep the panels cleanest when the solar panels are operating at maximum efficiency in the long days of spring and summer. Unfortunately, that's when demand for water is the highest, putting even more strain on a scarce resource.

When they can, operators of solar arrays let Mother Nature do the work for them. Though Southern Nevada gets only about 4 inches of rain in a good year, the weather is relatively predictable. That gives solar array managers time to get the panels ready for cloudy weather and, they hope, a free cleaning.

That preparation is a must. Cold water on a very hot solar panel usually means shattered glass, so managers have to power down arrays well before either a cleaning or rainfall. If the storm produces rain that falls in a torrent, they've hit the jackpot.

"A really good rainstorm means you don't need to worry about washing your panels for a while," Boehm said. "But if you get this typical Las Vegas rainstorm with tons of wind and dust and forty-five drops of rain, that's the worst kind of thing. It just plasters the dirt to the panel."

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- Rebuilding approximately 19 miles of existing 220-kV T/L to 500-kV standards between the existing Vincent and Gould Substations. Also adding a new 220-kV circuit on the vacant side of the existing double-circuit structures of the Eagle Rock-Mesa 220-kV T/L, between the existing Gould and Mesa Substations (Segment 11);
- Rebuilding of approximately 32 miles of existing 220-kV T/L to 500-kV standards from the existing Vincent Substation to the southern boundary of the ANF, including approximately 27 miles of the existing Antelope-Mesa 220-kV T/L and approximately 5 miles of the existing Rio Hondo-Vincent 220-kV No. 2 T/L (Segment 6);
- Rebuilding approximately 16 miles of the existing Antelope-Mesa 220-kV T/L to 500-kV standards from the southern boundary of the ANF to the existing Mesa Substation. This segment would replace the existing Antelope-Mesa 220-kV T/L (Segment 7);
- Rebuilding approximately 33 miles of existing Chino-Mesa 220-kV T/L to 500-kV standards from a point approximately 2 miles east of the existing Mesa Substation (the "San Gabriel Junction") to the existing Mira Loma Substation. Also rebuilding approximately 7 miles of the existing Chino-Mira Loma No. 1 line from single-circuit to double-circuit 220-kV structures (Segment 8);
- Building the new Whirlwind Substation, a 500/220-kV substation located approximately 4 to 5 miles south of the Cottonwind Substation near the intersection of 170th Street and Holiday Avenue in Kern County near the TWRA (Segment 9);
- Upgrading the existing Antelope, Vincent, Mesa, Gould, and Mira Loma Substations to accommodate new T/L construction and system compensation elements (Segment 9); and
- Installation of associated telecommunications infrastructure.
- The Draft EIR for the TRTP is currently in public review. Construction of the project is proposed to begin in July 2009 and end in November 2013.

### Other Cumulative Projects

Table 3-5 lists nearby residential, commercial, natural resource and solar energy projects. The Kern County Planning Department reviewed all known projects within a six-mile radius of the project site. The closest residential project is a general plan amendment (agriculture to residential) located adjacent to the Subarea 1 site, approximately 1.5 miles south of Highway 58, known as the Justin Holmberg Property. This is a relatively small project that would involve construction of residences on 8.54 acres.

Kern County Case ID	Project Name	Project Location	Case Type	Acreage
12787; 12788	Airstreams, LLC by Don Ward	Willow Springs & Jameson Road	General plan amendment and zone change to industrial	33.12
11938; 11939	All Source Realtors/Judy-May Russell	21011 Angel Street, Tehachapi	Specific plan amendment and zone change to commercial	0.62
12053	Aptaker, Stanley by Bruce Barton	North side SR-14, 2 miles north of California City Boulevard	General plan amendment to residential	74.18
12452; 12453	Arosso, LLC	East side Arosa Road, ¼ mile south of Banducci	General plan amendment and zone change to residential	21.29
11607	Av Design Group by Abe Nejim	Rosamond Boulevard Between 70th & 80th Streets	Zone change to commercial	160

<b>Table 3-5 Relevant Cumulative Projects other than Wind Energy in Kern County</b>				
<b>Kern County Case ID</b>	<b>Project Name</b>	<b>Project Location</b>	<b>Case Type</b>	<b>Acreage</b>
11957	Av Design Group by Abe Nejim	Rosamond Boulevard at 70th Street West	Zone change to commercial	160
12000; 12001	Barton, Larry by Pinnacle Civil Engineering	North side Knox Ave, 250 feet west of 40th St West	Specific plan amendment and zone change to residential	2.98
7867	Big Iron Construction/D Spoor	Ptn NE/4 Sec 8	Conditional use permit for surface mine & reclamation	0
10778	Bitfner, Edward/Jeane Harrigal	1400 W Orange St - Rosamond	Conditional use permit for salvage yard	0
11111	Blue Eagle Lode Mining Company	7 miles north of Willow Springs	Conditional use permit for reclamation plan for underground mine	1.75
11118	Blue Eagle Lode Mining Company	Tropico Mine located near Rosamond Blvd. and Mojave Tropico Road	Conditional use permit for ore crushing and processing	99.2
11113	Blue Eagle Lode Mining Company	Tropico Mine located near Rosamond Blvd. and Mojave Tropico Road	Zone change to natural resource	35.68
11115	Blue Eagle Lode Mining Company	Tropico Mine located near Rosamond Blvd. and Mojave Tropico Road	Zone change to natural resource	179.9
11116	Blue Eagle Lode Mining Company	Tropico Mine located near Rosamond Blvd. and Mojave Tropico Road	Zone change to natural resource	1.72
11117	Blue Eagle Lode Mining Company	Tropico Mine located near Rosamond Blvd. and Mojave Tropico Road	Zone change to natural resource	56.39
12351; 12375	Brite Vally Estates/ Eldwin Kennedy	Arosa Road, Tehachapi	General plan amendment and zone change to residential	35
12470	California Builders/Jess Rim	South side of Poplar Street	Zone change to residential	1.26
11743	Curry James	18955 Arosa Road	Zone change to agriculture	5
11149	Eisenberg, Donald/Cornerstone	Southwest corner Holiday Avenue & 55th Street West	Zone change to residential	
11631; 11630	EK Development / HFM Group	N Rosamond Boulevard 400' W of 50th Street W	General plan amendment and zone change to residential	13
12283	Fisher Sand & Gravel Co.	Southwest corner of 75th Street West & Reed Avenue	Conditional use permit for surface mine & reclamation plan	80
12407	Garcia, German by Ward Engineering	North side Banducci West of Alps	Zone change to estate	24.52
12930	GE Energy by Ty Remington	South. of SR-58, East Chantico Road	Conditional use permit for ten 20 mw solar voltaic panels	820
12823; 12089	Gholam R Saidi	20th and Patterson - Rosamond	General plan amendment and zone change to industrial	10
12888	Ioshpe, Motel	3783-B Sierra Hwy.	Conditional use permit for country club/tennis club	0
11291	Jackson, Howard by Don Ward	Southeast of Tucker Road & Highline Road	Zone change to estate	31.05
10978	Julien, H E & Associates	8684 Sweetser Rd - Rosamond	Zone change to agriculture	60

**Table 3-5 Relevant Cumulative Projects other than Wind Energy in Kern County**

Kern County Case ID	Project Name	Project Location	Case Type	Acreage
12299	Justin Holmberg	West side Tehachapi Willow Springs Road, approximately ½ mile south of SR-58	General plan amendment to residential	8.54
12506	Kelly, Randall	West of 30th Street West, Rosamond	Zone change to estate	10
9589; 9590	Kilby, Sidney	North side SR-58, 2 miles east of Mojave	General plan amendment and zone change to industrial	0
11216; 11217	King, Karl/ Richard Beigle	Northwest corner & Northeast corner of Sopp Road & Hwy 14	General plan amendment and zone change to estate	135
11875; 11469	Kjelstrom & Assoc/ Service Rock Products	South side SR-58, ¼ mile east of Janata Street	General plan amendment and zone change to industrial	24.52
12713; 12662	Lane, Charlene by Cornerstone Engineering	Northwest corner Eagle Way & Poplar Street	Specific plan amendment and zone change to commercial	5.02
10381	Largent Group, LLC/Cornerstone	Northwest corner 75th Street West & Edwards Avenue	Zone change to industrial	0
11107	Lehigh Southwest Cement Company	3 miles northeast of Tehachapi	Conditional use permit for reclamation plan	1200
11109	Lehigh Southwest Cement Company	3 miles northeast of Tehachapi	Conditional use permit for reclamation plan	1000
12225; 12226	Michael Richardson by Donald E. Ward	Southeast corner of Transvaal & Pretoria	General plan amendment and zone change to estate	20.02
12551; 12552	Monterey Homes LLC	Elder and 30th Street West, Rosamond	General plan amendment and zone change to residential	7.75
12178	Monterey Homes, Inc.	West side 52 <sup>nd</sup> Street W ¼ mile south of Holiday	Zone change to residential	2.5
11680; 12278	Nickie Lee Silk by WRA Engineering	SR-14 and SR-58, Mojave	General plan amendment and zone change to residential	510
11656	Old Town Ranch/Liston, Leonard	Old Town Road, Tehachapi	Zone change to estate	34.5
12538	Opportunity Builders	Southwest corner of Meyer at Victor, Mojave	Residential development	0
10815; 10816	Pannon Design & Development	East side Tehachapi-Willow Springs Road	Specific plan amendment and zone change to residential	226
12974	Paul Dhanens Architect	Woodford Tehachapi Road	Commercial development for medical buildings	20
10395	Pender, Birch	20221 Valley Boulevard – Tehachapi	Zone change to commercial	0
12051; 12052	PG Projects, Inc. by Cornerstone Eng.	West side SR-14, one mile south of Dawn Road	General plan amendment and zone change to residential	460
11170	Platner, James by HMFGroup	25th Street and Willow	General plan amendment to residential	9
12926	Powers, Richard/Glass Architects	SR-58, Mojave	Commercial development of CHP office	5
12142	Regal Development LLC by Providence Residential	Southwest corner Avenue A and SR-14, Rosamond	General plan amendment to highway commercial	74

**Table 3-5 Relevant Cumulative Projects other than Wind Energy in Kern County**

Kern County Case ID	Project Name	Project Location	Case Type	Acreage
12392	Reynolds, Charles	18812 Old Ranch Road	Conditional use permit for agriculture supply service	19
12771; 12772; 10928	Rick Cottrell by Comerstone Eng.	South side of Hwy 202, 350' west of Golden H	General plan amendment and zone change to commercial	20
12929	Roberts, George	24309 Cummings Valley Road	Conditional use permit for masonic temple	0
12725; 12727	Rogers Family Cummings Valley, LLC by Sikand Eng.	Northwest corner of Highline Road & Pellisier Road.	General plan amendment and zone change to residential/commercial resource	640
9361; 9362	Rosamond & 40th Street LLC/Moreland Consulting	Southeast corner Rosamond Boulevard & 40th Street W	Specific plan amendment and zone change to commercial	0
12360	Rosamond 135 LLC/Hertz	Southwest corner Holiday at 50th Street West	Zone change to residential	30
11651; 11652	Rosamond Acres LLC, by Wiley D Hughes Surveying	Northwest corner 40th Street West & Hook Avenue	General plan amendment and zone change to residential	20
11653; 11654	Rosamond Acres LLC, by Wiley D Hughes Surveying	Northeast corner 40th Street West & Hook Avenue	General plan amendment and zone change to residential	20
11273	Rosamond Acres LLC/Wiley Hughes	North side Holiday, Between 40th & 45th Streets	Zone change to residential	35
10724	Schultz, Robert	West side Steuber Road, south of Hwy 202	Conditional use permit for recreational vehicle park	0
12611	Segura, Julio	16026/16032 L Street, Mojave	Residential development of two duplexes	0
11530	Superior Real Estate, Inc.	Northwest corner 25th Street West & Avenue A	General plan amendment to residential	78.79
10760; 12084	Terra Five, LLC by Hall & Foreman, Inc.	Southwest corner of George Avenue & 70th Street West	General plan amendment and zone change to residential	75.55
12937	Thompson, Mark	24275 Bear Valley Road	Conditional use permit for agriculture supply service	20
12714; 12715	Thompson, Solveig	23698 Cummings Valley Road	Specific plan amendment and zone change to commercial	1.15
12919	Union Pacific Railroad/Gary Swartz	15780 I Street, Mojave	Office modular and railroad yard development	0
12459; 12864	United Engineering Group	East side Sierra Hwy, 1 mile north of Rosamond	General plan amendment and zone change to residential	536
10605	United Recycling Technology	1050 Sierra Hwy - Rosamond	Conditional use permit for medical waste treatment facility	0
11144; 11648	Van Weeze/Smithco Surveying	23270 Cummings Valley Road	General plan amendment and zone change to residential	20.59
10924	Villa Holdings by Dewalt	Northeast corner Holiday & 30th St West	Zone change to residential	20.25
10544	V-Mark Dev & Llico Financial/De Walt Corp	Southeast corner Rosamond Boulevard & 10th St West	Zone change to residential	0
12581	Wilson, James	1634 SR-58, Mojave	Zone change to commercial	6.49

<b>Kern County Case ID</b>	<b>Project Name</b>	<b>Project Location</b>	<b>Case Type</b>	<b>Acreage</b>
12979	WRA Engineering/Aaron Powell	SR-58 at Lone Butte Rd	Development of a church	0

Three additional residential/commercial development projects located in Kern and Los Angeles Counties were considered for inclusion in the project's cumulative analysis due to their large size. These projects are discussed below. However, because these projects are distant from the project site and are not in the same air basin, they are only included in the Chapter 4 cumulative analysis for relevant environmental topics.

#### **Tejon Mountain Village Specific Plan (GPA 1, Map 218) (Kern County)**

The Tejon Mountain Village project is proposed approximately 19 miles to the southwest of the project site and would consist of a mixed use development on approximately 28,000 acres. This project would be located east of Interstate 5 at the Lake Tejon exit, with a small portion west of Interstate 5. Approximately 23,000 acres of the site would be a nature reserve, and approximately 5,000 acres would be developed with a mix of residential, commercial, and recreational uses. The proposed uses include up to 3,450 residences (both single-family and multi-family units) and up to 160,000 square feet of commercial development. This resort development would include various hotel, spa, and resort facilities, with up to 750 lodging units at up to seven locations. There would be a number of recreational and educational facilities, including a nature center, farmers' market, day camps, equestrian facilities, a sporting clays course, parks, play lawns, swimming and boating facilities, docks on the lake, up to four 18-hole golf courses, and riding and hiking trails. A Draft Specific Plan, Special Plan and EIR is being circulated for public comment with hearings anticipated in August, 2009 before the Planning Commission and consideration by the Kern County Board of Supervisors in September, 2009. If approved, Build-out is expected 10-12 years from the start of construction.

#### **Frazier Park Estates (Specific Plan Amendment, Case No. 136) (Kern County)**

The Frazier Park Estates development is being proposed approximately 30 miles southwest from the project site. The project proposes a housing and retail development 30 miles south of Bakersfield at the southern boundary of the County in the Frazier Park/Lebec Specific Plan. The proposed master planned community would consist of 705 single-family homes; 41 multi-family units; approximately 36 acres of commercial and community facilities; and other community support facilities, such as a wastewater treatment plant and a park. Although this development is not located near the proposed project, some impacts are considered in the cumulative analysis under specific environmental topics.

#### **Centennial Specific Plan (Los Angeles County)**

This project is proposed approximately 24 miles to the southwest of the project site. The proposed project site consists of 12,000 acres located one mile east of Interstate 5 and adjacent to State Highway 138 in Los Angeles County. The project would include a specific plan and subdivision

entitlements (i.e., tract maps and conditional use permits) for a master planned community. The specific plan proposes a maximum of 23,000 dwelling units and 14 million total square feet of non-residential development of employment areas (12,233,390 square feet) and retail serving centers (1,986,336 square feet), anticipated to be built over approximately 20 years, with build-out expected in 2030. If approved by Los Angeles County, it is estimated that the non-residential development may generate approximately 31,000 jobs.

### City of Tehachapi

A cumulative project list was also compiled for the city of Tehachapi, based on a six-mile radius from the project site. Table 3-6 provides a list of residential and commercial projects that were located.

City Of Tehachapi Case ID	Project Name	Project Location	Case Type
2003-08	Tehachapi Junction	Southeast corner of Tehachapi Boulevard and Tucker Road.	22,400 square foot mixed use commercial center
2006-10	Tehachapi Garden Office Park	North of Tehachapi Boulevard, west and adjacent to the Old Tehachapi Boulevard, east of Tucker Road	12,451 square feet office park
2005-11	the Orchard Shopping Center	Southwest Corner of Tucker Road and Conway Avenue	42,003 square foot mixed use commercial center. Twelve tenant spaces occupied.
2006-09	Amak Center	North Side of Magellan Drive, Between Capital Hills Parkway and Zurich Street	18,250 square foot mixed use retail center
2006-07	Primo Plaza	Southeast corner of Tehachapi Boulevard and Hayes Street	7,090 square foot retail center
2004-01	Phased Mini Storage Facility	East of North Mill Street, north of the future Industrial Parkway Extension, west of Tehachapi Municipal Airport	76,150 square foot storage facility
2006-03	Tehachapi Hospital	North of and contiguous to the existing city limit line at terminus of Voyager Drive, north of Parcel Map 9423 within the Capital Hills Specific Plan	54,147 square foot hospital facility
2003-04	Amber Oaks	801 West Tehachapi Boulevard	72,620 square foot phased mini-storage/commercial space
2007-12	Mini Storage	Southwest corner of Conway Avenue and Mcintosh Street, west of Tucker Road	38,000 square foot phased mini-storage development in addition to an office/caretaker's quarters
2007-04	Mill Street Retail Center	Northeast corner of Mill Street and Industrial Parkway	38,750 square foot mixed use commercial center on a 3.8 acre site
2006-14	Marriott Fairfield Inn & Suites	South of Tehachapi Boulevard, East of Mulberry Street and north of "F" Street	83-unit three (3) story hotel on a 2.35-acre site
2007-05	Industrial Parkway Light Industrial Complex	South and adjacent to Industrial Parkway, east of North Mill Street	9,367 square foot light industrial building
2007-01	Mulberry Street Commercial Structure	East side of Mulberry Street between "E" and "F" Streets	8,871 square foot mixed-use retail / professional building

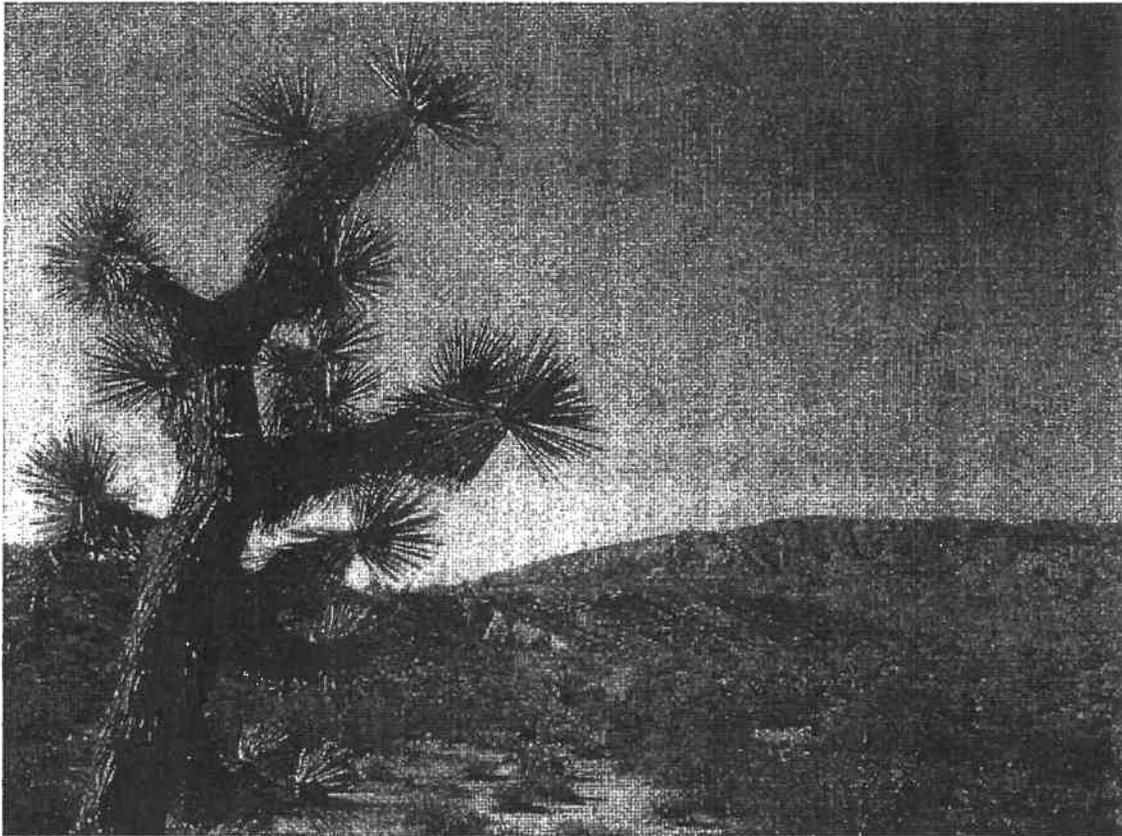
City Of Tehachapi Case ID	Project Name	Project Location	Case Type
2007-07 Pud	Professional/Light Industrial/Mini-Storage Complex	North and adjacent to West "J" Street and west of North Mill Street	20,916 square foot professional building, 8,211 square foot light industrial building and a 24,850 square foot storage facility.
2007-02	Riley Professional/Retail Building	310 South Curry Street	9,080 square foot two story retail/professional building.
2007-09	Kragen Auto	East and adjacent to Tucker Road, north of Bank Of The West and south of Henry's Café.	7,000 square foot Kragen auto parts store.
2007-11	Wal-Mart Super Center	East and adjacent to Tucker Road/State Hwy 202 and south of Tehachapi Boulevard.	185,433 square foot Wal-mart supercenter located on a 23-acre site.
2008-01	Professional Office Buildings	707 Valley Blvd. (north and adjacent to Valley Blvd. (Approximately 130 feet west of Mountain View Avenue).	Request to construct two professional office buildings totaling 12,107 square feet on 1.41 acres.
2007-13	Love's Truck Stop	South and adjacent to Tehachapi Boulevard, east of Highway 58 off-ramp, west of Monolith Street.	Truck and auto travel center with fueling pumps, truck sales, 6,151 square foot convenience store, a 2,828 square foot fast food restaurant with drive-thru, a 1,219 square foot fast food restaurant without drive-thru, and area to accommodate parking for up to 90 semi-trucks.
2007-10	Global Premier Development	Northeast corner of West H Street and North Mill Street.	Request to construct an 81-unit tax credit apartment complex on 6.53-acres yielding a density of 12.4 dwelling units per acre.
2008-01	Aspen Street Architects	Capital Hills, north and adjacent to Athens Street, East of Voyager, west of Challenger.	Request to construct three (3) medical office buildings measuring a total of 66,000 sq. ft. on a 5.45-acre site.
Tentative Parcel Map No. 11353	Dan Proffitt	South and adjacent to Tehachapi Boulevard, approximately 1350 feet east of Dennison Road.	Request to subdivide a 24-acre site into 16 light industrial properties.
Tentative Parcel Map No. 11385	Ghaleb Haddad	Southwest corner of Tehachapi Boulevard and Steuber Road.	Request to subdivide a 20.9-acre site into five (5) light industrial parcels.
Tentative Parcel Map No. 11651	Pickserv, Inc.	North of Goodrick Drive, southeast of Benz Sanitation and east of Ashe Village Residential Subdivision	Request to consider subdividing a 22.50-acre site into eight (8) industrial parcels.
Tract Map No. 4927	Michael Mugford	North and adjacent to Cherry Lane and South of Valley Boulevard.	6.64 acres residential development (4.18 dwelling units per acre).
Tract Map No. 6062	William & Judy Belrne	South Side of Pinon Street, west of Dennison Road, east of Curry Street and north of Highline Road.	51 acres residential development (2.45 dwelling units per acre).
Tract Map No. 6216	Empire Land, LLC	South of Pinon Street, west of Curry Street and north of Highline Road.	122.7 acres residential development (3.12 dwelling units per acre).
Tract Map No. 6248	Lee Bartell-Jorgensen Properties	Southeast corner of South Robinson Street and East "D" Street.	7.5 acres residential development (4.0 dwelling units per acre).

City Of Tehachapi Case ID	Project Name	Project Location	Case Type
Tract Map 6360 (Senior Overlay)	The Mill Street Collaborative	Northeast corner South Mill Street and "D" Street.	1.03 acres residential development (10.6 dwelling units per acre).
Tract Map No. 6461	Cornerstone Engineering	North side of Valley Boulevard, east of Las Colinas Street and west of Griffin Street.	9.78 acres residential development (4.5 dwelling units per acre).
Tract Map No. 6497	Pannon Design and Development, Inc.	North of Highline Road, South of Tehachapi High School and Morris Park, and west of Dennison Road.	60.9 acres residential development (1.0 dwelling unit per acre).
Tract Map No. 6506	Empire Land, LLC and Forma Engineering, Inc.	East and adjacent to Curry Street, west of the future southerly extension of Robinson Street, north and adjacent to Valley Boulevard.	30.15 acres residential development (3.7 dwelling units per acre).
Tract Map No. 6909	Empire Land, LLC and Forma Engineering, Inc.	North and adjacent to Valley Boulevard, East of the Future Southerly Extension of Robinson Street, south side of Holly Drive.	25.96 acres residential development (3.43 dwelling units per acre).
Tract Map No. 6507	Empire Land, LLC and Forma Engineering, Inc.	North and adjacent to Pinon Street and west and adjacent to future extension of Applewood Drive.	10.45 acres residential development (9.2 dwelling units per acre).
Tract Map No. 6554	Legacy Homes and Stantec	North and adjacent to Valley Boulevard, West and adjacent to Dennison Road and North of Tehachapi High School	17.6 acres residential development (5.3 dwelling units per acre).
Tract Map No. 6714	Stantec Engineering	North and adjacent to Pinon Street, South and adjacent to Cherry Lane.	24.24 acres residential development (3.09 dwelling units per acre).
Tract Map No. 6668	Stantec Engineering	North and adjacent to Pinon Street, East and adjacent to Fig Drive.	5.1 acres residential development (3.53 dwelling units per acre).
Tract Map No. 6928	Pacific Development Corp.	South of Pinon Street, East of Tucker Road.	44.8 acres residential development (4.98 dwelling units per acre).

**Draft Environmental Impact Statement and  
California Desert Conservation Area Plan Amendment  
for the Proposed Chevron Energy Solutions  
Lucerne Valley Solar Project**

**DOI-BLM-CAD008-2008-0030**

**Volume I**



January 2010

Prepared for:



**BUREAU OF LAND MANAGEMENT  
BARSTOW FIELD OFFICE**

Prepared by:



**ecology and environment, inc.**  
International Specialists in the Environment

Table 3.18-1 Potential Cumulative Projects

Map ID Number	Description	Location (All San Bernardino Baseline and Meridian)	Project Type and Size	Status	Resources Potentially Affected
Bureau of Land Management Barstow Field Office Renewable Energy projects					
1	LSR Pisgah LLC; CACA 50704	Lucerne T5N, R10E; 4.75 miles northwest	Solar energy; 10,880 acres; 300 MW	Pending	See 3.18.2
2	Solel Inc.; CACA 50150	Johnson Valley T4N, R3E & R4E; 5.75 miles east	Solar energy; 2,436 acres; 500 MW	Pending	See 3.18.2
3	LSR Pisgah, LLC; CACA 50706	Johnson Valley T4N, R3E, R4E & R5E; 4.75 miles east-northeast	Solar energy; 17,920 acres	Pending	See 3.18.2
ther B M projects Authori ations					
4	Johnson Valley Feature Film Shoot; National Geographic documentary on venomous snakes	Cougar Buttes area of Johnson Valley OHV Open Area; T5N, R2E, Sec 36; T5N, R3E, Sec 31; 5.75 miles northeast	Filming; less than 5 acres	Film shot from 6/7/08 – 6/9/08; one-time event	Temporary effects such as increase in traffic and potential disposal of solid waste.
5	Chevron PV Geotesting Land Use Permit—CACA-50562	T4N, R2E, Sections 19 & 20, within project boundary	Geologic testing; size unknown	Permit issued	Construction effects including temporary increase in air and fugitive dust emissions, noise and vibration; traffic; and disturbance of local wildlife.
6	JPL Balloon Testing Land Use Permit for Soggy Dry Lake area—CACA-50568	Johnson Valley OHV Open Area T4N, R3E, Secs. 5 & 8	Testing; size unknown	Awaiting BLM review.	No anticipated long-term effects.

Table 3.18-1 Potential Cumulative Projects

Map ID Number	Description	Location (All San Bernardino Baseline and Meridian)	Project Type and Size	Status	Resources Potentially Affected
7	Caltrans Camprock Rd/SR 247 Bridge & Road Realignment Right-of-Way	Big Bear City Quad: T3N, R1E, Sec 3; 3.4 miles southwest	Transportation; size unknown	Right-of-way grant for road realignment issued, work scheduled for early April 2009	Construction effects including temporary increase in air and fugitive dust emissions, noise and vibration; traffic; disturbance of local wildlife; potential changes to local surface water quality.
8	Replacement of 2 fire-damaged poles	Fawnskin Quad, T3N, R1E, Secs. 5 & 6; 5.5 miles west-southwest	Transmission line; size unknown	Awaiting BLM Review	Temporary construction effects including temporary increase in air and fugitive dust emissions, noise and vibration.
9	PGE Cushmanbury Natural Gas Line	T3N, R1E, Sec 3—Carb. Endemic ACEC; 3.5 miles southwest	Pipeline; size unknown	Approved	No anticipated permanent effects because the poles would be replacing existing poles. See 3.18.2.
<b>San Bernardino County Projects</b>					
SB-25	Parcel Map 18629 to create two parcels - 550 acres	Lucerne Valley; 5.4 miles southwest	Residential; 550 acres	Accepted	See 3.18.2.
SB-26	SPP to add a wood grinding storage and distribution system to an existing cement plant - a portion of 74 acres	Lucerne Valley; 4.1 miles south-southwest	Wood grinding storage and distribution system; 74 acres	Conditionally Approved	Temporary construction effects including temporary increase in air and fugitive dust emissions, noise and vibration; traffic; and disturbance of local wildlife. Permanent or long-term visual effect.

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# **ATTACHMENT 3**

## **RESPONSES TO ADAMS BROADWELL JOSEPH AND CARDOZO COMMENT LETTER**

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**Responses to Comments submitted by  
Adams Broadwell Joseph and Cardozo Representing  
International Brotherhood of International Workers, Local 477 (IBEW)**

A Mitigated Negative Declaration was prepared for the proposed Project pursuant to the State requirements of the California Environmental Quality Act and circulated for public review on March 29, 2010 and the comment period ended on April 30, 2010. There were no comments from members of the public. The following agencies commented on issues pertaining to biological resources, traffic, railway crossing safety issues, and water: the California Department of Fish and Game; U.S. Fish and Wildlife Service; Mojave Desert Air Quality Management District; California Public Utilities Commission; and Caltrans District 8. Agencies' comments were incorporated as minor revisions to the mitigation measures (see Staff Report Exhibit F2) and/or as conditions of approval (see Staff Report Exhibit G). Additional information was also provided to the respective agencies, as requested. No additional responses to these comments are required.

After the Planning Commission Hearing of June 3, 2010 Adams Broadwell Joseph and Cardozo submitted comments dated June 16, 2010 (see Attachment 2) challenging the adequacy of the proposed Project's Mitigated Negative Declaration as well as reiterating the need for a Water Supply Assessment for the proposed Project. Below are responses to this letter. The comments below are numbered as "IBEW-1, IBEW-2," etc. and the "page" and "section" numbers cited in the comment heading correspond to the "page" and "section" numbers in the comment letter. The responses acknowledge comments addressing issues and requests relevant to consideration for project approval and discuss, as necessary, the points relevant to the environmental review. None of the responses to the issues/concerns raised in this comment letter represent an introduction of substantial new information that would indicate a new or significant impact or that would change the conclusions drawn from the initial analysis.

**IBEW-1. No Water Supply Assessment (WSA) prepared for the Project (Pages 4-5, Section II).**

Attached is a WSA (September 2010) prepared by Integrated Resource Management, LLC for the Kramer Solar Farm Project. It provides details regarding the proposed Project's water requirements during construction (temporary requirements) and operation (long-term requirements), and assesses the Project's impacts on water supply. The WSA confirms that there is a reasonably available water supply from the Boron Community Service District to meet the de minimus amounts required for this project.

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**IBEW-2. Specific water amount specified to meet construction phase needs of the Project (Pages 6-7, Section II.A.1).**

The proposed Project will utilize water during construction only and in as much quantity as required for mitigation in accordance with Mojave Desert Air Quality Management District (“MDAQMD”) Rule 403.2, “Fugitive Dust Control for the Mojave Desert Planning Area.”

The WSA explains that 5.4 acre-feet of water will be required for each of the two year-long phases of construction for dust control in accordance with MDAQMD Rule 403.2 (See WSA, page 1). The Boron Community Services District has indicated that it can supply the 5.4 acre-feet of water required during each phase of construction without any significant impact on groundwater supplies (see WSA, page 2). The comment states that “[t]he use of large amounts of water to control dust emissions may significantly impact the environment.” But it does not specify what the commenter means by “large amounts” or what the potential environmental impacts may be. There is no evidence in the record (including the WSA), substantial or otherwise, that supports a conclusion that meeting construction-phase water requirements may have a significant impact on the environment. Instead, substantial evidence in the record, including the WSA, supports the County’s conclusion that the construction-phase impacts to area water supplies will be less than significant.

**IBEW-3. The MND underestimates the amount of water that will be required for Project maintenance (Pages 7-8, Section II.A.2).**

As demonstrated in the WSA, long-term Project operations and maintenance will require, between 0.72 and 2.18-acre feet of water per year for dust control and up to four panel washings/year (See WSA, page 2). Based on the Applicant’s experience, washing of each module typically requires a quarter-gallon per module. Two different photovoltaic technologies are being reviewed for use in the Project. Each would require a different number of modules to achieve the 40 MW being proposed. The worst case scenario, assuming that the photovoltaic technology requiring more modules is selected, the Project would consist of 636,200 modules. In an exceptionally long and dusty dry season and, using the technology requiring the most modules, it is anticipated that the Project may require up to four washing events each year. At a quarter-gallon per module and a total of 636,200 modules at full buildout, this equates to 159,050 gallons per wash or 636,200 gallons (approximately 1.95 acre-feet) per year over the course of the maximum of four washings. In addition, the Project will require approximately 75,000 gallons per year for dust control. Thus, assuming the photovoltaic technology that uses the most modules is selected, and assuming an exceptionally long and dusty dry season, the project will require a maximum of approximately 711,200 gallons of water (approximately 2.18 acre feet) per year for washings and dust control.

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The commenter's citation of the water requirements of the Boulevard Associates Kramer Junction Project and a newspaper article from the Las Vegas Sun is inapposite. There is no evidence, substantial or otherwise, in the record that the Project will use the same photovoltaic technology or even the same wash method. Therefore, they do not provide substantial evidence of the Project's water requirements for maintenance and operation, and they do not provide substantial evidence of any significant impact of the Project.

**IBEW-4. No determination by the County Fire Department that there is no need for onsite storage of water for fire suppression (Page 8, Section II.A.3).**

The County Fire Department has reviewed the Project design and location, and it has determined that no on-site water storage is required for fire suppression purposes (See WSA, page 6). In addition, most vegetation would be removed from the project footprint during grading to streamline facility operations; therefore, no fire fuel would be available for a significant risk of loss, injury or death involving wildland fires (MND, page 52, Section VIII(h)).

**IBEW-5. Lack of WSA and insufficient analysis of potential impacts on water supply (Page 9, Sections II.B.-C).**

See responses to IBEW 1-4, above. The commenter cites depletions and drawdown of water during construction of SEGS Units III and IV that affected adjacent well owners as evidence of possible impacts to wells of landowners adjacent to the Project. The Project is not proposing the use of wells onsite; therefore, there is no pumping of groundwater from immediately below the Project site (See WSA, page 6). Water will be supplied by the Boron Community Services District and trucked to the site (see WSA, page 6). Therefore, the Project will not have impacts to groundwater analogous to those caused by groundwater pumping during the construction phases of SEGS Units III and IV.

In addition, SEGS Units III and IV are each 30-Megawatt facilities, not 20-Megawatt facilities, they are based on a different technology (solar thermal collectors, not photovoltaic modules), and SEGS Units III through VII occupy almost 1,000 acres of land (MND, page 4). Thus, it is unreasonable to assume that the water requirements for the two phases of construction of the Project will require the same amount of groundwater, or produce the same impacts on adjacent wells in the areas from which Boron Community Services District receives a portion of its water, as the construction of SEGS Units III and IV.<sup>1</sup>

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<sup>1</sup> See California Energy Commission, Large Solar Energy Projects, Earlier Large, Solar Projects Producing Power, Luz SEGS III-VII (Solar/Nat Gas), <http://www.energy.ca.gov/siting/solar/index.html> (last accessed Sept. 13, 2010).

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**IBEW-6. Inadequate project description based on alleged failure to sufficiently describe water demand (Pages 9-10, Section III.A).**

See WSA and responses to comments IBEW-1 through IBEW-5, above.

**IBEW-7. Inadequate description of new transmission lines (Page 11, Section III.B. and Attachment A (Energy Consultant Letter)).**

The project description in the MND explains that the proposed Project will not require installation of any new electric power transmission lines. Two existing transmission lines (33kV and 115 kV) cross the Project property, and the existing 33kV can be used to transmit power to the nearby Kramer Substation without major upgrades (MND, pages 2-3, 4, and 11).

In addition, any upgrades to transmission in the area would not be a reasonably foreseeable effect of the Project itself. As the Marcus letter indicates, transmission studies conducted for the purposes of interconnection to the Southern California Edison (“SCE”) and the California Independent System Operator (“CAISO”) system are generally confidential. Such studies, in this case, are also confidential as they are classified as Critical Energy Infrastructure Information (“CEII”), and; therefore, confidential to CAISO, SCE and the proposed Project applicant. In addition, the Project applicant has confirmed that it has not received any study information indicating that significant transmission upgrades will be triggered as a result of this project.

Potential impacts to the transmission system are also too speculative to warrant analysis under CEQA. Environmental review of any transmission system upgrades that may ultimately be required if projects in the CAISO queue move forward will occur once specific plans have been made to undertake such upgrades. As the Marcus letter itself states, the Abengoa Mojave Solar Project (“AMS”) has opted to use a Special Protection System (“SPS”) in lieu of construction of a new transmission line to mitigate the impacts of that 250-MW solar thermal collector project on the transmission system.<sup>2</sup> But the Marcus letter does not conclude that it is reasonably foreseeable that construction of the Project will, in fact, trigger construction of any specific new transmission lines, or that it will exceed the new SPS’s ability to protect against overloads on the existing Kramer-Lugo transmission lines. Instead, the author states that *if* a number of contingencies occur, including construction of the proposed Project with CAISO queue number 142, or those occupying CAISO queue numbers 154, 391, and 515, then the addition of the Project *may* impact the reliability of the new SPS or, combined

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<sup>2</sup> See *also*, California Energy Commission, Abengoa Mojave Solar Project, Presiding Member’s Proposed Decision, at pp. 15, 92 (August 2010), <http://www.energy.ca.gov/2010publications/CEC-800-2010-008/CEC-800-2010-008-PMPD.PDF> (last accessed Sept. 13, 2010) (explaining that AMS has elected to use a new SPS that will be licensed and constructed by Southern California Edison after appropriate environmental review has been completed by Southern California Edison for the new SPS project).

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with those other projects, they *may* require upgrades to the transmission system (Marcus letter, page 2).

In addition, the Marcus letter does not dispute the Kramer Substation's ability to receive all 40 MW of generation capacity upon completion of both phases of the Project. Once the Project's power reaches the Kramer Substation, it is for SCE and CAISO to determine how to route the power through the CAISO grid, and SCE could elect to substitute the Project's renewable energy output for electric power generated elsewhere using fossil fuels, thus balancing the system load without the need for transmission upgrades or an SPS. Dispatch procedures for CAISO can be found at [www.caiso.com](http://www.caiso.com).

Thus, the Marcus letter is based on speculation that the proposed Project may have some impact on the need for transmission upgrades in the area. Speculation does not constitute substantial evidence that the Project may have any impact, significant or otherwise, on electric power transmission in the area.

**IBEW-8. The MND fails to include a list of closely related past, present, and reasonably foreseeable or probable future projects. The MND states that the Project may result in significant impacts on air quality, biological resources, cultural resources and land use and planning that requires mitigation; therefore, the Project may result in cumulatively considerable impacts to these resources (Page 11, Section III.C).**

The MND analyzed the potential for cumulatively considerable impacts to air quality (MND, page 26, Section III.(c)), explaining that the project would only contribute criteria pollutants during the two one-year construction phases, and, with mitigation, its contribution would be at levels below the Mojave Desert Air Quality Management District's thresholds of significance.

Potential impacts to biological resources were subject to intensive study and analysis (MND, pages 27-39, Section IV; TERACOR Resource Management, *General Biological Assessment* (August 6, 2009); TERACOR Resource Management, *Protocol Survey for Desert Tortoise (*Gopherus Agassizii*)* (August 7, 2009); and TERACOR Resource Management, *Desert Native Plant Assessment* (August 7, 2009)). Based on substantial evidence in the administrative record and adoption of mitigation measures BIO-1 through BIO-11, including securing incidental take permits from the California Department of Fish and Game ("CDFG") and/or the U.S. Fish and Wildlife Service for potential impacts to Mojave ground squirrel and Desert Tortoise, it was determined that the Project would have less than significant impacts on biological resources (see MND, pages 28-39, 75-76; MND Errata, pages 1-2 (indicating revisions made to BIO-5, BIO-6, and BIO-8, and adding mitigation measures BIO-9 through BIO-11)).

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Potential impacts to cultural resources were subject to intensive study and analysis (MND pages 39-44, Section V; and Brian F. Smith & Assocs., *Phase I Cultural Resources Study* (August 6, 2009)). It was determined that, as currently designed, the Project will only impact two historic trash deposits consisting primarily of historic cans and historic bottle fragments dating from the 1950s and 1970s (MND, pages 40-42). Based on substantial evidence in the record and adoption of mitigation measures CUL-1 through CUL-4, it was determined that the potential impacts to cultural resources are less than significant.

Impacts to land use and planning were analyzed and disclosed in the proposed Project's MND (MND, pages 55-60). The only impact determined to require mitigation is impacts to Desert Tortoise habitat within the *Western Mojave Recovery Unit of the Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (Gopherus agassizii)*<sup>3</sup> (MND, page 60). However, the adoption of mitigation measures BIO-1 and BIO-2 reduces the impact on land use and planning for the Desert Tortoise to less than significant (MND, page 3) ("The mitigation land currently being considered for purchase encompasses 640 acres, which when combined with the conserved on-site land, would result in 745 acres of conservation, resulting in an overall mitigation ratio of 2:1."), 33 (BIO-1 and BIO-2 defined), 60 (determination that BIO-1 and BIO-2 reduce impacts to land use and planning for the Desert Tortoise to less than significant).

As discussed in responses to comments IBEW-1 through IBEW-5 above, the Project will not have a significant impact on water resources, contrary to the claim made on the IBEW Comment letter, page 11.

The comment draws the erroneous inference that because certain impacts to air quality, biological resources, cultural resources, and land use and planning have been mitigated to less-than-significant levels, the Project's impacts on these resources "may be" cumulatively considerable. This constitutes pure speculation, not substantial evidence that any Project impacts may be cumulatively considerable.

Furthermore, as described in the MND, "It is assumed that developments near the project site were and/or would be constructed after completing an environmental review and that all environmental impacts were mitigated to levels that were less than significant" (MND page 73, Section XVIII). In addition, other closely related present, and reasonably foreseeable or probable projects in the area have been or will be subjected to environmental review under CEQA and/or the National Environmental Policy Act ("NEPA").

Thus, there is no evidence in the record, substantial or otherwise, that the impacts of the proposed Project on the identified resources, when considered

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<sup>3</sup> U.S. Fish and Wildlife Service, California and Nevada Region, Sacramento, CA (2008).

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in light of the impacts on the same resources of other closely related past, present, and reasonably foreseeable or probable future projects will be cumulatively considerable.

**IBEW-9. Failure to state identity or qualifications of personnel responsible for providing construction workers with a brief seminar on identifying sensitive organisms (Page 12, Section III.D).**

The specific program requirements and staff qualifications will be developed during the permit application process and in consultation with relevant resource agencies. A worker awareness plan will be developed and approved by the required resource agencies prior to construction.

There is no evidence in the administrative record, substantial or otherwise, that the identity of the personnel responsible for delivering worker training on how to identify and avoid sensitive organisms and habitats during grading and/or construction will in any way compromise the effectiveness of the training specified in mitigation measure BIO-4. As determined in the MND, implementation of BIO-1 through BIO-11, including BIO-3 (installation of orange safety fencing around the perimeter of the work area to discourage entry into natural areas) and BIO-4 (providing worker seminar and literature on how to identify and avoid sensitive organisms and habitat to all personnel who will be present on the site during grading and/or construction), will reduce any impacts to biological resources to less-than-significant levels.

**IBEW-10. Substantial evidence supports a fair argument that the Project may have a significant unmitigated impact on Desert Tortoise (Pages 13-15, Section IV.A.1).**

The comment letter and the letter from James W. Cornett, M.S., James W. Cornett Ecological Consultants, to Robyn C. Purchia, Adams Broadwell Joseph & Cardozo, PC (June 16, 2010) ("Cornett Letter") upon which it relies do not supply any evidence, substantial or otherwise, that the Project, as mitigated, may have significant impacts on Desert Tortoise. Instead, the Cornett letter raises a series of questions to which it supplies no relevant answers, and it fails to provide any assessment of the probability that (1) Desert Tortoise have wandered onto the Project site since the last focused survey was conducted in 2009 or (2) the mitigation measures set forth in the MND are, in fact, inadequate. Instead of producing evidence from Desert Tortoise surveys of his own, Mr. Cornett claims to have reviewed the *Protocol Survey for Desert Tortoise (Gopherus Agassizii)* prepared by TERACOR Resource Management (August 6, 2009) for the proposed Project. Thus, any claims made in the Cornett letter are speculative, and do not constitute substantial evidence.

For example, the Cornett letter claims that the protocol surveys conducted during April and May 2009 *may* have missed Desert Tortoise on the site

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because ambient temperatures during the surveys *may* have been below the lower temperature limit for such protocol surveys (Cornett letter, page 4). But the Cornett letter does not dispute that May and April are appropriate months in which to conduct protocol surveys for Desert Tortoise in the Mojave Desert, and it cites no evidence from any source of historic climatic conditions for the Mojave Desert in the Kramer Junction area that indicate that the temperatures were, in fact, below the lower temperature limit. Indeed, the General Biological Assessment states:

*Desert Tortoise protocol surveys were conducted on 16, 17, 18, 21, 22, 23, 25, 28, and 29 April, 05, 12, 13 and 14 May 2009. Surveys were conducted between the hours of 8:00 am and 5:00 pm, and conditions were generally suitable for observing targeted organisms.*

[. . .]

*Weather data (including temperature, wind speed, cloud cover, precipitation data) were collected on each survey date, and as noted above, were conducive for observing targeted organisms.*

(General Biological Assessment, Page 6 [emphasis added]).

The Cornett letter also includes the claim that the protocol survey should have included certain offsite areas because the Project may have indirect impacts to Desert Tortoise due to “[use of] access roads, utility corridors to the site, changes in area drainage patterns as a result of site grading, etc.” (Cornett letter, page 4). But the MND clearly discloses that the Project will not result in significant “changes in area drainage patterns” (MND, pages 53-54; *see also id.* pages 2, 33 (BIO-2) (dedication of on-site wash areas and wash buffer zone as open space preserved in perpetuity)),<sup>4</sup> and it will not require travel along any offsite access roads or utility corridors, since all necessary access roads and utility corridors already exist on site (MND, pages 2-3 (utility tie-in via on-site 33kV transmission line); MND, pages 3-4 (the site will be accessed from State Route 58, which divides the property, and several existing on-site dirt roads that meet SR-58, as well as Sheep Creek Road, which is an existing 40-foot wide County easement dirt road that runs along the western border of the Project site).

The Cornett letter attempts to undermine the validity of the protocol survey by disparaging the qualifications of the biologists who conducted them and providing what the author claims are superior citations to secondary sources from those used by TERACOR’s biologists (Cornett letter, page 5). But based on the discovery of inactive burrows and one adult tortoise carcass (shell), the Desert Tortoise has been “determined” present (MND, page 29).

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<sup>4</sup> The Comment letter does not include any comments regarding the analysis of storm water flows or impacts on hydrology or water quality. Therefore, no response is required.

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Thus, any alleged deficiencies in the citations to secondary authority, and any claimed lack of qualifications of the biologists who carried out the protocol surveys is immaterial and irrelevant. The County has on file TERACOR Resource Management's Statement of Qualifications, and are available upon request.

The Cornett letter also faults the MND for not including a full Desert Tortoise translocation plan (Cornett letter, pages 4-5). The comment suggests that if there is no translocation plan, and because Desert Tortoise may be present on the site, then there may be significant unmitigated impacts to Desert Tortoise. This conclusion, however, is contradicted by the evidence in the record. Specific measures only need to be proposed if Desert Tortoises are present on the proposed Project site.

Because Desert Tortoise are assumed to be present on the proposed Project site and because it is listed as "threatened" under the California and Federal Endangered Species Acts, the applicant must obtain authorization from the CDFG and the USFWS to "take" any Desert Tortoise, or, in the alternative, it must obtain a letter from these agencies indicating that such a permit is not required. MND, Errata at p. 1 (revised mitigation measure BIO-6).

Therefore, if a Desert Tortoise or an active burrow is encountered during pre-construction surveys or during construction itself, it will be avoided or relocated by a licensed biologist in accordance with state and federal law, and the specific terms and conditions of the incidental take permits issued by the CDFG and the USFWS.

The Cornett letter further claims that any CDFG-approved land purchased as mitigation for potential impacts to Desert Tortoise (among other species) (MND at pp. 3, 33 (BIO-1)) may be unsuitable Desert Tortoise habitat, and may be unsuitable for any relocation that may occur if a Desert Tortoise is encountered in an area planned for grading or construction (Cornett letter, page 4). However, this hypothesis relies on the unsupported assumption that the CDFG will approve the purchase of mitigation land that lacks habitat suitable for Desert Tortoise, and that it would approve a translocation plan that would permit Desert Tortoise to be relocated to unsuitable land, either because of unsuitable habitat, or because known territorial disputes would arise. Not only does the Cornett letter fail to cite any instance in which the CDFG has failed to carry out its mandate as an agency responsible for conserving natural resources, but also, under California law, state agencies are presumed to carry out their legal mandates. Therefore, this assumption is both factually and legally unfounded.

Thus, substantial evidence in the record supports the County's conclusion that impacts to Desert Tortoise, which have not been observed on the Project site, will be less than significant. The preservation on-site of approximately 100 acres of habitat that has been confirmed suitable for Desert Tortoise

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(BIO-2), and the purchase of off-site mitigation land that is approved by CDFG (BIO-1), along with mitigation measures BIO-3 (fencing off natural areas during grading and construction), BIO-4 (educating construction workers to identify and avoid sensitive organisms and habitats), and BIO-6 (requiring an incidental take permits or letters from the CDFG and the USFWS indicating that such permits are not required) will mitigate potential impacts to the Desert Tortoise to a less-than-significant level.

**IBEW-11. Substantial evidence supports a fair argument that the Project may have a significant unmitigated impact on Mojave ground squirrel (Page 15, Section IV.A.2).**

The Cornett letter faults the MND for not including a full translocation plan for the Mojave ground squirrel (Cornett letter, page 3). The comment suggests that if there is no translocation plan, and because Mojave ground squirrel are assumed to be present on the site, then there may be significant unmitigated impacts to Mojave ground squirrel. This conclusion, however, is contradicted by the evidence in the record. Because this species is “determined” present, and because it is listed as “threatened” under the California Endangered Species Act, the applicant must obtain authorization from the CDFG to “take” any Mojave ground squirrel, or, in the alternative, it must obtain a letter from CDFG indicating that such a permit is not required (MND Errata, page 1 (revised mitigation measure BIO-6)).

Therefore, if a Mojave ground squirrel or an active burrow is encountered during pre-construction surveys or during construction itself, it will be avoided or relocated by a licensed biologist in accordance with state law, and the specific terms and conditions of the incidental take permit issued by the CDFG.

The Cornett letter further claims that any CDFG-approved land purchased as mitigation for potential impacts to Mojave ground squirrel (among other species) (MND, pages 3, 33 (BIO-1)) may be unsuitable Mojave ground squirrel habitat, and may be unsuitable for any relocation that may occur if a Mojave ground squirrel is encountered in an area planned for grading or construction (Cornett letter, page 3). However, this hypothesis relies on the unsupported assumption that the CDFG will approve the purchase of mitigation land that lacks habitat suitable for Mojave ground squirrel, and that it would approve a translocation plan that would permit Mojave ground squirrel to be relocated to unsuitable land, either because of unsuitable habitat, or because known territorial disputes would arise. Not only does the Cornett letter fail to cite any instance in which the CDFG has failed to carry out its mandate as an agency responsible for conserving natural resources, but also, under California law, state agencies are presumed to carry out their legal mandates. Therefore, this assumption is both factually and legally unfounded.

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Thus, substantial evidence in the record supports the County's conclusion that impacts to Mojave ground squirrel will be less than significant. The preservation on-site of approximately 100 acres of habitat that has been confirmed suitable for Mohave ground squirrel (BIO-2), and the purchase of off-site mitigation land that is approved by CDFG (BIO-1), along with mitigation measures BIO-3 (fencing off natural areas during grading and construction), BIO-4 (educating construction workers to identify and avoid sensitive organisms and habitats), and BIO-6 (requiring an incidental take permit or letter from CDFG indicating that such a permit is not required) will mitigate potential impacts to the Mojave ground squirrel to a less-than-significant level.

**IBEW-12. Substantial evidence supports a fair argument that the Project may have a significant unmitigated impact on the Western burrowing owl (Page 16, Section IV.A.3).**

The Commenter asserts that "the surveys contained such egregious errors that Mr. Cornett doubts the credibility of their findings," suggesting that Mr. Cornett found the burrowing owl surveys to be inadequate (IBEW letter, page 16). But the Cornett letter does not discuss the adequacy of the burrowing owl surveys. Despite the presence of numerous abandoned animal burrow complexes, which could provide suitable burrowing owl habitat, none of them indicated that burrowing owls currently use or have recently used the site (MND ,page 30; Proposed Project's General Biological Assessment, page 20). The commenter also claims that the MND must disclose burrowing owl use of the site for the last three years prior to the burrowing owl surveys (IBEW letter, page 16). But the County has been unable to find any basis in law for this requirement, and the source cited by the commenter does not support this purported requirement.

Nevertheless, burrowing owls have been observed in the general area, and the MND includes the finding that the likelihood of their presences is "moderately low." Therefore, mitigation measures BIO-1 through BIO-5 (as amended in the MND Errata) have been adopted, after consultation with the respective resource agencies, to mitigate any potential impacts to the burrowing owl to less than significant.

Unlike the Desert Tortoise and the Mojave ground squirrel, however, the Western burrowing owl is not listed as threatened or endangered under the California or Federal Endangered Species Act (MND, page 30). Consequently, if burrowing owls or active burrows are discovered in pre-construction surveys or during construction, there is no requirement in state or federal law that the applicant obtains an incidental take permit from the CDFG and/or the USFWS. As stated above, the County, after consultation with CDFG and USFWS, added revised mitigation measures BIO-9 through BIO-11 to the MND to ensure that impacts to Western burrowing owls are adequately addressed (MND Errata, pages 1-2 (BIO-9 through BIO-11)).

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The additional mitigation measures specify that if burrowing owls are observed during pre-construction surveys, the applicant must place mitigation land known to be used by burrowing owls for nesting and foraging under conservation in perpetuity in specific mitigation ratios depending on the quality of the burrowing owl habitat on the proposed mitigation land (BIO-9); relocate, pursuant to a specific protocol, any burrowing owls associated with occupied burrows that will be directly impacted (BIO-10); and submit a Burrowing Owl Mitigation and Monitoring Plan to the California Department of Fish and Game for review and approval prior to relocation of any burrowing owls associated with occupied burrows that will be directly impacted (BIO-11). *Id.* A Burrowing Owl Mitigation and Monitoring Plan only need to be proposed if burrowing owls are present on the Project site. Because no burrowing owls are present on the site, no specific mitigation measures are proposed in the MND.

In combination with mitigation measures BIO-1 (purchase of CDFG-approved offsite mitigation land for permanent conservation), BIO-2 (dedication of the northern parcel and the large desert wash and a wash buffer zone in the southeastern portion of the site as open space), BIO-3 (installation of orange safety fencing around all natural areas during grading and construction), and BIO-4 (worker training on how to identify and avoid sensitive organisms and habitat), and BIO-9 through BIO-11 ensure that the Project will not result in a significant impact to Western burrowing owls, even if burrowing owls or active burrows are discovered on the Project site before or during construction.

**IBEW-13. Substantial evidence supports a fair argument that the Project may have a significant unmitigated impact on native plant species (Page 17, Section IV.A.4).**

The Cornett letter includes the assertion that 50 percent of all Joshua trees that are dug up for storage or relocation die (Cornett letter, page 5). However, Mr. Cornett does not cite any authority for this claim based on empirical studies, and he does not explain whether this is based on his own direct experience, and if so, in connection with which Joshua tree relocation projects he has observed this rate of mortality.

In addition, as explained in the MND, impacts to Joshua trees are subject to regulation under the County Code (MND, pages 36-38; MND Errata, page 1 [revised BIO-8]). The County has taken into account mortality due to the relocation of Joshua trees, and has determined that the impacts to Joshua trees and avian species that utilize them for nesting will nevertheless be less than significant with implementation of mitigation measures BIO-7 and BIO-8 (MND, page 38; MND Errata, page 1).

The Cornett letter also questions the ability of the biologists who conducted the native plant survey to recognize Joshua trees because he could not find their names on the 2010 list of biologists that have registered with the County

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of San Bernardino. But merely raising questions about the qualifications of the biologists who conducted the native plant survey is not evidence, substantial or otherwise, that the survey is inaccurate, or that there may, in fact, be significant impacts to Joshua trees. Indeed, the mere fact that their names do not appear on the 2010 list of biologists registered with the County does not provide evidence that they are *not* qualified to identify Joshua trees. The County has on file a copy of TERACOR Resource Management's Statement of Qualifications as well as that of Andrew C. Sanders Herbarium Curator at UC Riverside who consulted with TERACOR on this project.

The County's determination that impacts to Joshua trees will be less than significant with the adoption and implementation of mitigation measures is supported by substantial evidence in the administrative record. See, e.g., MND pages 33, 38; MND Errata page 1 (BIO-1 and BIO-2 "*purchase and permanent conservation of mitigation land*", BIO-3 and BIO-4 "*safety fencing around natural habitat and worker training to recognize and avoid sensitive organisms and habitat*", as well as BIO-7 "*applicant must obtain a Joshua tree removal permit, relocate specimen-sized trees to the perimeter of the Project or to another County-approved location, stockpiling and adequate care of any trees not immediately relocated, and development of a County-approved Joshua tree management program to preserve as many Joshua trees as possible*").

**IBEW-14. Substantial evidence supports a fair argument that the Project may have significant unmitigated impacts from exposure to hazardous materials (Pages 17-18, Section IV.B).**

Commenter relies on a letter from Matt Hagemann, P.G., SWAPE, to Robyn C. Purchia, Adams Broadwell Joseph & Cardozo, PC (June 15, 2010) ("Hagemann letter") to support the claim that there is substantial evidence in the administrative record that the Project may result in significant impacts to the environment from exposure to hazardous materials (IBEW, pages 17-18). Notably, the Hagemann letter is not based on any first-hand study of the site, or any information he obtained from any official hazardous material site lists maintained by local, state, or federal government agencies. Instead, it is based on his review of the MND itself. Thus, the Hagemann letter adds no new information to the administrative record other than Mr. Hagemann's own relatively uninformed opinion that hazardous wastes *may* occur on the site that *may* be discovered if a Phase I environmental assessment were conducted. Such speculation and unsubstantiated opinion does not constitute evidence, substantial or otherwise, sufficient to call into question the County's finding of no significant impact (See MND, pages 49-52).

Indeed, without inspecting public records, the Project site, or the abandoned truck, Mr. Hagemann simply contradicts the County's finding, which is based on a search of the relevant hazardous waste site lists, and a thorough first-hand inspection of the trash piles and abandoned truck. The County found no

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evidence of past use of the site for activities involving the use of hazardous materials, no evidence of the presence of any hazardous materials, no evidence of leaks from the abandoned truck, and that the trash piles consisted of bottle fragments, cans, and some plastic debris, none of which indicate the presence of hazardous materials (MND pages 50-51).

The commenter also fails to take into account the fact that only two of the trash piles would be removed to construct the Project (MND, pages 40-41; 51). In addition, the Project proponent has informed the County that the abandoned “truck” is merely the shell of a truck cab, not an entire truck. Thus, his conclusion that a Phase I environmental assessment should be conducted is based on the mistaken assumption that all nine trash piles and the truck would be removed and the ground beneath them disturbed, and the author’s factually baseless assumption that the presence of an abandoned truck is evidence that hazardous materials may have been spilled or leached from the truck in contradiction to the reports from first-hand inspection of the truck cab and its surroundings.

In the unlikely event that during construction the Project applicant were to encounter pre-existing hazardous substances within the construction footprint, the MND specifies that “[a]ll activity involving hazardous substances would be handled . . . in accordance with applicable local, State, and Federal safety standards” (MND, page 50). Thus, “[p]otential impacts associated with use, transport, storage, and disposal of hazardous materials would be less than significant” (MND, page 50).<sup>5</sup>

**IBEW-15. Substantial evidence supports a fair argument that the Project may result in impacts from potential transmission upgrades (Pages 18-19, Section IV.C).**

See response to comment IBEW-7, above.

**IBEW-16. Substantial evidence supports a fair argument that the Project may substantially affect water resources (Page 19, Section IV.D).**

See responses to comments IBEW-1 through IBEW-5, above.

**IBEW-17. Substantial evidence supports a fair argument that the Project may result in cumulative impacts (Page 19, Section IV.E).**

See response to comment IBEW-8, above.

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<sup>5</sup> The IBEW Comment letter did not question the adequacy of the local, state, and federal requirements applicable to the use, transport, storage, and disposal of hazardous wastes.

# EXHIBIT D

## Conditions of Approval

## **CONDITIONS OF APPROVAL**

Kramer South Solar Facility  
Conditional Use Permit

### **GENERAL REQUIREMENTS**

Conditions of Operation and Procedures

#### **LAND USE SERVICES DEPARTMENT– Planning Division (909) 387-8311**

1. **Project Approval Description.** This Conditional Use Permit (CUP) is conditionally approved to construct and operate a 130MW utility scale photovoltaic solar power generating facility with approximately 130 MW of battery storage capacity on approximately 360 acres, in the community of Kramer Junction. APN: 0492-221-22 Project No: P201700466.

The project shall be constructed and operated in compliance with the San Bernardino County Code (SBCC), California Building Codes (CBC) San Bernardino County Fire Code, and the following conditions of approval, the approved site plan and all other required and approved reports and/or displays (e.g. elevations). The developer shall provide a copy of the approved conditions and approved site plan to every current and future developer to facilitate compliance with these conditions of approval and continuous use requirements for the project site.

2. **Project Location.** The project is located on State Route 58, west of US Highway 395 in the community of Kramer Junction.
3. **Revisions.** Any proposed change to the approved site plan, conditions of approval, approved use/activity on the site or any increase in the developed area of the site or any expansion or modification to the approved facilities, including changes to the height, location, bulk or size of structure or equipment shall require an additional land use application subject to approval by the County. The developer shall prepare, submit with fees and obtain approval of the application prior to implementing any such revision or modification. (SBCC §86.06.070)
4. **Indemnification.** In compliance with SBCC §81.01.070, the developer shall agree, to defend, indemnify, and hold harmless the County or its “indemnitees” (herein collectively the County’s elected officials, appointed officials (including Planning Commissioners), Zoning Administrator, agents, officers, employees, volunteers, advisory agencies or committees, appeal boards or legislative body) from any claim, action, or proceeding against the County or its indemnitees to attack, set aside, void, or annul an approval of the County by an indemnitee concerning a map or permit or any other action relating to or arising out of County approval, including the acts, errors or omissions of any person and for any costs or expenses incurred by the indemnitees on account of any claim, except where such indemnification is prohibited by law. In the alternative, the developer may agree to relinquish such approval.

Any condition of approval imposed in compliance with the County Development Code or County General Plan shall include a requirement that the County acts reasonably to promptly notify the developer of any claim, action, or proceeding and that the County cooperates fully in the defense. The developer shall reimburse the County and its indemnitees for all expenses resulting from such actions, including any court costs and attorney fees, which the County or its indemnitees may be required by a court to pay as a result of such action.

The County may, at its sole discretion, participate at its own expense in the defense of any such action, but such participation shall not relieve the developer of their obligations under this condition to reimburse the County or its indemnitees for all such expenses.

This indemnification provision shall apply regardless of the existence or degree of fault of indemnitees. The developer’s indemnification obligation applies to the indemnitees’ “passive” negligence but does not apply to the indemnitees’ “sole” or “active” negligence or “willful misconduct” within the meaning of Civil Code Section 2782.

5. Expiration. This project permit approval shall expire and become void if the CUP is not “exercised” within three (3) years of the effective date of this approval, unless an extension of time is approved. The approval is deemed “exercised” and the CUP shall remain effective for a period not to exceed ten (10) years when either:
- The permittee has commenced actual construction or alteration within three (3) years under a validly issued building permit and construction of all future phases has commenced within ten (10) years of the date of this approval, or
  - The permittee has substantially commenced the approved land use or activity on the project site, for those portions of the project not requiring a building permit. (SBCC §86.06.060)

PLEASE NOTE: This will be the ONLY notice given of this approval’s expiration date. The developer is responsible to initiate any Extension of Time application.

6. Occupancy of Approved Land Use. Occupancy of completed structures and operation of the approved and exercised land use remains valid continuously for the life of the project and the approval runs with the land, unless one of the following occurs:
- Construction permits for all or part of the project are not issued or the construction permits expire before the structure is completed and the final inspection is approved.
  - The land use is determined by the County to be abandoned or non-conforming.
  - The land use is determined by the County to be not operating in compliance with these conditions of approval, the County Code, or other applicable laws, ordinances or regulations. In these cases, the land use may be subject to a revocation hearing and possible termination.
7. Continuous Effect/Revocation. All of the conditions of this project approval are continuously in effect throughout the operative life of the project for all approved structures and approved land uses/activities. Failure of the property owner or developer to comply with any or all of the conditions at any time may result in a public hearing and possible revocation of the approved land use, provided adequate notice, time and opportunity is provided to the property owner, developer or other interested party to correct the non-complying situation.
8. Extension of Time. Extensions of time to the expiration date (listed above or as otherwise extended) may be granted in increments each not to exceed an additional three years beyond the current expiration date. An application to request consideration of an extension of time may be filed with the appropriate fees no less than thirty days before the expiration date. Extensions of time may be granted based on a review of the application, which includes a justification of the delay in construction and a plan of action for completion. The granting of such an extension request is a discretionary action that may be subject to additional or revised conditions of approval or site plan modifications. (SBCC §86.06.060)
9. Project Account. The Project account number is P201700466. This is an actual cost project with a deposit account to which hourly charges are assessed by various county agency staff (e.g. Land Use Services, Public Works, and County Counsel). Upon notice, the “developer” shall deposit additional funds to maintain or return the account to a positive balance. The “developer” is responsible for all expense charged to this account. Processing of the project shall cease, if it is determined that the account has a negative balance and that an additional deposit has not been made in a timely manner. A minimum balance of \$1,000.00 must be in the project account at the time the Condition Compliance Review is initiated. Sufficient funds must remain in the account to cover the charges during each compliance review. All fees required for processing shall be paid in full prior to final inspection, occupancy and operation of the approved use.
10. Condition Compliance - Construction. In order to obtain construction permits for grading, building, final inspection and tenant occupancy for each approved building, the developer shall process Condition Compliance Release Form(s) (CCRF) through County Planning in accordance with the directions stated in the

Approval letter. County Planning shall release its holds on each phase of development by providing to County Building and Safety the following:

- a. Grading Permits: A copy of the signed CCRF for grading/land disturbance and two “red” stamped and signed approved copies of the grading plans.
- b. Building Permits: A copy of the signed CCRF for building permits and three “red” stamped and signed approved copies of the final approved site plan.
- c. Final Inspection/Occupancy: A copy of the signed CCRF for final inspection, after an on-site compliance inspection by County Planning.

11. Development Impact Fees. Additional fees may be required prior to issuance of development permits. Fees shall be paid as specified in adopted fee ordinances.
12. State and Federal Endangered Species Act. This approval does not relieve the property owner or project proponent of responsibility to comply with State and Federal Endangered Species Acts. If any listed species are identified during grading, building or land disturbing activity, all on-site activities in the vicinity of the species observation must cease, the California Department of Fish and Wildlife (CDFW) and/or U.S. Fish and Wildlife Service (USFWS) (as applicable) must be contacted for consultation. Construction may recommence upon determination by the County I consultation with USFWS and CDFW that appropriate avoidance, minimization and/or mitigation measures have been implemented.
13. Additional Permits. The developer shall ascertain compliance with all laws, ordinances, regulations and any other requirements of Federal, State, County and Local agencies that may apply for the development and operation of the approved land use. These may include but not limited to:
  - a. FEDERAL: U.S Army Corps of Engineers (ACOE), U.S. Fish and Wildlife Service (USFWS);
  - b. STATE: California Department of Fish and Wildlife (CDFW), Mojave Desert Air Quality Management District, Lahontan Regional Water Quality Control Board (RWQCB);
  - c. COUNTY: Land Use Services – Building and Safety, Code Enforcement, Land Development; Public Health – Environmental Health Services; Public Works – County Surveyor; Fire Department; and
  - d. LOCAL: None
14. Continuous Maintenance. The Project property owner shall continually maintain the property so that it is not visually derelict and not dangerous to the health, safety and general welfare of both on-site users (e.g. employees) and surrounding properties. The property owner shall ensure that all facets of the development are regularly inspected, maintained and that any defects are timely repaired. Among the elements to be maintained, include but are not limited to:
  - a. Annual maintenance and repair: The developer shall conduct inspections for any structures, fencing/walls, driveways, and signs to assure proper structural, electrical, and mechanical safety.
  - b. Graffiti and debris: The developer shall remove graffiti and debris immediately through weekly maintenance.
  - c. Dust control: The developer shall maintain dust control measures on any undeveloped areas where soil stabilization is required.
  - d. Erosion control: The developer shall maintain erosion control measures to reduce water runoff, siltation, and promote slope stability.
  - e. External Storage: The developer shall maintain external storage, loading, recycling and trash storage areas in a neat and orderly manner, and fully screened from public view. Outside storage shall not exceed the height of the screening walls.
  - f. Metal Storage Containers: The developer shall NOT place metal storage containers in loading areas or other areas unless specifically approved by this or subsequent land use approvals.
  - g. Screening: The developer shall maintain screening that is visually attractive. All trash areas, loading areas, mechanical equipment (including roof top) shall be screened from public view.

- h. Parking and on-site circulation: The developer shall maintain all parking and on-site circulation requirements, including surfaces, all markings and traffic/directional signs in an un-faded condition as identified on the approved site plan, as applicable. Any modification to parking and access layout requires the Planning Division review and approval.
  - i. Fire Lanes: The developer shall clearly define and maintain in good condition at all times all markings required by the Fire Department, including “No Parking” designations and “Fire Lane” designations.
15. Performance Standards. The approved land uses shall operate in compliance with the general performance standards listed in the County Development Code Chapter 83.01, regarding air quality, electrical disturbance, fire hazards (storage of flammable or other hazardous materials), heat, noise, vibration, and the disposal of liquid waste.
16. Lighting. Lighting shall comply with Table 83-7 “Shielding Requirements for Outdoor Lighting in the Mountain Region and Desert Region” of the County’s Development Code (i.e. “Dark Sky” requirements). All lighting shall be limited to that necessary for maintenance activities and security purposes. This is to allow minimum obstruction of night sky remote area views. No light shall project onto adjacent roadways in a manner that interferes with on-coming traffic. All signs proposed by this project shall only be lit by steady, stationary, shielded light directed at the sign, or by light inside the sign.
17. Clear Sight Triangle. Adequate visibility for vehicular and pedestrian traffic shall be provided at clear sight triangles at all 90 degree angle intersections of public rights-of-way and private driveways. All signs, structures and landscaping located within any clear sight triangle shall comply with the height and location requirements specified by County Development Code (SBCC§ 83.02.030).
18. Construction Hours. Construction will be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday in accordance with the County of San Bernardino Development Code standards.
19. Public Safety Services Impact Fees. Upon completion and final construction of the Project, the developer of an approved commercial solar energy generation facility shall pay a fee on an annual basis according to the following schedule:

Parcel Size	Fee Per Acre
0-4.99 acres	\$580
5-14.99 acres	\$280
15 acres or greater	\$157

Alternatively, the developer of an approved commercial solar energy generation facility shall pay an annual public services impact fee on a per acre basis based on a project-specific study of the project’s public safety services impacts, which study shall be paid at the developer’s expense, using a consultant approved by the County.

Whether based on the above schedule or on the basis of the project-specific study, the per acre annual impact fee shall be adjusted annually based on the Consumer Price Index for All Urban Consumers (CPI-U) for the Los Angeles-Riverside-Orange County, California area.

20. GHG – Operational Standards. The developer shall implement the following as greenhouse gas (GHG) mitigation during the operation of the approved project:
- a. Waste Stream Reduction. The “developer” shall provide to all tenants and project employees County-approved informational materials about methods and need to reduce the solid waste stream and listing available recycling services.

- b. Vehicle Trip Reduction. The “developer” shall provide to all tenants and project employees County-approved informational materials about the need to reduce vehicle trips and the program elements this project is implementing. Such elements may include: participation in established ride-sharing programs, creating a new ride-share employee vanpool, designating preferred parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading for ride sharing vehicles with benches in waiting areas, and/or providing a web site or message board for coordinating rides.
- c. Provide Educational Materials. The developer shall provide to all tenants and staff education materials and other publicity about reducing waste and available recycling services. The education and publicity materials/program shall be submitted to County Planning for review and approval.
- d. Landscape Equipment. The developer shall require in the landscape maintenance contract and/or in onsite procedures that a minimum of 20% of the landscape maintenance equipment shall be electric-powered.

21. Construction Noise. The following measures shall be adhered to during the construction phase of the project:

- a. All construction equipment shall be muffled in accordance with manufacturer’s specifications.
- b. All construction staging shall be performed as far as possible from occupied dwellings. The location of staging areas shall be subject to review and approval by the County prior to the issuance of grading and/or building permits.
- c. All stationary construction equipment shall be placed in a manner so that emitted noise is directed away from sensitive receptors (e.g. residences and schools) nearest the project site.
- d. Maintain all construction tools and equipment in good operating order according to manufacturers’ specifications.
- e. Limit use of major excavating and earthmoving machinery to daytime hours.
- f. To the extent feasible, schedule construction activity during normal working hours on weekdays when higher sound levels are typically present and are found acceptable. Some limited activities, such as concrete pours, will be required to occur continuously until completion.
- g. Equip any internal combustion engine related to the job with a properly operating muffler that is free from rust, holes, and leaks.
- h. For construction devices that utilize internal combustion engines, ensure the engine’s housing doors are kept closed, and install noise-insulating material mounted on the engine housing consistent with manufacturers’ guidelines, if possible.
- i. Limit possible evening shift work to low noise activities such as welding, wire pulling, and other similar activities, together with appropriate material handling equipment.
- j. Utilize a complaint resolution procedure to address any noise complaints received from residents.
- k. Post signage showing the overall construction schedule.
- l. Deploy temporary sound barrier or other engineering solution when construction activities are located within 200 feet of a residence so that the noise level at the residents’ property line is less than the federal transit administration threshold of 80 dBA. The sound barriers should be placed so that the construction equipment is blocked with a buffer of approximately 20 feet from the equipment to edges of the barrier. This reduction in noise can also be accomplished using a comparable engineering solution to minimize noise.

**PUBLIC HEALTH - Environmental Health Services (800) 442-2283**

22. Noise. Noise level shall be maintained at or below County Standards, Development Code Section 83.01.080. For information, please call DEHS at 1-800-442-2283.

23. Septic System. If installed, the septic system shall be maintained so as not to create a public nuisance and shall be serviced by a DEHS permitted pumper. For information, please call DEHS/Wastewater Section at: 1-800-442-2283.
24. Refuse Storage/removal. All refuse generated at the premises shall at all times be stored in approved containers and shall be placed in a manner so that environmental public health nuisances are minimized. All refuse not containing garbage shall be removed from the premises at least **1** time per week, or as often as necessary to minimize public health nuisances. Refuse containing garbage shall be removed from the premises at least **2** times per week, or as often if necessary to minimize public health nuisances, by a permitted hauler to an approved solid waste facility in conformance with San Bernardino County Code Chapter 8, Section 33.0830 et. seq. For information, please call DEHS/LEA at: 1-800-442-2283.

**LAND USE SERVICES DEPARTMENT – Land Development Division – Drainage Section (909) 387-8311**

25. Tributary Drainage. Adequate provisions should be made to intercept and conduct the tributary off site - on site drainage flows around and through the site in a manner, which will not adversely affect adjacent or downstream properties at the time the site is developed.
26. Natural Drainage. The natural drainage courses traversing the site shall not be occupied or obstructed.
27. Additional Drainage Requirements. In addition to drainage requirements stated herein, other "on-site" and/or "off-site" improvements may be required which cannot be determined from tentative plans at this time and would have to be reviewed after more complete improvement plans and profiles have been submitted to this office.

**LAND USE SERVICES DEPARTMENT– Code Enforcement Division (909) 387-8311**

28. Enforcement. If any County enforcement activities are required to enforce compliance with the conditions of approval, the property owner and “developer” shall be charged for such enforcement activities in accordance with the County Code Schedule of Fees. Failure to comply with these conditions of approval or the approved site plan design required for this project approval shall be enforceable against the property owner and “developer” (by both criminal and civil procedures) as provided by the San Bernardino County Code, Title 8 (Development Code), Chapter 86.09 – Enforcement.
29. Weed Abatement. The applicant shall comply with San Bernardino County weed abatement regulations and periodically clear the site of all non-complying vegetation. This includes removal of all Russian thistle (tumbleweeds).

**DEPARTMENT OF PUBLIC WORKS – Solid Waste Management – (909) 387-8701**

30. Franchise Hauler Service Area. This project falls within a County Franchise Area. If subscribing for the collection and removal of construction and demolition waste from the project site, all developers, contractors, and subcontractors shall be required to receive services through the grantee holding a franchise agreement in the corresponding County Franchise Area.
31. Recycling Storage Capacity. The developer shall provide adequate space and storage bins for both refuse and recycling materials. This requirement is to assist the County in compliance with the recycling requirements of Assembly Bill (AB) 2176.

**COUNTY FIRE – COMMUNITY SAFETY DIVISION (909) 386-8400**

32. Expiration. Construction permits, including Fire Condition Letters, shall automatically expire and become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Suspension or abandonment shall mean that no inspection by the Department has occurred within 180 days of any previous inspection. After a construction permit or Fire Condition Letter becomes invalid and before such previously approved work recommences, a new permit shall be first obtained and the fee to recommence work shall be one-half the fee for the new permit for such work, provided no changes have been made or will be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year. A request to extend the Fire Condition Letter or Permit may be made in writing PRIOR TO the expiration date justifying the reason that the Fire Condition Letter should be extended (EXPNOTE).
33. Jurisdiction. The project is under the jurisdiction of the San Bernardino County Fire Department herein (Fire Department). Prior to any construction occurring on any parcel, the applicant shall contact the Fire Department for verification of current fire protection requirements. All new construction shall comply with the current Uniform Fire Code requirements and all applicable statutes, codes, ordinance and standards of the Fire Department (F01).
34. Additional Requirements. In addition to the Fire requirements stated herein, other on-site and off-site improvements may be required which cannot be determined from tentative plans at this time and would have to be reviewed after more complete improvement plans and profiles have been submitted to this office (F01A).

**PRIOR TO ISSUANCE OF GRADING PERMITS  
OR LAND DISTURBING ACTIVITY**

*The following shall be completed:*

**LAND USE SERVICES DEPARTMENT– Planning Division (909) 387-8311**

35. GHG – Construction Standards. The developer shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce GHG emissions and submitting documentation of compliance. The developer/construction contractors shall do the following:
- a. Implement the approved Coating Restriction Plans.
  - b. Select construction equipment based on low GHG emissions factors and high-energy efficiency. All diesel/gasoline-powered construction equipment shall be replaced, where possible, with equivalent electric or CNG equipment.
  - c. Grading contractor shall provide the implement the following when possible:
    1. Training operators to use equipment more efficiently.
    2. identifying the proper size equipment for a task can also provide fuel savings and associated reductions in GHG emissions
    3. replacing older, less fuel-efficient equipment with newer models
    4. use GPS for grading to maximize efficiency
  - d. Grading plans shall include the following statements:
    - “All construction equipment engines shall be properly tuned and maintained in accordance with the manufacturers specifications prior to arriving on site and throughout construction duration.”
    - “All construction equipment (including electric generators) shall be shut off by work crews when not in use and shall not idle for more than 5 minutes.”
  - e. Schedule construction traffic ingress/egress to not interfere with peak-hour traffic and to minimize traffic obstructions. Queuing of trucks on and off site shall be firmly discouraged and not scheduled. A flag person shall be retained to maintain efficient traffic flow and safety adjacent to existing roadways.
  - f. Recycle and reuse construction and demolition waste (e.g. soil, vegetation, concrete, lumber, metal, and cardboard) per County Solid Waste procedures.
  - g. The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew and educate all construction workers about the required waste reduction and the availability of recycling services.
36. Air Quality. The Project proponent is required to comply with all applicable rules and regulations as the Mojave Desert Air Basin is in non-attainment status for ozone and suspended particulates [PM<sub>10</sub> and PM<sub>2.5</sub> (State)]. To limit dust production, the Project proponent must comply with Rules 402 nuisance and 403 fugitive dust, which require the implementation of Best Available Control Measures for each fugitive dust source. This would include, but not be limited to, the following Best Available Control Measures. Compliance with Rules 402 and 403 are mandatory requirements and thus not considered mitigation measures:
- a. The Project proponent shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.
    1. The Project proponent shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading. Portions of the site that are actively being graded shall be watered to ensure that a crust is formed on the ground surface, and shall be watered at the end of each workday.
    2. The Project proponent shall ensure that all disturbed areas are treated, if necessary, to prevent erosion.

3. The Project proponent shall ensure that all grading activities are suspended when winds exceed 25 miles per hour.
  - b. Exhaust emissions from vehicles and equipment and fugitive dust generated by equipment traveling over exposed surfaces, will increase NO<sub>x</sub> and PM<sub>10</sub> levels in the area. The Project proponent will be required to implement the following requirements of the Mojave Desert Air Quality Management District thresholds during operations:
    1. All equipment used for grading and construction must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel.
    2. The operator shall maintain and effectively utilize and schedule on-site equipment and on-site and off-site haul trucks in order to minimize exhaust emissions from truck idling.
37. Diesel Regulations. The operator shall comply with all existing and future California Air Resources Board and Mojave Desert Air Quality Management District regulations related to diesel-fueled trucks, which among others may include: (1) meeting more stringent emission standards; (2) retrofitting existing engines with particulate traps; (3) use of low sulfur fuel; and (4) use of alternative fuels or equipment. Mojave Desert Air Quality Management District rules for diesel emissions from equipment and trucks are embedded in the compliance for all diesel fueled engines, trucks, and equipment with the statewide California Air Resources Board Diesel Reduction Plan. These measures will be implemented by the California Air Resources Board in phases with new rules imposed on existing and new diesel-fueled engines.
38. Air Quality Mitigation. The project applicant shall ensure that the following dust suppression measures are implemented as part of the project's mitigation: **(AIR-1)**
1. Disturbed areas of the site shall be watered a minimum of three times daily, unless dust is controlled by rainfall or use of a dust palliative, or other approved dust control measure.
  2. All excavating and grading operations shall be suspended when wind speeds (as instantaneous gusts) exceed 20 mph.
  3. Wheel washers shall be installed where vehicles enter and exit unpaved roads onto paved roads; trucks and any equipment shall be washed down before leaving the site.
  4. All on-site roads and other areas that have no vegetation shall be paved, watered, or chemically stabilized.
  5. On-site vehicle speeds will be limited to 15 miles per hour
39. Biological Resource Mitigation. Prior to the issuance of the project grading permit, the project applicant shall purchase California Department of Fish and Wildlife (CDFW) approved land for offsite conservation. The purchased land shall provide offsite mitigation of project impacts at a mitigation impact ratio ranging from a minimum of 1.5:1 through 5:1 and will be refined through the Incidental Take Permit Process. **(BIO-1)**
40. Biological Resource Mitigation. Prior to the issuance of the project grading permit, the project applicant shall dedicate as open space the large desert wash and a wash buffer zone in the southeastern portion of the site and parcel 0492-221-26, or an area of similar size with similar vegetation characteristics. No manmade disturbance shall occur in these areas. **(BIO-2)**
41. Biological Resource Mitigation. Prior to the start of construction activities, the project applicant shall install orange safety fencing around the perimeter of the work area to discourage entry into natural areas. All construction personnel shall be advised to stay out of fenced areas. Fencing shall remain in place until the completion of construction activities. **(BIO-3)**
42. Biological Resource Mitigation. Prior to the start of equipment placement or construction activities at the project site, the project applicant shall ensure that all workers that will be present on the site during grading and/or construction activities are given literature and a brief instruction seminar to advise the workers on identifying sensitive organisms and habitats and how to best avoid these organisms and areas. **(BIO-4)**

43. Biological Resource Mitigation. In accordance with the Migratory Bird Treaty Act (MBTA), if vegetation removal must occur during the bird-nesting season, a qualified ornithologist will examine the site to avoid impacts to nesting birds. If active bird nest(s) are detected during the pre-construction nesting surveys, the qualified ornithologist will establish an adequate buffer around the active nest(s) to ensure the nesting birds are not disturbed until the young birds have fledged. The ornithologist will remain onsite to actively monitor the birds and/or nests during construction. **(BIO-5)**
44. Biological Resource Mitigation. Prior to the issuance of the project grading permit, the project applicant shall secure "take" permits for the State endangered Mohave Ground Squirrel and the State and Federally threatened Desert Tortoise from the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service or a letter from these agencies indicating that such a permit is not required. **(BIO-6)**
45. Biological Resource Mitigation. Prior to the issuance of grading permits, the project applicant shall apply for a tree removal permit from the County. Trees meeting the specimen size requirements of the County shall be removed and relocated around the perimeter of the project, if possible, or at another County-approved location. Any specimen size trees that are not relocated shall be stockpiled for future transplanting. Any stockpiling of trees shall occur through coordination with the County to ensure the plants are well cared for and the root systems are kept watered on a regular basis until the trees are relocated. The project applicant and the County shall develop a Joshua Tree Management Program to preserve as many Joshua trees as possible. **(BIO-7)**
46. Biological Resource Mitigation. Joshua tree relocation shall be avoided during the nesting season to avoid affecting migratory bird species. If Joshua tree removals are conducted during the nesting season (generally February 1 to August 1), a survey shall be conducted by a qualified biologist/ecologist to confirm whether active nests are present. If eggs or nestlings are present, removal of vegetation must be postponed under provisions of the Migration Bird Treaty Act (MBTA) until nestlings have fledged. **(BIO-8)**

If burrowing owls are observed during the pre-construction surveys, the following measures will apply:

47. Biological Resource Mitigation. As compensation for the direct loss of burrowing owl nesting and foraging habitat, the project applicant shall be mitigated by acquiring and permanently protecting known burrowing owl nesting and foraging habitat at the following ratio:
  - i. Replacement of occupied habitat with occupied habitat at 1.5 times 6.5 acres per pair or single bird;
  - ii. Replacement of occupied habitat with habitat contiguous with occupied habitat at 2 times 6.5 acres per pair or single bird; and/or
  - iii. Replacement of occupied habitat with suitable unoccupied habitat at 3 times 6.5 acres per pair or single bird.
48. Biological Resource Mitigation. The project applicant shall establish a non-wasting endowment account for the long-term management of the preservation site for burrowing owls. The site shall be managed for the benefit of burrowing owls. The preservation site, site management, and endowment shall be approved by the CDFW. **(BIO-9)**
49. Biological Resource Mitigation. All burrowing owls associated with occupied burrows, that will be directly impacted (temporarily or permanently) by the project, shall be relocated and the following measures shall be implemented to avoid take of owls: **(BIO-10)**
  - i. Occupied burrows shall not be disturbed during the nesting season of February 1 through August 31, unless a qualified biologist can verify through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.
  - ii. Owls must be relocated by a qualified biologist from any occupied burrows that will be impacted by project activities. Suitable habitat must be available adjacent to or near the disturbance site or artificial burrows will need to be provided nearby. Once the biologist has confirmed that owls

have left the burrow, burrows should be excavated using hand tools and refilled to prevent reoccupation.

- iii. All relocation shall be approved by the CDFW. The permitted biologist shall monitor the relocated owls a minimum of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and monitoring shall be submitted to the CDFW within 30 days following completion of the relocation and monitoring of the owls.

50. Biological Resource Mitigation. A Burrowing Owl Mitigation Monitoring Plan shall be submitted to the CDFW for review and approval prior to relocation of owls. The Burrowing Owl Mitigation and Monitoring Plan shall describe proposed relocation and monitoring plans. The plan shall include the number and location of occupied burrow sites and details on adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation of artificial burrows (numbers, location and type of burrows) shall also be included in the plan. The plan shall also describe the proposed offsite areas to preserve to compensate for impacts to burrowing owls/occupied burrows at the project site as required in BIO-9. **(BIO-11)**
51. Cultural Resource Mitigation. As a condition of approval, the project applicant shall dedicate the area north of Highway 58, or an equivalent area on another parcel, as an open space easement and segregate it from any construction activity. Land acquired in compliance with Mitigation Measure BIO-2 shall be deemed to also meet the requirements of this mitigation measure. **(CUL-1)**
52. Cultural Resource Mitigation. Prior to the start of construction activity, a qualified archaeologist shall be retained by the applicant to identify and stake the archaeological site boundaries for Sites Temp 7 and Temp 8. As a condition for the grading permit of the project, the project applicant shall place temporary fencing around the western boundaries of Sites Temp 7 and Temp 8 to avoid any intrusion or construction impacts to the sites. **(CUL-2)**
53. Cultural Resource Mitigation. Prior to the start of construction activity, the project applicant shall retain a qualified archaeologist to conduct cultural resource significance evaluations for Sites Temp 6 and Temp 9. These evaluations may require subsurface investigations and surface collection for formal determinations of significance. Based upon the evaluations, resources identified as significant must be subjected to additional data recovery mitigation efforts. The mitigation program for significant sites shall be carried out following consultation with the reviewing agency. **(CUL-3)**
54. Cultural Resource Mitigation. Prior to the start of construction activity, the project applicant shall retain a qualified archaeologist to implement the cultural resource mitigation monitoring plan (MMRP). The archaeologist shall establish procedures (monitoring plan) for archaeological resource surveillance, and procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of cultural resources as appropriate. The archaeologist shall also be present at the pregrading conference to explain the established procedures based on a preapproved monitoring plan. If additional or unexpected archaeological resources are discovered, a qualified archaeologist shall determine appropriate actions, in cooperation with the implementing agency/agencies, for testing and/or data recovery. **(CUL-4)**
55. Cultural Resource Mitigation. In the event that Pleistocene older alluvium or significant vertebrate fossils are encountered during project construction activities, work in the immediate area of the find shall be halted. The project applicant shall retain a qualified vertebrate paleontologist (as defined by the County Development Code 82.20.040) to develop a program to mitigate impacts to nonrenewable paleontological resources, including full curation of all recovered resources. The mitigation program shall be consistent with the provisions of the California Environmental Quality Act as well as regulations currently implemented by the County and the proposed guidelines of the Society of Vertebrate Paleontology. **(CUL-5)**

**LAND USE SERVICES DEPARTMENT - Building and Safety Division (909) 387-8311**

56. Geotechnical (Soil) Report. When earthwork quantities exceed 5,000 cubic yards, a geotechnical (soil) report shall be submitted to the Building and Safety Division for review and approval prior to issuance of grading permits.

57. Grading Plans. Grading plans shall be submitted to Building and Safety for review and approval prior to grading/land disturbance of more than 100 Cu Yards.
58. Erosion & Sediment Control Plan. An erosion and sediment control plan shall be submitted to and approved by the Building Official.
59. Erosion Control Installation. Erosion control devices must be installed at all perimeter openings and slopes. No sediment is to leave the job site.
60. NPDES Permit. An NPDES permit - Notice of Intent (NOI) - is required on all grading of one (1) acre or more prior to issuance of a grading/construction permit. Contact your Regional Water Quality Control Board for specifics. [www.swrcb.ca.gov](http://www.swrcb.ca.gov)
61. Regional Board Permit. CONSTRUCTION projects involving one or more acres must be accompanied by Regional Board permit WDID #. Construction activity includes clearing, grading, or excavation that results in the disturbance of at least one (1) acre of land total.

#### **LAND USE SERVICES DEPARTMENT – Land Development Division – Drainage Section (909) 387-8311**

62. Drainage Improvements. A Registered Civil Engineer (RCE) shall investigate and design adequate drainage improvements to intercept and conduct the off-site and on-site drainage flows around and through the site in a safety manner, which will not adversely affect adjacent or downstream properties. Submit drainage study for review and obtain approval. . A \$550 deposit for drainage study review will be collected upon submittal to the Land Development Division. Deposit amounts are subject to change in accordance with the latest approved fee schedule.
63. Drainage Easements. Adequate San Bernardino County Drainage Easements (minimum fifteen [15] feet wide) shall be provided over the natural drainage courses, drainage facilities/or concentration of runoff from the site. Proof of recordation shall be provided to the Land Development Division.
64. FEMA Flood Zone. The project is located within Flood Zone D according to FEMA Panel Number 06071C 3825H dated 28 August 2008. Flood Hazards are undetermined in this area but possible.
65. Topo Map. A topographic map shall be provided to facilitate the design and review of necessary drainage facilities.
66. Grading Plans. Grading plans shall be submitted for review and approval obtained, prior to construction. All Drainage improvements shall be shown on the Grading plans according to the approved Drainage study reports.
67. Streambed Alteration Agreement. California Department of Fish and Wildlife (CDFW) must be notified per Fish and Game Code (FGC) §1602. A streambed alteration agreement shall be provided prior to Grading permit issuance. Link to CDFW website at <https://www.wildlife.ca.gov/Conservation/LSA>.

#### **DEPARTMENT OF PUBLIC WORKS – Surveyor (909) 387-8148**

68. Monumentation. If any activity on this project will disturb any land survey monumentation, including but not limited to vertical control points (benchmarks), said monumentation shall be located and referenced by or under the direction of a licensed land surveyor or registered civil engineer authorized to practice land surveying prior to commencement of any activity with the potential to disturb said monumentation, and a corner

record or record of survey of the references shall be filed with the County Surveyor pursuant to Section 8771(b) Business and Professions Code.

69. Record of Survey, Corner Record. Pursuant to Sections 8762(b) and/or 8773 of the Business and Professions Code, a Record of Survey or Corner Record shall be filed under any of the following circumstances:
- a. Monuments set to mark property lines or corners;
  - b. Performance of a field survey to establish property boundary lines for the purposes of construction staking, establishing setback lines, writing legal descriptions, or for boundary establishment/mapping of the subject parcel;
  - c. Any other applicable circumstances pursuant to the Business and Professions Code that would necessitate filing of a Record of Survey.

**COUNTY FIRE – COMMUNITY SAFETY DIVISION (909) 386-8400**

70. Access. The development shall have a minimum of one point of vehicular access. These are for fire/emergency equipment access and for evaluation routes. Standard 902.2.1 (CON0036908).
71. Single Story Road Access Width. All buildings shall have access provided by approved roads, alleys and private drives with a minimum twenty six (26) foot unobstructed width and vertically to fourteen (14) feet six (6) inches in height. Other recognized standards may be more restrictive by requiring wider access provisions.
72. Multi-Story Road Access Width. Buildings three (3) stories in height or more shall have a minimum access of thirty (30) feet unobstructed width and vertically to fourteen (14) feet six (6) inches in height (F41).

**PRIOR TO ISSUANCE OF BUILDING PERMITS**

*The following shall be completed:*

**LAND USE SERVICES DEPARTMENT – Planning Division (909) 387-8311**

73. GHG – Design Standards. The developer shall submit for review and obtain approval from County Planning evidence that the following measures have been incorporated into the design of the project. These are intended to reduce potential project greenhouse gas (GHGs) emissions. Proper installation of the approved design features and equipment shall be confirmed by County Building and Safety prior to final inspection of each structure.
- a. Meet Title 24 Energy Efficiency requirements. The Developer shall document that the design of the proposed structures meets the current Title 24 energy-efficiency requirements. County Planning shall coordinate this review with the County Building and Safety. Any combination of the following design features may be used to fulfill this requirement, provided that the total increase in efficiency meets or exceeds the cumulative goal (100%+ of Title 24) for the entire project (Title 24, Part 6 of the California Code of Regulations; Energy Efficiency Standards for Residential and Non Residential Buildings, as amended:
- Incorporate dual paned or other energy efficient windows,
  - Incorporate energy efficient space heating and cooling equipment,
  - Incorporate energy efficient light fixtures, photocells, and motion detectors,
  - Incorporate energy efficient appliances,
  - Incorporate energy efficient domestic hot water systems,
  - Incorporate solar panels into the electrical system,
  - Incorporate cool roofs/light colored roofing,
  - Incorporate other measures that will increase energy efficiency.
  - Increase insulation to reduce heat transfer and thermal bridging.
  - Limit air leakage throughout the structure and within the heating and cooling distribution system to minimize energy consumption.
- b. Plumbing. All plumbing shall incorporate the following:
- All showerheads, lavatory faucets, and sink faucets shall comply with the California Energy Conservation flow rate standards.
  - Low flush toilets shall be installed where applicable as specified in California State Health and Safety Code Section 17921.3.
  - All hot water piping and storage tanks shall be insulated. Energy efficient boilers shall be used.
- c. Lighting. Lighting design for building interiors shall support the use of:
- Compact fluorescent light bulbs or equivalently efficient lighting.
  - Natural day lighting through site orientation and the use of reflected light.
  - Skylight/roof window systems.
  - Light colored building materials and finishes shall be used to reflect natural and artificial light with greater efficiency and less glare.
  - A multi-zone programmable dimming system shall be used to control lighting to maximize the energy efficiency of lighting requirements at various times of the day.
  - Provide a minimum of 2.5 percent of the project's electricity needs by on-site solar panels.
- d. Building Design. Building design and construction shall incorporate the following elements:
- Orient building locations to best utilize natural cooling/heating with respect to the sun and prevailing winds/natural convection to take advantage of shade, day lighting and natural cooling opportunities.
  - Utilize natural, low maintenance building materials that do not require finishes and regular maintenance.
  - Roofing materials shall have a solar reflectance index of 78 or greater.
  - All supply duct work shall be sealed and leak-tested. Oval or round ducts shall be used for at least 75 percent of the supply duct work, excluding risers.
  - Energy Star or equivalent appliances shall be installed.

- A building automation system including outdoor temperature/humidity sensors will control public area heating, vent, and air conditioning units
  - e. Landscaping. The developer shall submit for review and obtain approval from County Planning of landscape and irrigation plans that are designed to include drought tolerant and smog tolerant trees, shrubs, and groundcover to ensure the long-term viability and to conserve water and energy. The landscape plans shall include shade trees around main buildings, particularly along southern and western elevations, where practical.
  - f. Irrigation. The developer shall submit irrigation plans that are designed, so that all common area irrigation areas shall be capable of being operated by a computerized irrigation system, which includes either an on-site weather station, ET gauge or ET-based controller capable of reading current weather data and making automatic adjustments to independent run times for each irrigation valve based on changes in temperature, solar radiation, relative humidity, rain and wind. In addition, the computerized irrigation system shall be equipped with flow sensing capabilities, thus automatically shutting down the irrigation system in the event of a mainline break or broken head. These features will assist in conserving water, eliminating the potential of slope failure due to mainline breaks and eliminating over-watering and flooding due to pipe and/or head breaks.
  - g. Recycling. Exterior storage areas for recyclables and green waste shall be provided. Where recycling pickup is available, adequate recycling containers shall be located in public areas. Construction and operation waste shall be collected for reuse and recycling.
  - h. Transportation Demand Management (TDM) Program. The project shall include adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. Preferred carpool/vanpool spaces shall be provided and, if available, mass transit facilities shall be provided (e.g. bus stop bench/shelter). The developer shall demonstrate that the TDM program has been instituted for the project or that the buildings will join an existing program located within a quarter mile radius from the project site that provides a cumulative 20% reduction in unmitigated employee commute trips. The TDM Program shall publish ride-sharing information for ride-sharing vehicles and provide a website or message board for coordinating rides. The Program shall ensure that appropriate bus route information is placed in each building.
74. Special Use Permit. The developer shall submit for review and gain approval for a Special Use Permit (SUP) from County Code Enforcement. Thereafter, the SUP shall be renewed annually subject to annual inspections. The annual SUP inspections shall review & confirm continuing compliance with the listed conditions of approval, including all mitigation measures. This comprehensive compliance review shall include evaluation of the maintenance of all storage areas, landscaping, screening and buffering. Failure to comply shall cause enforcement actions against the developer. Such actions may cause a hearing or an action that could result in revocation of this approval and imposition of additional sanctions and/or penalties in accordance with established land use enforcement procedures. Any additional inspections that are deemed necessary by the Code Enforcement Supervisor shall constitute a special inspection and shall be charged at a rate in accordance with the County Fee Schedule, including travel time, not to exceed three (3) hours per inspection. As part of this, the developer shall pay an annual public safety services impact fee in accordance with Code §84.29.040(d).
75. Decommissioning Requirements. In accordance with SBCC 84.29.070, Decommissioning Requirements, the Developer shall submit a Closure Plan to the Planning Division for review and approval. The Decommissioning Plan shall satisfy the following requirements:
- a. Closure Plan. Following the operational life of the project, the project owner shall perform site closure activities to meet federal, state, and local requirements for the rehabilitation and re-vegetation of the project Site after decommissioning. The applicant shall prepare a Closure, Re-vegetation, and Rehabilitation Plan and submit to the Planning Division for review and approval prior to building permit issuance. Under this plan, all aboveground structures and facilities shall be removed to a depth of three feet below grade, and removed off-site for recycling or disposal. Concrete, piping, and other materials existing below three feet in depth may be left in place. Areas that had been graded shall be restored to original contours unless it can be shown that there is a community benefit for the grading to remain as altered. Succulent plant species native to the area shall be salvaged prior to construction, transplanted into windrows, and maintained for later

transplanting following decommissioning. Shrubs and other plant species shall be re-vegetated by the collection of seeds and re-seeding following decommissioning.

- b. Closure Compliance. Following the operational life of the project, the developer shall perform site closure activities in accordance with the approved closure plan to meet federal, state, and local requirements for the rehabilitation and re-vegetation of the project site after decommissioning. Project decommissioning shall be performed in accordance with all other plans, permits, and mitigation measures that would assure the project conforms to applicable requirements and would avoid significant adverse impacts. These plans shall include the following as applicable:
- Water Quality Management Plan
  - Erosion and Sediment Control Plan
  - Drainage Report
  - Notice of Intent and Stormwater Pollution Prevention Plan
  - Air Quality Permits
  - Biological Resources Report
  - Incidental Take Permit, Section 2081 of the Fish and Game Code
  - Cultural Records Report.
  - The County may require a Phase 1 Environmental Site Assessment be performed at the end of decommissioning to verify site conditions.

#### **LAND USE SERVICES DEPARTMENT - Building and Safety Division (909) 387-8311**

76. Construction Plans. Any building, sign, or structure to be constructed or located on site, will require professionally prepared plans based on the most current County and California Building Codes, submitted for review and approval by the Building and Safety Division.
77. Temporary Use Permit. A Temporary Use Permit (T.U.P.) for the office trailer will be required or it must be placed on a permanent foundation per State H.C.D. guidelines. A T.U.P. is only valid for a maximum of five (5) years.

#### **PUBLIC HEALTH - Environmental Health Services (800) 442-2283**

78. Water purveyor. If required, the water purveyor shall be EHS approved.
79. Water System. A water system permit may be required and concurrently approved by the State Water Resources Control Board – Division of Drinking Water. Applicant shall submit preliminary technical report at least 6 months before initiating construction of any water-related development. Source of water shall meet water quality and quantity standards. Test results, which show source meets water quality and quantity standards shall be submitted to the Division of Environmental Health Services (DEHS). For information, contact the Water Section at 1-800-442-2283 and SWRCB-DDW at 916-449-5577.
80. Onsite wastewater treatment system. Method of sewage disposal shall be EHS approved onsite wastewater treatment system (OWTS) if proposed.
81. Onsite wastewater treatment system. If sewer connection and/or service are unavailable, onsite wastewater treatment system(s) may then be allowed under the following conditions: A soil percolation report per June 2017 standards shall be submitted to DEHS for review and approval. If the percolation report cannot be approved, the project may require an alternative OWTS. For information, please contact the Wastewater Section at 1-800-442-2283.
82. Noise/Acoustics. Submit preliminary acoustical information demonstrating that the proposed project maintains noise levels at or below San Bernardino County Noise Standard(s), San Bernardino Development Code Section 83.01.080. The purpose is to evaluate potential future on-site and/or adjacent off-site

noise sources. If the preliminary information cannot demonstrate compliance to noise information/analysis to the DEHS for review and approval. For information and acoustical checklist, contact DEHS at 1-800-442-2283.

**LAND USE SERVICES DEPARTMENT – Land Development Division – Road Section (909) 387-8311**

83. Road Dedication/Improvements. The developer shall submit for review and obtain approval from the Land Use Services Department the following dedications and plans for the listed required improvements, designed by a Registered Civil Engineer (RCE), licensed in the State of California.

**a. State Hwy 58 (Major Highway – 104')**

- Road Dedication. A grant of easement is required to provide a half-width right-of-way of 52 feet from the centerline.
- Curb Return Dedication. A 35 foot radius return grant of easement is required at the intersection of State Highway 58 and Sheep Creek Road.

**b. Sheep Creek Road (Section Line – 88')**

- Road Dedication. A 44 feet grant of easement is required to provide a half-width right-of-way of 44 feet.
- Street Improvements. Design AC Dike with match up paving 26 feet in width from HWY 58 to the main entrance of the site.
- Curb Return Dedication. A 35-foot radius return grant of easement is required at the intersections of Sheep Creek Road, and Utica Road.
- Driveway Approach. Design driveway approach per San Bernardino County Standard 129A, and located per Standard 130

**c. Utica Road (Section Line – 88')**

- Road Dedication. A 44 foot grant of easement is required to provide a half-width right-of-way of 44 feet.
- Curb Return Dedication. A 35-foot radius return grant of easement is required at the intersections of Pepper Street and Utica Road.

**d. Pepper Street (Section Line – 88')**

- Road Dedication. A 44 foot grant of easement is required to provide a half-width right-of-way of 44 feet.
- Curb Return Dedication. A 35-foot radius return grant of easement is required at the intersections of Utica Road and Pepper Street.

**e. "No Name Street" (1/4 Section Line – 88')**

- Road Dedication. A 44 foot grant of easement is required to provide a half-width right-of-way of 44 feet.
- Curb Return Dedication. A 35-foot radius return grant of easement is required at the intersections of Pepper Street and this road.

84. Road Standards and Design. All required street improvements shall comply with latest San Bernardino County Road Planning and Design Standards and the San Bernardino County Standard Plans. Road sections shall be designed to Desert Road Standards of San Bernardino County, and to the policies and requirements of the County Department of Public Works and in accordance with the General Plan, Circulation Element.
85. Street Improvement Plans. The developer shall submit for review and obtain approval of street improvement plans prior to construction. Final plans and profiles shall indicate the location of any existing utility facility or utility pole which would affect construction, and any such utility shall be relocated as necessary without cost to the County. Street improvement plans shall not be approved until all necessary right-of-way is acquired.
86. CMRS Exclusion. Road improvements required for this development shall not be entered into the County Maintained Road System (CMRS).
87. Paved Access Road. This project is required to have a minimum of 26-foot wide paved access road within at least 40' of right-of-way and designed to County Standard 114b that ties into a maintained paved public road.
88. Turnarounds. Turnarounds at dead end streets shall be in accordance with the requirements of the County Department of Public Works and Fire Department.
89. Transitional Improvements. Right-of-way and improvements (including off-site) to transition traffic and drainage flows from proposed to existing, shall be required as necessary.
90. Street Gradients. Road profile grades shall not be less than 0.5% unless the engineer at the time of submittal of the improvement plans provides justification to the satisfaction of County Public Works confirming the adequacy of the grade.
91. Caltrans Review. Obtain comments from Caltrans for access requirements and working within their right-of-way.
92. Two Access Points. A minimum two points of ingress/egress are required or alternative approved by County Fire Department.

**DEPARTMENT OF PUBLIC WORKS – Solid Waste Management – (909) 387-8701**

93. Construction and Demolition Waste Management Plan (CWMP) Part 1. The developer shall prepare, submit, and obtain approval from SWMD of a CDWMP Part 1 for each phase of the project. The CWMP shall list the types and weights of solid waste materials expected to be generated from construction. The CWMP shall include options to divert waste materials from landfill disposal, materials for reuse or recycling by a minimum of 65% of total weight or volume. Forms can be found on our website at <http://cms.sbcounty.gov/dpw/solidwastemanagement.aspx>. An approved CDWMP Part 1 is required before a permit can be issued.

**COUNTY FIRE – COMMUNITY SAFETY DIVISION (909) 386-8400**

94. Solar/Photovoltaic System Plans. No less than three (3) complete sets of Solar/Photovoltaic Plans shall be submitted to the Fire Department for review and approval. Plans must be submitted and approved prior to Conditional Compliance Release of Building (F39).
95. Fire Fee. The required fees shall be paid to the San Bernardino County Fire Department/Community Safety Division (909) 386-8400 (CON0036907).

**PRIOR TO FINAL INSPECTION OR OCCUPANCY OF ANY STRUCTURE**

*The following shall be completed:*

**LAND USE SERVICES DEPARTMENT – Land Development Division – Drainage Section (909) 387-8311**

96. Drainage Improvements. All required drainage improvements shall be completed by the applicant. The private Registered Civil Engineer (RCE) shall inspect improvements outside the County right-of-way and certify that these improvements have been completed according to the approved plans. Certification letter shall be submitted to Land Development.

**LAND USE SERVICES DEPARTMENT – Land Development Division – Road Section (909) 387-8311**

97. LDD Requirements. All LDD requirements shall be completed by the applicant prior to occupancy.

98. Private Roads/Improvements. All required on-site and off-site improvements shall be completed by the applicant. Construction of private roads and private road related drainage improvements shall be inspected and certified by the engineer. Certification shall be submitted to Land Development by the engineer identifying all supporting engineering criteria.

99. Caltrans Approval. Obtain approval from Caltrans for access requirements and working within their right-of-way.

100. Structural Section Testing. A thorough evaluation of the structural road section, to include parkway improvements, from a qualified materials engineer, shall be submitted to County Public Works.

**DEPARTMENT OF PUBLIC WORKS – Solid Waste Management – (909) 387-8701**

101. Construction and Demolition Waste Management Plan (CDWMP) Part 2. The developer shall complete SWMD's CDWMP Part 2 for construction and demolition. This summary shall provide documentation of actual diversion of materials including but not limited to receipts, invoices or letters from diversion facilities or certification of reuse of materials on site. The CDWMP Part 2 shall provide evidence to the satisfaction of SWMD that demonstrates that the project has diverted from landfill disposal, material for reuse or recycling by a minimum of 65% of total weight or volume of all construction waste.

**COUNTY FIRE– Hazardous Materials (909) 386-8401**

102. Permits. Prior to occupancy, the business operator shall be required to apply for one or more of the following permits, or apply from exemption from hazardous materials laws and regulations: a Hazardous Materials Permit, a Hazardous Waste Permit, Aboveground Storage Tank Permit or an Underground Storage Tank Permit. Application for one or more of these permits shall occur by submitting a hazardous materials business plan using the California Environmental Reporting System (CERS) <http://cers.calepa.ca.gov/>

**LAND USE SERVICES DEPARTMENT – Planning Division (909) 387-8311**

103. Fees Paid. Prior to final inspection by Building and Safety Division and/or issuance of a Certificate of Conditional Use by the Planning Division, the applicant shall pay in full all fees required under actual cost job number P201700466.

104. Shield Lights. Any lights used to illuminate the site shall include appropriate fixture lamp types as listed in SBCC Table 83-7 and be hooded and designed so as to reflect away from adjoining properties and public thoroughfares and in compliance with SBCC Chapter 83.07, "Glare and Outdoor Lighting" (i.e. "Dark Sky Ordinance).

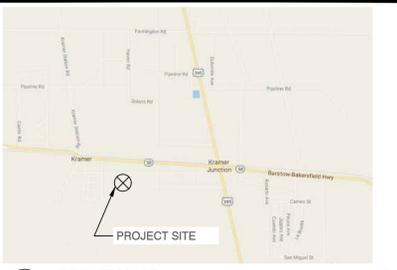
105. CCRF/Occupancy. Prior to occupancy/use, all Condition Compliance Release Forms (CCRF) shall be completed to the satisfaction of County Planning with appropriate authorizing signatures from each reviewing agency.
106. Installation of Improvements. All required on-site improvements shall be installed per approved plans.
107. GHG – Installation/Implementation Standards. The developer shall submit for review and obtain approval from County Planning of evidence that all applicable GHG performance standards have been installed, implemented properly and that specified performance objectives are being met to the satisfaction of County Planning and County Building and Safety.
108. Air Quality– Installation/Implementation Standards. The developer shall submit for review and obtain approval from County Planning of evidence that all applicable Air Quality performance standards have been installed, implemented properly and that specified performance objectives are being met to the satisfaction of County Planning and County Building and Safety.
109. Dust Control – Operation. Prior to final inspection, the applicant shall develop an Operational Dust Control Plan that shall be approved and implemented prior to energization of the solar facility. The Operational Dust Control Plan shall include Dust Control Strategies sufficient to ensure that areas within the Project will not generate visible fugitive dust (as defined in Mojave Desert Air Quality Management District’s (MDAQMD) Rule 403.2) such that dust remains visible in the atmosphere beyond the property boundary. During high wind events, Dust Control Strategies shall be implemented so as to minimize the Project site’s contribution to visible fugitive dust beyond that observed at the upwind boundary.
110. Removal Surety. Surety in a form and manner determined acceptable to County Counsel and the Land Use Services Director shall be required for the closure costs and complete removal of the solar energy generating facility and other elements of the facility. The developer shall either:
- a. Post a performance or other equivalent surety bond issued by an admitted surety insurer to guarantee the closure costs and complete removal of the solar panels and other elements of the facility in a form or manner determined acceptable to County Counsel and the Land Use Services Director in an amount equal to 120 percent of the cost estimate generated by a licensed civil engineer and approved by the Land Use Services Director; or
  - b. Cause the issuance of a certificate of deposit or an irrevocable letter of credit payable to the County of San Bernardino issued by a bank or savings association authorized to do business in this state and insured by the Federal Deposit Insurance Corporation for the purpose of guaranteeing the closure costs and complete removal of the solar panels and other elements of the facility in a form or manner determined acceptable to County Counsel and the Land Use Services Director in an amount equal to 120 percent of the cost estimate generated by a licensed civil engineer and approved by the Land Use Services Director.
111. Revegetation. Prior to the commencement of the decommissioning phase, the project applicant shall prepare a revegetation plan as part of the Decommissioning Plan to identify performance standards necessary for revegetation of the site with native plants. The Decommissioning Plan shall specify success criteria, including but not limited to, site preparation methods, installation specifications, maintenance requirements, and monitoring/report measures to ensure certain botanical thresholds are met such as adequate cover, density and species richness. Standards of success shall include at least a 50 percent revegetation success rate compared to baseline conditions and shall include annual monitoring for two years. If 50 percent revegetation has not been achieved within two years due to lack of water or other environmental factors, the applicant shall work with the County to identify and implement an alternate solution to achieve the identified success rate.

**COUNTY FIRE – COMMUNITY SAFETY DIVISION (909) 386-8400**

112. Inspection by Fire Department. Permission to occupy or use the building (Certification of Occupancy or Shell Release) will not be granted until the Fire Department inspects, approves and signs off on the Building and Safety job card for “fire Final” (F03).

# EXHIBIT E

## Site Plan



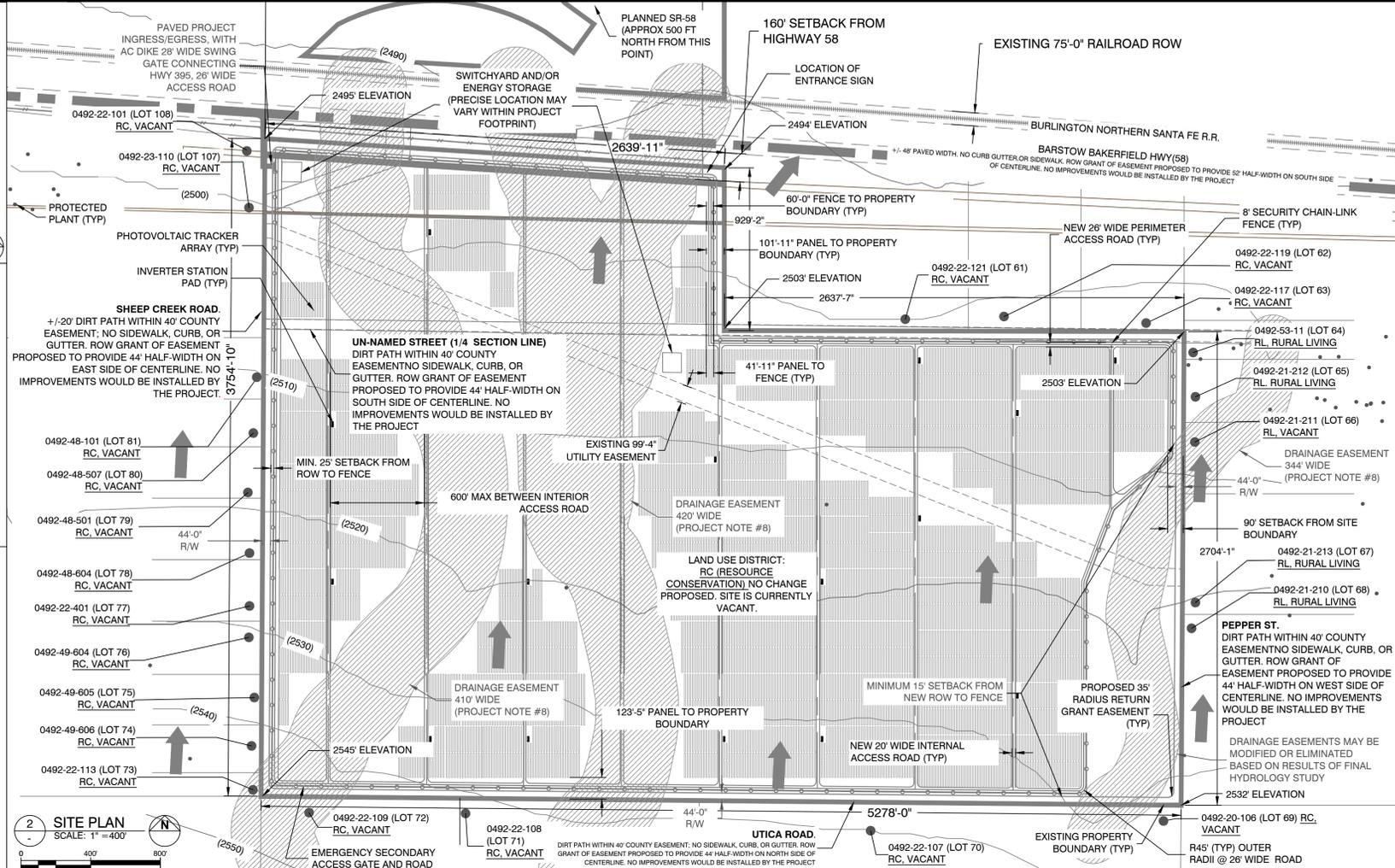
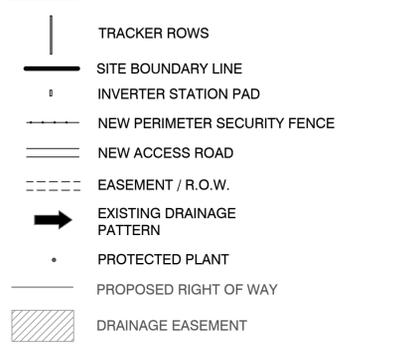
1 VICINITY MAP  
SCALE: N/A

PROJECT DATA:

- MAX. 130 MW SOLAR PHOTOVOLTAIC ENERGY GENERATION.
- MAX. 130 MW ENERGY STORAGE.
- LF OF FENCE: APPROXIMATE 17,500 LF
- LF OF ROAD: APPROXIMATE 44,800 LF
- NUMBER OF INVERTERS: 55
- NUMBER OF TRACKERS: TBD
- NUMBER OF SOLAR PANELS: TBD
- NUMBER OF DRIVE MOTORS: TBD

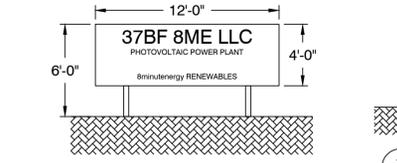
\*PRECISE NUMBER OF INVERTERS, TRACKERS, SOLAR MODULES, AND OTHER PLAN FEATURES WILL VARY BASED ON THE SELECTED PRODUCT MANUFACTURERS. SUCH CHANGES WOULD NOT RESULT IN ANY NOTICEABLE PHYSICAL OR OPERATIONAL IMPACT TO THE FACILITY.

LEGENDS:

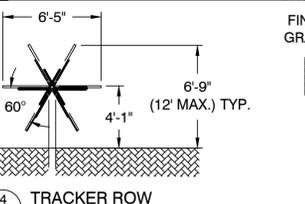


2 SITE PLAN  
SCALE: 1" = 400'

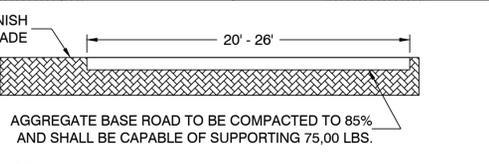
NOTE: CONTENTS ON SIGN MAY CHANGE SUBJECT TO FINAL DESIGN



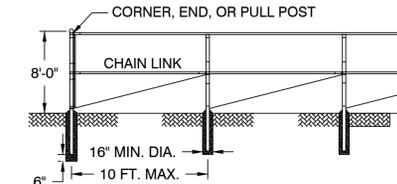
3 ENTRANCE SIGN  
SCALE: 3/16" = 1'



4 TRACKER ROW  
SCALE: 3/16" = 1'

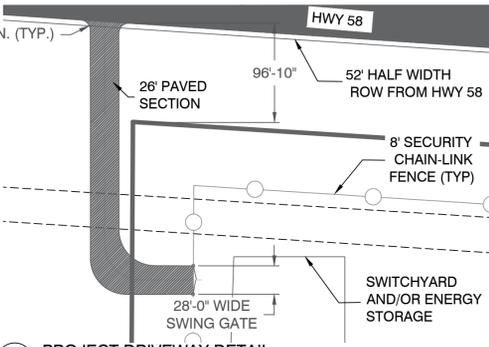


5 TYPICAL ACCESS ROAD  
SCALE: 3/16" = 1'

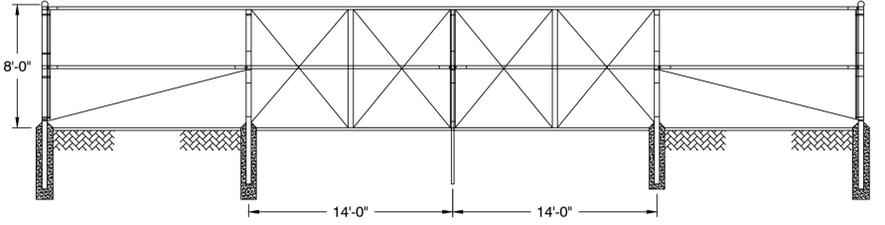


FENCE NOTES:  
1. STRUCTURAL DESIGN AND DETAILS WILL BE COMPLETED DURING FINAL DESIGN  
2. FENCE MAY BE TOPPED BY THREE-STRAND OR SIMILAR BARBED WIRE.

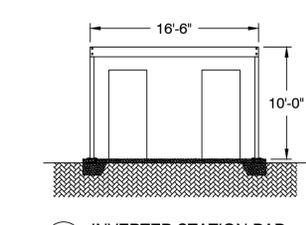
6 8' SECURITY FENCE  
SCALE: 1/8" = 1'



7 PROJECT DRIVEWAY DETAIL  
SCALE: 1" = 80'-0"



8 28' WIDE SWING GATE  
SCALE: 3/16" = 1'



9 INVERTER STATION PAD  
SCALE: 1/8" = 1'

PROJECT NOTES:

- NO PARKING IS PROPOSED OR REQUIRED.
- NO GRADING IS PROPOSED OR REQUIRED.
- NO LANDSCAPING IS PROPOSED OR REQUIRED.
- LOT COVERAGE:
  - TOTAL PARCEL AREA (EXCLUDING EXISTING UTILITY EASEMENT): 360.71 ACRES
  - IMPERVIOUS AREA: 0.5 ACRES
  - LANDSCAPED: 0 ACRES
  - OPEN SPACE:
    - WITHIN SITE FENCE: 71.14 ACRES
    - OUTSIDE SITE FENCE: 22.04 ACRES
  - IMPERVIOUS SURFACE: < 1 PERCENT
- NEW PAVED DRIVEWAY LENGTH: 60 FEET
- LIGHTING WILL BE LIMITED TO SMALL-SCALE FIXTURES ALONG THE PERIMETER AND AS REQUIRED BY BUILDING CODES FOR ON-SITE ELECTRICAL FACILITIES. ALL FIXTURES WILL BE DIRECTED ONSITE AND SHIELDED IN COMPLIANCE WITH COUNTY REGULATIONS.
- POLE-MOUNTED SECURITY CAMERAS MAY BE USED. ONE CAMERA PER ENTRANCE AT 30 FEET (MAX.) HEIGHT. EASEMENT WIDTHS ARE BASED ON PRELIMINARY HYDROLOGY STUDY AND MAY BE MODIFIED BY THE FINAL HYDROLOGY STUDY
- FINAL LAYOUT OF SOLAR PANELS MAY INCORPORATE AREAS SHOWN WITHIN THE FENCE LINE THAT ARE DETERMINED IN THE FINAL HYDROLOGY STUDY TO BE EXCLUDED FROM DRAINAGE EASEMENTS.
- TYPICAL DESIGN FOR ENERGY STORAGE UNITS IS A METAL STORAGE CONTAINER, DIMENSIONS 40 FEET LONG, 8 FEET HIGH, 8 FEET LONG. MAXIMUM HEIGHT WOULD BE APPROXIMATELY 16 FEET. SIZE AND MATERIALS MAY VARY WITH FINAL DESIGN.

UTILITIES:

- WATER - CONSTRUCTION, OPERATIONAL, AND DECOMMISSIONING WATER WOULD BE SOURCED FROM EITHER ON-SITE WELLS OR OFF-SITE SOURCES APPROVED BY THE ENVIRONMENTAL HEALTH SERVICES DIVISION
- SEWAGE - NO SERVICE AVAILABLE OR REQUIRED FOR PROJECT.
- ELECTRIC - SOUTHERN CALIFORNIA EDISON, P.O. BOX 800, ROSEMEAD, CA 91770, (800) 990-7788
- GAS - NO SERVICE AVAILABLE OR REQUIRED FOR PROJECT.
- TELEPHONE - NO SERVICE AVAILABLE OR REQUIRED FOR PROJECT.
- CABLE TV - NO SERVICE AVAILABLE OR REQUIRED FOR PROJECT.

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF SAN BERNARDINO, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

APN: PARCEL A (0492-221-22-0-000): SECTION 1, TOWNSHIP 10 NORTH, RANGE 7 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF. EXCEPTING THEREFROM THE NORTHEAST 1/4 THEREOF. ALSO EXCEPTING THEREFROM THE LAND OF ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY AS DESCRIBED IN DEEDS RECORDED DECEMBER 28, 1911 IN BOOK 496, PAGE 169 AND MARCH 16, 1914 IN BOOK 548, PAGE 29, BOTH OF OFFICIAL RECORDS. ALSO EXCEPTING THEREFROM THE LAND OF ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY SHOWN PARCELS NO. 2 AND NO. 3 ON COUNTY SURVEYOR MAP NO. 3240, RECORDS OF SAID COUNTY, ALSO BEING DESCRIBED IN A DEED RECORDED AUGUST 12, 1898, IN BOOK 252, PAGE 145, BOOK OF DEEDS. ALSO EXCEPTING THEREFROM THE LAND DESCRIBED IN THE GRANT DEED TO THE STATE OF CALIFORNIA RECORDED JANUARY 14, 2010 AS INSTRUMENT NO. 2010-0017180 OF OFFICIAL RECORDS. ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE STATE OF CALIFORNIA BY DEED RECORDED JANUARY 29, 2016 AS INSTRUMENT NO. 2016-0035771 OF OFFICIAL RECORDS.

AREA TABLE	
DESCRIPTION	ACRES
NET USABLE PROPERTY	342.37
PRESERVED AREA	22.04
SSC EASEMENT (**)	25.74
TOTAL	386.45

\*\* EXCLUDES EASEMENT

OFFICIAL USE ONLY:

PLAN IDENTIFICATION:  
ASSESSOR'S PARCEL NUMBER:  
049-222-122

APPLICATION TYPE:  
CONDITIONAL USE PERMIT FOR SOLAR ENERGY GENERATION FACILITY

APPLICANT:  
37BF 8ME LLC  
C/O 8MINUTENERGY RENEWABLES  
5455 WILSHIRE BLVD, SUITE 2010  
LOS ANGELES, CA 90036  
(310) 525-0900

REPRESENTATIVE:  
EPD SOLUTIONS, INC.  
C/O RAFIK ALBERT  
2030 MAIN ST., STE. 1200  
IRVINE, CA 92614  
(949) 794-1182

PROPERTY OWNERS:  
GM GABRYCH FAMILY LP  
C/O EUGENE GABRYCH

**SOLVIDA**  
DESIGN + ENGINEERING  
1641 Kains Avenue, Berkeley, California 94702

**8minutenergy**  
RENEWABLES  
5455 Wilshire Blvd., Suite 2010  
Los Angeles, CA 90036

**KRAMER SOUTH SOLAR**  
37BF 8ME LLC

SAN BERNARDINO COUNTY

REV. NO	DESCRIPTION	DATE
4	AHJ COMMENTS	10/21/19
3	AHJ COMMENTS	01/16/19
2	AHJ COMMENTS	07/06/18
1	AHJ COMMENTS	06/29/18
0	PERMIT SUBMITTAL	07/28/17

SHEET TITLE:  
**CONDITIONAL USE PERMIT (CUP) PLAN**

PROJ. MGR.: SS    PROJ. ENGR.: SC    DATE: 05/26/2017  
DRAWN BY: BS    CHECKED BY: GB    SCALE: AS SHOWN

DRAWING NO.  
**CUP-100**

# EXHIBIT F

## Mitigated Negative Declaration (SCH No. 2010031123)



San Bernardino County Land Use Services Department, Planning Division  
 385 North Arrowhead Avenue, First Floor, San Bernardino, CA 92415-0182

**MITIGATED NEGATIVE DECLARATION**

**Project Description**

**APN:** 0492-221-22; 0492-221-26  
**APPLICANT:** LIGHTSOURCE RENEWABLES, LLC  
**COMMUNITY:** KRAMER JUNCTION/1<sup>ST</sup> SUPERVISORIAL DIST.  
**LOCATION:** STATE ROUTE 58, APPROXIMATELY ONE MILE WEST OF U.S. HIGHWAY 395  
**PROJECT NO.:** P200900467  
**PROPOSAL:** CONDITIONAL USE PERMIT TO ESTABLISH A 40 MEGAWATT (MW) PHOTOVOLTAIC (PV) SOLAR ENERGY FACILITY ON A 350 ACRE PORTION OF A 401.6 ACRE PARCEL  
**STAFF:** DOUG FEREMENGA  
**REP('S):** ROBERT FERRARA, LLC

**Vicinity Map**



**March 26, 2010**

**Effective date of Negative Declaration**

Plans and specifications for the referenced project are available for public inspection in the San Bernardino County Land Use Services Department, Current Planning Division.

Pursuant to provisions of the California Environmental Quality Act and the San Bernardino County Environmental Review Guidelines, the above referenced project has been determined not to have a significant effect upon the environment. An Environmental Impact Report will not be required.

Reasons to support this finding are included in the written Initial Study prepared by the San Bernardino County Land Use Services Department, Current Planning Division.

The decision may be appealed by any aggrieved person, organization or agency to the County Board of Supervisors. Appeals shall be filed before the effective date of the Negative Declaration listed above. The Notice of Appeal shall be in writing and shall be filed with the appropriate fee at the San Bernardino County Government Center during normal business hours.

*James M. Squire*  
 James M. Squire, Deputy Director

**March 26, 2010**  
 Date of Determination

SAN BERNARDINO COUNTY  
INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA Guidelines.

**PROJECT LABEL:**

<b>APN:</b>	0492-221-22, 0492-221-26
<b>Applicant:</b>	Mr. Robert Ferrara LightSource Renewables, LLC
<b>Community:</b>	Kramer Junction
<b>Location:</b>	Southeast corner of Highway 58 and Sheep Creek Road, approximately two miles west of US Hwy 395
<b>Project No:</b>	P200900467
<b>Staff:</b>	Doug Feremenga, AICP, Senior Planner
<b>Rep:</b>	Mr. Robert Ferrara LightSource Renewables, LLC 9151 Rehco Road San Diego, California 92121 Tele: (951) 315-6229, FAX: (858) 430-2431 e-mail: robert.t.ferrara@gmail.com
<b>Proposal:</b>	A Conditional Use Permit to establish a 40 megawatt Solar Photovoltaic Energy Facility on a 350-acre portion of a 401.6-acre property.

**USGS Quad:** Kramer Junction and Saddleback Mountain

**T, R, Section:** T10N R7W Sec. 1

**Thomas Bros.:** P 348 / GRID: H-7

**Community Plan:** N/A

**LUZD:** RC- Resource Conservation

**Overlays:** Biotic Resources  
Paleontological Resources

**PROJECT CONTACT INFORMATION:**

**Lead agency:** County of San Bernardino  
Land Use Services Department  
385 N. Arrowhead Avenue  
San Bernardino, CA 92415-0182

**Contact person:** Doug Feremenga, AICP, Senior Planner

**Phone No:** (909) 387-4147 Fax No: (909) 387-3223

**E-mail:** dferemenga@lusc.sbcounty.gov

**Project Sponsor:** LightSource Renewables, LLC  
9151 Rehco Road  
San Diego, California 92121

**PROJECT DESCRIPTION:**

The proposed project, titled the Kramer Junction Solar Farm, would be a 40 megawatt (MW) photovoltaic solar energy generating facility located on approximately 350 acres in the Mojave Desert within San Bernardino County about one (1) mile west of the intersection of State Route 58 and US Highway 395 (**Figure 1, Regional Location**). The property consists of 401.6 acres, of which approximately 45 acres have been previously disturbed for uses such as natural gas pipelines, communications lines, power lines and roads. The project site has relatively flat terrain and is situated less than a mile west of the existing Southern California Edison (SCE) Kramer

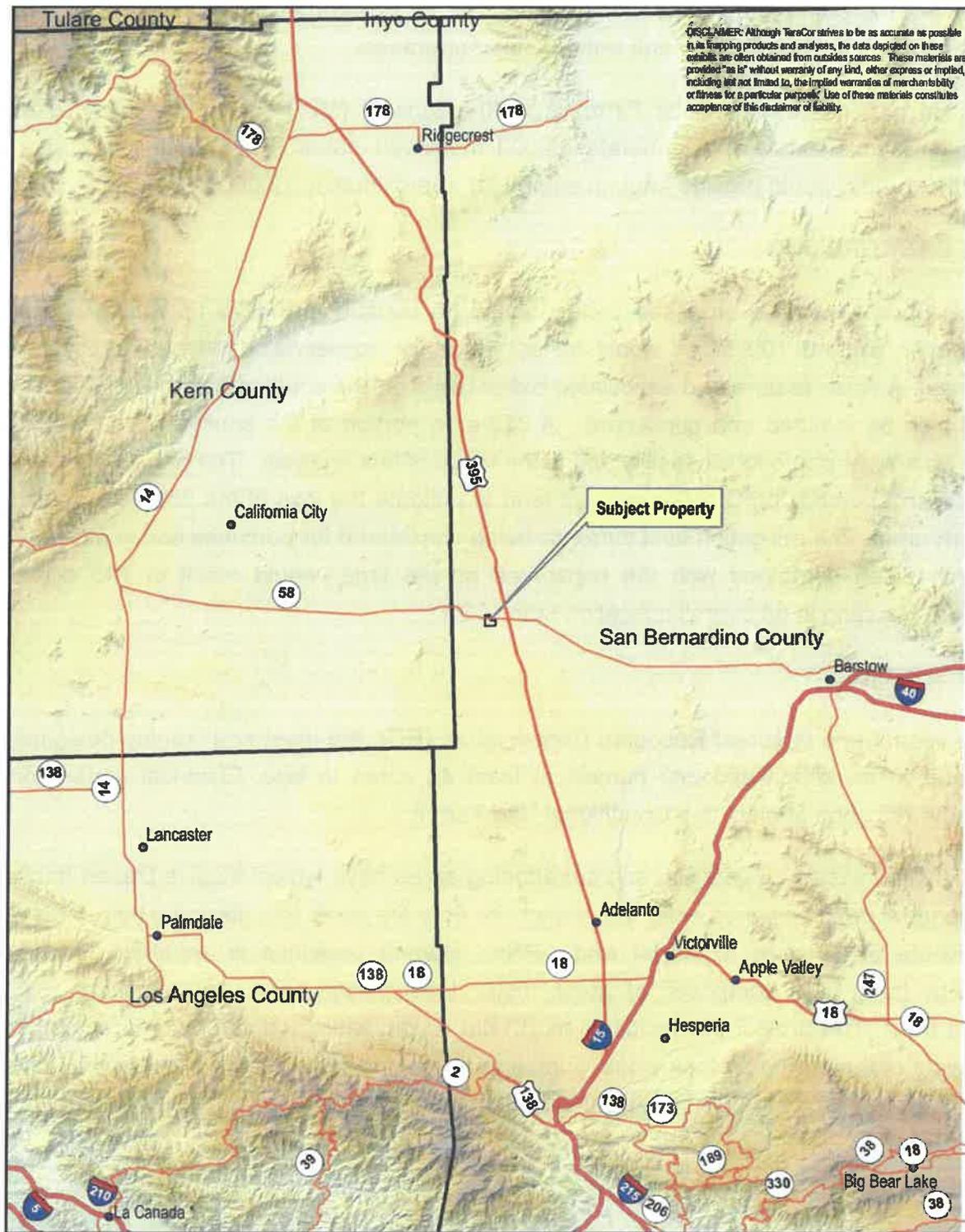
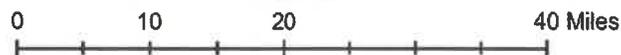


Figure 1  
 Regional Location



Substation. Both a 33kV and 115kV transmission line pass through the site, and the project anticipates connecting via the 33 kV line without major upgrades.

The proposed project (Kramer Solar Farm) is a 40-megawatt (MW) solar photovoltaic electric generating facility. Estimated to generate 95,000 megawatt hours (MWh) in the first year of operation, the project would provide enough energy for approximately 12,000 people.

## PROJECT BACKGROUND

The parcels upon which the proposed project would be constructed make up a little over 450 acres; however, around 100 acres would be set aside for conservation (**Figure 2, Proposed Project Area**). A wash feature and associated buffer lands on the southeast border of the project site would also be avoided and conserved. A 350-acre portion of the southern area would be developed as a solar photovoltaic facility and is the focus of this analysis. The project applicant is in the process of purchasing CDFG-approved land to mitigate the loss of the 350-acre portion of the southern area. The mitigation land currently being considered for purchase encompasses 640 acres, which when combined with the conserved on-site land, would result in 745 acres of conservation, resulting in an overall mitigation ratio of 2:1.

## PROJECT SETTING

The site is vacant and is zoned Resource Conservation (RC), the most rural zoning designation, allowing land to be subdivided into parcels at least 40 acres in size. Electrical generation is allowed in the RC zone subject to a Conditional Use Permit.

The relatively flat, vacant project site and surrounding areas have typical Mojave Desert habitats. Three ephemeral desert washes enter the project site from the south and dissipate before they get to State Route 58 (**Figure 3, Aerial and APNs**). Human presence is apparent on site as evidenced by trash piles composed of wood, metal, tires, plastic beverage containers, and an abandoned truck. The project site includes six (6) dirt roads, which judging by their smoothness and the height of the berms on their sides, appear to be graded periodically. Eight (8) easements and/or rights-of-way cross the property on the north and south) and include the following:

- 
- Burlington Northern Santa Fe Railway
  - State Route 58 rights-of-way for Caltrans
  - California Electric Power Company
  - Nevada-California Electric Corporation
  - Pacific Gas and Electric Company
  - All American Pipeline
  - Pacific Properties
  - Kern River Gas Transmission Company

State Route 58 and the Burlington Northern Santa Fe Railway line parallel each other and divide the property into north and south. The site can presently be accessed from dirt roads that meet State Route 58 and Sheep Creek Road (which is an existing 40-foot-wide County easement dirt road), along the western border.

The Kramer Junction Solar Electric Generating System (SEGS), which is a series of solar thermal (not photovoltaic) electric power plants with turbines, is spread across almost 1,000 acres nearly a mile to the northeast across State Route 58 directly west of US 395. On cloudy days or early evenings, an auxiliary natural gas fired heater operates to supplement sources of power<sup>1</sup>. The solar power eventually heats water, which boils and drives a steam turbine, thereby generating electricity.

To the east about 0.45 mile away is a bus repair yard. The unincorporated community of Kramer Junction is generally located near the intersection of State Route 58 and US 395. Along the highway are several commercial establishments including restaurants, a trucking travel center, gas stations, a restaurant, motels, and a gift shop. The Southern California Edison (SCE) Kramer Substation is also located there. To the south is Federal land, Edwards Air Force Base (AFB), where the Precision Impact Range Area (PIRA) is located. The PIRA makes up 60,800 acres, or 20 percent, of the area of Edwards AFB. Of those 60,800 PIRA acres, 1,800 acres are cleared for target use<sup>2</sup>. This cleared area was not observed from the project site. Between the bus repair yard and Kramer Junction is another part of Edwards AFB.

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<sup>1</sup> Kramer Junction Solar Electric Generating System, <http://www.solel.com/products/pgeneration/ls2/kramerjunction/>, accessed August 5, 2009.

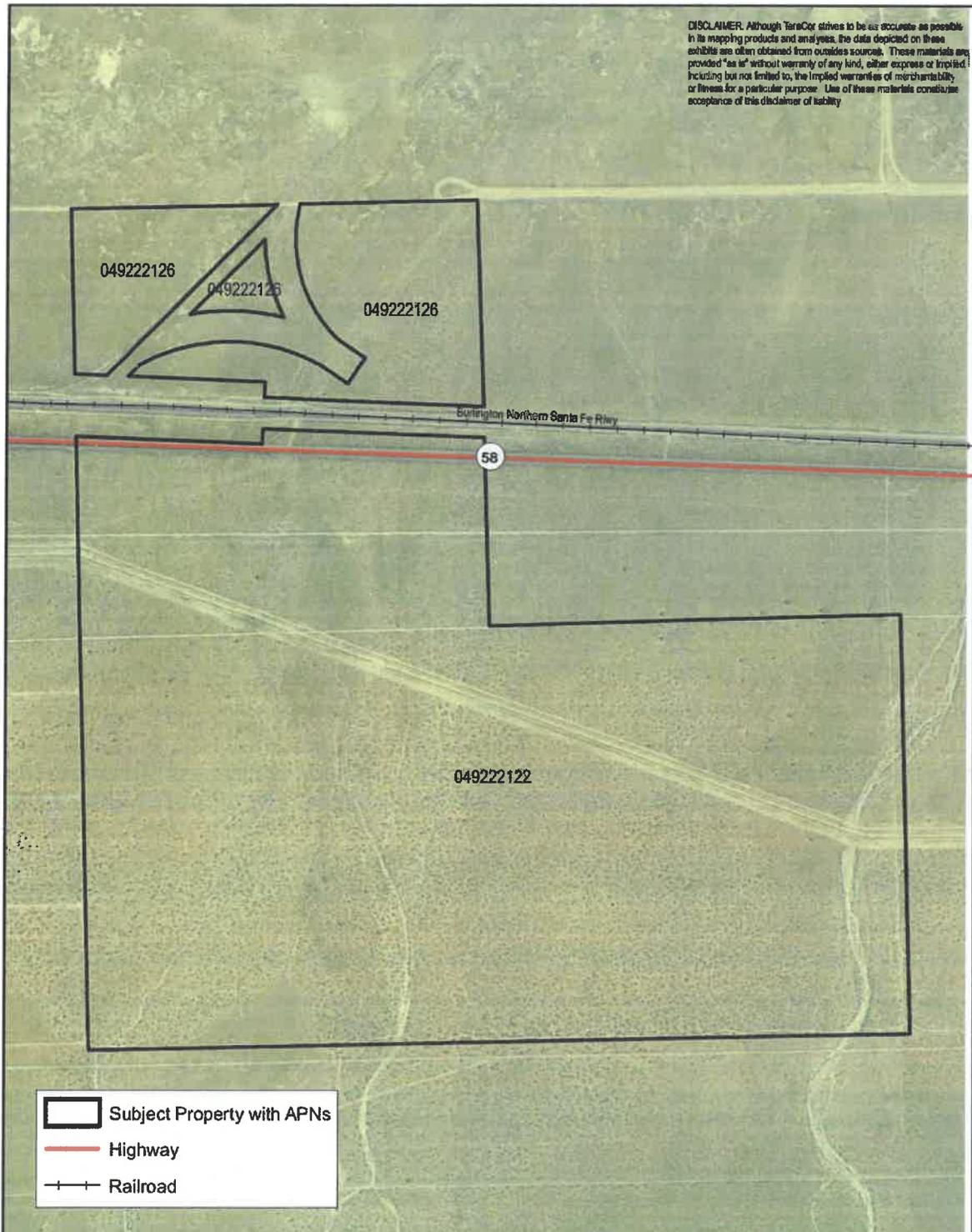
<sup>2</sup> Department of Defense, Mission Sustainment Quarterly Newsletter, *News You Can Use from the DoD Range Sustainment Initiative*, Summer 2009.



LIGHTSOURCE RENEWABLES, LLC - 453  
AUGUST 2009



Figure 2  
Proposed Project Area



LIGHTSOURCE RENEWABLES, LLC - 453  
AUGUST 2009

0 500 1,000 2,000 Feet

Figure 3  
Aerial and APNs - 2005



Aerial view of Project site with SEGS solar project to the northeast



View of Project site with 33kv line in foreground and 110kv line in background



View driving eastbound on State Route 58 along border of project

### Site Photographs

Existing land uses and Land Use Zoning Districts on and adjacent to the project site are listed in **Table 1**.

<b>Location</b>	<b>Existing Land Use</b>	<b>Existing Land Use Zoning District</b>
Project Site	Vacant	Resource Conservation (RC)
North	Vacant, State Route 58, railroad tracks; farther north is the Kramer Junction Solar Electric Generating System (SEGS)	RC
East	Vacant; farther east 0.45 mile is bus repair yard, then jutting portion of Edwards AFB, then Kramer Junction and the Southern California Edison (SCE) Kramer Substation one mile east of the site boundary.	Rural Living (RL), portion is RC
South	Edwards AFB Precision Impact Range Area (PIRA)	RC
West	Vacant	RC

*Sources:* County of San Bernardino 2007 Development Code, Title 8, Division 2, Chapter 82.01, Section 20; Kramer Junction Land Use Zoning District, map EH04 A; existing land uses determined by site visit on July 26, 2009, and examination of technical reports for this Initial Study and of aerial images.

## **PROJECT CHARACTERISTICS**

The proposed project consists of a photovoltaic power system that utilizes sunlight to generate electricity and other related equipment.

### **Photovoltaic Power System**

Photovoltaic power systems convert sunlight solar energy into direct current (DC), and inverters convert the DC to alternating current (AC), which is eventually used by households and businesses. The process starts with photovoltaic cells, which make up photovoltaic modules, also referred to as solar panels (environmentally sealed collections of photovoltaic cells). Several photovoltaic modules make up photovoltaic arrays.

The proposed project design (**Figure 4, Site Plan**) includes the arrangement of photovoltaic modules, inverters, and other items into one (1)-megawatt (MW) blocks that, combined, would achieve the full plant capacity of 40 MW.

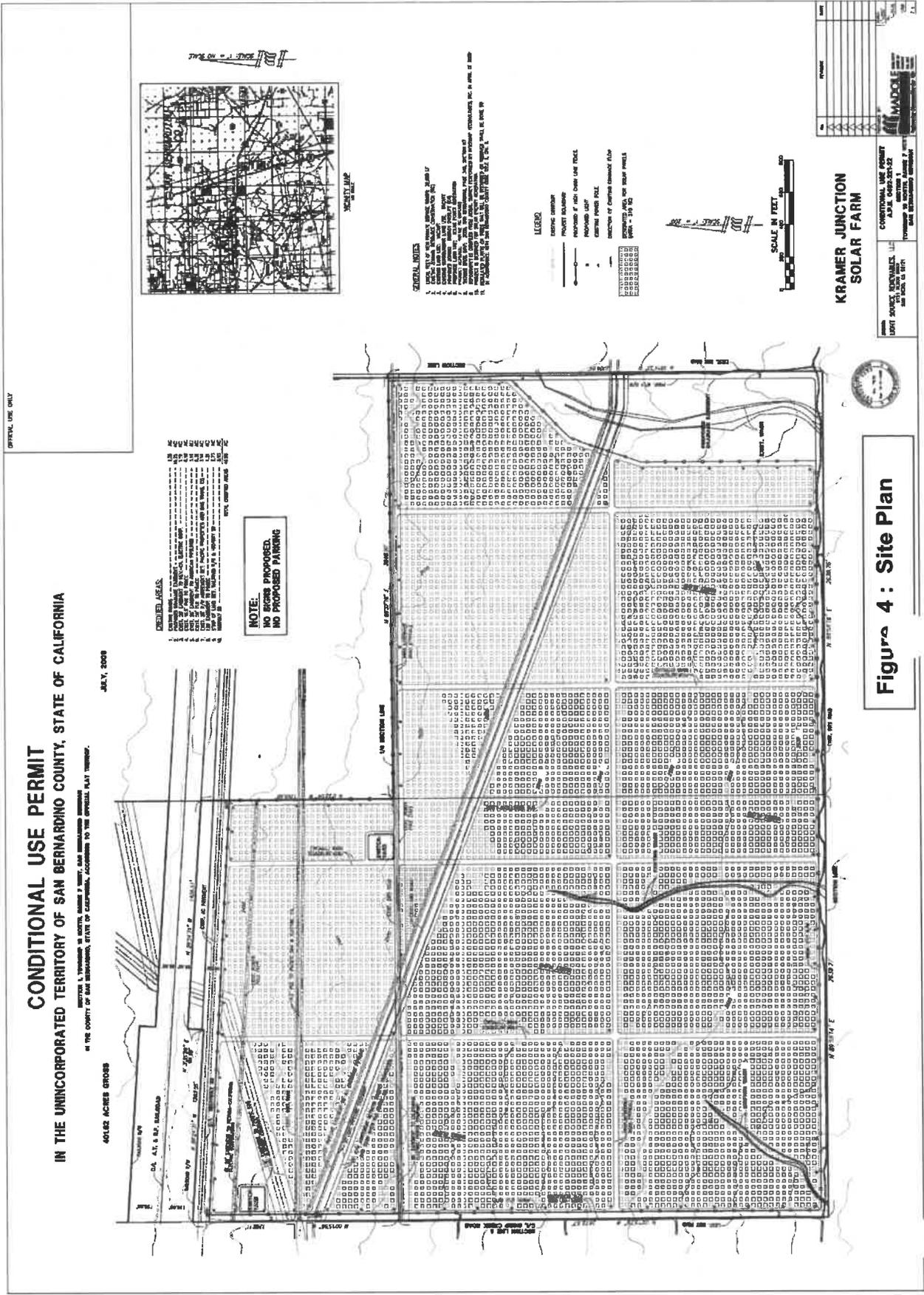


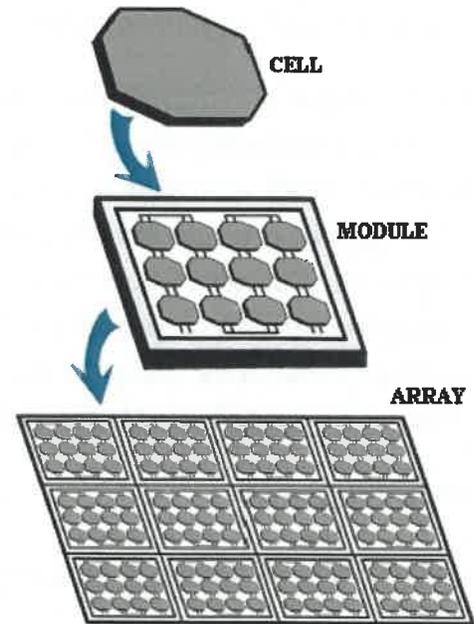
Figure 4: Site Plan

Major components of the proposed project would include the following:

- Photovoltaic modules and photovoltaic arrays;
- Tracker units; and
- Inverters and transformers.

### Photovoltaic Modules and Photovoltaic Arrays

Photovoltaic modules, which are similar to rooftop solar panels, would produce all the electricity generated by the project facilities. Photovoltaic modules are non-reflective and convert sunlight directly into DC electricity. They would be mounted on tracker units arranged in photovoltaic arrays, which are connected groups of photovoltaic modules.



### Tracker Units

Photovoltaic modules would be mounted on tracker units that would face south and tilt to take full advantage of the sun. The tilted tracker units would rotate the solar modules from east to west to follow the sun on a single axis throughout the day. The tracker units are linked together and attached to a drive motor in long rows. These tracker rows are parallel to one another to create a photovoltaic array, with space between each row to avoid one row shading the next.



### Inverters and Transformers

Electrical energy generated by the tracker units would be gathered via an underground collection system to centralized inverters that convert the power to AC for use by the electrical grid. The project inverters and transformers, as well as other electrical equipment, would be located within

approximately 40 protected electrical equipment enclosures supported by concrete pads. Each enclosure would be approximately 15 feet wide, 60 feet long, and 10 to 12 feet in height.

The DC output of multiple rows of photovoltaic modules would be collected along an underground trench (approximately three (3) feet deep and up to five (5) feet wide [width includes trench and disturbed area]) and sent to an inverter. The inverter would convert the DC electricity to AC electricity, which would then flow to a step-up transformer (a transformer that increases voltage). Multiple transformers would be connected in series, and would deliver AC electricity along an underground trench (approximately four (4) feet deep and up to five (5) feet wide [width includes trench and disturbed area]) to electrical risers located throughout the site. From the risers, the power would be delivered to the internal overhead collection lines and onward.

### **Other Equipment**

Other equipment related to the proposed project includes the following:

- Switchyards;
- Roads, fencing, water supply, and lighting; and
- A meteorological station.

### **Switchyards**

Because the proposed project would be constructed in two phases, it would require two outdoor switchyards, where electricity that is created at the Kramer Solar Farm would be transferred to the nearby SCE substation. The switchyards would be located south of State Route 58 in the northern portion of the proposed 350-acre developed area adjacent to the pole lines.

Each fenced 150-square-foot switchyard area would be surfaced with a combination of concrete pads, compacted road base for internal access roads, and compacted soils. A transformer in the switchyard would change the voltage up or down for off-site transmission. Each transformer would be surrounded by an earthen or concrete containment berm and/or curb. The containment area would be lined with an impermeable membrane covered with gravel, and would drain to an underground storage tank. Any stormwater or fluid drained to the tank would be pumped through an oil/water separator to a holding pond, where it would be retained, pending discharge or disposal. The holding pond system would be designed to accommodate the volume of the dielectric (non-conductive) fluid in the transformer plus an allowance for rain.

## **Roads, Fencing, Water Supply, and Lighting**

The internal roadway system of the proposed project would include perimeter roads surrounding the facility, as well as a network of 30-foot-wide dirt roads approximately 1,200 feet apart. An eight (8)-foot security fence, built during the first phase of construction, would secure the solar field area as well as the perimeter of the project site. Additionally, this fence would be buried underground to prevent burrowing animals, such as desert tortoise (*Gopherus agassizii*), from entering the site. Lighting would be provided along the perimeter and at key intersections within the proposed project.

## **Meteorological Station**

The project would include one or more small solar meteorological stations to measure solar energy, air temperature, and wind speed. Located inside the photovoltaic array field, the station(s) would be mounted on tripods that would require no permanent foundation. The proposed project's power system or a dedicated photovoltaic module with a small battery would provide power.

## **PROJECT CONSTRUCTION**

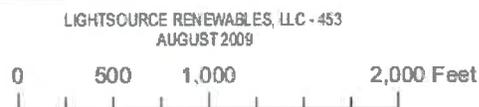
Construction is expected to begin in late 2010. Two (2) phases of construction (**Figure 5, Construction Phases**) are anticipated to take one year, with approximately five (5) months of activity for each phase. Each construction phase would generally consist of several arrays of photovoltaic modules of 20 MW.

Construction activities would include grading, trenching, placing components securely, etc. There would be no soil import or export necessary, because the site is flat, and photovoltaic modules can be adjusted for variations in grade. Minimal grading would be required. Cut and fill would likely be an equal 50 cubic yards. The main purpose of grading would be to clear vegetation. Trenching would be required to place various components of the proposed project underground. The placement of components aboveground may include various methods; however, ground disturbance would largely be created by grading.

Construction staging areas would be used to keep construction equipment and materials nearby; these areas would be located along the existing or proposed dirt roads or central locations within each construction phase. No construction staging area would be located in conservation areas or off the project developed area site. A total of 560 truck trips (about six (6) trucks per day) are anticipated over the 105 day (21 working days per month) construction period for each phase.



Figure 5  
 Construction Phases



Forty-foot trailer trucks will be delivering PV modules, inverters, tables, piers, pier caps, wire, collection gear, and other hardware to the project site.

Construction traffic would include approximately 40 commuting construction workers (carpenters, electricians, laborers, operating engineers, and technicians), accounting for approximately 40 round trips per day. There would be no haul truck trips to transfer soil.

A variety of construction equipment, listed in **Table 2**, would be used to complete the proposed project.

Equipment	Estimated Number of Pieces of Equipment	
	Phase 1	Phase 2
Grader (CAT-12)	1	1
Excavator, CAT 235	1	1
Dozer (D-8)	1	1
Dump Truck (15 Cylinder)	1	1
Compactor	1	1
Water Truck, 4,000 gallons	1	1
Concrete Truck	1	1
Case Backhoe / Front End Loader (580)	1	1
Hydraulic Mobile Crane (15 Ton)	1	1
Grade All	1	1
Flatbed – State Body Truck	3	3
Crawler Trencher	1	1
Pick Up Truck	12	12

## PROJECT MAINTENANCE

Once the proposed project is operational, there would be minimal maintenance required. Maintenance would primarily consist of washing the photovoltaic modules two (2) to four (4) times per year. A minimal amount of water would be used to clean and then drain without ponding or collecting dirt. The site would utilize de-ionized wash water for washing the modules, which would be delivered to the site via 4,000-gallon water trucks. Each wash cycle would consume approximately 100,000 gallons of water (0.30 acre feet).

There would be no on-site staff; therefore, no on-site water or sewer hookups would be required, thereby eliminating maintenance of water and sewer utilities. Security cars would randomly patrol the area twice per day. In addition, there would be surveillance cameras with remote security monitoring the site 24 hours/day.

## PROJECT DESIGN AND CONSTRUCTION FEATURES

The proposed project will include design features to avoid significant impacts to the environment. Because these design features have been incorporated into the design of the proposed project, they are not considered to be mitigation measures.

### *General Measures*

- The proposed project will comply with applicable local ordinances, standards, and procedures for public facility design, construction, and operation.

### *Air Quality*

- To reduce dust, the speed of motor vehicles involved in construction will be limited to 15 miles per hour (mph) while traveling on dirt roads or anywhere on the project site.
- The proposed project will comply with the Mojave Desert Air Quality Management District (MDAQMD) Rule 401 "Visible Emissions," Rule 402 "Nuisance," Rule 403.2 "Fugitive Dust Control for the Mojave Desert Planning Area," and Rule 405 "Solid Particulate Matter Weight."

### *Hazards*

- Prior to occupancy, project applicant shall submit Business Emergency / Contingency Plan for emergency release or threatened release of hazardous materials and wastes or a letter of exemption to the Office of the County Fire Marshall, Hazardous Material Division.
- Hazardous materials will be handled in accordance with State and Federal requirements.
- The Construction Contractor will have Construction Safety Orders and General Industry Safety Orders, which are issued by the State Division of Industrial Safety, along with other required forms and plans at the work site.
- The Construction Contractor will be responsible for implementing, administering, and maintaining a confined space entry program if applicable.

### *Noise*

- The Construction Contractor will place all stationary construction equipment so that emitted noise will be directed away from sensitive receptors (i.e., residences to the east).

- Construction activities will be limited to between the hours of 7 am and 7 pm, Monday through Friday. Grading will not be allowed on weekends and holidays.
- During construction of the project, construction equipment shall be properly maintained and include proper tuning and timing of engines to minimize noise emissions.
- All construction equipment shall be fitted with properly operating mufflers, air intake, silencers, and engine shrouds as called for in the manufacturer's specifications for each piece of equipment.

**Other public agencies whose approval is required, e.g., permits, financing approval, or participation agreement**

- California Regional Water Quality Control Board, Lahontan Region
- Caltrans District 8
- California Department of Fish and Game
- US Fish and Wildlife Service

**EVALUATION FORMAT**

This initial study is prepared in compliance with the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21000, et seq. and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an Initial Study is guided by Section 15063 of the State CEQA Guidelines. This format of the study is presented as follows. The project is evaluated based upon its effect on 18 major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor.

The Initial Study Checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The potential effect of the project is categorized into one of the following four categories of possible determinations:

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

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

1. **No Impact:** Therefore, no impacts are identified or anticipated and no mitigation measures are required.
2. **Less than Significant Impact:** Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.
3. **Less than Significant Impact with Mitigation Incorporated:** Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List mitigation measures)
4. **Potentially Significant Impact:** Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are (Listing the impacts requiring analysis within the EIR). At the end of the analysis the required mitigation measures are restated and categorized as being either self- monitoring or as requiring a Mitigation Monitoring and Reporting Program.

At the end of the analysis the required mitigation measures are restated and categorized either as being 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 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:

<input type="checkbox"/>	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	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 applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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.

*Doug Feremenga*

Signature (prepared by Doug Feremenga, AICP, Senior Planner)

May 28, 2010

Date

*Carrie Hyke*

Signature: Carrie Hyke, AICP, Principal Planner  
 Advance Planning Division, Environmental and Mining Section

May 28, 2010

Date

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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**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):

a,c) **Less than Significant Impact.** The County General Plan Open Space Element, Policy OS 5.1. states that a feature or vista can be considered scenic if it:

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

The Saddleback Mountains are located approximately five (5) miles north of the project site. The BNSF Railway line and State Route 58, closely parallel one another directly north of the site. Highway advertising signs and a railroad signaling structure powered by photovoltaic cells are visible to the north.

Multiple lines of above ground telephone and high-voltage electric lines run mainly east to west through the area. At the intersection of State Route 58 and US 395, Kramer Junction provides fast food outlets, a trucking travel center, gas stations, a restaurant, motels, and a gift shop.

Views to the east include high-voltage electrical lines and towers and the Southern

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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California Edison (SCE) Substation. The SCE Substation in Kramer Junction covers almost 40 acres, which is smaller than the acreage for the project site, but its looming towers make it a landmark in the area. Another landmark in the area is the Kramer Junction Solar Electric Generating System (SEGS), which is a series of solar thermal electric power plants with steam turbines and other large equipment. The SEGS site is nearly a mile from the project site to the northeast across State Route 58 directly west of US 395. It covers approximately 1,000 acres and from a distance, it appears blue in color due to the mirrors.

To the east from the project site about 0.45 mile away is an industrial site (bus repair yard).. To the south is Federal land, Edwards AFB, where the Precision Impact Range Area (PIRA) is located. The PIRA makes up 60,800 acres and 1,800 acres are cleared for target use<sup>3</sup>. This cleared area was not observed from the project site.

The project site is currently vacant and relatively flat, crossed with six (6) dirt roads and wooden poles that carry electrical wires. The site and surrounding areas have typical Mojave Desert habitats. State Route 58 and the railway line parallel each other and divide the larger property into north and south (the south is where development would occur). The site can presently be accessed by dirt roads that meet State Route 58 and from Sheep Creek Road, which borders the site on the west. There are a number of illegally dumped trash piles on the site.

The equipment that would be part of the proposed project would maintain a low profile no more than 12 feet high. Photovoltaic modules, which convert sunlight directly into DC electricity, are non-reflective. They would be mounted on tracker units arranged in photovoltaic arrays. The project inverters and transformers, as well as other electrical equipment, would be located within approximately 40 protected electrical equipment enclosures supported by concrete pads. Each enclosure would be approximately 15 feet wide, 60 feet long, and 10 to 12 feet in height.

Two (2) outdoor 150-square-foot switchyards, where electricity created at the Kramer Solar Farm would be transferred to the nearby SCE substation, would have poles that would be

<sup>3</sup> Department of Defense, Mission Sustainment Quarterly Newsletter, News You Can Use from the DoD Range Sustainment Initiative, Summer 2009.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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no taller than the existing poles on the project site. The switchyards would be located south of State Route 58 in the northern portion of the proposed 350-acre developed area adjacent to existing pole lines on the site for easy access.

The proposed internal roadway system of the project would include perimeter roads surrounding the facility, as well as a network of 30-foot-wide dirt roads approximately 1,200 feet apart. An 8-foot security fence, built during the first phase of construction, would secure the solar field area as well as the perimeter of the project site. Shielded lighting would be provided along the perimeter and at key intersections within the proposed project. Mounted on tripods that would require no permanent foundation, one or more small solar meteorological stations would measure solar energy, air temperature, and wind speed.

Construction would begin in November 2010. Two (2) phases of construction are anticipated to take one year each. Each construction phase would generally consist of several arrays of photovoltaic modules of 20 MW. Once the proposed project was operational, there would be minimal maintenance needed, primarily washing the photovoltaic modules two to four times a year. There would be no onsite staff. No signage or parking is proposed.

Viewers of the project area would consist mainly of motorists on State Route 58. The proposed project would not introduce a new use that is unexpected in the area. As interest in solar energy increases, solar farms will become a more commonly encountered land use, particularly in remote desert areas that provide large areas of open land and adequate sunlight. Considering the surrounding uses and lack of sensitive viewers in the area, the proposed project would not have a substantial adverse effect on a scenic vista or adversely change the visual character of the area; impacts would be less than significant.

- b) **Less than Significant Impact.** State Route 58 is not an officially designated scenic highway; however, the portion of State Route 58 from State Route 14 (near Mojave) to Interstate 15 (near Barstow) is eligible for designation<sup>4</sup>. This includes the portion of State Route 58 that traverses through the project site. The project site; however, is currently vacant and does not contain any historic buildings or rock outcroppings. While the project

<sup>4</sup> Caltrans Scenic Highways Program, <http://www.dot.ca.gov/hq/LandArch/scenic/cahisys2.htm>, accessed August 3, 2009.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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site does contain Joshua trees (which are discussed in more detail in the Biological Resources section), all Joshua trees would be handled in accordance with County requirements for native desert plants. This would include the relocation of Joshua trees that meet County requirements. Compliance with County requirements would ensure impacts related to tree removal would be less than significant. The project site is not located within close proximity to any roadways designated by the County as a scenic route<sup>5</sup>. Thus, the development of the proposed project would not substantially damage scenic resources within a state scenic highway. Impacts would be less than significant.

- d) **Less than Significant Impact.** County Ordinance No. 3900 regulates glare, outdoor lighting, and night sky protection. Nighttime lighting associated with the proposed project would include lighting provided along the perimeter and at key intersections within the project site. All lighting for the project would be subject to County approval and compliance with County requirements. The proposed project would not include any uses that would produce substantial glare, including the photovoltaic modules, which are non-reflective. As the project would be required to adhere to County Ordinance 3900, impacts associated with glare and lighting would be less than significant.

**II. AGRICULTURE 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. Would the project:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

<sup>5</sup> County of San Bernardino 2007 General Plan, Conservation Element, Adopted March 13, 2007; pages VI-13 through VI-17.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

- a) **No Impact. No Impact.** The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the California Department of Conservation<sup>6</sup>. As the proposed project would not convert Farmland (as designated by the California Department of Conservation), no impact would occur.
- b) **No Impact.** The project site is currently vacant and zoned RC (Resource Conservation). The project site is not zoned for agricultural use, and is not designated as Williamson Act land<sup>7</sup>. No impact to existing agricultural resources or Williamson Act lands would occur.
- c) **No Impact.** The project site is not designated as Farmland or for agriculture uses. The site is vacant and is not used for agricultural crops, nor are there any plans to utilize the site for agricultural uses. Thus, the proposed project would not result in any changes to the environment that could result in the conversion of agricultural uses to non-agricultural uses. No impact would occur.

**III. AIR QUALITY -** Where available, the significance criteria established by the applicable air quality management or air pollution control district might be relied upon to make the following determinations. Would the project:

- |   |                          |                                     |                                     |                          |
|---|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan?   | <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 | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

<sup>6</sup> County of San Bernardino, Conservation Background Report; February 1, 2006; Figure 6-9C: Prime Farmland, Desert Region.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 Air Quality Management Plan, if applicable):

a) **Less than Significant Impact.** The project site is located within the Mojave Desert Air Basin (MDAB) and is within the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). The Air Quality Management Plan (AQMP) provides a program for obtaining attainment status for key monitored air pollution standards, based on existing and future air pollution emissions resulting from employment and residential growth projections. The AQMP is developed using input from various agencies' General Plans and other projections for population and employment growth. While the proposed project is not identified specifically in the County General Plan, it would not generate new homes or employment opportunities that would change the County's projections. Given that the proposed project would not alter the population or employment projections considered during the development of the AQMP, and considering the minor emissions attributable to the proposed project during operation (refer to discussion in item III(b) below), impacts associated with AQMP consistency would be less than significant.

b) **Less than Significant Impact with Mitigation Incorporated.** During the construction phase of the project, on-site stationary sources, heavy-duty construction vehicles, construction worker vehicles, and energy use would generate emissions. In addition, fugitive dust would be generated during grading and construction activities. The following significance thresholds for criteria pollutants have been established by the MDAQMD:

- 137 pounds per day or 25 tons per year of Reactive Organic Gases (ROG);
- 137 pounds per day or 25 tons per year of nitrogen oxides (NOX);
- 548 pounds per day or 100 tons per year of carbon monoxide (CO);

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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- 137 pounds per day or 25 tons per year of sulfur oxides (SOX);
- 82 pounds per day or 15 tons per year of particulate matter 10 microns or less in diameter (PM10); and
- 82 pounds per day or 15 tons per year of particulate matter 2.5 microns or less in diameter (PM2.5).

Projects in the MDAQMD with construction-related emissions or operation-related emissions that exceed any of the emission thresholds listed are considered to have significant impacts. **Table 3** summarizes the proposed project's estimated emissions for construction.

Construction Periods	Pollutants (lbs/day)					
	ROG	NOX	CO	SOx	PM10	PM2.5
2010 totals (unmitigated)	4.91	40.36	23.34	0.00	<b>152.00</b>	33.16
2010 totals (mitigated)	4.91	40.36	23.34	0.00	79.71	18.06
2011 totals (unmitigated)	18.08	113.98	335.14	0.50	<b>151.89</b>	33.05
2011 totals (mitigated)	18.08	113.98	335.14	0.50	79.60	17.96
2012 totals (unmitigated)	16.76	104.37	308.44	0.50	6.10	4.50
2012 totals (mitigated)	16.76	104.37	308.44	0.50	6.10	4.50
<b>MDAQMD Thresholds</b>	<b>137</b>	<b>137</b>	<b>548</b>	<b>137</b>	<b>82</b>	<b>82</b>

As shown in **Table 3** above, peak construction emissions, with no mitigation, would not exceed the applicable thresholds for ROG, NOX, CO, SOX, or PM2.5. However, emissions of PM10 would exceed the daily threshold during 2010 and 2011 construction. This is a significant impact, requiring mitigation. Implementation of mitigation measure **AIR-1** and compliance with MDAQMD's Rules 403 and 403.2 for fugitive dust control would reduce impacts to a less than significant level by reducing PM10 emissions below the daily threshold of 82 lbs.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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**Mitigation Measures:**

**AIR-1:** The project applicant shall ensure that the following dust suppression measures are implemented as part of the project's mitigation:

1. Disturbed areas of the site shall be watered a minimum of three times daily.
2. All excavating and grading operations shall be suspended when wind speeds (as instantaneous gusts) exceed 25 mph.
3. Wheel washers shall be installed where vehicles enter and exit unpaved roads onto paved roads; trucks and any equipment shall be washed down before leaving the site.
4. All on-site roads and other areas that have no vegetation shall be paved, watered, or chemically stabilized.

**Table 4** identifies vehicle emissions associated with the long-term operations activities. As shown in the table, emissions from the proposed project would not exceed MDAQMD's threshold for any criteria pollutants.

Operational Emission Source	Pollutants (lbs/day)					
	ROG	NO <sub>x</sub>	CO	Sox	PM <sub>10</sub>	PM <sub>2.5</sub>
Vehicle Emissions	13.56	5.32	122.70	0.10	15.14	2.86
<b>MDAQMD Threshold</b>	<b>137</b>	<b>137</b>	<b>548</b>	<b>137</b>	<b>82</b>	<b>82</b>

- c) **Less than Significant Impact.** The project would contribute criteria pollutants in the area during the construction period. However, since the proposed project's emissions would be below MDAQMD thresholds, as discussed in response III(b) above, impacts would be less than significant.

- d) **No Impact.** Sensitive receptors are defined as populations that are more susceptible to the effects of pollution than the population at large. Sensitive receptors include long-term health care facilities, convalescent centers, hospitals, residences, playgrounds, rehabilitation centers, retirement homes, schools, child care centers, and athletic facilities. There are no nearby sensitive receptors; therefore, the proposed project would not expose any sensitive receptors to substantial pollutant concentrations. There would be no impacts.
- 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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**IV. BIOLOGICAL RESOURCES - Would the project:**

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- |  |                          |                                     |                                     |                          |
|--|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 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 checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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**SUBSTANTIATION:** (Check if project is located in the Biological Resources Overlay or contains habitat for any species listed in the California Natural Diversity Database 

The following discussion of biological impacts is based on the following technical studies prepared for the proposed project:

- General Biological Assessment for an Approximate 453.0-Acre Property in the County of San Bernardino, California, Assessor's Parcel No.'s 0492-221-22, -26, TERACOR Resource Management, August 6, 2009.
- Protocol Survey for Desert Tortoise (*Gopherus Agassizii*) for an Approximate 453.0-Acre Property in the County of San Bernardino, California, Assessor's Parcel No.'s 0492-221-22, -26, TERACOR Resource Management, August 7, 2009.
- Desert Native Plant Assessment for an Approximate 453.0-Acre Property in the County of San Bernardino, California, Assessor's Parcel No.'s 0492-221-22, -26, TERACOR Resource Management, August 7, 2009.

a) **Less than Significant Impact with Mitigation Incorporated.** A number of sensitive species are known to inhabit the area in which the project site is located. **Table 5** identifies species that have potential to occur on the project site.

<b>Table 5: Local Sensitive Species</b>		
Species	Sensitive Species Status	Presence/Probability of Occurrence on the Site
<b>Plants</b>		
<b>white pygmy-poppy</b> ( <i>Canbya candida</i> ) .	California Native Plant Society List 4.2 This species has no formal governmental listing.	<b>Moderate.</b> Biological surveys were conducted on the Property in April and May during this species' blooming period and was not detected. According to the CNDDDB, white pygmy-poppy was last detected in 1952 just east of Highway 395 approximately 8.0 miles southeast of the Site
<b>desert cymopterus</b> ( <i>Cymopterus deserticola</i> )	California Native Plant Society List 1B.2 This species has no formal governmental listing.	<b>Confirmed Present.</b> One individual of this species was detected at the site beneath a creosote bush along the southern Property boundary of the Site.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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Species	Sensitive Species Status	Presence/Probability of Occurrence on the Site
<b>Barstow woolly sunflower</b> ( <i>Eriophyllum mohavense</i> )	California Native Plant Society List 1B.2 This species has no formal governmental listing.	<b>Moderately High.</b> This species blooms from April to May. This species was not detected over the course of several surveys on the Property; however, habitats on the Site are highly suitable. According to the CNDDDB, this species was most recently detected in 2003 approximately 1.9 miles southwest of the Property; however, it was recorded as occurring approximately 265 feet north of the Property in 1987.
<b>Sagebrush loeflingia</b> ( <i>Loeflingia squarrosa</i> var. <i>artemisiarum</i> )	California Native Plant Society List 2.2 This species has no formal governmental listing.	<b>Moderate.</b> Biological surveys were conducted on the Property during this species blooming period (April to May); however, this species was not detected. According to the CNDDDB, sagebrush loeflingia was last detected within the vicinity of the Site in 2003. It was detected approximately 5.8 miles south of the Property.
<b>Reptiles</b>		
<b>California Legless Lizard</b> ( <i>Anniella pulchra</i> )	State Species of Special Concern	<b>Moderate.</b> It occurs in a variety of habitats that include sandy desert wash habitats similar to those present on the Site.
<b>Desert Tortoise</b> ( <i>Gopherus agassizii</i> )	Federally listed as Threatened, State listed as Threatened	<b>“Determined” Present.</b> Protocol surveys were conducted for Desert Tortoise on the Property during April and May 2009. Sign was detected on the Property, which included inactive burrows and an adult Desert Tortoise carcass (shell).
<b>Desert Rosy Boa</b> ( <i>Lichanura orcutti</i> )	State Special Animal	<b>Moderate.</b> The Site contains a number of physical features that are characteristic elements of Desert Rosy Boa habitat but it lacks one important feature, rocky areas.
<b>Birds</b>		
<b>Sharp-shinned Hawk</b> ( <i>Accipiter striatus</i> )	State Watch List Bird Species (Nesting)	<b>Moderately Low.</b> This species of raptor does not occur in southern California, except for high elevation mountainous areas, during the nesting season. It could use the Property for wintering or as a migratory stopover. The Sharp-shinned Hawk, though seldom, will occur in desert areas in winter.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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Species	Sensitive Species Status	Presence/Probability of Occurrence on the Site
<b>Burrowing Owl</b> ( <i>Athene cucularia</i> )	State Species of Special Concern (Burrow sites and some wintering sites)	<b>Moderately Low.</b> This species does not nest on the Property. Biological surveys on the Site were conducted and no Burrowing Owl was detected. The Property contains numerous abandoned burrow complexes, which are suitable for Burrowing Owl; however, these complexes lacked any sign of Burrowing Owl use or occupation (i.e., feathers, pellets, and/or wash). Burrowing Owl have been observed in this general area.
<b>California Horned Lark</b> ( <i>Eremophila alpestris actia</i> )	State Watch List Bird Species	<b>Confirmed Present.</b> This bird was commonly detected on the Property during surveys in Spring and Summer 2009.
<b>Loggerhead Shrike</b> ( <i>Lanius ludovicianus</i> )	State Species of Special Concern (Nesting)	<b>Moderate.</b> Although this species was not detected on the Property, it could potentially occur due to structurally suitable habitats being present.
<b>Black-tailed Gnatcatcher</b> ( <i>Poliopitila melanura</i> )	State Special Animal	<b>Confirmed Present.</b> This species was detected on the Property during field surveys in April and May 2009.
<b>Le Conte's Thrasher</b> ( <i>Toxostoma lecontei</i> )	State Species of Special Concern	<b>Moderately High.</b> Habitats on the Property are highly suitable for this species. Le Conte's Thrasher prefers habitats of open desert scrub often comprised of saltbush and creosote bush. This species was not detected on the Property.
Species	Sensitive Species Status	Presence/Probability of Occurrence on the Site
<b>Mammals</b>		
<b>pallid bat</b> ( <i>Antrozous pallidus</i> )	State Species of Special Concern	<b>Moderately High.</b> Occasional cavities occur where branches have broken on a few of the Joshua trees present on the site that could be a suitable roost site; however, this species was not directly observed during field surveys.
<b>pallid San Diego pocket mouse</b> ( <i>Chaetodipus fallax pallidus</i> )	State Species of Special Concern	<b>Moderate.</b> Detailed life history information is lacking on this subspecies; however, Hall (1959) depicts this subspecies' range, which includes the Property.
<b>Townsend's bigeared bat</b> ( <i>Corynorhinus townsendii</i> )	State Species of Special Concern	<b>Moderately Low.</b> No suitable roost sites were detected on the Property; however, it could occasionally utilize the Site to forage.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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Species	Sensitive Species Status	Presence/Probability of Occurrence on the Site
<b>spotted bat</b> ( <i>Euderma maculatum</i> )	State Species of Special Concern	<b>Moderate.</b> No suitable roost sites are present within the Site; however, it could occasionally utilize the Site to forage.
<b>western mastiff bat</b> ( <i>Eumops perotis californicus</i> )	State Species of Special Concern	<b>Moderately Low.</b> No suitable roost sites are present within the Site; however, it could occasionally utilize the Site to forage.
<b>California leaf-nosed bat</b> ( <i>Macrotus californicus</i> )	State Species of Special Concern	<b>Moderate.</b> No suitable roost sites are present within the Site; however, it could occasionally utilize the Site to forage.
<b>western small-footed myotis</b> ( <i>Myotis ciliolabrum</i> )	State Special Animal	<b>Moderate.</b> Suitable roost sites, such as exfoliating "bark" material on a few of the Joshua trees present on the Site; however, roosting is unlikely. This species may occasionally forage above the Property.
<b>cave myotis</b> ( <i>Myotis velifer</i> )	State Species of Special Concern	<b>Moderate.</b> Although no suitable roost sites (i.e., large caves) are present on the Property, this species may occasionally utilize the Site as a foraging ground.
<b>Yuma myotis</b> ( <i>Myotis yumanensis</i> )	State Special Animal	<b>Low.</b> This species' distribution is closely tied to bodies of water, which are not present on the Site.
<b>pocketed free-tailed bat</b> ( <i>Nyctinomops femorosaccus</i> )	State Species of Special Concern	<b>Low.</b> No suitable roost sites were detected on the Property due to the lack of riparian habitat.
<b>big free-tailed bat</b> ( <i>Nyctinomops macrotis</i> )	State Species of Special Concern	<b>Low.</b> Marginally suitable roost sites were detected on the Site; however, it likely does not utilize the Site.
<b>Mohave ground squirrel</b> ( <i>Spermophilus mojavensis</i> )	State listed as Threatened	<b>High.</b> Habitats on the Property are highly suitable for this organism. This species was most recently detected in 1992 approximately 7.4 miles southeast of the Property, according to the CNDDB.
<b>American badger</b> ( <i>Taxidea taxus</i> )	State Species of Special Concern	<b>Low.</b> The American badger could roam onto the Site from the surrounding hillsides, but this possible occurrence is expected to be transient.

Source: General Biological Assessment for an Approximate 453.0-Acre Property in the County of San Bernardino, California, Assessor's Parcel No.'s 0492-221-22, -26, TERACOR Resource Management, August 6, 2009; Table 1.

The probability of the 26 special status species to occur on site is summarized as follows:

- Four species have **Low** potential to occur;
- Four species have **Moderately Low** potential to occur;
- Ten species have **Moderate** potential to occur;
- Three species have **Moderately High** potential to occur;
- One species has a **High** potential to occur;

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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- Three species (desert cymopterus, California Horned Lark, and Black-tailed Gnatcatcher) were **Confirmed Present** on site; and
- One species, the Desert Tortoise, was **Determined Present** on site.

The 26 species identified as having potential to occur on the project site may be affected by implementation of the proposed project, resulting in a potentially significant impact. Implementation of mitigation measures **BIO-1** through **BIO-5** would reduce impacts to these species to a less than significant level.

The Desert Tortoise, which is Federally listed and State listed as threatened, was determined present on site. The site is not listed within Desert Tortoise critical habitat; however, habitat on site is suitable for Desert Tortoise. A protocol survey was conducted for the Desert Tortoise at the project site. No live Tortoises were discovered; however, eight inactive burrows, seven pallet features (pallets are depressions in the soil that serve as shelter sites for Desert Tortoises), and one Tortoise shell was detected on the site. Implementation of the proposed project would result in the removal of approximately 347.3 acres of suitable Desert Tortoise habitat. All Desert Tortoise sign detected during the survey, except for one burrow, would be affected by the proposed project. This is a potentially significant impact, requiring mitigation. **BIO-1**, **BIO-2**, and **BIO-6** would reduce impacts to Desert Tortoise to a less than significant level.

The proposed project would result in impacts to the known location of the California Native Plant Society (CNPS) listed desert cymopterus (one individual was identified during on-site field investigations). Additionally, the project would result in impacts to 347.3 acres of suitable habitat for this species. This is a potentially significant impact, requiring mitigation. Compliance with mitigation measures **BIO-1** and **BIO-2** would reduce impacts to a less than significant level.

Although a focused trapping program was not conducted for Mohave ground squirrel, it is assumed that the species is highly likely to occur on the project site; thus, presence of the

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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Mohave ground squirrel is assumed. Implementation of the proposed project would result in potentially significant impacts to Mohave ground squirrel. Mitigation measures **BIO-1**, **BIO-2**, and **BIO-6** would reduce impacts to a less than significant level.

**Mitigation Measures**

**BIO-1:** Prior to the issuance of the project grading permit, the project applicant shall purchase California Department of Fish and Game (CDFG) approved land for off-site conservation.

**BIO-2:** Prior to the issuance of the project grading permit, the project applicant shall dedicate the northern parcel of the project site and the large desert wash and a wash buffer zone in the southeastern portion of the site, as open space. No man-made disturbance shall occur in these areas.

**BIO-3:** Prior to the start of construction activities, the project applicant shall install orange safety fencing around the perimeter of the work area to discourage entry into natural areas. All construction personnel shall be advised to stay out of fenced areas. Fencing shall remain in place until the completion of construction activities.

**BIO-4:** Prior to the start of equipment placement or construction activities at the project site, the project applicant shall ensure that all workers that will be present on the site during grading and/or construction activities are given literature and a brief instruction seminar to advise the workers on identifying sensitive organisms and habitats and how to best avoid these organisms and areas.

**BIO-5:** In accordance with the Migratory Bird Treaty Act (MBTA), if vegetation removal shall occur during the bird-nesting season, generally March 1 to August 1, a qualified biologist will conduct preconstruction bird nesting surveys to avoid impacts to nesting birds. If active bird nest(s) are detected during the pre-construction nesting surveys, an adequate no disturbance buffer around the active nest(s) will be established as determined by a qualified biologist until the nest(s) have fledged to ensure the nesting birds are not disturbed until the young birds have fledged.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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**BIO-6:** Prior to the issuance of the project grading permit, the project applicant shall secure a “take” permit for the State endangered Mohave ground squirrel and the State and Federally threatened Desert Tortoise.

- b) **Less than Significant Impact with Mitigation Incorporated.** The project site is made up of vegetation associations typical of the Mojave Desert, including Mojave creosote bush (*Larrea tridentata*) scrub, allscale (*Atriplex polycarpa*) scrub, and open Joshua tree (*Yucca brevifolia*) associations. Other land covers present on site include desert wash, desert pan, and disturbed areas. Table 6 describes the acreages of the plant communities on the project site.

**Table 6  
 Vegetation Communities and Land Cover Impacts**

Vegetation Community/Land Cover	Present on site (acres)	Impacted by Project (acres)
Mojave Creosote Bush Scrub	103.3	98.4
Mojave Creosote Bush Scrub – Allscale Scrub	70.2	60.8
Joshua Tree Woodland – Mojave Creosote Bush Scrub	18.0	17.8
Joshua Tree Woodland – Allscale Scrub	44.0	42.1
Joshua Tree Woodland – Mojave Creosote Bush Scrub - Allscale Scrub	35.2	35.2
Allscale Scrub	100.2	81.0
Desert Wash	4.7	1.9
Disturbed	27.3	9.9
<b>Total</b>	<b>402.9</b>	<b>347.3</b>

Source: *General Biological Assessment for an Approximate 453.0-Acre Property in the County of San Bernardino, California, Assessor's Parcel No.'s 0492-221-22, -26, TERACOR Resource Management, August 6, 2009; pages 7-9 and Table 2.*

As indicated in **Table 6** above, the project would result in impacts to almost 350 acres of vegetation communities/land cover on the project site, resulting in a potentially significant impact to sensitive vegetation communities. The implementation of mitigation measures **BIO-1** and **BIO-2** would reduce these impacts to a less than significant level.

- c) **Less than Significant Impact.** Three (3) potential hydrologic features, covering an area of 4.7 acres on the project site, were detected during biological surveys. The features, identified as Features 1, 2, and 3, are described below:

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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**Feature 1:** Feature 1 is a 0.49-acre wash located in the southwestern portion of the site. It is narrow, with no defined bed or bank. With sediment transport, vegetation is sparser but is not discernibly different from the desert scrub community within which it is contained. The feature tapers out and is clearly isolated. It is not jurisdictional under Section 404 of the Federal Clean Water Act as implemented by the U.S. Army Corps of Engineers (ACOE). Although Feature 1 is small, it appears to fall within the jurisdiction of CDFG under Section 1600 of the Fish and Game Code.

**Feature 2:** Feature 2 is a 1.41-acre wash in the south-central portion of the site. Feature 2 varies in width from approximately 12 to 20 feet. It is largely void of vegetation. Beds and banks are not consistently present. The feature tapers out and transitions to sheet flow. It is not jurisdictional under Section 404 of the Federal Clean Water Act. Feature 2 is within the jurisdiction of CDFG under Section 1600 of the Fish and Game Code.

**Feature 3:** Feature 3, which is 2.83 acres, is located in the southeastern portion of the site (which is not part of the proposed developed area of approximately 350 acres). This feature supports a well-defined bed and is mostly void of vegetation. Feature 3 continues into adjacent Property and then terminates near Highway 58. It is not jurisdictional under Section 404 but is within the jurisdiction of CDFG under Section 1600 of the Fish and Game Code.

As described above, none of the three features present on site was determined to be jurisdictional pursuant to Section 404 of the Federal Clean Water Act. Feature 3 is also located within a portion of the project site that would not be disturbed as part of the project (refer to mitigation measure **BIO-2**); thus, proposed project activities would not have an impact on Feature 3. Each of these features is subject to CDFG jurisdiction; however, compliance with CDFG section 1600 requirements, including Streambed Alteration Agreement permitting requirements and incorporation of applicable Best Management Practices (BMPs), would ensure that impacts would be less than significant.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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d) **Less than Significant Impact.** Due to the project site's location in the Mojave Desert, which is an area that is often considered inhospitable to numerous people, natural connective desert scrub and desert wash habitats remain intact throughout much of the surrounding area. Aside from existing developed areas, highly traveled highways, and military lands, wildlife can move unimpeded throughout most of the project site and surrounding areas. The project site is located within a large habitat complex, interrupted with small pockets of developed areas, such as Boron, Kramer Junction, and the Kramer Junction SEGS. While the proposed project would incrementally add to habitat loss in the Mojave Desert, it would not result in obstruction of a wildlife corridor or a wildlife movement pathway. Impacts would be less than significant.

e) **Less than Significant Impact with Mitigation Incorporated.** Joshua trees are regulated under provisions of the County Developmental Code Chapter 88.01.060, Desert Native Plant Protection. The County Plant Protection and Management section of the County Development Code (88.01.050) requires that Joshua trees that are proposed for removal should be transplanted or stockpiled for future transplanting where possible. Transplanting activities shall comply with the provisions of the Desert Native Plants Act (Food and Agricultural Code Section 80001 *et seq.*), as required by Subsection 88.01.060(d), *Compliance with Desert Native Plants Act*. The County Code contains requirements for specimen size trees, which are defined as meeting one or more of the following criteria:

- a. *A circumference measurement equal to or greater than fifty (50) inches at four (4) feet from grade.*
- b. *Total tree height of fifteen (15) feet or greater.*
- c. *Trees possessing a bark-like trunk.*
- d. *A cluster of ten (10) or more individual trees, of any size, growing in close proximity to each other.*

Additionally, the County Plant Protection and Management section of the County Development Code (88.01.060) requires that listed desert native plants or any part of the

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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plants be left in place, except under a Tree or Plant Removal Permit in compliance with Section 88.01.050.

During the vegetative surveys conducted at the project site in August 2009, no smoketrees, mesquites, significant creosote rings, ironwood, palos verdes, or other members of the family *Agavaceae* were detected on the site<sup>8</sup>. However, there are 232 Joshua trees scattered throughout the project site. This count includes many juvenile Joshua trees. All Joshua trees on the project site appear to occur naturally. In total, 86 Joshua trees meeting County requirements for specimen size trees were detected, evaluated, tagged and mapped. Suitability was based on the overall health of each tree, including the following:

- Whether the tree was growing straight or inclined;
- The presence or absence of cavities;
- Strength of the root system;
- Crown symmetry;
- Presence and abundance of dead branches;
- Amount of attached dead material; and
- Presence or absence of exfoliating bark.

Also detected and assessed were 146 non-specimen size trees. Of the 232 Joshua trees located on the project site, implementation of the proposed project would require the removal of 224 Joshua trees. Five specimen-size trees and three non specimen-size trees would be preserved on the site. The removal of the Joshua trees is a potentially significant impact and requires mitigation. Implementation of mitigation measures **BIO-7** and **BIO-8** would reduce impacts to a less than significant level.

<sup>8</sup> Desert Native Plant Assessment for an Approximate 453.0-Acre Property in the County of San Bernardino, California, Assessor's Parcel No.'s 0492-221-22, -26, TERACOR Resource Management, August 7, 2009.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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**Mitigation Measures**

**BIO-7:** Prior to the issuance of grading permits, the project applicant shall apply for a tree removal permit from the County. Trees meeting the specimen size requirements of the County shall be removed and relocated around the perimeter of the project, if possible, or at another County-approved location. Any specimen size trees that are not relocated shall be stockpiled for future transplanting. Any stockpiling of trees shall occur through coordination with the County to ensure the plants are well cared for and the root systems are kept watered on a regular basis until the trees are relocated. The project applicant and the County shall develop a Joshua Tree Management Program to preserve as many Joshua trees as possible.

**BIO-8:** Joshua tree relocation shall be avoided during the nesting season to avoid affecting migratory bird species. If Joshua tree removals are conducted during the nesting season (generally March 1 to August 1), a survey shall be conducted by a qualified biologist/ecologist to confirm whether active nests are present. If eggs or nestlings are present, removal of vegetation must be postponed under provisions of the Migration Bird Treaty Act (MBTA) until nestlings have fledged.

- f) **Less than Significant Impact with Mitigation Incorporated.** The project site is located within the Western Mojave Recovery Unit of the Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (*Gopherus agassizii*)<sup>9</sup>. The Western Mojave Recovery Unit includes the Fremont-Kramer, Superior-Cronese, and Ord-Rodman critical habitat units. The Western Mojave Recovery Unit also includes the western half of Death Valley National Park, Marine Corps Air Ground Combat Center, Fort Irwin National Training Center, China Lake Laval Weapons Center, and Edwards AFB. The project site is located outside the closest designated critical habitat unit: the Fremont-Kramer critical habitat unit. Additionally, the project site is not located within a Desert Wildlife Management Area, or any designated Areas of Critical Environmental Concern as identified within the Recovery Plan. The U.S. Fish and Wildlife Service (USFWS) is in the process of developing a revised

<sup>9</sup> Draft revised recovery plan for the Mojave population of the Desert Tortoise (*Gopherus agassizii*). U.S. Fish and Wildlife Service, California and Nevada Region, Sacramento, California, 2008.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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recovery plan. While the project would result in the loss of habitat within the Plan, the implementation of mitigation measures **BIO-1** and **BIO-2**, which would provide mitigation for impacts via set-aside conservation land, would reduce impacts to a less than significant level.

**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 checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?       | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input 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 Paleontologic  Resources overlays or cite results of cultural resource review):

a, b) **Less than Significant Impact with Mitigation Incorporated.** A *Phase I Cultural Resources Study*<sup>10</sup> was conducted for the proposed project. As part of the study, a records search was conducted at the San Bernardino Archaeological Information Center at the County Museum. The records search indicated that portions of the property had been previously surveyed and that two historic resources were recorded on the property, consisting of one historic railway grade and one historic railroad.

The project site was also surveyed for cultural resources on June 8, 2009, when an additional 9 unrecorded sites and 28 isolates were located. The two previously recorded resources (identified during the records search) combined with the 9 unrecorded sites and 28 isolates (identified during the field survey) brings the total number of resources on the entire project site (including the northern portion that will remain undeveloped) to 39. Eleven of these 39 sites are considered historic. Nine of the historic sites represent refuse deposits that date from the late 1800s to the mid-1900s. The remaining two sites represent

<sup>10</sup> *Phase I Cultural Resources Study for the Kramer 453 project*, Brian F. Smith & Associates, August 6, 2009.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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historic rail lines.

**Table 7** summarizes the eleven historic resources identified on the project. The sites identified as Temp 1 through Temp 9 are the nine previously unrecorded sites that were identified during the field survey of the project site. CA-SBR-5731H and CA-SBR-66933H are the historic sites that were previously recorded and were also identified during the records search.

Table 7  
**Cultural Resources within Project Site**

Site/Isolate #	Resource Description
Temp 1	Historic trash deposit. Deposit consists primarily of historic cans. Likely date between 1900-1930s.
Temp 2	Historic trash deposit. Deposit consists primarily of historic bottles with some solarized glass. Likely date between 1900-1930s as indicated by diagnostic specimens.
Temp 3	Historic trash deposit. Deposit consists primarily of historic cans and historic bottle fragments (some solarized). Likely date between 1900-1930s as indicated by diagnostic specimens.
Temp 4	Historic trash deposit. Deposit consists primarily of historic cans and historic bottle fragments (some solarized). Likely date between 1900-1930s as indicated by diagnostic specimens.
Temp 5	Historic trash deposit. Deposit consists primarily of historic cans and historic bottle fragments (some solarized). Likely date between 1900-1930s as indicated by diagnostic specimens.
Temp 6	Historic trash deposit. Deposit consists primarily of historic cans and historic bottle fragments. Likely dates from 1950s as indicated by diagnostic specimens.
Temp 7	Historic trash deposit. Deposit consists primarily of historic cans (several hundred), historic glass fragments, and miscellaneous domestic goods). Likely dates from 1940s to 1950s as indicated by diagnostic specimens.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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Table 7 (continued)

Site/Isolate #	Resource Description
Temp 8	Historic trash deposit. Deposit consists primarily of historic cans historic bottle, and historic tableware fragments. Likely dates from 1950s as indicated by dates on diagnostic specimens.
Temp 9	Historic trash deposit. Deposit consists primarily of historic cans and historic bottle fragments. Likely dates between 1950s and 1970s as indicated by diagnostic specimens. Likely represents multiple small dumping activities over time.
CA-SBR-5731H	Historic Randsburg Railroad grade constructed in 1897 and abandoned in 1933. Portions of grade still intact on Project property.
CA- SBR-66933H	Historic Railroad. Atchison, Topeka, Santa Fe railroad line crosses Project area. Historic railway still in use. Determined eligible to the National Register of Historic Places (NRHP) in 1994.

Source: Phase I Cultural Resources Study for the Kramer 453 Project, Brian F. Smith & Associates, August 6, 2009; Table 5.0-1.

No development or disturbance of the site is expected to occur north of Highway 58; consequently, there are no anticipated impacts to cultural resources Temp 1 through Temp 5, CA-SBR-5731H, and CA-SBR- 6693H. However, if any disturbance were to occur in this northern portion of the site, it could result in potentially significant impacts to these cultural resources. Implementation of mitigation measure **CUL-1** would ensure that no significant impacts to Temp 1 through Temp 5, CA-SBR-5731H, and CA-SBR- 6693H would occur.

The activities of the proposed project would directly affect the majority of the site directly south of Highway 58, which contains Temp 6 through Temp 9; however, the current project design would avoid impacts to Temp 7 and Temp 8. If the project design changed or if construction activity were to encroach on the areas where Temp 7 or Temp 8 is located, potentially significant impacts to these resources could occur. With implementation of mitigation measure **CUL-2**, impacts to Temp 7 and Temp 8 would remain less than significant.

Temp 6 and Temp 9 are located within the portion of the project site where disturbance and placement of solar equipment would occur. Thus, implementation of the proposed project

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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would result in potentially significant impacts to Temp 6 and Temp 9. Mitigation measures **CUL-3** and **CUL-4**, which require archaeological evaluations for Temp 6 and Temp 9, and implementation of a mitigation program for any sites identified as significant, would reduce impacts to a less than significant level. Implementation of mitigation measures **CUL-1**, **CUL-2**, **CUL-3**, and **CUL-4** would reduce impacts to historic and archaeological resources to a less than significant level.

**Mitigation Measures**

**CUL-1:** As a condition of approval, the project applicant shall dedicate the area north of Highway 58 as an open space easement and segregate it from any construction activity.

**CUL-2:** Prior to the start of construction activity, a qualified archaeologist shall be retained by the applicant to identify and stake the archaeological site boundaries for Sites Temp 7 and Temp 8. As a condition for the grading permit of the project, the project applicant shall place temporary fencing around the western boundaries of Sites Temp 7 and Temp 8 to avoid any intrusion or construction impacts to the sites.

**CUL-3:** Prior to the start of construction activity, the project applicant shall retain a qualified archaeologist to conduct cultural resource significance evaluations for Sites Temp 6 and Temp 9. These evaluations may require subsurface investigations and surface collection for formal determinations of significance. Based upon the evaluations, resources identified as significant must be subjected to additional data recovery mitigation efforts. The mitigation program for significant sites shall be carried out following consultation with the reviewing agency.

**CUL-4:** Prior to the start of construction activity, the project applicant shall retain a qualified archaeologist to implement the cultural resource mitigation monitoring plan (MMRP). The archaeologist shall establish procedures (monitoring plan) for archaeological resource surveillance, and procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of cultural resources as appropriate. The archaeologist shall also be present at the pregrading

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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conference to explain the established procedures based on a preapproved monitoring plan. If additional or unexpected archaeological resources are discovered, a qualified archaeologist shall determine appropriate actions, in cooperation with the implementing agency/agencies, for testing and/or data recovery.

- c) **Less than Significant Impact with Mitigation Incorporated.** This discussion is based on the *Paleontological Resource and Monitoring Assessment*<sup>11</sup> prepared for the proposed project. According to geologic maps of the project area, the project site is located on distal surface exposures of young Quaternary alluvium and alluvial fan deposits of probably Holocene age that spread outward from topographic higher areas to the south that are made up of granitic rocks. These granitic source rocks do not have any potential to yield paleontological resources; however, these sediments may overlie older Pleistocene alluvium present in the subsurface. If present, this older alluvium would have high potential to contain significant nonrenewable paleontological resources.

Two minor paleontological finds from surface scatter have been documented within the project boundaries. These finds represent an unidentified bone fragment and an unidentified tooth, neither of which were sufficiently complete or well enough preserved to be identified to the genus or species level. Because these two finds cannot be identified to the appropriate level, they are not time-diagnostic, and a Pleistocene age for the remains cannot be confirmed.

The excavation of the project site has a low potential to have an impact on significant nonrenewable fossil sources. In the event Pleistocene older alluvium is encountered in the subsurface, or if significant vertebrate fossils are exposed during construction of the proposed project, implementation of mitigation measure **CUL-5** would reduce impacts to a less than significant level.

<sup>11</sup> *Paleontological Resource and Monitoring Assessment*, Brian F. Smith & Associates, July 8, 2009.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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**Mitigation Measures**

**CUL-5:** In the event that Pleistocene older alluvium or significant vertebrate fossils are encountered during project construction activities, work in the immediate area of the find shall be halted. The project applicant shall retain a qualified vertebrate paleontologist (as defined by the County Development Code 82.20.040) to develop a program to mitigate impacts to nonrenewable paleontological resources, including full curation of all recovered resources. The mitigation program shall be consistent with the provisions of the California Environmental Quality Act as well as regulations currently implemented by the County and the proposed guidelines of the Society of Vertebrate Paleontology.

- d) **Less than Significant Impact.** The project site has not been used for any known religious or sacred uses, and no evidence is in place to suggest that the project site has been used for human burials. The California Health and Safety Code (Section 7050.5) states that if human remains are discovered on the site, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commissions (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. As adherence to State regulations is required for all development, no mitigation is required in the unlikely event human remains are discovered on site. Impacts associated with this issue would be less than significant.

**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:

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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 type="checkbox"/>	<input checked="" 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 181-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):

- a) **i) No Impact.** The Kramer Hills Fault is located approximately 1 mile to the south of the project site<sup>12,13</sup>. There are no faults identified on the project site by the County and the United States Geologic Survey (USGS); therefore, no impact associated with the rupture of a known fault would occur.
- ii) Less than Significant Impact.** Like most of Southern California, the project site is located within close proximity to earthquake faults, including the Kramer Fault to the south of the site, and there is potential for strong seismic ground shaking. However, given that the

<sup>12</sup> United States Geologic Survey website, California-Nevada Active Fault Maps, <http://quake.usgs.gov/info/faultmaps/index.html>, website accessed August 9, 2009.

<sup>13</sup> County of San Bernardino, Safety Background Report; June 15, 2005; Figure 7-1C: Regional Fault and Epicenter Map- Desert Region.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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proposed project would not result in any long-term occupation of the site (the project would be unmanned during long-term operations, with the exception of occasional maintenance and the security patrol), exposure of people to adverse effects from strong seismic shaking would be less than significant. The project would also not result in the placement of permanent buildings at the site. All equipment associated with the proposed project would be installed per engineering requirements to ensure protection during most seismic ground shaking. Impacts associated with ground shaking would be less than significant.

iii) **Less than Significant Impact.** The soil types of the project site have not been mapped by the USGS; therefore, detailed soil properties information is not available. Regardless, as the project site would be unoccupied following completion of construction, even if soils on the site were susceptible to liquefaction, the project would not result in the exposure of people or structures to the risk of loss, injury, or death as a result of liquefaction. Impacts would be less than significant.

iv) **No Impact.** The project site is a gently sloping site with elevations ranging from 2,546 feet at the southwest corner to 2,469 feet at the northeast corner<sup>14</sup>. The project site and surrounding area is relatively flat, and there are no areas that would be subject to landslides. No impact would occur.

b) The proposed project would require grading and movement of soils on the site. Construction projects resulting in disturbance of one (1) acre or more are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit issued by the Regional Water Quality Control Board (RWQCB). The project's construction contractor would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) that identifies Best Management Practices (BMPs) to limit the soil erosion during project construction. Adherence during construction to provisions of the NPDES permit and applicable BMPs contained in the SWPPP would ensure potential impacts remain less than significant.

<sup>14</sup> General Biological Assessment for an Approximate 453.0-Acre Property in the County of San Bernardino, California, Assessor's Parcel No.'s 0492-221-22, -26, TERACOR Resource Management, August 6, 2009; page 3.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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- c) **Less than Significant Impact.** Due to site topography, the potential for seismic slope instability/lateral spreading affecting the proposed project is considered low. Impacts would be less than significant.
- d) **Less than Significant Impact.** Expansive soils generally have a significant amount of clay particles, which can give up water (shrink) or take on water (swell). The change in volume exerts stress on buildings and other loads placed on these types of soils. The extent of shrink/swell is influenced by the amount and kind of clay in the soil. As discussed in response VI (a)(iii) above, the soils on the project site have not been mapped. However, given that the project does not include the construction of any buildings, which can be severely damaged by expansive soils, impacts would be less than significant.
- e) **No Impact.** The proposed project does not include any septic tanks or other alternative wastewater disposal systems. Thus, there would be no impact associated with soil capability for supporting septic tanks.

**VII GREENHOUSE GAS EMISSIONS - Would the project:**

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

***SUBSTANTIATION:***

a,b) **Less than Significant Impact.** In September 2006 Governor Swarzenegger signed the Global Warming Solutions Act (Assembly Bill 32), which was created to address the Global Warming situation in California. The Act requires that the greenhouse gas (GHG) emissions in California be reduced to 1990 levels by 2020. This is part of a larger plan in which California hopes to reduce its emissions to 80 percent below 1990 levels by 2050. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012 and regulated by the California Air

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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Resources Board (CARB). With this Act in place, CARB is in charge of setting specific standards for different source emissions, as well as monitoring whether they are being met.

As discussed in Section III of this document, the proposed project's primary contribution to air emissions is attributable to construction activities. project construction will result in greenhouse gas (GHG) emissions from the following construction related sources: (1) construction equipment emissions and (2) emissions from construction workers personal vehicles traveling to and from 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 (CO<sub>2</sub>) from gasoline and diesel combustion, with more limited vehicle tailpipe emissions of nitrous oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>), as well as other GHG emissions related to vehicle cooling systems. Although construction emissions are a one-time event, GHG emissions such as CO<sub>2</sub> can persist in the atmosphere for decades.

Currently, neither the MDAQMD nor the County has established a quantitative threshold or standard for determining whether a project's GHG emissions are significant. In December 2008, SCAQMD adopted interim CEQA GHG significance thresholds of 10,000 metric tons of CO<sub>2</sub>e (MTCO<sub>2</sub>e) per year for stationary/industrial projects that include a tiered approach for assessing the significance of GHG emissions from a project (SCAQMD 2008). For the purposes of determining whether or not GHG emissions from a project are significant, SCAQMD recommends summing emissions from amortized construction emissions over the life of the proposed project, generally defined as 30 years, and operational emissions, and comparing the result with the established interim GHG significance threshold. While the individual project emissions would be less than 10,000 MTCO<sub>2</sub>e/yr, it is recognized that small increases in GHG emissions associated with construction and operation of the proposed project would contribute to regional increases in GHG emissions.

GHGs and criteria pollutants would realize co-beneficial emissions reduction from the implementation of mitigation measures discussed in Section III, *Air Quality*, as well as the *General conditions, project Design and Construction Features* discussed elsewhere in this

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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document. Furthermore, the construction of this project would result in “green” electric power generation that would otherwise be produced at a traditional fossil fuel burning plant, which generate 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.

**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 type="checkbox"/>            | <input checked="" 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 type="checkbox"/>            | <input checked="" 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 checked="" type="checkbox"/> | <input 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"/>            |

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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***SUBSTANTIATION:***

a,b) **Less than Significant Impact.** In photovoltaic systems, there are no high-speed moving parts, lasers, robots or cutting tools. Photovoltaic cells are generally manufactured using an inert material and are completely recyclable. The cells (72 per photovoltaic module) are sealed between 1/8-inch tempered glass and a polyester plastic backing sheet using an anodized aluminum frame for protection from breakage. All solder used is lead-free. No liquids, gases, or reactive materials are contained in the photovoltaic modules. Each transformer contains approximately 400 gallons of dielectric oil that consists of fire resistant vegetable oil, which is not toxic<sup>15</sup>. To avoid hazards with construction equipment, the Construction Contractor is required to make sure the equipment is maintained. Additionally, the project may require the storage of small amounts of hazardous materials, such as fuel and lubricants. This material would be stored consistent with State and Federal regulatory requirements.

All activity involving hazardous substances would be handled through certification by national and international electrical power regulatory agencies and in accordance with applicable local, State, and Federal safety standards. Potential impacts associated with the use, transport, storage, and disposal of hazardous materials and reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant.

c) **No Impact.** The closest school to the project site is the Boron Junior/Senior High School, located in Kern County a little over five (5) miles away. Project activities would not affect this school, and there would be no impacts.

d) **No Impact.** The project site is not listed on any of the following:

- CAL/EPA Hazardous Waste and Substances Sites;
- California Department of Toxic Substances Control, Resource Conservation and

<sup>15</sup> McShane C.P., Relative properties of the new combustion-resistant vegetable oil-based dielectric coolants for distribution and power transformers. IEEE Trans. on Industry Applications, Vol. 37, No. 4, July/August 2001, pp. 1132-1139, No. 0093-9994/01, 2001.

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Recovery Act (RCRA) Facilities;

- Hazardous Waste and Substances Site List (Cortese List); and
- California State Water Resources Control Board Leaking Underground Storage Tank Information System (LUSTIS).

A lack of data from these sites indicates that no past uses on the project site have involved hazardous materials. There are a number of trash piles on the project site consisting of wood, metal, tires, various plastics, and an abandoned truck. No spills of chemicals or oils have been reported by those who have visited the site, whether as project representatives or consultants. The abandoned truck was carefully inspected for evidence of oil spills. There was none. There would be no impact from the proposed project associated with being listed on a hazardous materials site.

- e, f) **Less than Significant Impact.** The project is not located within an airport land use plan or within two (2) miles of a public airport or public use airport. About 0.75 mile northeast of the project site, beyond Highway 58 and the railroad tracks, is a one-half-mile dirt landing strip, essentially an extension of Salton Road. Signs have been placed sporadically in the vicinity to advise individuals to be careful of low-flying airplanes. Small aircraft landing and taking off from this dirt strip would create a less than significant impact with respect to safety hazards for people residing or working in the project area.
- g) **No Impact.** State Route 58 and US 395 have been designated evacuation routes for evacuation of residents in the event of wildland fires and other natural disasters<sup>16</sup>;1 therefore, it is important to keep these routes free flowing. No roadways would be closed to through traffic during project construction. Emergency vehicles, residents, and employees in the area would be able to pass through the area without obstruction. Emergency access impacts would be less than significant.

<sup>16</sup> County of San Bernardino General Plan, VIII Safety Element, E. Desert Region Goals and Policies of the Safety Element, page VIII-33.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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- h) **Less than Significant Impact.** Essentially providing a fuel break, most vegetation would be removed during grading so as to streamline facility operations; therefore, no fire fuel would be available for a significant risk of loss, injury or death involving wildland fires (also known as brush or forest fires). With no fuel for wildfires, impacts would be less than significant.

**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 which 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 which would impede or redirect flood flows?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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:**

a,c,d **Less than Significant Impact.** According to the Water Quality Management Plan (WQMP) e,f) for the proposed project<sup>17</sup>, there are no known pre-existing water quality standards that have been violated in the area. The proposed project would have no wastewater generation or discharges. There are no streams or rivers located in the immediate area of the project site<sup>18</sup>. Three ephemeral desert washes enter the project site from the south and dissipate before they get to State Route 58. There are no storm water drainage facilities in the immediate area. Storm water on the site flows from south to north and over State Route 58 and then under the Burlington Northern Santa Fe Railway line via culverts. Flows would not be hindered by the proposed project, as the spacing of the photovoltaic arrays support free flow. The proposed project would not substantially alter the existing drainage pattern.

The construction and grading phases of the project site would require temporary disturbance of surface soils and removal of vegetative cover. This could result in exposure of soil to storm runoff, potentially causing erosion and entrainment of sediment in runoff and, if not managed properly, the runoff could cause erosion and increased sedimentation in the storm flow and in local washes.

By volume, sediment is the principal component in most storm runoff. Sediments also transport substances such as nutrients, hydrocarbons, and trace metals, which are conveyed to receiving waters. The potential for chemical releases is present at most construction sites in the form of fuels, solvents, and other building construction materials. Once released, these substances could be transported to nearby washes and/or to groundwater in stormwater runoff, wash water, and dust control water, potentially reducing the quality of the receiving waters.

<sup>17</sup> Preliminary Water Quality Management Plan (WQMP), prepared by Madole & Associates, Inc., Wendell L. Iwatsuru, August 8, 2009.  
<sup>18</sup> Ibid

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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Development of the project site is in excess of one acre; therefore, the project would be required to obtain coverage pursuant to an NPDES permit. Additionally, the project applicant would be required to submit a SWPPP for construction discharges. The SWPPP includes a surface water control plan and erosion control plan citing specific measures to control on-site and off-site erosion during the grading and construction period. In addition, the SWPPP emphasizes structural and non-structural BMPs to control sediment and non-visible discharges from the site. During the construction period of the project, these BMPs would be used to reduce erosion and sedimentation and may include the use of sand bags, check dams, and soil binders. The Construction Contractor would be required to uphold these controls and to maintain an inspection log.

In addition, projects submitted for approval are required to submit a project specific WQMP prior to the first discretionary project approval or permit<sup>19</sup>. The WQMP is required to identify BMPs. With implementation of the erosion/sedimentation/pollution control measures required in the NPDES construction permit and SWPPP and the required WQMP and BMPs, water quality impacts would be less than significant. Moreover, because the proposed project, as designed, would replicate the existing sheet flow, there would be less than significant impacts with respect to altered drainage patterns.

b) **Less than Significant Impact.** The proposed project would not deplete groundwater supplies, as water would be used minimally. The photovoltaic modules would be washed two to four times annually, using water that is trucked in. Groundwater recharge would continue at the same pace. There would be no paved areas for parking (no public parking is proposed) or for roads (they would remain unimproved dirt roads); therefore, the soils would remain permeable, except for pan soils, to facilitate groundwater recharge. The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge; thus, impacts would be less than significant.

g,h) **No Impact.** Most of the annual rainfall in the region occurs in the winter; during this time, flooding could result from intense storms that cause rapid runoff. The proposed project does not propose any construction of housing or other such structures. As such, it has no

<sup>19</sup> San Bernardino County Storm Water Program, *Model Water Quality Management Plan Guidance*, June 2005.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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potential to place housing or other structures at risk of flooding or of impeding the flow of stormwater. There would be no impact.

- i) **Less than Significant Impact.** The project area floods when significant rain events occur. People could be exposed to some risk of injury during a flood event; however, it would probably not be a significant risk of loss, injury or death. Exposure of people to flooding impacts would be less than significant.
- j) **No Impact.** Seiches are oscillations in enclosed bodies of water that are caused by a number of factors, most often wind or seismic activity. Because the project site is not located immediately adjacent to a lake, no seiche-related flooding resulting from a lake is anticipated to occur on-site. Inundation of the site by a tsunami is highly unlikely. A tsunami is a series of waves generated in the body of water by a pulsating or abrupt disturbance that vertically displaces water. Because of the site's distance from the ocean, there are no potential risks associated with tsunami (tidal wave) inundation. A mudslide (also known as a mudflow) occurs when there is fast-moving water and a great volume of sediment and debris that surges down a slope, stream, canyon, arroyo, or gulch with tremendous force. Because the site is relatively flat, with no high points or narrow formations surrounding it, a mudslide is not expected to occur. There would be no inundation impacts.

**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 checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |

***SUBSTANTIATION:***

- a) **No Impact.** Kramer Junction is essentially the intersection of State Route 58 and US 395, approximately one (1) mile east of the project site. There are fast food outlets, a trucking

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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travel center, gas stations, a restaurant, motels, and a gift shop. The SCE Kramer Substation is also located there. This area could be characterized as an established community. There are no other established communities near the site. The proposed project would not physically divide this community; consequently, there would be no community division impacts.

- b) **Less than Significant Impact.** According to the Kramer Junction Land Use Zoning Districts (map EH04 A), the project site presently is designated RC (Resource Conservation), which provides sites for open space and recreational activities, single-family homes on very large parcels, and similar and compatible uses. The surrounding area is designated RC to the north, west and south; and RL (Rural Living) to the east, which provides sites for rural residential uses, incidental agricultural uses, and similar and compatible uses<sup>20</sup>. To the south is the Edwards Air Force Base. The proposed project would require a Conditional Use Permit to allow the solar photovoltaic facility.

### Conditional Use Permit

Conditional Use Permits provide the County an opportunity to review the design, location, and manner of development of the proposed project before its implementation<sup>21</sup>. **Table 8** lists the required general findings for a Conditional Use Permit and provides potential specific findings related to the Kramer Solar Farm.

<sup>20</sup> County of San Bernardino 2007 Development Code, County of San Bernardino, Land Use Services Division; adopted March 13, 2007, effective April 12, 2007, amended January 15, 2009; Purpose and Intent of Development Code; Title 8, Division 2, Chapter 82.01, Section 20.

<sup>21</sup> County of San Bernardino 2007 Development Code, County of San Bernardino, Land Use Services Division; adopted March 13, 2007, effective April 12, 2007, amended January 15, 2009; Conditional Use Permits, Title 8, Division 5, Chapter 85.06.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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**Table 8  
 Conditional Use Permit Findings**

General Findings Required	Proposed Project Findings
The Project site is adequate in terms of shape and size to accommodate the proposed use and other required features.	Kramer Solar Farm would be a 40-MW photovoltaic electric generating facility. The site was specifically chosen because of its high solar insolation value, relatively flat terrain, and its proximity to an existing SCE electrical transmission facility.
The Project site has adequate access.	Sheep Creek Road, on the western border, would provide access to the Project site. This is adequate for the limited traffic that would use the Project site.
The proposed use would not generate excessive noise, traffic, vibration, or other disturbance. In addition, the use would not substantially interfere with the present or future ability to use solar energy systems.	Sections in this Initial Study analyze noise, traffic, and vibration, and demonstrate that there would not be excessive disturbance created by the proposed Project. Because of the very nature of the proposed Project, it would not interfere with solar energy systems; rather, the Project would substantially contribute to solar energy systems.
The proposed use and manner of development are consistent with the goals, maps, policies, and standards of the General Plan.	See analysis in sections of this Initial Study and below for policy consistency.
There is supporting infrastructure to accommodate the proposed development without significantly lowering service levels.	Service levels would not be affected by the proposed Project. There would be no employees on the site during operations; washing of the photovoltaic arrays two to four times annually and daily security patrols would be the main activities.
The lawful conditions stated in the approval are deemed reasonable and necessary to protect the public health, safety, and general welfare.	The conditions of approval that are usually attached to any approval would obviously be lawful; reasonable; and necessary to protect the public health, safety, and general welfare.
The design of the site has considered the potential for the use of solar energy systems and passive or natural heating and cooling opportunities.	The entire design and purpose of the proposed Project is to increase the use of renewable solar energy.

Source: *County of San Bernardino 2007 Development Code*, County of San Bernardino, Land Use Services Division; adopted March 13, 2007, effective April 12, 2007, amended January 15, 2009; Conditional Use Permit, Title 8, Division 5, Chapter 85.06.

**General Plan Policies**

Many General Plan policies apply to the proposed project. The first group relates to energy, which the Kramer Solar Farm is consistent with by virtue of its function:

- CI 18.1** Coordinate with Southern California Edison and other utility suppliers to make certain that adequate capacity and supply exists for current and planned development in the County;
- CO 4.12** Provide incentives to promote siting or use of clean air technologies (e.g., fuel cell technologies, renewable energy sources, UV coatings, and hydrogen fuel);
- CO 8.2** Conserve energy and minimize peak load demands through the efficient production, distribution and use of energy; and

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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**D/CO 2.2** Encourage use of renewable and alternative energy systems for residential uses.

The second group of polices relate to the design of and mitigation measures incorporated into the proposed project with respect to:

- Stormwater runoff;
- Water conservation;
- Biological resources; and
- Cultural resources.

The proposed project has fulfilled the following stormwater runoff polices by incorporating required BMPs into its design, making sure not to impede flow across the site, and conserving the southeast wash.

**CI 13.1** Utilize site-design, source-control, and treatment control best management practices (BMPs) on applicable projects, to achieve compliance with the County Municipal Stormwater NPDES Permit.

**CI 13.2** Promote the implementation of low impact design principles to help control the quantity and improve the quality of urban runoff.

**D/CI 3.10** Encourage the retention of natural drainage areas unless such areas cannot carry flood flows without damage to structures or other facilities.

Water conservation is a major feature of the proposed project. The photovoltaic arrays are required to be washed two to four times annually for optimum performance, and the water would be trucked in to accomplish this necessary task. No hook-up to water utilities would be required; the project site would be essentially self-contained. The proposed project is in compliance with the following water conservation policy.

**D/CO 1.8** Require future development to utilize water conservation techniques.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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Several biological studies (General Biological Assessment, Survey for Desert Tortoise, and Desert Native Plant Assessment)<sup>22</sup> were completed for the project site. In the Biological Resources section of this Initial Study, the analysis contained in these studies is summarized, and impacts and associated mitigation measures are put forth. The proposed project is in compliance with the following policies.

**CO 2.4** All discretionary approvals requiring mitigation measures for impacts to biological resources will include the condition that the mitigation measures be monitored and modified, if necessary, unless a finding is made that such monitoring is not feasible.

**CO 5.4** Drainage courses will be kept in their natural condition to the greatest extent feasible to retain habitat, allow some recharge of groundwater basins and resultant savings. The feasibility of retaining features of existing drainage courses will be determined by evaluating the engineering feasibility and overall costs of the improvements to the drainage courses balanced with the extent of the retention of existing habitat and recharge potential.

**D/CO 1.3** Require retention of existing native vegetation for new development projects, particularly Joshua trees, Mojave yuccas and creosote rings, and other species protected by the Development Code and other regulations.

A Cultural Resources Study was completed for the project site<sup>23</sup>. In that study and contained in this Initial Study, archaeological and historic cultural resources were identified, and mitigation measures were presented to protect these resources. The proposed project is in compliance with the following policies.

<sup>22</sup> *General Biological Assessment for an Approximate 453.0-Acre Property in the County of San Bernardino, California, Assessor's Parcel No.'s 0492-221-22, -26, TERACOR Resource Management, August 6, 2009; Protocol Survey for Desert Tortoise (Gopherus Agassizii) for an Approximate 453.0-Acre Property in the County of San Bernardino, California, Assessor's Parcel No.'s 0492-221-22, -26, TERACOR Resource Management, August 7, 2009; Desert Native Plant Assessment for an Approximate 453.0-Acre Property in the County of San Bernardino, California, Assessor's Parcel No.'s 0492-221-22, -26, TERACOR Resource Management, August 7, 2009.*

<sup>23</sup> *Phase I Cultural Resources Study for the Kramer 453 project, Brian F. Smith & Associates, August 6, 2009.*

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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**CO 3.1** Identify and protect important archaeological and historic cultural resources in areas of the County that have been determined to have known cultural resource sensitivity.

**D/CO 6.1** Identify and protect significant cultural resources from damage or destruction.

The proposed project would most likely not have conflicts with any applicable land use plan or policy adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.

- c) **Less than Significant Impact with Mitigation Incorporated.** The project site is located within the Western Mojave Recovery Unit of the Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (*Gopherus agassizii*)<sup>24</sup>. The project site is located outside the closest designated critical habitat unit, the Fremont-Kramer critical habitat unit and is not located within a Desert Wildlife Management Area, or any designated Areas of Critical Environmental Concern as identified within the Recovery Plan. USFWS is in the process of developing a revised recovery plan. While the project would result in the loss of habitat within the Plan, the implementation of mitigation measures **BIO-1** and **BIO-2**, which would provide mitigation for impacts via set-aside conservation land, would reduce impacts to a less than significant level.

**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):

- a,b) **No Impact.** The State of California has established Mineral Resource Zones (MRZs) to designate lands that contain mineral deposits. The project site is located within an area

<sup>24</sup> Draft revised recovery plan for the Mojave population of the Desert Tortoise (*Gopherus agassizii*). U.S. Fish and Wildlife Service, California and Nevada Region, Sacramento, California, 2008.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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designated as MRZ-4. The MRZ-4 designation is for areas where there is not enough information available to determine the presence or absence of mineral deposits. There are no existing mines located within close proximity to the project site<sup>25</sup>. Because there is not enough information available to determine the presence or absence of mineral deposits, it is assumed that there are no known mineral resources at the site that would be of value to the region and residents of the state. No impact to known mineral resources would occur.

**XII. NOISE - Would the project result in:**

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| 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 type="checkbox"/>            | <input checked="" 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 checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input type="checkbox"/>            |

<sup>25</sup> County of San Bernardino, *Conservation Background Report*; February 1, 2006; Figure 6-11C: Mines, Desert Region.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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**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 ):

Noise-sensitive receptors include convalescent homes, hospitals, day-care centers, residential areas, fire stations, schools, hotels, libraries and campgrounds. Potential major noise generators include roadways, airports, industrial plants, railroads, racetracks, off-highway vehicle areas, and public shooting ranges. There are no noise-sensitive receptors near the project site. Major existing noise generators near the project site include the Burlington Northern Santa Fe Railway and State Route 58.

- a,d) **Less than Significant Impact.** The long-term operations of the project would not result in substantial increases in existing noise levels at or surrounding the project site; operations would be virtually silent. Temporary construction activities, however, may contribute some increase in noise levels above the levels shown in **Table 9**.

**Table 9  
 Noise Standards for Stationary Noise Sources**

Affected Land Uses (Receiving Noise)	7 am-10 pm Leq	10 pm-7 am Leq
Residential	55 dBA	45 dBA
Professional Services	55 dBA	55 dBA
Other Commercial	60 dBA	60 dBA
Industrial	70 dBA	70 dBA

Source: County of San Bernardino 2007 Development Code, County of San Bernardino, Land Use Services Division; adopted March 13, 2007, effective April 12, 2007, amended January 15, 2009; General Performance Standards, Noise, Title 8, Division 3, Chapter 83.01, Section 80.

Notes: <sup>1</sup> Leq = (Equivalent Energy Level). The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period, typically 1, 8 or 24 hours.  
<sup>2</sup> dB(A) = (A-weighted Sound Pressure Level). The sound pressure level, in decibels, as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound, placing greater emphasis on those frequencies within the sensitivity range of the human ear.  
<sup>3</sup> Ldn = (Day-Night Noise Level). The average equivalent A-weighted sound level during a 24-hour day obtained by adding 10 decibels to the hourly noise levels measured during the night (from 10 pm to 7 am). In this way, Ldn takes into account the lower tolerance of people for noise during nighttime periods.

For a single-point source<sup>26</sup>, sound levels decrease approximately six (6) dBA for each doubling of distance from the source. If noise is produced by a line source<sup>27</sup>, the sound decreases three (3) dBA for each doubling of distance in a hard-site environment, but in a

<sup>26</sup> A single-point source of noise is a source that radiates sound as if from a single point (e.g., stationary equipment).

<sup>27</sup> A line source of noise is many single sources that are close together (e.g., multiple vehicles on a roadway or a train on a railroad).

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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relatively flat environment with absorptive vegetation, it decreases 4.5 dBA for each doubling of distance.

The nearest land use (bus repair yard) is approximately 0.45 mile, or about 2,400 feet, to the east of the project site. If a single-point source piece of construction equipment were to produce 130 dBA<sup>28</sup> and be located directly on the eastern border, the sound would be attenuated by the time it reached the yard to approximately 40 dBA, which is below the industrial standard of 70 dBA. There would be no exposure of persons to or generation of noise levels in excess of standards. These levels would not be construed as a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Impacts would be less than significant.

- b) **No Impact.** Ground borne vibrations could occur during construction activities but would not occur during long-term operations. According to *County 2007 Development Code*, “temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays,” are exempt from regulations of General Performance Standards<sup>29</sup>, including ground borne vibrations; thus, there would be no impact.
- c) **Less than Significant Impact.** After the completion of construction activities, there would be no substantial permanent increase in ambient noise levels in the project vicinity. The project would create virtually no noise, and impacts would be less than significant.
- e,f) **Less than Significant Impact.** The project is not located within an airport land use plan or within two (2) miles of a public airport or public use airport. About 0.75 northeast of the project site, beyond Highway 58 and the railway tracks, is a one-half-mile dirt landing strip, essentially an extension of Salton Road. Signs have been placed sporadically in the vicinity to advise individuals to be careful of low-flying airplanes. The construction workers and occasional operations workers would not be exposed to excessive noise levels as a result of small airplanes landing and taking off. Impacts would be less than significant.

<sup>28</sup> This level is usually associated with a jack hammer; however, a jack hammer would not be required during construction.

<sup>29</sup> *County of San Bernardino 2007 Development Code*, County of San Bernardino, Land Use Services Division; adopted March 13, 2007, effective April 12, 2007, amended January 15, 2009; General Performance Standards, Vibration, Title 8, Division 3, Chapter 83.01, Section 90.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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**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:***

- a) **No Impact.** The proposed project would not result in the introduction of new homes or new businesses to the area. The proposed project is intended to provide a new source of solar energy to serve existing energy demands by connecting to the existing SCE Kramer Substation. The Substation would be able to accommodate the power that would be generated by the proposed project without any major upgrades. Thus, the power generated by the proposed project would be accommodated by existing infrastructure. The proposed project would not result in the creation of a substantial number of new long-term jobs, as once construction is complete, the operation of the project would not require any on-site presence. The implementation of the proposed project would not induce substantial population growth in the area, either directly or indirectly. No impact would occur.
- b) **No Impact.** There are no existing residential uses on site or on adjacent sites. The proposed project would not result in the displacement of any housing and thus, would not require the construction of any replacement housing. No impact would occur.
- c) **No Impact.** As discussed previously, no residential uses are present on site, and there are no other types of structures present on the site. The proposed project would not result in the displacement of any people; consequently, no impact would occur.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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**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:***

a) **Fire - Less than Significant Impact.** The County Fire Department, North Desert Division, would provide fire protection services to the site. The station nearest the site is the Hinkley Station, which provides services to a large area, including the vast unincorporated areas west of Hinkley, to the County line near Boron<sup>30</sup>. The fire protection needs of the proposed project are not expected to result in any increased demand on the County Fire Department; therefore, impacts associated with fire protection would be less than significant.

**Police Protection – Less than Significant Impact.** The County Sheriff’s Department would provide police protection services for the project area. During construction and operation, theft or vandalism at the site could require a response from police; however, the project site would be fenced, and a security patrol would be used at the site to discourage theft or vandalism. Because the project would not result in the construction of residential or business structures, the likelihood of incidents would be low, and the project would not

<sup>30</sup> San Bernardino County Fire Department website, [http://www.sbcfire.org/fire\\_rescue/northd/stn125.htm](http://www.sbcfire.org/fire_rescue/northd/stn125.htm), site accessed August 9, 2009.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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require the need for new or altered police protection facilities or additional staff. Police protection impacts would be less than significant.

**Schools – No Impact.** The project would not include any components, such as the construction of businesses or residences that would result in a population increase. With no increase in population, no increase in school-aged children would occur because of the project. As there would be no increased demand for school services, no impact to school services would occur.

**Parks – No Impact.** As the proposed project would not result in any population increase, no increased usage of parks would occur. Thus, no impacts to parks would occur because of the proposed project.

**Other Public Facilities – No Impact.** The project would not include the construction of any buildings. Additionally, with no population increase associated with the project (no construction of residential or employment generating uses), there would be need for increases in any other governmental services, such as libraries, hospitals, or public housing. No impact associated with other public facilities would occur.

**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:**

a,b) **No Impact.** The proposed project would not result in the construction of any housing and would not include any substantial long-term job-generating uses. Because the proposed project would not result in new housing or new jobs in the area and would not result in any

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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increase in population of surrounding areas, the proposed project would not increase the use of any existing neighborhood or regional parks or any other facilities. No impact would occur.

**XVI. TRANSPORTATION/TRAFFIC - Would the project:**

a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION:**

- a) **Less-Than-Significant Impact. Less than Significant Impact.** Vehicle trips generated by the proposed project would be limited to around 40 commuting construction workers, accounting for approximately 40 round trips per day. Trips associated with the project would be temporary, limited to two construction periods of approximately one year each, starting in November 2010. An increase of approximately 40 commuter round trips per day onto area roadways would not result in significant traffic congestion. Impacts associated with increased vehicle trips would be less than significant.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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- b) **Less-Than-Significant Impact.** Mostly a four-lane highway throughout its length, near the project site State Route 58 is a two (2)-lane highway, creating congestion at the intersection of State Route 58 and US 395. State Route 58, from the Los Angeles County Line to Interstate 15, has approximately 9,000 to 13,000 average daily traffic volume. The level of service (LOS) for morning and afternoon peak hours is LOS D<sup>31</sup>. Peak hours usually occur in the morning and evening commute periods, and at LOS D, intersections still function; however, short queues develop, and motorists may have to wait through one cycle of signal lights. During project construction, merging of existing traffic and 40 commuting construction workers could result in temporary impacts to LOS. Level of service impacts would be less than significant, however, because of its temporary nature and the relatively low number of commuters when compared to the average daily traffic volume. Once construction activities are complete, the project would not have any impact on LOS, as operations traffic would be negligible.
  
- c) **Less than Significant Impact.** About 0.75 northeast of the project site, beyond State Route 58 and the railroad tracks, is a 0.5-mile dirt landing strip, essentially an extension of Salton Road. Signs have been placed sporadically in the vicinity to advise individuals to be careful of low-flying airplanes. The project would not include any tall buildings or any operations that would change air traffic patterns, including either an increase in traffic levels or a change in location that could result in substantial safety risks. Photovoltaic modules that would be used in the proposed project are non-reflective and would not pose a hazard to general aviation pilots. Air traffic pattern impacts would be less than significant.
  
- d) **Less than Significant Impact.** The proposed project would not include hazardous design features, such as sharp curves or dangerous intersections. Merging construction traffic could cause safety hazards for motorists in the area; however, when temporarily obstructing traffic on a roadway, standard procedures involving the use of flag persons or signs would control the flow of traffic. Incompatible use impacts would be less than significant.

<sup>31</sup> Final Environmental Impact Report for the County of San Bernardino General Plan, Table IV-O-2. Existing Lane Configuration, Average Daily Traffic Volumes and Peak Hour Level of Service for State Highways Located in San Bernardino County.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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- e) **Less than Significant Impact.** State Route 58 and US 395 have been designated evacuation routes for evacuation of residents in the event of wildland fires and other natural disasters<sup>32</sup>; therefore, it is important to keep these routes free flowing. No roadways would be closed to through traffic during project construction. Emergency vehicles, residents, and employees in the area would be able to pass through the area without obstruction. Emergency access impacts would be less than significant.
- f) **Less than Significant Impact.** During construction activities, temporary areas on the project site would be set aside to accommodate parking required for construction workers. The project does not include the construction of any structures requiring permanent parking after project completion; consequently, parking capacity impacts would be less than significant.
- g) **No Impact.** The project would not conflict with adopted policies, plans, or programs supporting alternative transportation, as no bus stops, bike paths, or other means of alternative transportation are available at the project site. There would be no impact on adopted policies, plans, or programs.

**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 checked="" type="checkbox"/> | <input 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"/> |

<sup>32</sup> County of San Bernardino General Plan, VIII Safety Element, E. Desert Region Goals and Policies of the Safety Element, page VIII-33.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>

***SUBSTANTIATION:***

- a) **Less than Significant Impact.** Pursuant to Section 402 of the Clean Water Act, the Regional Water Quality Control Board (RWQCB) issues NPDES permits to regulate discharges to "waters of the nation," which include rivers, lakes, and their tributary waters. Waste discharges include discharges of stormwater and construction project discharges. A construction project resulting in the disturbance of more than one acre requires a NPDES permit. The project applicant is also required to prepare a SWPPP. Because the project would comply with the waste discharge prohibitions and water quality objectives established by the RWQCB, impacts related to this issue would be less than significant.
- b) **No Impact.** The proposed project would not include the construction of any habitable structures (such as residences or businesses); therefore, it would not create any substantial new water demand or generate new wastewater flows. As the project does not include any uses that would generate wastewater flows, no new or expanded wastewater facilities would be needed to accommodate the project. The only water use proposed at the site would be for washing photovoltaic modules a few times a year. Water for washing equipment would be delivered to the site by truck. No impacts to water and wastewater facilities would occur.
- c) **No Impact.** The proposed project does not include any wastewater generating uses. There would be no wastewater infrastructure at the project site, and there would be no proposed construction of wastewater infrastructure. No impact would occur.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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- d) **Less than Significant Impact.** As discussed in response XVI(b) above, the proposed project would not create any substantial new water demand. While water would have to be transported to the site for washing equipment, the proposed project would not use any substantial amounts of water, and no expanded entitlements would be needed. Impacts would be less than significant.
- e) **No Impact.** As discussed in response XVI(b) above, the proposed project does not include any uses that would generate wastewater flows. No wastewater infrastructure is currently present at the site and none would be added because of the proposed project. No impact would occur.
- f) **Less than Significant Impact.** The proposed project does not include any long-term solid-waste generating uses. While some may be generated during the construction period, these solid wastes would be disposed of at a nearby landfill. There would be, however, no long-term generation of solid waste and no long-term increases in waste sent to nearby landfills attributable to the proposed project. Thus, impacts would be less than significant.
- g) **No Impact.** While the proposed project is not expected to generate solid waste during the long-term operation of the site, it would be required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other applicable local, State, and Federal solid waste disposal standards. No impact would occur.

**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE:**

- a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUBSTANTIATION:**

- a) **Less than Significant Impact with Mitigation Incorporated.** The proposed project would have less than significant impacts, after mitigation is applied, with respect to the potential for substantially degrading the quality of the environment; substantially reducing the habitat of a fish or wildlife species; causing a fish or wildlife population to drop below self-sustaining levels; threatening to eliminate a plant or animal community; reducing the number or restricting the range of an endangered, rare or threatened species; or eliminating important examples of the major periods of California history or prehistory.

Potential to Degrade Quality of Environment. The proposed project would not have the potential to degrade the quality of the environment. As indicated in the foregoing analysis, because of the proposed project either no impact or no significant impact (with or without mitigation measures) would occur with respect to all of the environmental issues analyzed with the exception of biological and cultural resources, which would be less than significant in impact upon incorporation of the proposed mitigation measures.

Substantial Impacts on Biological Resources. The proposed project would not:

- 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; or
- Reduce the number or restrict the range of an endangered, rare or threatened species.

The proposed project would cause the removal of almost 350 acres of vegetation communities/land cover, 26 potential species to be affected, the removal of approximately 347.3 acres of suitable Desert Tortoise habitat, impacts to the known location of the

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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California Native Plant Society (CNPS) listed desert cymopterus, and the removal of Joshua trees. The implementation of mitigation measures **BIO-1** through **BIO-8** would reduce these impacts to a less than significant level.

Substantial Impacts on Historical Resources. The proposed project would not eliminate important examples of the major periods of California history or prehistory; however, it could affect cultural resources Temp 1 through Temp 9, CA-SBR-5731H, and CA-SBR-6693H. Mitigation measures **CUL-1** through **CUL-4** would mitigate these impacts to a less than significant level.

- 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.*

It is assumed that developments near the project site were constructed after completing an environmental review and that all environmental impacts were mitigated to levels that were less than significant.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
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With regard to visual impacts, the project would be located in an area with a readily visible solar generation facility (SEGS), major electrical transmission lines, local above-ground utility lines, two highways and a SCE substation, along with the restaurants and travelers facilities in the immediate area. Thus, visual impacts from this project are not considered cumulatively considerable.

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

## 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.)

### AIR QUALITY

**AIR-1:** The project applicant shall ensure that the following dust suppression measures are implemented as part of the project's mitigation:

1. Disturbed areas of the site shall be watered a minimum of three times daily.
2. All excavating and grading operations shall be suspended when wind speeds (as instantaneous gusts) exceed 25 mph.
3. Wheel washers shall be installed where vehicles enter and exit unpaved roads onto paved roads; trucks and any equipment shall be washed down before leaving the site.
4. All on-site roads and other areas that have no vegetation shall be paved, watered, or chemically stabilized.

### BIOLOGICAL RESOURCES

**BIO-1:** Prior to the issuance of the project grading permit, the project applicant shall purchase California Department of Fish and Game (CDFG) approved land for off-site conservation.

**BIO-2:** Prior to the issuance of the project grading permit, the project applicant shall dedicate the northern parcel of the project site and the large desert wash and a wash buffer zone in the southeastern portion of the site, as open space. No man-made disturbance shall occur in these areas.

**BIO-3:** Prior to the start of construction activities, the project applicant shall install orange safety fencing around the perimeter of the work area to discourage entry into natural areas. All construction personnel shall be advised to stay out of fenced areas. Fencing shall remain in place until the completion of construction activities.

**BIO-4:** Prior to the start of equipment placement or construction activities at the project site, the project applicant shall ensure that all workers that will be present on the site during grading

and/or construction activities are given literature and a brief instruction seminar to advise the workers on identifying sensitive organisms and habitats and how to best avoid these organisms and areas.

- BIO-5:** In accordance with the Migratory Bird Treaty Act (MBTA), if vegetation removal shall occur during the bird-nesting season, generally March 1 to August 1, a qualified biologist will conduct preconstruction bird nesting surveys to avoid impacts to nesting birds. If active bird nest(s) are detected during the pre-construction nesting surveys, an adequate no disturbance buffer around the active nest(s) will be established as determined by a qualified biologist until the nest(s) have fledged to ensure the nesting birds are not disturbed until the young birds have fledged.
- BIO-6:** Prior to the issuance of the project grading permit, the project applicant shall secure a "take" permit for the State endangered Mohave ground squirrel and the State and Federally threatened Desert Tortoise.
- BIO-7:** Prior to the issuance of grading permits, the project applicant shall apply for a tree removal permit from the County. Trees meeting the specimen size requirements of the County shall be removed and relocated around the perimeter of the project, if possible, or at another County-approved location. Any specimen size trees that are not relocated shall be stockpiled for future transplanting. Any stockpiling of trees shall occur through coordination with the County to ensure the plants are well cared for and the root systems are kept watered on a regular basis until the trees are relocated. The project applicant and the County shall develop a Joshua tree management program to preserve as many Joshua trees as possible.
- BIO-8:** Joshua tree relocation shall be avoided during the nesting season to avoid affecting migratory bird species. If Joshua tree removals are conducted during the nesting season (generally March 1 to August 1), a survey shall be conducted by a qualified biologist/ecologist to confirm whether active nests are present. If eggs or nestlings are present, removal of vegetation must be postponed under provisions of the Migration Bird Treaty Act (MBTA) until nestlings have fledged.

## **CULTURAL RESOURCES**

- CUL-1:** As a condition of approval, the project applicant shall dedicate the area north of Highway 58 as an open space easement and segregate it from any construction activity.

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- CUL-2:** Prior to the start of construction activity, a qualified archaeologist shall be retained by the applicant to identify and stake the archaeological site boundaries for Sites Temp 7 and Temp 8. As a condition for the grading permit of the project, the project applicant shall place temporary fencing around the western boundaries of Sites Temp 7 and Temp 8 to avoid any intrusion or construction impacts to the sites.
- CUL-3:** Prior to the start of construction activity, the project applicant shall retain a qualified archaeologist to conduct cultural resource significance evaluations for Sites Temp 6 and Temp 9. These evaluations may require subsurface investigations and surface collection for formal determinations of significance. Based upon the evaluations, resources identified as significant must be subjected to additional data recovery mitigation efforts. The mitigation program for significant sites shall be carried out following consultation with the reviewing agency.
- CUL-4:** Prior to the start of construction activity, the project applicant shall retain a qualified archaeologist to implement the cultural resource mitigation monitoring plan (MMRP). The archaeologist shall establish procedures (monitoring plan) for archaeological resource surveillance, and procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of cultural resources as appropriate. The archaeologist shall also be present at the pregrading conference to explain the established procedures based on a preapproved monitoring plan. If additional or unexpected archaeological resources are discovered, a qualified archaeologist shall determine appropriate actions, in cooperation with the implementing agency/agencies, for testing and/or data recovery.
- CUL-5:** In the event that Pleistocene older alluvium or significant vertebrate fossils are encountered during project construction activities, work in the immediate area of the find shall be halted. The project applicant shall retain a qualified vertebrate paleontologist (as defined by the County Development Code 82.20.040) to develop a program to mitigate impacts to nonrenewable paleontological resources, including full curation of all recovered resources. The mitigation program shall be consistent with the provisions of the California Environmental Quality Act as well as regulations currently implemented by the County and the proposed guidelines of the Society of Vertebrate Paleontology.

## ERRATA

(The following mitigation measures have been revised based on comments received from the California Department of Fish and Game and U.S. Fish and Wildlife. The revisions are shown in ~~strike-out~~ and underline to show “deleted” and “added” language, respectively).

**BIO-1:** Prior to the issuance of the project grading permit, the project applicant shall purchase California Department of Fish and Game (CDFG) approved land for off-site conservation. The purchased land shall provide offsite mitigation of project impacts at a mitigation impact ratio ranging from a minimum of 1.5:1 through 5:1 and will be refined through the Incidental Take Permit Process.

**BIO-5:** In accordance with the Migratory Bird Treaty Act (MBTA), if vegetation removal ~~shall~~ must occur during the bird-nesting season, a qualified ornithologist will examine the site generally March 1 to August 1, a qualified biologist will conduct preconstruction bird nesting surveys to avoid impacts to nesting birds. If active bird nest(s) are detected during the pre-construction nesting surveys, the qualified ornithologist will establish an adequate no disturbance buffer around the active nest(s) will be established as determined by a qualified biologist until the nest(s) have fledged to ensure the nesting birds are not disturbed until the young birds have fledged. The ornithologist will remain onsite to actively monitor the birds and/or nests during construction.

**BIO-6:** Prior to the issuance of the project grading permit, the project applicant shall secure a “take” permits for the State endangered Mohave ground squirrel and the State and Federally threatened Desert Tortoise from the California Department of Fish and Game and U.S. Fish and Wildlife Service or a letter from these agencies indicating that such a permit is not required.

**BIO-8:** Joshua tree relocation shall be avoided during the nesting season to avoid affecting migratory bird species. If Joshua tree removals are conducted during the nesting season (generally ~~March~~ February 1 to August 1), a survey shall be conducted by a qualified biologist/ecologist to confirm whether active nests are present. If eggs or nestlings are present, removal of vegetation must be postponed under provisions of the Migration Bird Treaty Act (MBTA) until nestlings have fledged.

If burrowing owls are observed during the pre-construction surveys, the following measures will apply:

**BIO-9:** As compensation for the direct loss of burrowing owl nesting and foraging habitat, the project applicant shall mitigated by acquiring and permanently protecting known burrowing owl besting and foraging habitat at the following ratio:

- i. Replacement of occupied habitat with occupied habitat at 1.5 times 6.5 acres per pair or single bird;
- ii. Replacement of occupied habitat with habitat contiguous with occupied habitat at 2 times 6.5 acres per pair or single bird; and/or
- iii. Replacement of occupied habitat with suitable unoccupied habitat at 3 times 6.5 acres per pair or single bird;

The project applicant shall establish a non-wasting endowment account for the long-term management of the preservation site for burrowing owls. The site shall be managed for the benefit of burrowing owls. The preservation site, site management, and endowment shall be approved by the CDFG.

**BIO-10:** All burrowing owls associated with occupied burrows, that will be directly impacted (temporarily or permanently) by the project, shall be relocated and the following measures shall be implemented to avoid take of owls:

- i. Occupied burrows shall not be disturbed during the nesting season of February 1 through August 31, unless a qualified biologist can verify through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.
- ii. Owls must be relocated by a qualified biologist from any occupied burrows that will be impacted by project activities. Suitable habitat must be available adjacent to or near the disturbance site or artificial burrows will need to be provided nearby. Once the biologist has confirmed that owls have left the burrow, burrows should be excavated using hand tools and refilled to prevent reoccupation.
- iii. All relocation shall be approved by the CDFG. The permitted biologist shall monitor the relocated owls a minimum of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and monitoring shall be submitted to the CDFG within 30 days following completion of the relocation and monitoring of the owls.

**BIO-11:** A Burrowing Owl Mitigation Monitoring Plan shall be submitted to the CDFG for review and approval prior to relocation of owls. The Burrowing Owl Mitigation and Monitoring Plan shall describe proposed relocation and monitoring plans. The plan shall include the number and location of occupied burrow sites and details on adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation of artificial burrows (numbers, location and type of burrows) shall also be included in the plan. The plan shall also describe the proposed offsite areas to preserve to compensate for impacts to burrowing owls/occupied burrows at the project site as required in BIO-9.