



# LAND USE SERVICES DEPARTMENT PLANNING COMMISSION STAFF REPORT

HEARING DATE: April 21, 2016

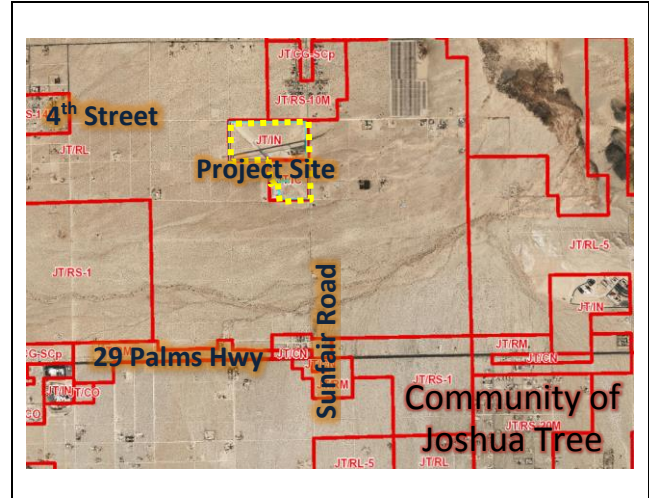
AGENDA ITEM # 2

## Project Description

## Vicinity Map -



**APN:** 060723119 and 060736406  
**Applicant:** Joshua Tree Solar Farm, LLC  
**Community:** Joshua Tree/ 3rd Supervisorial District  
**Location:** 5500 Sunfair Road, Joshua Tree  
**Project No:** P201400482/CUP  
**Staff:** John Oquendo  
**Rep:** Jess Melin  
**Proposal:** Conditional Use Permit to establish a 20 megawatt photovoltaic solar energy generating facility on approximately 115 acres at the former Hi Desert (Roy Williams) Airport



161 Hearing Notices Sent On: April 8, 2016

Report Prepared By: John Oquendo

## **SITE INFORMATION**

**Parcel Size:** 115 Acres

**Terrain:** Flat desert terrain. The topography of the project site is relatively flat and ranges in elevation from approximately 2,470 feet above mean sea level on the western boundary of the site to 2,430 feet above mean sea level on the northeast corner of the site

**Vegetation:** Decommissioned airport site. Sparse vegetation; mostly disturbed.

## **SURROUNDING LAND DESCRIPTION:**

AREA	EXISTING LAND USE	LAND USE ZONING DISTRICT
Site	Vacant; Decommissioned airport	Community Industrial (IC) and Institutional (IN)
North	Vacant lot; Walpi Drive and rural neighborhood	Rural Living (RL)
South	Cement Plant and vacant lots	RL
East	Vacant and scattered rural	RL and Resource Conservation (RC)
West	Vacant lots	RL

## **AGENCY**

## **COMMENT**

City Sphere of Influence:

None

Water Service:

Joshua Basin Water

Conditional Will Serve

Sewer Service:

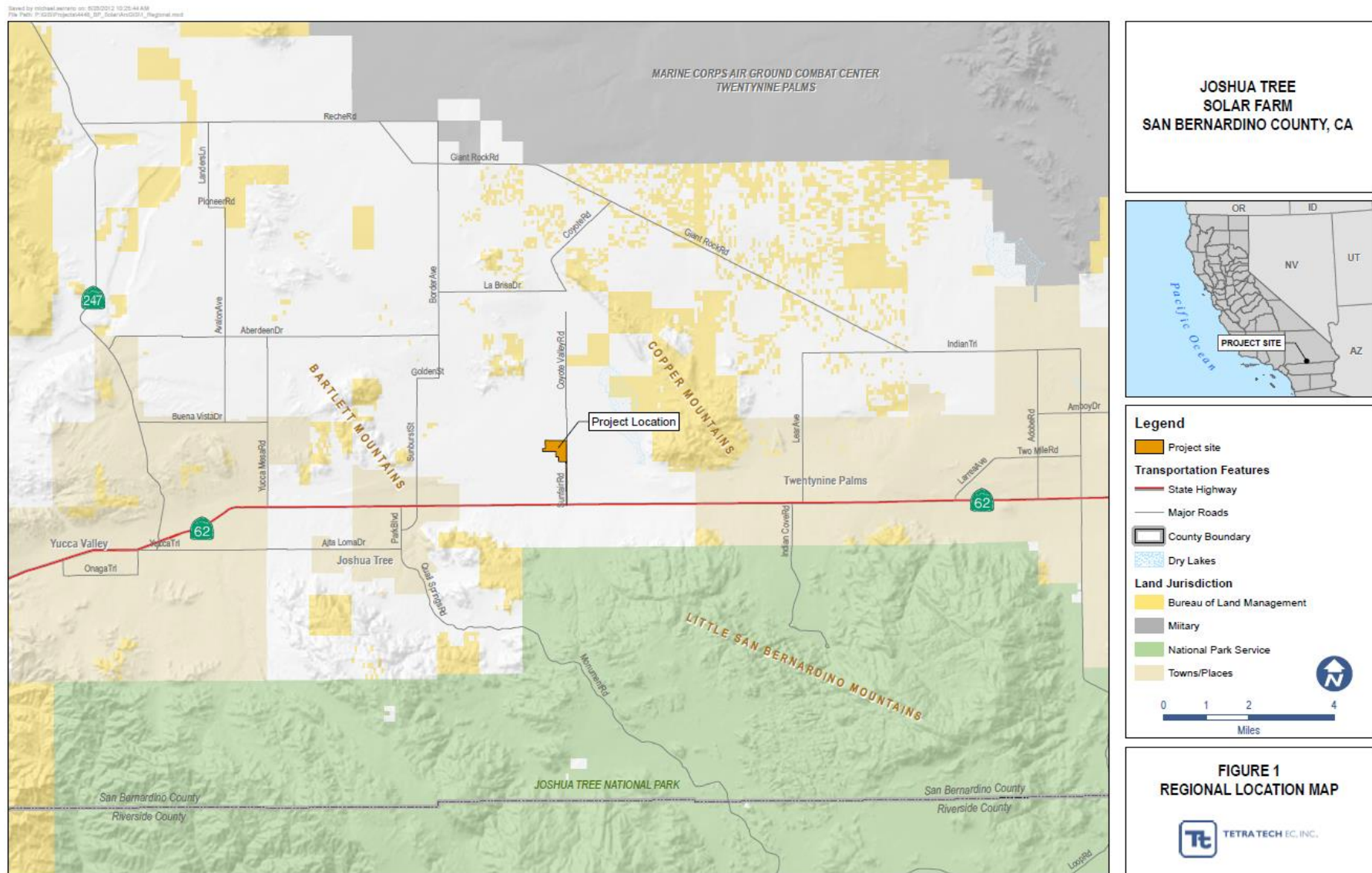
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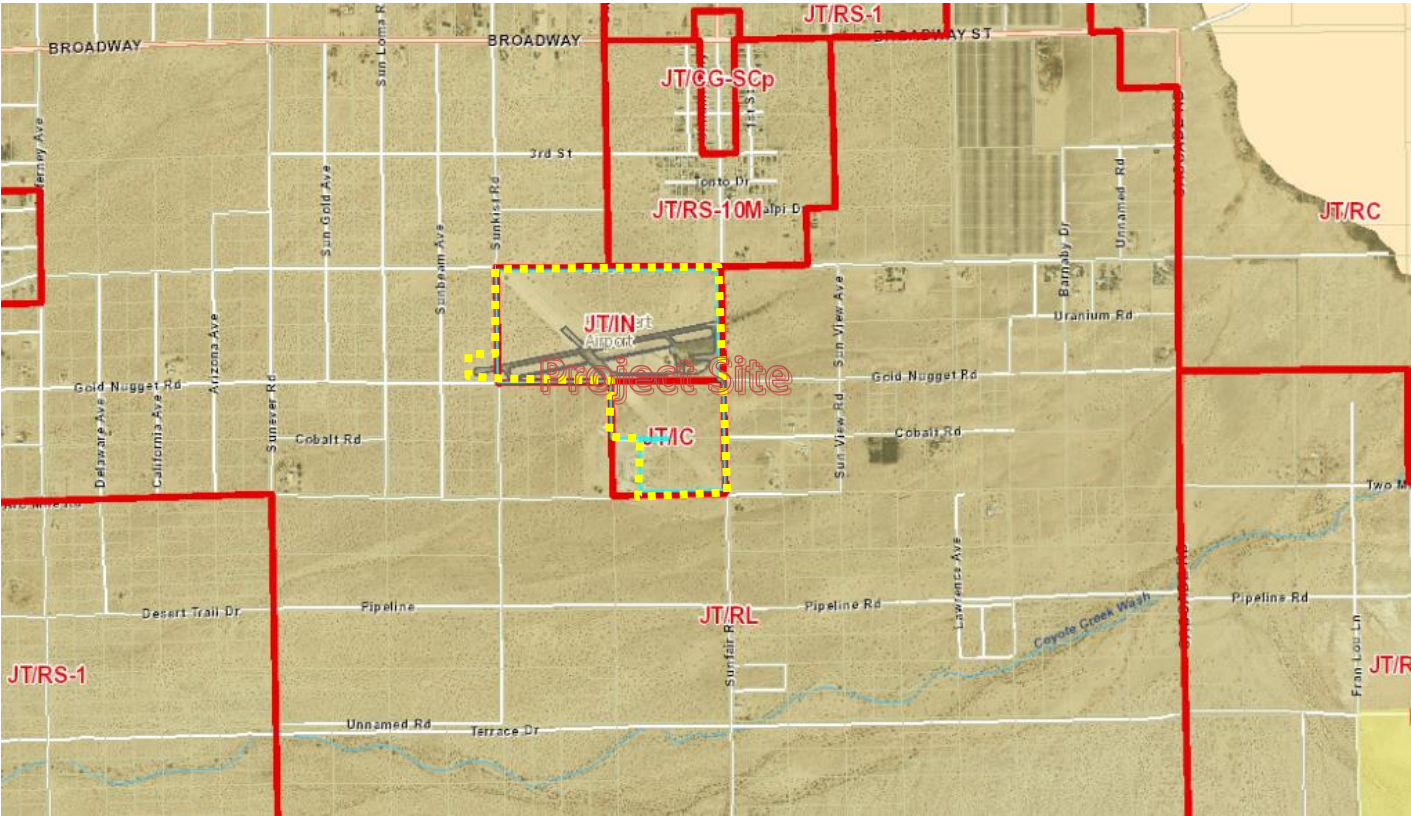
In accordance with Section 86.08.010 of the Development Code, the Planning Commission action may be appealed to the Board of Supervisors

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## VICINITY MAP



OFFICIAL LAND USE DISTRICT MAP





## SITE PHOTOS



*View North on Sunfair Road*



*Edge of Runway of at Sunfair*



*View of Existing Residence*

## SITE PHOTOS



*View of Site Looking North*



*View south on Sunfair*



*View of Site to the Southwest*

## **PROJECT DESCRIPTION AND BACKGROUND:**

Project: The proposed Conditional Use Permit (CUP) is a request to establish a 20-megawatt solar photovoltaic (PV) electricity generation facility (Project) on approximately 115 acres east of the unincorporated Community of Joshua Tree. Upon completion, the facility would be unmanned, with occasional maintenance and security visits by personnel.

Location and Access: The proposed site is a decommissioned airport and consists of former runways and disturbed soils. Sunfair Road runs north and south to the east of the Project site. Access to the site will be off of Sunfair Road.

Environmental Setting: The topography of the Project site is relatively flat and ranges in elevation from approximately 2,470 feet above mean sea level on the western boundary of the site to 2,430 feet above mean sea level on the northeast corner of the site.

The site photographs illustrate the general character of vegetation on the Project site and immediately adjacent areas. Much of the site has been cleared or subjected to intensive previous surface disturbance for airport operation and, where runways are absent, has regrown with croton and perennial bunch grasses. Adjacent land uses include scattered rural properties and undeveloped land, light industrial use including the cement plant to the south.

Solar Array Operation: The modules will be mounted on a steel and aluminum racking system which will be supported, when practical, by driven piers (piles) directly embedded in the ground. The front of the arrays with fixed tilt racking will maintain a 2 foot clearance from ground level. The array height will be approximately 7-10 feet from ground level. The maximum height of an array will be approximately 10.5 feet and no higher than 12 feet.

The inverter stations convert the direct current (DC) electrical energy from the PV arrays into alternating current (AC). These stations perform three critical functions for the plant: (1) collect DC power in a central location, (2) convert the DC power into AC power, and, (3) convert low-voltage AC power to medium-voltage AC power. While the preliminary design is based on 750 kW<sub>AC</sub> utility-scale inverters and 1.6 MVA (megavolt amps) transformers, the final rating will be determined during detailed design and equipment procurement. The typical height of an inverter station is approximately 9 feet and no higher than 12 feet.

The AC collection system is 33 kV, and all related equipment will be 35 kV class. The collection system is a network of either buried or aboveground cables appropriately sized to minimize energy loss. The system will effectively collect energy from the solar panels and transfer energy to the main collection switchgear, which will allow the energy to be transmitted to the electric grid. The switchgear will be separately enclosed with a security fence and lockable access gates.

Distribution line improvements are a part of this Project. However, the improvements will be constructed, owned, and operated by Southern California Edison (SCE). Approval for the changes to the distribution line will come from the California Public Utilities Commission. For the section of Sunfair Road between Twentynine Palms Highway and Two Mile Road, SCE will be replacing approximately one mile of existing distribution line poles with approximately 25 new poles. The existing poles are approximately 60 feet in height. For SCE to co-locate two existing distribution lines, an estimated maximum pole height of 65 feet will be required to get adequate conductor clearances.

## **PUBLIC COMMENTS**

The Planning Division mailed notices to surrounding property owners within a one-quarter mile radius of the site, in compliance with standard noticing requirements. Notices were mailed upon acceptance of the complete Project application, upon release of the Project Initial Study for public comments, and 10 days prior to the public hearing date. Additionally, legal advertisements were published in the Sun and Daily Press. Public comments have expressed concerns about impacts on property values, other economic impacts to the Joshua Tree Community, the disposition of the Power Purchase Agreement for the Project, compatibility of utility scale solar projects with the surrounding residences, proximity of the Project to Joshua Tree National Park, concerns with past projects, such as the Cascade solar project, water use, and general impacts in the areas of noise, aesthetics, traffic and wildlife. Exhibit D presents comments submitted in response to the environmental Initial Study, with responses. Exhibit E presents general comments on the Project. Together, the Analysis Section of this staff report, the Initial Study and proposed mitigation measures, the Response to Comments document and the recommended conditions of approval address the areas of concern stated in the public comments.

## **ANALYSIS:**

Consistency with Planning and Zoning Regulations: The proposed Project is consistent with the County General Plan, Joshua Tree Community Plan, and Development Code, as discussed in the Findings proposed for the Project (Exhibit A). The current General Plan Land Use Zoning designations of the Project site are Joshua Tree (JT) Community Industrial (IC) and Institutional (IN). These designations allow development of renewable energy generation facilities with a CUP, as requested by the Project applicant.

The proposed Project meets the standards outlined in San Bernardino County Development Code (Development Code) Chapter 84.29 Renewable Energy Generation Facilities. Proposed Findings of Consistency with these standards are attached to this Staff Report (Exhibit A). Proposed Conditions of Approval are also attached (Exhibit B).

Renewable Energy Mandates: The California Renewable Portfolio Standard (RPS) legislation, established in 2002 (Senate Bill 1078), and accelerated in 2006 (Senate Bill 107), requires retail sellers of electricity to obtain 20 percent of their supply of electricity from renewable energy sources by 2010 and 33 percent of electricity from renewable energy sources by 2020. In September 2015, SB 350, the Clean Energy and Pollution Reduction Act, which calls for a 50 percent RPS by 2030, passed the California legislature, and was signed into law by Governor Brown on October 7, 2015. The Project would be consistent with efforts to fulfill these mandates.

General Plan Policies: The County General Plan establishes goals for renewable energy production in the County. Conservation Element Policy CO 4.12 states the County shall promote siting of renewable energy resources. Conservation Element Goal CO 8 aims to minimize energy consumption and promote safe energy extraction, uses and systems to benefit local, regional and global environmental goals. Policies under this Goal include Policy CO 8.3, which states that the County will assist in efforts to develop alternative energy technologies that have minimum adverse effect on the environment, and will explore and promote new opportunities for the use of alternative energy sources. The proposed Project would support these goals and policies.

Joshua Tree Community Plan: The Project is located on the site of the former Roy Williams Airport, within the boundary of the Joshua Tree Community Plan. At the time the Community Plan was adopted, the Roy Williams Airport was a private airport, utilized as a fly-in bed and breakfast. The use of the site as an airport has since been discontinued. The airport has been officially closed, and the site is currently used solely as a private residence. Although the Community Plan recognized the Roy Williams Airport and encouraged its continued use as an aviation facility, the owner has discontinued that use, and made the site available for an alternative use. The property is zoned for industrial or institutional land uses (JT/IC and JT/IN), which allows for a solar energy generation facility to be developed subject to approval of a CUP. The following Goal and Policy from the Joshua Tree Community Plan support approval of the Project:

- Encourage utilization of renewable energy resources. (Goal JT/CO4).
- Industrial land uses shall be located in areas where industrial uses will best serve the needs of the community and will have a minimum adverse effect upon surrounding property with minimal disturbance to the natural environment and the total community. (Policy JT/LU 4.5)

Aesthetics/Visual: As described in the Aesthetics section of the IS/MND, the current visual character of the site and surrounding vicinity consists of scattered low-density rural residential uses and an industrial facility (cement plant). Photovoltaic panels and other appurtenant structures would be sited on the majority of the 115 acre site, as shown on the Site Plan. An eight-foot high chain link fence would also be constructed and installed around the perimeter of the site, setback per County regulation by 15 feet on street adjacent edges.

The Project site is semi-rural in character with a wide variety of visual encroachments, including scattered ranch structures, electrical distribution lines, well structures, roadways, and vegetated and non-vegetated berms. The Project site is mostly flat, with no unique or unusual features. Vegetation on the site is generally disturbed.

The Initial Study (Exhibit C) analyzed the potential visual effects of the Project and included simulated views of the Project from several surrounding locations. No designated scenic vistas are located in the vicinity of the Project site. Views from most areas would not be substantially altered. A few residents would have a view of the Project site; however, the existing views are not unique and have already been altered by multiple prior modifications. Project structures would not dominate the horizon or significantly modify the overall visual landscape. The Project's Visual Resources Technical Report explains that the resulting landscape change would not be substantial, considering the distance to the Project site, the Project's low profile, and intervening features.

The proposed Project would have a low profile and would have limited potential to create glare, because the PV panels are designed to absorb as much sunlight as possible and engineered to inherently minimize reflectivity. Minimal and controlled lighting would be used at night, in compliance with Development Code standards for preservation of night skies. Therefore, light and glare associated with the Project would not substantially degrade the existing night-time visual character or quality of the site and its surroundings.

Habitat: Numerous biological reports and studies have been prepared for this Project. No federally threatened, endangered, or candidate species were observed within the Project site during extensive field surveys. Consultation with both the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) has occurred.

Although no State or Federal endangered or threatened species were found on the Project site during surveys, the Initial Study and the proposed Conditions of Approval require mitigation to avoid or minimize potential impacts to sensitive biological resources. Biological assessments and surveys are discussed and included by reference in the Initial Study (Exhibit C).

Traffic: Construction activities at the Project site are anticipated to take place over a period of approximately 6 months, during which the Project (including the off-site interconnection) would generate approximately 150 round trips per day. During operation, the Project would generate approximately 12 round trips per month.

Cultural Resources: The Project will be located so as to avoid or mitigate impacts to significant cultural and historic resources, as well as sacred landscapes.

As specified in the Cultural Resource Assessment and summarized in the Initial Study/Mitigated Negative Declaration, no significant cultural or historic resources were identified within the Project boundary. Even so, a sacred lands record search was requested from the Native American Heritage Commission and Native American tribes associated with the Project area were consulted regarding the Project pursuant to Assembly Bill 52. A mitigation measure has been included in the Initial Study for any cultural resources that may be discovered. This mitigation measure has been reviewed and accepted by all of the Tribes with an interest in the Project.

Water: The Project is within the service area of the Joshua Basin Water District (JBWD). As a standard procedure of development review, the County requires that a Project applicant provide a will serve letter from the local water purveyor. JBWD has responded to the applicant's request with a conditional will-serve letter. The letter states that JBWD is able to provide adequate water to serve the Project, but will not do so while the drought emergency exists. Due to the language within the conditional will-serve letter, Planning staff instructed the applicant to identify an alternative water source to meet the needs of the Project, in the event that JBWD is not able or unwilling to serve the Project. The applicant proposes to utilize an onsite well as an alternative to meet the water demand of the Project, an arrangement that is permissible under Infrastructure Improvement Standards for the Desert Region identified in Section 83.09.050 of the Development Code. The applicant has identified that the peak water demand for the Project will occur during the construction phase, which will require 30 acre feet of water to be completed. The Project is located in the Copper Mountain Valley Groundwater sub-basin of the greater Morongo Groundwater basin, which is not adjudicated. Requests for well permits will be reviewed by the Environmental Health Services Division. This topic is also covered in the Initial Study (Exhibit C) under Section IX - Hydrology and Water Quality.

Greenhouse Gas Emissions Reduction: In 2006, the State of California passed the California Global Warming Solutions Act (Assembly Bill 32) which requires the state to reduce emissions of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases (GHG) to 1990 emission levels (a 30 percent reduction) by 2020. Senate Bill 1368, enacted in 2006, prohibits California electric utilities from constructing power plants or entering into long-term

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energy purchase contracts with facilities that do not meet the GHG emissions standard. In December 2011, the County adopted a GHG Emissions Reduction Plan (GHG Reduction Plan) that established review criteria for GHG emissions. The proposed Project would assist in efforts to meet the California GHG emissions legislation, consistent with the County GHG Reduction Plan.

There will be a positive impact of a substantial net reduction in GHG emissions as a result of building the Project. Generating power from solar energy is a substantial reduction in GHG emissions over conventional power generation from the combustion of fossil fuels. The solar energy produced by the proposed Project is estimated at 20 MW and would provide an estimated reduction of 34,050 tons of CO<sub>2</sub>e per year during operation. After analyzing the Project's operation emissions of 17.39 tons of CO<sub>2</sub>e annually, the net operation emissions would displace approximately 34,033 tons of CO<sub>2</sub>e each year during operation, which would provide a net benefit to the environment.

The proposed Project supports adopted plans, policies, and regulations of the State of California intended to reduce GHG emissions because it generates renewable electricity. SCE has selected this Project through the competitive bid process over several others and has issued a PPA in order to help meet this goal.

Valley Fever: Public comments raised questions about Coccidioidomycosis (Valley Fever). The Planning Division has previously consulted the Health Officer of the Public Health Department, Dr. Maxwell Ohikhuare. In a memorandum, Dr. Ohikhuare states that the Valley Fever incidence rate in San Bernardino County is lower than both the National and State levels. The memo also states that the health risk from Valley Fever in San Bernardino County is low. Dr. Ohikhuare's memo about Valley Fever in San Bernardino County is attached as Exhibit F.

### **SUMMARY:**

The proposed Project is consistent with applicable County goals, policies, and regulations regarding renewable energy. The proposed Project would assist in meeting the renewable energy targets for retail sellers of electricity in California and is consistent with the State and County GHG emissions goals. Potential impacts have been studied and analyzed, and impacts are less than significant, supporting the determination of a mitigated negative declaration. Therefore, Staff recommends approval of the Project.

### **RECOMENDATION:**

That the Planning Commission:

- 1) **ADOPT** the Mitigated Negative Declaration.
  - 2) **ADOPT** the proposed Findings for approval of the Conditional Use Permit per Development Code Section 85.06.040, and the Required Findings for Approval of a Commercial Solar Energy Facility per Development Code Section 84.29.035.
  - 3) **APPROVE** a Conditional Use Permit to establish a 20-MW solar photovoltaic electricity generation facility on 115 acres subject to the recommended Conditions of Approval.
  - 4) **FILE** a Notice of Determination.
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**ATTACHMENTS:**

- Exhibit A: Findings
- Exhibit B: Conditions of Approval
- Exhibit C: Initial Study/Mitigated Negative Declaration
- Exhibit D: Comments on the Initial Study & Responses to Comments
- Exhibit E: Other Public Comments Received
- Exhibit F: Valley Fever Memo

## **EXHIBIT A**

### **Findings**

## EXHIBIT A: FINDINGS

### Joshua Tree Solar Farm

#### Findings per Development Code Section 85.06.040 [Conditional Use Permit]

Per Development Code Section 85.06.040, the following are the required findings that the reviewing authority must adopt before approving a Conditional Use Permit. The following are the required findings and supporting facts for the proposed 20-megawatt solar photovoltaic electricity generation facility (Project) located on approximately 115 acres of land (APNs 060723119 and 060736406 ) in unincorporated San Bernardino County.

1. ***Finding:*** 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 Project site is located on 115 acres. The subject site is adequate in shape and size to provide for all required features pertaining to the proposed solar facility in compliance with applicable development standards, including all required setbacks and fences. The site is able to accommodate the proposed solar panels and all ancillary facilities associated with the Project. No permanent open spaces or yards are required as the proposed facility will be unmanned with occasional maintenance and service.

2. ***Finding:*** The site for the proposed use has adequate access, which means that the site design incorporates appropriate street and highway characteristics to serve the proposed use.

The proposed Project provides for adequate site access off of Sunfair Road. Per agreements with the County, the Project will make improvements to Sunfair Road, including paving to a width of 40 feet and a length of approximately 2,500 feet.

3. ***Finding:*** 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. In addition, the use will not substantially interfere with the present or future ability to use solar energy systems.

A Draft Initial Study (IS) was prepared for the proposed Project resulting in a proposed Mitigated Negative Declaration (MND). These documents are collectively referred to as the "IS/MND." The IS/MND analyzed potential impacts to surrounding properties, and recommended mitigation measures to address any potentially significant impacts, including traffic, vibration and noise. These mitigation measures, which are incorporated

into the Project's proposed Conditions of Approval, ensure that there will be no significant adverse impacts to abutting properties from the Project.

As detailed in the IS/MND, the Project will not generate excessive noise, traffic, vibration or other disturbances to any abutting properties.

The Project would comply with the noise restrictions established by Development Code Section 83.01.080 during construction and operations. Construction would be temporary and would not involve blasting or produce noise and/or vibration that exceed Development Code requirements. Operation of the facility would generate minimal noise that is within County Development Code standards. No discernible vibrations are expected during operations given the nature of the proposed use.

Construction traffic was also analyzed in the IS/MND and was determined to have a less than significant impact after mitigation. During Project operations, the facility will be unmanned; and minimal traffic will come to the site other than for maintenance.

Dust impacts were also analyzed in the IS/MND, and would be controlled onsite during Project construction pursuant to Mojave Desert Air Quality Management District (MDAQMD) requirements. Accordingly, there would be no substantial adverse effect on abutting properties.

The proposed facility would not shade adjacent parcels and would not limit the future development of solar energy systems or other development on neighboring properties in any way. In fact, the proposed solar panels would not exceed a maximum of 12 feet in height, which is lower than the typical single-story residence. In conclusion, the facility is a passive use and would not otherwise result in any substantial adverse effects on abutting properties.

4. ***Finding:*** The proposed use and manner of development are consistent with the goals, maps, policies, and standards of the General Plan and any applicable community or specific plan.

Solar energy generation is a conditionally permitted use within the Institutional (IN) and Community Industrial (IC) zoning designations. Therefore, the Project's land use is consistent with the General Plan zoning and map for the area. The General Plan is strongly supportive of the development of renewable energy resources and businesses that operate in the renewable energy field. Specifically, the General Plan states that the County should:

- Encourage utilization of renewable energy resources (Goal D/CO 2).
- Encourage use of renewable and alternative energy systems for residential uses (Policy D/CO 2.2).

- Provide incentives to promote siting or use of clean air technologies (e.g., fuel cell technologies, renewable energy sources, UV coatings, and hydrogen fuel) (Policy CO 4.12).
- Assist in efforts to develop alternative energy technologies that have minimum adverse effect on the environment, and explore and promote newer opportunities for the use of alternative energy sources (Policy CO 8.3).

The project is located within the boundary of the Joshua Tree Community Plan. Additionally, the Roy Williams Airport is discussed in several locations within the plan. At the time the Community Plan was adopted, the airport was in use as a fly-in bed and breakfast. The use of the site has since been discontinued and the site is currently used solely as a private residence. This Goal and Policy of the Joshua Tree Community Plan support approval of the Project.

- Industrial land uses shall be located in areas where industrial uses will best serve the needs of the community and will have a minimum adverse effect upon surrounding property with minimal disturbance to the natural environment and the total community. (Policy JT/LU 4.5)
- Encourage utilization of renewable energy resources. (Goal JT/CO4).

The Project proposes no changes to zoning within Joshua Tree Community Plan, nor does it propose changes to zoning or regulations for the county at-large. The voluntary discontinuation of the use of the airport is the result a decision by the current property owner. The degraded quality of the land, due to its past use, presents is an advantage over other sites able to be developed, allowing for further minimization of impacts upon the environment.

The Project will not conflict with any applicable adopted land use plan, policy, or regulation of an agency with jurisdiction over the Project.

5. ***Finding:*** 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 and operation the Project's required use of local infrastructure will not significantly affect existing service levels. Operation of the Project will generate an insignificant number of vehicle trips that would easily be accommodated by existing local roadways and mitigation will ensure the effects of temporary construction traffic is less than significant. Sunfair Road runs along the east side of the Project. SCE will upgrade the existing transmission line along Sunfair Road to serve the Project. The Project will obtain water either by drilling a well on site, or by entering into an agreement with the Joshua Basin Water District (JBWD) for service. In either case, the Project applicant will be responsible for

paying for and/or constructing the minimal necessary infrastructure improvements and thus there will be no significant effect on existing service levels. Additionally, if the Project utilizes water from the JBWD, the applicant will purchase additional water commensurate with what it uses for the Project such that there is no net decrease in the JBWD's available water supply. No wastewater, natural gas, or cable television infrastructure is required to serve the Project.

6. ***Finding:*** The lawful conditions stated in the approval are deemed reasonable and necessary to protect the public health, safety, and general welfare.

The Project's Conditions of Approval reflect requirements designed to protect the public health, safety, and general welfare. These conditions 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. ***Finding:*** 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 Project is a solar energy generation facility and therefore fully complies with this finding. Implementation of the Project would not impede development of solar energy generation systems on adjacent parcels.

8. ***Finding:*** A Draft Environmental IS has been prepared in compliance with the California Environmental Quality Act (CEQA) and represents the independent judgment of the County acting as lead agency for the Project. Based on the entire record of proceedings, there is no substantial evidence that the Project

An IS was prepared for the Project that complies fully with CEQA. The IS/MND concludes on the entire record that no substantial evidence has been submitted that the Project will have a significant adverse impact on the environment with implementation recommended mitigation measures, which have been incorporated into the Conditions of Approval. The Draft IS/MND represents the independent judgment of the County acting as lead agency for the Project.

### **Findings per Development Code Section 84.29.035 [Findings for a Commercial Solar Energy Facility]**

Per Development Code Section 84.29.035, the following are the required findings that the reviewing authority must adopt before approving a commercial solar energy facility. The Project's consistency with each finding is described below:

1. **Finding:** 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.

The Project is located on unincorporated lands to the east of the Town of Yucca Valley in San Bernardino County, California. The Project is sufficiently separated from existing communities and rural residential areas such that adverse effects are avoided. The nearest residence is approximately 600 feet to the east and the nearest neighborhood is approximately 650 feet to the north.

To the immediate south of the Project is a cement manufacturing plant. No new utility lines would be required to accommodate the electricity generated by the Project because the Project would be able to connect to existing electrical infrastructure that is adjacent to the Project site.

In addition, the IS/MND concludes that the proposed Project will not have any significant adverse impacts, with recommended mitigation measures that have been incorporated as Conditions of Approval.

2. **Finding:** 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.

Several Project design features, as noted above, will act to minimize visual impacts. A proposed chain link fence around the perimeter and along Sunfair Road would be consistent in type with that of other rural properties in the area and within the maximum allowed height. By enclosing the Project with a fence, the Project will not stand out to travelers on Sunfair Road. The Project will not be visible from Highway 62.

The Project site is flat and contains no significant geological features or vegetation that could be considered scenic. None of the proposed onsite equipment would obstruct any viewsheds in the area. Overall, the Project is largely obscured from view of adjacent residences. Consequently, the proposed facility would blend with and be subordinate to the environment and character of the area.

3. **Finding:** The siting and design of the proposed commercial solar energy generation facility will either be: (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.

The Project would not detract from the visual qualities of the area as viewed from communities, rural residential uses, and major roadways and highways. The Project is sufficiently separated from existing communities and rural residential areas. Project facilities are generally 650 feet from the nearest residence on the north and 600 feet to scattered residences on the east. In addition, the property to the south of the Project is a cement manufacturing plant, which is a visually-dominant heavy industrial land use. In comparison, the tallest structure on the Joshua Tree Project site would be 12 feet, approximately one half the height of a common residential structure.

The Project's low, flat profile would not limit views across the Project to the mountains. As discussed in the IS/MND, the Project site currently consists of previously disturbed, abandoned airport property of low scenic value.

4. **Finding:** 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.

The primary access points to the Project site would be directly from the existing public right of way, Sunfair Road. In accordance with County standards, a 26-foot-wide perimeter road and 20-foot-wide internal roads have been incorporated into the site design. Where feasible, the Project will retain existing vegetation and windrows at least 15 feet from the property line which, in addition to the unimproved portion of the Sunfair Road right-of-way, would further attenuate views of the perimeter access road on the sides of the facility facing Sunfair Road. Views of other segments of the perimeter access road and the internal access roads would be attenuated by the solar panels and support posts. Temporary access roads would be restored following completion of construction.

5. **Finding:** The proposed commercial solar energy generation facility will not adversely affect the feasibility of financing infrastructure development in areas planned for infrastructure development or will be located within an area not planned for future infrastructure development (e.g., areas outside of water agency jurisdiction).

No element of the proposed Project is expected to impact the feasibility of financing infrastructure development for the local area. With regard to areas

unplanned for infrastructure development, the site is adequately served by the existing and planned Project infrastructure improvements.

6. **Finding:** 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 and developing rural residential areas.

The project would not substantially deplete groundwater supplies or interfere with groundwater recharge; therefore the Project would not adversely affect to a significant degree the availability of groundwater supplies. Water will likely be provided by a well on site or through the Joshua Basin Water District (JBWD). Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the six months of project construction; this represents less than 2% of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

The JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant is willing to purchase water to be placed into the recharge pond, which will enhance groundwater recharge and thus ensure that the Project will not cause groundwater depletions in excess of the basin's safe yield.

Regardless of whether the Project uses water from an onsite well, or from the JBWD, the impact to the groundwater basin will be minimal. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

7. **Finding:** The proposed commercial solar energy generation facility will minimize site grading, excavating, and filling activities by being located on land where the existing grade does not exceed an average of five (5) percent across the developed portion of the project site, and by utilizing construction methods that minimize ground disturbance.

The Project's gentle slope is less than one percent (1%) across the site, consistent with # 7 above. This slight slope will minimize the amount of grading necessary to prepare the site for construction. Final topographical grades for the Project site will be similar to existing conditions. Construction activities would further minimize grading by maintaining the existing site grade

and drainage pattern where feasible, balancing the site in terms of cut and fill and locating site access roads only where necessary to meet County Fire safety requirements. The Project would not significantly change the site contouring as the site was previously leveled for airport runways.

8. **Finding:** The proposed commercial solar energy generation facility is located in proximity to existing electrical infrastructure such as transmission lines, utility corridors and roads such that: (a) minimal ground disturbance and above ground infrastructure will be required to connect to the existing transmission grid, (b) new electrical generation tie lines have been 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.

The Project site is located adjacent to existing transmission lines along Sunfair Road. The point of interconnection to these transmission lines is located on the Project site. The Project will use existing rights-of-way and designated utility corridors. This will result in the shortest possible generation tie line and thus also minimize disturbance for connection to the Project site. SCE will be re-conductoring the lines and replacing poles within their existing right-of-way. For the section of Sunfair Road between Twentynine Palms Highway and Two Mile Road, SCE will be replacing approximately one mile of existing distribution line poles with approximately 25 new poles. The existing poles are approximately 60 feet in height. For SCE to co-locate two existing distribution lines, an estimated maximum pole height of 65 feet will be required to get adequate conductor clearances. The system will be designed and built by SCE, so all final design and engineering decisions will be made by SCE and fully supported by the Project.

9. **Finding:** 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, important habitat/wildlife linkages or areas of connectivity designated by County, State or Federal agencies, and areas of Habitat Conservation Plans or Natural Community Conservation Plans that discourage or preclude development.

The Project site was carefully selected to avoid habitat that would be beneficial to threatened and endangered species. The site was previously used as an airport therefore very little vegetation or habitat exists to support any wildlife species. Full biology surveys and reports have been done to the specifications of CDFW and the USFWS. There are no threatened or endangered species, Critical Habitat Areas, important habitat/wildlife linkages, areas of connectivity designated by County, State or Federal agencies, or areas of Habitat Conservation Plans or Natural Community Conservation Plans on the Project site.

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

The Project will not cause or encourage the growth of invasive weeds during and following construction and will use standard best management practices for the control of weeds.

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

The Cultural Resources Assessment prepared for the Project included desktop and pedestrian phase 1 surveys of the site. As specified in the Cultural Resource Assessment and summarized in the IS/MND, no significant cultural or historic resources were identified within the Project boundary.

A sacred lands record search was requested from the Native American Heritage Commission and Native American tribes associated with the Project area were consulted regarding the Project pursuant to AB 52. A mitigation measure has been included in the Initial Study for cultural resources. This mitigation measure has been reviewed and accepted by all of the Tribes with an interest in the Project.

12. **Finding:** 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.

The Project's area of disturbance does not contain any state or federal jurisdictional streams or wetlands. The Project's design proposes minimal site grading for the majority of the site with finished topographical grades being similar to existing conditions. The Project's design also minimizes impacts to storm water flows and impacts to natural drainage courses because the vast majority of the Project site would remain permeable once constructed. The Project consequently would not require the placement of any new facilities or structures within the delineated 100-year floodplain which could otherwise change or re-direct existing flood conveyance facilities. A stormwater pollution prevention plan (SWPPP) incorporating best management practices for erosion control will be prepared and approved prior to the start of construction. During site preparation, the SWPPP will be implemented and preliminary erosion and sediment control features will be installed. Thus, the Project will not impede flood flows, avoids substantial modification of natural water courses, and will not result in erosion or substantially affect area water quality.

13. **Finding:** 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.

The Project site is not located within a 100-year floodplain or in a floodway, as evidenced in the Hydrology Report for the Project. The Project engineering prepared concludes that any increased runoff volume resulting from the Project will be minimal and will not increase off-site flooding hazards.

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

The entire solar facility will be located more than one foot above the base flood elevation as shown on Flood Insurance Rate Maps. No portion of the proposed development is within a 100-year flood zone. Hydrologic modeling completed for the Project confirms that the Project would not be subject to inundation during a 100-year flood event. The Project site minimizes impacts to annual storm water flows by preserving the existing onsite natural drainages. The Hydrology Report prepared for the Project and summarized in the IS/MND estimated that increased runoff volume resulting from the proposed Project is insignificant.

15. **Finding:** 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.

The Project site is not located on or adjacent to undeveloped alluvial fans. The Project site is located in an area that has rural development, including homes, roads, highways, and utility lines which prevent the migration of channels onto the development footprint, and the attendant erosion impacts.

16. **Finding:** 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.

The Project is located on a decommissioned airport site. The Project is not located on Prime Farmland, Unique Farmland or Farmland of Statewide Importance, as mapped by the State.

17. **Finding:** 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.

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

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

The Project site is not located in an area of known, significant mineral resources. There are no identified important mineral resources on the Project site and the site is not within a Mineral Resource Zone Overlay. Additionally, solar energy generation is considered an interim land use (with a limited-term contract with a utility) and is expected to be removed after its contractual lifetime.

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

No designated scenic natural formations as identified by the County are located at the Project site. As explained in the IS, the Project site itself as viewed from multiple vantages has been disturbed for previous aviation use with other rural residential, transportation and industrial uses surrounding the Project site. The Project site is located on flat land, and will not result in the modification of any recognized scenic natural formations.

20. **Finding:** 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 (3) 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.

The IS/MND assessed potential air quality impacts, and incorporated a mitigation measure which requires preparation and implementation of a Dust Control Plan, which in turn requires watering three times daily or other comparable effective dust control methods. The Project will apply dust control measures in compliance with Mojave Desert Air Quality Management District (MDAQMD) regulations. Compliance with MDAQMD regulations and mitigation required by the IS/MND ensure that the facility minimizes dust generation. Accordingly, the Project will minimize dust generation and incorporate the recommended dust control methods.

21. **Finding:** 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 20 percent or greater opacity impact

public roads, occupied structures, or neighboring property, and in conformance with Air Quality Management District (AQMD) regulations.

The Project will apply dust control measures in compliance with MDAQMD regulations. The Dust Control Plan prepared for the Project requires activities on unpaved surfaces to cease when wind speeds exceed 20 miles per hour averaged over one hour or when dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or neighboring property. AQ-2 in the IS/MND will ensure compliance with these conditions.

22. **Finding:** 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.

Fence slats would be strategically incorporated into the Project design to provide a form of wind fencing on the north side of the Project site. These slats will create an adequate wind barrier to potentially blowing dust. During operations, there would be no regular earth-disturbing activities that would have the potential to generate any significant amount of blowing dust.

During construction, the Project will apply dust control measures in compliance with MDAQMD regulations and mitigation required in the IS/MND. This includes using water trucks to apply water and/or palliatives to minimize the production of visible dust emissions in areas where grading occurs, within the staging areas, and on any unpaved roads used during Project construction.

To control wind erosion in dry climates where soil moisture levels are difficult to maintain, the Project would implement a series of measures to provide proper soil stabilization both during and following construction. These measures include daily watering, limiting vehicle speeds, and any reestablishment of vegetation following construction grading required by a SWPPP. Per the requirements of the State General Construction Permit, the SWPPP is required to include an erosion control plan and post-construction BMPs. These measures are effective in controlling wind erosion during and following construction activities.

The soil materials on site would be stabilized through the measures implemented during and following Project construction, such as the use of water trucks to apply water and/or dust palliatives where grading occurs and, if necessary, application of gravel or other surface fixing materials to the Project's unpaved internal access roads. The solar arrays would also be expected to provide some level of wind-break.

23. **Finding:** 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.

The Project will apply dust control measures in compliance with MDAQMD regulations in order to prevent excessive dust. The Project's Dust Control Plan contains measures requiring the use of dust palliatives or gravel to control dust generation on unpaved access roads on the Project site. The Project's driveways will be subject to applicable paving requirements of the County.

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

The Dust Control Plan for the Project and AQ-2 in the IS/MND limits vehicle speeds on unpaved roads to 15 miles per hour.

25. **Finding:** For proposed commercial solar energy generation facilities within two (2) 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.

The Project site is not within two miles of Joshua Tree National Park. The Project's interconnection point with the electric transmission line along Sunfair Road, is located on the Project site. The interconnection point is not within two miles of Joshua Tree National Park.

26. **Finding:** For proposed facilities within two (2) 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.

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

27. **Finding:** For proposed facilities within two (2) 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.

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

28. **Finding:** For proposed facilities within two (2) miles of the boundaries of a 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.

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

29. **Finding:** For proposed facilities within two (2) 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.

The Project site is not within two miles of any active military base. The nearest active military base is the 29 Palms Marine Base, approximately 12 miles to the northeast.

30. **Finding:** When located within a city's sphere of influence, in addition to other County requirements, the proposed commercial solar energy facility will also be consistent with relevant city zoning requirements that would be applied to similar facilities within the city.

The Project site is not located within a sphere of influence of a city.

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

Adequate surety for decommissioning and reclamation of the site will occur in compliance with Development Code Section 84.29.070, which requires removal of site facilities when operations cease.

## **EXHIBIT B**

### **Conditions of Approval**

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# **Conditions of Approval**

## CONDITIONS OF APPROVAL

### GENERAL REQUIREMENTS

Conditions of Operation and Procedure

*[Not subject to Condition Compliance Release Form (CCRF) signatures]*

#### LAND USE SERVICES – Planning Division (760) 995-8140

1. Project Approval Description. For the proposed twenty (20) megawatt (MW) solar photovoltaic electricity generation facility (Project) on approximately 115 acres of land (APN(s) 0607-231-19 and 0607-364-06) eastern portion of the community of Joshua Tree in unincorporated San Bernardino County (County), this Conditional Use Permit (CUP) Project is approved to be constructed and operated in compliance with the San Bernardino County Code (SBCC), California Building Codes (CBC), the following Conditions of Approval, the approved site plan, and all other required and approved reports and displays (e.g., elevations). This CUP Project is approved to establish a 20 megawatt photovoltaic solar energy generating facility on approximately 115 acres at the former Hi Desert (Roy Williams) Airport. The modules will be mounted on a steel and aluminum structural system ("racking" system) which will be supported, when practical, by driven piers (piles) directly embedded in the ground. The front (south, lower) side of the arrays with fixed tilt racking will maintain a 2 foot clearance from ground level. The array height will be approximately 7-10 feet from ground level. The highest maximum height of an array (from the ground to the north, upper side) will be approximately 10.5 feet and no higher than 12 feet. Any proposed change to this Project Description including maximum height and/or tracking systems shall require a Revision to an Approved Action application to be filed with County Planning.

The developer shall provide a copy of the approved conditions and the site plan to every current and future Project tenant, lessee, and property owner to facilitate compliance with these Conditions of Approval and continuous use requirements for the Project Site with APN(s) 0607-231-19 and 0607-364-06 and Project Number: P201400482.

2. Project Location. The Project site is located at 5500 Sunfair Road in the community of Joshua Tree. Site is located on the west side of Sun Fair Road, between 4<sup>th</sup> Street and Two Mile Road.
3. Zoning Standards. The Project site is located in the Desert Region, within the JT/IN Institutional and JT/IC Community Industrial Land Use Zoning Districts within the Joshua tree Community Plan area.
4. Facility Design. The facility design shall incorporate the following guidelines:
  - The applicant shall arrange the arrays in a logical, orderly manner and pattern.

- The applicant shall maintain the panels, inverters, and transformers so that electrical interference will not affect adjacent properties.
  - The applicant shall perform any repairs or upgrades to the components of the solar power facility at such times and in such a manner that noise and glare will not be significantly disruptive to adjacent properties, roads, or traffic.
5. Continuous Maintenance. The Project property owner shall continually maintain the property so that it is not dangerous to the health, safety, and general welfare of both on-site users (e.g. employees) and surrounding properties. The developer shall ensure that all facets of the development are regularly inspected, maintained and that any defects are timely repaired. The elements to be maintained, include but are not limited to:
- Annual maintenance and repair inspections shall be conducted for all structures, fencing/walls, driveways, and signs to assure proper structural, electrical, and mechanical safety.
  - Graffiti and debris shall be removed within 48 hours of notification.
  - Dust control measures shall be maintained on any undeveloped areas where landscaping has not been provided.
  - Erosion control measures shall be maintained to reduce water runoff, siltation, and promote slope stability.
  - Signage. All on-site signs, including posted area signs (e.g. "No Trespassing") shall be maintained in a clean readable condition at all times and all graffiti and vandalism shall be removed and repaired on a regular basis. Signs on the site shall be of the size and general location as shown on the approved site plan or subsequent County Planning-approved sign plan.
  - Fire Lanes. All markings required by the Fire Department, including "No Parking" designations and "Fire Lane" designations shall be clearly defined and shall be maintained in good condition at all times.
6. Performance Standards. The approved land uses shall operate in compliance with the general performance standards listed in the SBCC 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. In addition to these, none of the following shall be perceptible without instruments at any point outside the Project boundaries at adjoining property lines:
- Odors: No offensive or objectionable odor.
  - Smoke: No smoke of a greater density than that described in No. 2 on the Ringelmann Chart, as published currently by the United States Bureau of Mines, shall be emitted from any Project source.
  - Radiation: No dangerous amount of radioactive emissions.

- **Toxic Gases:** No emission of toxic, noxious or corrosive fumes of gases.
  - **Glare:** No intense glare that is not effectively screened from view at any point outside the Project boundary.
7. **Revisions.** Any proposed change to the approved use/activity on the site (e.g. from solar facility to other uses); or any increase in the developed area of the site or expansion to the approved facilities, including changes to structures, tracking system, equipment, elevations, heights, signs, parking allocation, lighting, or a proposed change in the Conditions of Approval, including operational restrictions from those shown either on the approved site plan and/or in the Conditions of Approval shall require that an additional land use application (e.g. Revision to an approved Action) be approved 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)
8. **Continuous Effect/Revocation.** All of the Conditions of Approval applied to this Project shall be effective continuously throughout the operative life of the Project for all approved structures and approved land uses/activities. Failure of the Project 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.
9. **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 the 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's fees, which the County or its indemnitees may be required by a court to pay as a result of such action.

At its sole discretion, the County may 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 indemnitee's "passive" negligence but does not apply to the indemnitee's "sole" or "active" negligence or "willful misconduct" within the meaning of Civil Code Section 2782.

10. Local Labor. The developer shall give preference to and employ San Bernardino County residents as much as practicable during construction and operation of the facility.
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. Project Account. Project Account. The Job Costing System (JCS) account number is P201400482. This is an actual cost Project with a deposit account to which hourly charges are assessed. The developer shall maintain a positive account balance at all times. A minimum balance of \$1000 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. There shall be sufficient funds remaining in the account to properly fund file closure and any other required post-occupancy review and inspection (e.g. landscape performance).
13. Expiration. This Project permit approval shall expire and become void if it is not exercised within three years of the effective date of this approval, unless an extension of time is approved. The permit is deemed exercised when either:
  - The permittee has commenced actual construction or alteration under a validly issued Building Permit 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)Occupancy of completed structures and operation of the approved 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 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.

**PLEASE NOTE:** *This will be the ONLY notice given of the expiration date. The developer is responsible for initiation of any Extension of Time application.*

14. **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 30 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)
15. **Condition Compliance.** In order to obtain construction permits for grading, building, final inspection and/or tenant occupancy for each approved building, the developer shall process a Condition Compliance Release Form (CCRF) for each respective building and/or phase of the development through County Planning in accordance with the directions stated in the Approval letter. County Planning shall release their holds on each phase of development by providing to County Building and Safety the following:
  - **Grading Permits** – a copy of the signed CCRF for grading/land disturbance and two “red” stamped and signed approved copies of the grading plans.
  - **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.
  - **Final Inspection** – a copy of the signed CCRF for final inspection of each respective building, after an on-site compliance inspection by County Planning.
16. **Additional Permits.** The property owner, developer, and land use operator are all responsible to ascertain and comply with all laws, ordinances, regulations, and any other requirements of Federal, State, County, and Local agencies as are applicable to the development and operation of the approved land use and Project site. These include:
  - a) **FEDERAL:** None
  - b) **STATE:** California Department of Fish and Wildlife, Mojave Desert Air Quality Management District, Colorado Regional Water Quality Control Board, California Energy Commission

c) COUNTY: Land Use Services – Divisions of Planning, Building and Safety, Code Enforcement, Land Development; County Fire; Environmental Health Services; and Public Works

d) LOCAL: None Identified

17. Lighting. Any lighting shall be maintained so that all lights are operating properly for safety purposes and shall not Project onto adjoining properties or roadways. Lighting shall adhere to San Bernardino County Desert and Mountain night light regulations.

18. 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) or as otherwise required by County Traffic.

#### LAND USE SERVICES – Code Enforcement Division (760) 995-8140

19. Enforcement. If any County enforcement activities are required to enforce compliance with the Conditions of Approval, the property owner shall be charged for such enforcement activities in accordance with the County Code Schedule of Fees.

20. Weed Abatement. In conjunction with required permits, the applicant shall comply with San Bernardino County Desert Area Fire Hazard Abatement regulations [SBCC§ 23.031-23.043] and periodically clear the site of all non-complying vegetation. This includes removal of all Russian thistle (tumbleweeds).

#### PUBLIC HEALTH – Environmental Health Services [DEHS] (800) 442-2283

21. 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.

#### SAN BERNARDINO COUNTY FIRE – (760) 995-8190

22. Jurisdiction. The above referenced Project is under the jurisdiction of the San Bernardino County Fire Department, herein “Fire Department”. Prior to any construction occurring on any parcel, the developer 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, ordinances, and standards of the Fire Department.

23. 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 with 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.

24. Additional Requirements. In addition to the Fire requirements stated herein, other requirements from the Solar Photovoltaic Installation Guideline from the California State Fire Marshal may arise at the time of field inspection.

LAND USE SERVICES – 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.

PUBLIC WORKS – Solid Waste Management Division (909) 386-8701

28. Mandatory Commercial Recycling. Beginning July 1, 2012 all businesses defined to include a commercial or public entity that generates 4 or more cubic yards of commercial solid waste a week or is a multi-family residential dwelling of 5 units or more to arrange for recycling services. The County is required to monitor business recycling and will require the business to provide recycling information. This requirement is to assist the County in compliance with the recycling requirements of AB 341.
29. 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 AB 341.

## **PRIOR TO ANY LAND DISTURBANCE OR ISSUANCE OF ANY GRADING PERMITS**

Completion of the following must occur, with CCRF signatures

### LAND USE SERVICES – Building and Safety Division (760) 995-8140

30. Erosion and Sediment Control Plan. Applicant shall submit an erosion and sediment control plan and permit application to Building and Safety for review and approval prior to any land disturbance.
31. Erosion Control Installation. Erosion control devices must be installed at all perimeter openings and slopes. No sediment is to leave the job site.
32. Grading Plans. Grading plans shall be submitted to Building and Safety for review and approval prior to grading/land disturbance of more than 50 cubic yards.
33. 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)
34. Regional Board Permit Letter. CONSTRUCTION projects involving one or more acres must be accompanied by a copy of the Regional Board permit letter with the WDID#. Construction activity includes clearing, grading, or excavation that results in the disturbance of at least one (1) acre of land total.
35. Retaining Wall Plans. Submit plans and obtain separate building permits for any required walls or retaining walls.
36. Demolition Permit. Obtain a Demolition Permit for any buildings/structures to be demolished. Underground structures must be broken in, backfilled and inspected before covering.
37. Geotechnical (Soil) Report. A Geotechnical (soil) Report shall be submitted to the Building and Safety Division for review and approval prior to issuance of grading permits.
38. Geology Report. A geology report shall be submitted to the Building and Safety Division for review and approval by the County Geologist and fees paid for the review prior to final project approval.
39. Erosion Control and Stormwater Pollution Prevention Plan. The Project was sited to avoid direct impacts to riparian habitat, however indirect impacts may occur via stormwater or non-stormwater runoff. As such, a SWPPP, created by a Qualified SWPPP Developer (QSD) and implemented by a Qualified SWPPP Practitioner (QSP), will be prepared and implemented for the Project. This SWPPP will list all measures to eliminate the discharge of pollutants other than stormwater) and non-

storm water discharges authorized by the California Construction General Permit Order 2009-0009-DWQ or another National Pollutant Discharge Elimination System (NPDES) permit. The SWPPP will contain programs to monitor visual pollutants, chemical pollutants, and potential sediments. Specific and Best Management Practices, Numeric Action Levels, Numeric Effluent Levels, and Rain Event Action Plans will be implemented as required to ensure non-permitted discharges are eliminated. The SWPPP will be prepared prior to commencement of Project construction. [MM HWQ-1]

LAND USE SERVICES – Planning Division (760) 995-8140

40. Reciprocal Access Agreement. Prior to land disturbance, the developer shall record a reciprocal access easement between the owners of the project parcels.
41. Adequate Wind Barrier. An adequate wind barrier of fence slats or similar wind barrier shall be installed at strategic locations aligned with the predominant wind direction to minimize wind-blown dust at adjacent residences. Provide verification of compliance (i.e. material specification sheets, site photos showing installation, etc.) to the Planning Division prior to land disturbance.
42. Mojave Desert Air Quality District / Dust Control Plan. The developer will prepare, submit and obtain approval from the Mojave Desert Air Quality District (MDAQD) a Dust Control Plan (DCP) consistent with MDAQMD guidelines. The DCP will include the following elements to reduce dust production:
  - a) Exposed soils and haul roads will be watered three (3) times per day to reduce fugitive dust during all grading/construction activities. Inactive areas will be treated with soil stabilizers such as hay bales, non-toxic soil binder, or aggregate cover.
  - b) Street sweeping will be conducted when visible soil accumulations occur along site access roadways to remove dirt dropped by construction vehicles.
  - c) Site access driveways and adjacent streets will be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday.
43. **AQ Operational Mitigation**. **Operation of all off-road and on-road diesel vehicles/equipment shall comply with the County Diesel Exhaust Control Measures [SBCC §83.01.040 (c)], including but not limited to:**
  - a) **Equipment/vehicles shall not be left idling for periods in excess of five minutes.**
  - b) **Engines shall be maintained in good working order to reduce emissions.**
  - c) **Onsite electrical power connections shall be made available where feasible.**

- d) **Ultra low-sulfur diesel fuel shall be utilized.**
- e) **Electric and gasoline powered equipment shall substituted for diesel powered equipment where feasible.**
- f) **Signs shall be posted requiring all vehicle drivers and equipment operators to turn off engines when not in use.**
- g) **All transportation refrigeration units (TRUs) shall be provided electric connections. [AQ-1]**

44. **AQ Dust Control Plan.** *The developer shall prepare, submit and obtain approval from County Planning of a Dust Control Plan (DCP) consistent with MDAQMD guidelines and a letter agreeing to include in any construction contracts/subcontracts a requirement that project contractors adhere to the requirements of the DCP. The DCP shall include the following elements to reduce dust production:*

- a) *Exposed soils and haul roads shall be watered up to three (3) times per day to reduce fugitive dust during grading/construction activities. Inactive areas shall be treated with soil stabilizers such as hay bales or aggregate cover.*
- b) *Street sweeping shall be conducted when visible soil accumulations occur along site access roadways to remove dirt dropped by construction vehicles.*
- c) *Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday.*
- d) *Construction vehicle tires shall be cleaned prior to leaving the project site.*
- e) *All trucks hauling dirt away from the site shall be covered, and speeds on unpaved roads shall be reduced below 15 miles per hour.*
- f) *During high wind conditions (i.e., sustained wind speeds exceeding 20 mph), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall cease until wind speeds no longer exceed 20 mph.*
- g) *Storage piles that are to be left in place for more than three working days shall either be sprayed with a non-toxic soil binder, covered with plastic or revegetated. [AQ-2]*

45. **AQ Signage.** *The developer shall agree to erect a sign for fugitive dust issues. The MDAQMD requires a sign to be erected not later than the commencement of construction at the project site entrance. This sign will include a phone number and contact information for anyone who wants to report dust issues resulting from the project construction. [AQ-4]*

**46. General Habitat Impact Avoidance and Minimization Measures. The developer shall submit for review and obtain approval from County Planning evidence the following general avoidance and minimization measures have been satisfactorily integrated in the construction plans for the Project:**

- **Implement a worker environmental awareness training for all project personnel.**
- **Limit areas of disturbance to the minimum necessary for development.**
- **Salvage the topsoil containing the native seed bank and redistribute over temporarily disturbed areas to facilitate passive revegetation.**
- **The project has been designed to minimize night lighting. All outdoor lighting, including street lighting, will be provided in accordance with the County Night Sky Protection Ordinance and will only be provided as necessary to meet safety standards. Outdoor lighting will be shielded or directed away from adjacent native habitat to protect species from direct night lighting.**
- **The projected increases in noise will be reduced to the maximum extent practicable during construction activities. During all grading on-site, the construction contractors will equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards to reduce construction equipment noise to the maximum extent possible. Enforce a 15 mph speed limit on project roads.**
- **Vehicles and equipment to remain on designated roadways.**
- **Standard dust control procedures will be implemented to minimize dust. If water is used as a dust suppressant, it will be administered such that pooling or ponding of water is minimized so that it does not provide a wildlife attractant.**
- **Trash will be kept in raven and coyote-proof containers and removed regularly from the project so that it does not provide a wildlife attractant.**  
**[BIO-1]**

**47. Desert Tortoise. There is no evidence that tortoises are using the project site or have used it in the recent past. Therefore, potential impacts to tortoises are expected to be limited to tortoises that may wander on site. If tortoises walk onto the project site, they could be injured or killed (e.g., collision with vehicles or equipment). Because of these reasons, the following mitigation measures are designed to avoid impacts to tortoises.**

- **Install permanent tortoise exclusion fencing around the perimeter of the main project site to exclude tortoise during construction and operation. Clearance surveys of the fenced site will be conducted by qualified biologists to ensure that no tortoises are inside the site. Clearance surveys will be conducted as soon as feasible after tortoise exclusion**

***fencing is installed. Any newly installed fence will be monitored appropriately during and after fence installation to ensure that no tortoises exhibit fence walking behavior that could result in injury or death to the tortoise.***

- Monitor and maintain the fence at appropriate intervals throughout construction and operations. This includes monitoring during storm events or other circumstances that could damage the fence.***
- Enforce speed limits of 15 miles per hour on roads within the project site.***
- Ensure that a biological monitor is on site during all initial surface grubbing and grading in the event that a tortoise is encountered. Biological monitors must be present during construction of the perimeter fence, during ground disturbance in unfenced areas, and during active construction in unfenced areas to properly implement mitigation measures. A biologist must be available (not onsite) during construction activities in fenced areas that have been surveyed for and cleared of tortoises and other biological resources to promptly implement protection measures for biological resources in the unlikely event that a tortoise or other biological resource is detected onsite. [BIO-2]***

48. ***Burrowing Owl. Owls could move onto the site prior to project development, so focused burrowing owl take avoidance surveys will be completed according to CDFW (CDFG 2012) guidelines within 14 days of site grading. If owls are found on site prior to construction, a passive relocation plan may be developed to minimize impacts to onsite owls, and avoidance will adhere to CDFW guidance for avoidance buffers (CDFG 2012). Other standard measures such as speed limits, limiting the area of disturbance, and having a biological monitor present for construction outside of the fenced site will contribute toward avoiding and minimizing any potential impacts to this species and their habitat.[BIO-3]***

49. ***Nesting Birds. Vegetation removal during construction, and construction noise and activity, could potentially adversely impact nesting birds. Therefore, to the extent feasible, vegetation removal should take place outside of the breeding season, which is typically February 15 to August 31. If construction will take place during the breeding season, pre-construction clearance surveys to locate nesting birds should be conducted immediately prior to construction. If active nests are present within the construction area, they must be avoided by establishing a non-disturbance buffer until the young fledge or the nest fails (as determined by a qualified biologist familiar with bird breeding and behavior). Nesting birds that are adjacent to active construction will also be avoided by this approved buffer. The buffer areas will be delineated and flagged to ensure avoidance. [BIO-4]***

50. ***Desert Kit Fox. Kit fox could move onto the site prior to project development, so surveys will be completed within 30 days of site grading and may be***

***conducted concurrently with desert tortoise surveys. Depending on the results of those surveys, a plan may be developed to address individuals that are denning within the project site. Other standard measures such as speed limits, limiting area of disturbance, and having biological monitors present will contribute toward minimizing any potential impacts to this species and their habitat. [BIO-5]***

51. **Protected Plants.** Species protected by the California Desert Native Plant Protection Act and the San Bernardino County Code (beavertail cactus, buckhorn cholla, Joshua tree, and silver cholla) are present on the project site and will directly impacted by development. Where feasible, individuals of these species will be avoided. For those that cannot be avoided, removal will comply with the California Desert Native Plant Protection Act and the San Bernardino County Code and be transplanted into the perimeter landscape buffer. [BIO-6]

52. **Weed Management.** Due to the disturbed nature of the site, there are several established non-native species (i.e., weeds) present within the project. Although eradication of these existing weeds is not considered feasible, the following best management practices will be implemented during construction and operations of the project to help control the spread of existing weeds and the introduction of new weed species:

- Limit the size of any vegetation/ground disturbance to a minimum and limit ingress and egress to defined routes;
- Passively reestablish vegetation on temporarily disturbed sites;
- Prevent spread of weeds via vehicular sources by implementing methods for cleaning construction vehicles;
- Use only certified weed-free straw, hay bales, and seed if used for erosion control and sediment barrier installations;
- Invasive, non-native species shall not be used in landscaping plans;
- Monitor weed invasions and rapidly implement control measures to eradicate new weed invasions. [BIO-7]

53. **Raven Management.** ***Contribute to the USFWS Regional Raven Management Program to reduce raven impacts to desert tortoises. A one-time payment will be submitted the USFWS Regional Raven Management Program. The amount shall be a one-time payment of \$105 per acre for the 115-acre project site. Payment will be to the National Fish and Wildlife Foundation (NFWF). [BIO-8]***

54. **Treatment Plan.** A Tribal Cultural Resources Monitoring, Discovery, Treatment and Disposition Plan will be established prior to commencing construction. The Plan will address Tribal monitoring and evaluation/disposition of new

discoveries including human remains. The Plan will allow for one or more Native American cultural resources specialists to monitor all ground-disturbing activities and excavations on the project site. If any Cultural Resources are encountered, ground-disturbing activities in the area shall be temporarily redirected from the vicinity of the find. All cultural resources encountered will be documented on the California Department of Parks and Recreation Site Forms to be filed with the CHRIS SBAIC. If any human remains are encountered unexpectedly during construction or grading activities, the Applicant will comply with State Health and Safety Code Section 7050.5 such that no further disturbance in the area of such discovery occurs until the County Coroner has made necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If any such remains are determined to be of Native American descent, the County Coroner will notify the NAHC, which is required to identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who then, in consultation with the landowner, will take additional steps, as necessary, in accordance with CEQA Guidelines Section 15064.5(e) and Public Resources Code Section 5097.98. [CR-1]

55. **Paleontological Resources.** *Prior to the approval of the project plans and specifications by San Bernardino County, the project shall confirm that the plans and specifications stipulate that if evidence of subsurface paleontological resources are found during construction, excavation and other construction activity in that area shall cease and the contractor shall a county certified Paleontologist to determine the extent of the find and take proper actions. [PR-1]*

56. **Construction Noise.** The developer shall submit for review and obtain approval of an agreement letter that stipulates that all construction contracts/subcontracts contain as a requirement that the following noise attenuation measures be implemented:

a) Noise levels of any project use or activity shall be maintained at or below adopted County noise standards (SBCC 83.01.080). The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.

b) Construction equipment shall be muffled per manufacturer's specifications. Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.

c) All stationary construction equipment shall be placed in a manner so that emitted noise is directed away from sensitive receptors nearest the project site. [N-1]

## PUBLIC WORKS – Surveyor (909) 387-8149

57. Record of Survey. The following conditions are for the occasion where the monuments of record cannot be located and the boundary must be determined for construction purposes. A Record of Survey/Corner Record shall be filed in the following instances:

- Performance of a field survey to establish property boundary lines for the purposes of construction staking, establishing setback lines, writing legal descriptions or boundary establishment/mapping of the subject parcel.
- Monuments set to mark the property lines.
- Any other applicable circumstances pursuant to applicable sections of the Business and Professions Code that would necessitate filing of a Record of Survey.

58. 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 (Section 8771(b) Business and Professions Code).

## LAND USE SERVICES – Land Development Division – Drainage Section (909) 387-8311

59. Drainage Improvements. A Registered Civil Engineer 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 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..

60. Topo Map. A topographic map shall be provided to facilitate the design and review of necessary drainage facilities.

61. Grading Plans. Grading plans shall be submitted for review and approval obtained. An \$806 deposit for grading plan 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.

## PUBLIC WORKS – Solid Waste Management Division (909) 386-8701

62. Construction and Demolition Waste Management Plan (CDWMP) – Part 1. The developer shall prepare, submit, and obtain approval from Solid Waste Management Division (SWMD) of a “Construction Waste Management Recycling Plan (CDWMP),

Part I. The CDWMP shall list the types and volumes of solid waste materials expected to be generated from grading and construction. The Plan shall include options to divert from landfill disposal materials for reuse or recycling by a minimum of 50 percent of total volume.

Upon completion of construction, the developer shall complete SWMD's CDWMP Part 2. This summary shall provide documentation of diversion of materials including but not limited to receipts or letters from diversion facilities or certification regarding reuse of materials on site.

#### PUBLIC WORKS – Traffic Division (909) 387-8186

63. Maintenance Agreement. The developer may be required to enter into a maintenance agreement with the County Department of Public Works, Transportation Operations Division to insure all County maintained roads utilized by the construction traffic shall remain in acceptable condition during construction. For information regarding the maintenance agreement, please contact the Transportation Operations Division at (909) 387-7995.

#### SAN BERNARDINO COUNTY FIRE – (760) 995-8190

64. Access. The development shall have a minimum of 2 points of vehicular access. These are for fire/emergency equipment access and for an evacuation routes.

**PRIOR TO ISSUANCE OF BUILDING PERMITS**  
Completion of the following must occur, with CCRF signatures

LAND USE SERVICES – Land Development Division – Roads Section (909) 387-8311

65. Road Dedication/Improvements. The developer shall submit for review and obtain approval from the 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.

• **Sunfair Rd (Major Highway – 104')**

- Road Dedication. A grant of easement is required to provide a half-width right-of-way of 52'.
- Street Improvements. Design AC dike with match up paving 40 feet from centerline.
- Curb Return Dedication. A 35 foot radius return grant of easement is required at the intersections of Sunfair Rd with Fourth St and Two Mile Rd.
- Driveway Approach. Design driveway approach per 2010 Caltrans Driveway Standard Detail A87A (W=24' min – 34' max), and located per San Bernardino County Standard 130.

**Fourth Street (1/4 Section Line – 88')**

- Road Dedication. A 4 foot grant of easement is required to provide an ultimate half-width right-of-way of 44'.
- Curb Return Dedication. A 35 foot radius return grant of easement is required at the intersections of Fourth Street and Sunkist Rd.

**Sunkist Rd (1/4 Section Line – 88')**

- Road Dedication. A 44 foot grant of easement is required to provide an ultimate half-width right-of-way of 44'.
- Curb Return Dedication. A 20 foot radius return grant of easement is required at the intersections of Sunkist Rd and Gold Nugget Rd.

**Gold Nugget Rd (1/16 Section Line – 60')**

- Road Dedication. A 30 foot grant of easement is required to provide an ultimate half-width right-of-way of 30'.

**Sunray Rd (1/16 Section Line – 60')**

- Road Dedication. A 30 foot grant of easement is required to provide an ultimate half-width right-of-way of 30'.
- Curb Return Dedication. A 20 foot radius return grant of easement is required at the intersections of Sunray Rd and Cobalt Rd.

**Cobalt Rd (Local Street – 60')**

- Road Dedication. A 30 foot grant of easement is required to provide an ultimate half-width right-of-way of 30'.
- Vacate. That portion of Cobalt Rd proposed to be within the project area to receive recommendation for approval of vacation from the Highway Planning Technical Committee (HPTC), Department of Public Works. A processing fee shall be required prior to vacation and the vacation shall be finalized prior to certificate of occupancy. Contact Transportation Right-of-Way at (909) 387-7951 to obtain additional information.

**Two Mile Rd (Section Line – 88')**

- Road Dedication. A 4 foot grant of easement is required to provide an ultimate half-width right-of-way of 44'.

66. 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.

67. 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.

68. Construction Permits. Prior to installation of road and drainage improvements, a construction permit is required from County Public Works, Transportation Operations Division, Permit Section, (909) 387-8046, as well as other agencies prior to work within their jurisdiction. Submittal shall include a materials report and pavement section design in support of the section shown on the plans. Applicant shall conduct classification counts and compute a Traffic Index (TI) Value in support of the pavement section design.
69. Encroachment Permits. Prior to installation of driveways, sidewalks, etc., an encroachment permit is required from County Public Works, Transportation Operations Division, Permit Section, (909) 387-8046, as well as other agencies prior to work within their jurisdiction.
70. Soils Testing. Any grading within the road right-of-way prior to the signing of the improvement plans shall be accomplished under the direction of a soils testing engineer. Compaction tests of embankment construction, trench back fill, and all sub-grades shall be performed at no cost to San Bernardino County and a written report shall be submitted to the Transportation Operations Division, Permits Section of County Public Works, prior to any placement of base materials and/or paving.
71. 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.
72. 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.

#### LAND USE SERVICES – Building and Safety Division (760) 995-8140

73. Building 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.
74. Permits. Obtain permits for all structures located on site and all work done without a permit.

#### SAN BERNARDINO COUNTY FIRE – (760) 995-8190

75. Building Plans. No less than three complete sets of Solar/Photovoltaic Plans shall be submitted to the Fire Department for review and approval. Plans shall be submitted and approved prior to CCRF for building permit issuance.
76. Road Standards. All roads must be an all-weather driving surface or an aggregate base compacted to 85% to hold 75,000 pounds. Roads must have a 45' outside turning radius. Access roads must be a maximum of 600' apart. Perimeter roads

must be no less than 26' wide and interior roads no less than 20' wide. Fire Access roadways must be 26' wide minimum, where no paved roadways exist and road grades do not exceed 8%, and where serving only single family dwellings or accessory buildings, roads may be constructed with approved native materials or gravel compacted to 85% compaction. One point of access required for each fenced in area.

77. Street Sign. This Project is required to have an approved street sign (temporary or permanent). The street sign shall be installed on the nearest street corner to the Project. Installation of the temporary sign shall be prior any combustible material being placed on the construction site. Prior to final inspection and occupancy of the first structure, the permanent street sign shall be installed.

ENVIRONMENTAL HEALTH SERVICES- (800) 442-2283

78. Water. Water purveyor shall be EHS approved.

79. Wells. Industrial grade wells are required and will not be allowed for use as potable water. Provide the well completion reports for the industrial wells that show when the wells were constructed with a minimum 50 foot annular seal. For information contact DEHS at 1-800-442-2283 or the Department of Water Resources at 818-500-1645.

80. Additional Permits. Contact DEHS for proper permits if well destruction, modification or reconstruction is required.

81. Additional Well Requirements. If there is more than one well onsite, an additional well may be used for emergency non- potable purposes only. All other wells onsite must be properly destroyed.

82. Acoustic Study. 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 standards, a project specific acoustical analysis shall be required. Submit information/analysis to the DEHS for review and approval. For information and acoustical checklist, contact DEHS at 1-800-442-2283.

LAND USE SERVICES – Planning Division (760) 995-8140

83. **Building Materials. As appropriate, on-site switchyard buildings shall use non-reflective materials and neutral colors as approved by the Land Use Services Department, Planning Division. [AES-1]**

84. 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).

85. Decommissioning Requirements. In accordance with SBCC 84.29.060, Decommissioning Requirements, the Developer shall submit a Closure Plan to the Planning Division for review and approval. The Decommissioning documents 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 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 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. Following the implementation of a decommissioning plan, all equipment and fencing shall be removed and the site would be re-vegetated so that the end use and site are in a stable condition.
- 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:
  - Erosion and Sediment Control Plan
  - Drainage Report
  - Notice of Intent and Stormwater Pollution Prevention Plan
  - Air Quality Permits

- Biological Resources Report
- Cultural Records Report
- The County may require a Phase 1 Environmental Site Assessment be performed at the end of decommissioning to verify site conditions.

**PRIOR TO FINAL INSPECTION OR OCCUPANCY,**  
Completion of the following must occur, with CCRF signatures

SAN BERNARDINO COUNTY FIRE – (760) 995-8190

86. Haz-Mat Approval. The applicant shall contact the San Bernardino County Fire Department/Hazardous Materials Division (909) 386-8400 for review and approval of building plans, where the planned use of such buildings will or may use hazardous materials or generate hazardous waste materials.
87. 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".

COUNTY FIRE DEPARTMENT – Hazardous Materials Division (909) 386-8401

88. Disclosure Information. Prior to occupancy, operator shall submit disclosure information using the California Environmental Reporting System (CERS) for emergency release or threatened release of hazardous materials and wastes or apply for exemption from hazardous materials laws and regulations. Contact the Office of the Fire Marshall, Hazardous Materials Division at (909) 386-8401
89. Permits. Prior to occupancy, the applicant shall be required to apply for one or more of the following: a Hazardous Materials Handler Permit, a Hazardous Waste Generator Permit, and/or an Underground Storage Tank Permit. For information, contact the Office of the Fire Marshall, Hazardous Materials Division at (909) 386-8401.

PUBLIC WORKS – Solid Waste Management Division (909) 386-8701

90. Construction and Demolition Waste Management Plan (CDWMP) – Part 2. The developer shall complete SWMD's CDWMP Part 2. This summary shall provide documentation of diversion of materials including but not limited to receipts or letters from diversion facilities or certification reuse of materials on site. The CDWMP Part 2 shall provide evidence to the satisfaction of County Solid Waste that demonstrates that the Project has diverted from landfill disposal materials for reuse or recycling by a minimum of 50 percent of total volume of all construction waste.

LAND USE SERVICES–Land Development Division–Roads Section (909) 387-8311

91. Road Vacation. Vacation process shall be completed by recordation of a Tract Map Parcel Map Board Resolution or other instrument as accepted by the Land Development Division. Proof of recordation and completion of the vacation process shall be provided to the Land Development Division prior to occupancy.
92. Road Improvements. All required on-site and off-site improvements shall be completed by the applicant, inspected and approved by County Public Works.
93. Open Roads/Cash Deposit. Existing County roads, which will require reconstruction, shall remain open for traffic at all times, with adequate detours, during actual construction. A cash deposit shall be made to cover the cost of grading and paving prior to issuance of road encroachment permit. Upon completion of the road and drainage improvement to the satisfaction of the Department of Public Works, the cash deposit may be refunded.
94. 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.
95. Parkway Planting. Trees, irrigation systems, and landscaping required to be installed on public right-of-way shall be approved by County Public Works and Current Planning and shall be maintained by the adjacent property owner or other County-approved entity.

LAND USE SERVICES–Land Development Division–Drainage Section (909) 387-8311

96. Drainage Improvements. All required drainage improvements shall be completed by the applicant. The private registered engineer 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 – Building and Safety Division (760) 995-8140

97. Final Occupancy/Use. Prior to occupancy/use, all requirements and sign-offs shall be completed and confirmed by the Planning Division.

LAND USE SERVICES – Planning Division (760) 995-8140

98. 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 affected agency.
99. **AQ Installation**. *The developer shall submit for review and obtain approval from County Planning of evidence that all air quality mitigation measures have been installed properly and that specified performance objectives are being met to the satisfaction of County Planning and County Building and Safety. [AQ-3]*
100. 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 site shall not generate visible fugitive dust (as defined in Mojave Desert Air Quality Management District's [MDAQMD's] 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.
101. 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% 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.

\*Mitigation Measures shown in **Bold**

102. Installation of Improvements. All required on-site and off-site improvements shall be installed.
103. Payment of Fees. 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 P201400482.

**END OF CONDITIONS**

## **EXHIBIT C**

### **Initial Study/Mitigated Negative Declaration**

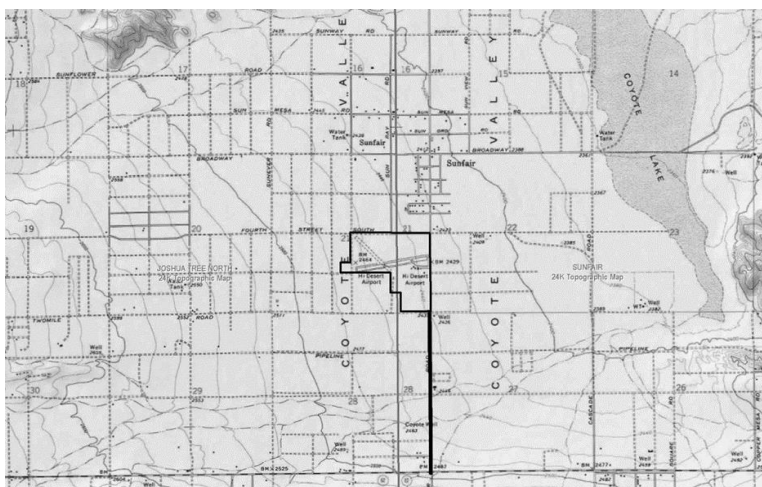
## SAN BERNARDINO COUNTY INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

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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>	060723119 and 060736406	<b>USGS Quad:</b>	Joshua Tree North & Sunfair
<b>APPLICANT:</b>	Joshua Tree Solar Farm, LLC	<b>T, R, Section:</b>	T1N, R7E, Section 21
<b>COMMUNITY:</b>	Joshua Tree/ 3 <sup>rd</sup> Supervisorial District	<b>Planning Area:</b>	Joshua Tree Community Plan
<b>LOCATION:</b>	5500 Sunfair Road, Joshua Tree	<b>Land Use Zoning:</b>	JT/IN, JT/IC, JT/RL
<b>PROJECT NO.:</b>	P201400482/CUP	<b>Overlays:</b>	Biological Resources
<b>STAFF:</b>	John Oquendo		
<b>REP(S):</b>	Jess Melin		
<b>PROPOSAL:</b>	Conditional Use Permit to establish a 20 megawatt photovoltaic solar energy generating facility on approximately 115 acres at the former Hi Desert (Roy Williams) Airport		



### PROJECT CONTACT INFORMATION:

**Applicant:** Joshua Tree Solar Farm, LLC  
700 Universe Boulevard, FBD/JB  
Juno Beach, Florida 33408

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

**Contact person:** John Oquendo, Senior Planner  
Phone: 760-995-8153 Fax: 760-995-8167  
E-mail: John.Oquendo@lus.sbcounty.gov

## PROJECT DESCRIPTION:

# Joshua Tree Solar Farm

## 1.0 INTRODUCTION

Joshua Tree Solar Farm, LLC (JTSF or applicant) proposes to construct, own, and operate a 20 megawatt (MW) alternating current (AC) solar photovoltaic (PV) generating facility located on approximately 115 acres of disturbed land (the Project), 3.5 miles east of the unincorporated community of Joshua Tree and 1.3 miles north of Twentynine Palms Highway (State Route 62) in unincorporated San Bernardino County. The generated power will be delivered to the electrical grid via a 33 kilovolt (kV) interconnection to the Southern California Edison (SCE) distribution system at a point near Sunfair Road, just south of State Route 62.

The project location has been specifically chosen to repurpose a previously developed site, the deactivated, privately owned Hi Desert (or Roy Williams) Airport (airport). The project site consists of highly disturbed land as a result of the remaining airport infrastructure including runways, an ideal scenario for repurposing the land with a solar facility. Initially, a larger parcel of vacant land (approximately 160 acres) to the south of the airport was being considered for the project. Concerns about surface hydrology and undisturbed desert vegetation led JTSF to evaluate the currently proposed project site (located to the north), when it became known that the deactivated airport was available for sale. Land option agreements were entered into with the owner of the airport, and environmental studies of the airport site commenced. It was soon determined that the 115 acres constituting the airport site were not sufficient in quantity to produce 20 MW<sub>AC</sub> of power using a tracking PV system.

JTSF then began negotiations to purchase an additional 40 acres adjacent to the airport to the east. Additional environmental studies analyzing cultural resources, biology, and waters of the State were conducted to assess the existing environmental condition of these 40 acres. After hearing community concerns about the use of undisturbed desert land for solar project, JTSF decided to revert back to only using the 115 acres on the disturbed airport site. By doing so, and in order to still meet the objective of producing 20 MW<sub>AC</sub> of power, the configuration was changed from tracking to fixed tilt. A fixed tilt layout is able to accommodate more PV panels in a smaller space.

The following factors contributed to the decisions in the site selection:

- The project site is a deactivated airport which has already been disturbed. The project site is also outside the two-mile radius of Joshua Tree National Park. Development of this site would lower the environmental impact to vegetation and wildlife habitat as compared to developing on undisturbed land.
- The land is fairly level, reducing the need for grading.
- There is existing access to the site off of Twentynine Palms Highway and Sunfair Road, eliminating the need for new roads or new right of way.
- The project site is in an area with an excellent solar energy resource with high irradiance and is of sufficient size to produce up to 20 MW<sub>AC</sub> of electricity from PV solar panels.

- The project site is adjacent to an existing SCE electrical distribution line which will take energy produced by the project into the grid. Distribution line improvements will be made and will likely include replacing the existing poles with new poles over a length of one mile.

## 1.1 Project Objectives

The primary objective of the project is to assist in achieving or exceeding the State's Renewable Portfolio Standards (RPS) and greenhouse gas emissions reduction objectives. This will be achieved by developing and constructing California RPS-qualified solar generation. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33% of total procurement by 2020. Recently, in October 2015, the California governor passed Senate Bill 350, which demands an increase in the RPS of the state from 33% to 50% by 2030. Increasing renewable resources to 50 percent of the state's electricity consumption by 2030 sets California on path to meet its 2050 climate change goals. The JTSF will help meet this goal.

The project specific objectives are as follows:

1. Develop approximately 20 MW<sub>AC</sub> of renewable solar energy that can operate during on-peak power periods, indirectly reducing the need to emit greenhouse gases caused by the generation of similar quantities of electricity from either existing or future non-renewable sources to meet existing and future electricity demands.
2. Develop approximately 20 MW<sub>AC</sub> of renewable solar energy that satisfies the terms of the Project's Interconnection Agreement, while minimizing environmental impacts by using previously disturbed land.
3. Develop a renewable project that is consistent with the County of San Bernardino General Plan (San Bernardino 2014a), and the Solar Ordinance developed by San Bernardino County (San Bernardino 2014b), as well as the principles in the draft Desert Renewable Energy Conservation Plan (DRECP 2015), to the extent applicable. See Attachment A.
4. Invest approximately 50 million dollars in total expenditures, which will help to support the economy in San Bernardino County through the creation of jobs and capital expenditures.
5. Maximize the potential for creation of local construction jobs for a variety of trades, thereby supporting unemployment reduction goals in the area for the duration of construction.

## 2.0 PROJECT DESCRIPTION

The following sections provide further detail on the design, construction, operation, maintenance, and decommissioning of the project. Preliminary design is underway, with project size, typical equipment, and array configurations determined. A final selection of solar modules, inverters, mounting system, and precise dimensions will be decided during detailed design and equipment procurement. A project overview is provided in Table 1 below. Specifics of the project are detailed in the following subsections.

**Table 1: Project Summary Information**

Site Capacity	20.0 MW <sub>AC</sub>
Collection and Intertie	33 kV line (SCE)
Array Configuration	Fixed tilt 15-25 degrees

The following project plans will satisfy County guidelines on project development, design, construction, and operation of the project:

- The effective service life of the project is approximately 30 years (before major overhaul of equipment) with the potential to repower
- Site grading will be minimal due to previous development and flat terrain
- Grading and cut/fill operations are expected to be limited to storm water management
- Recycling goals of 50 percent will be implemented where possible of all building materials and packaging
- Existing reusable structures will be disassembled and materials recycled as possible (hangars, shelters, etc.)
- Where practical, site asphalt pavement will remain; concrete pads will be demolished and removed
- Site debris that cannot be reused or recycled will be taken to an off-site disposal facility approved for disposal of the target debris

## **2.1 Location and Existing Conditions**

The 115-acre Joshua Tree project site is within Section 21, Township 1 North, Range 7 East, as mapped on the United States Geological Survey 7.5-minute series Joshua Tree North, California, and Sunfair, California quadrangles (Figure 1).

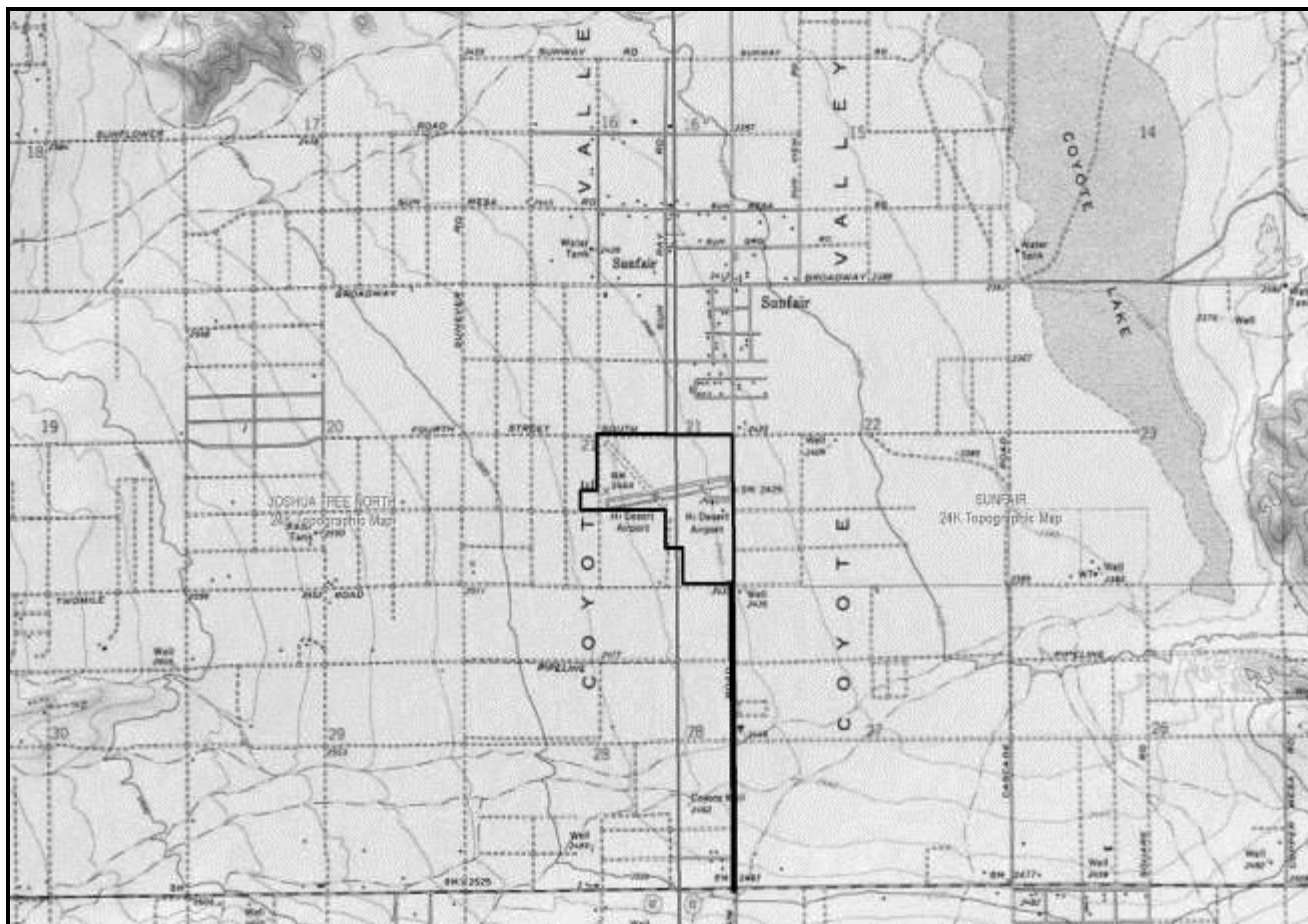


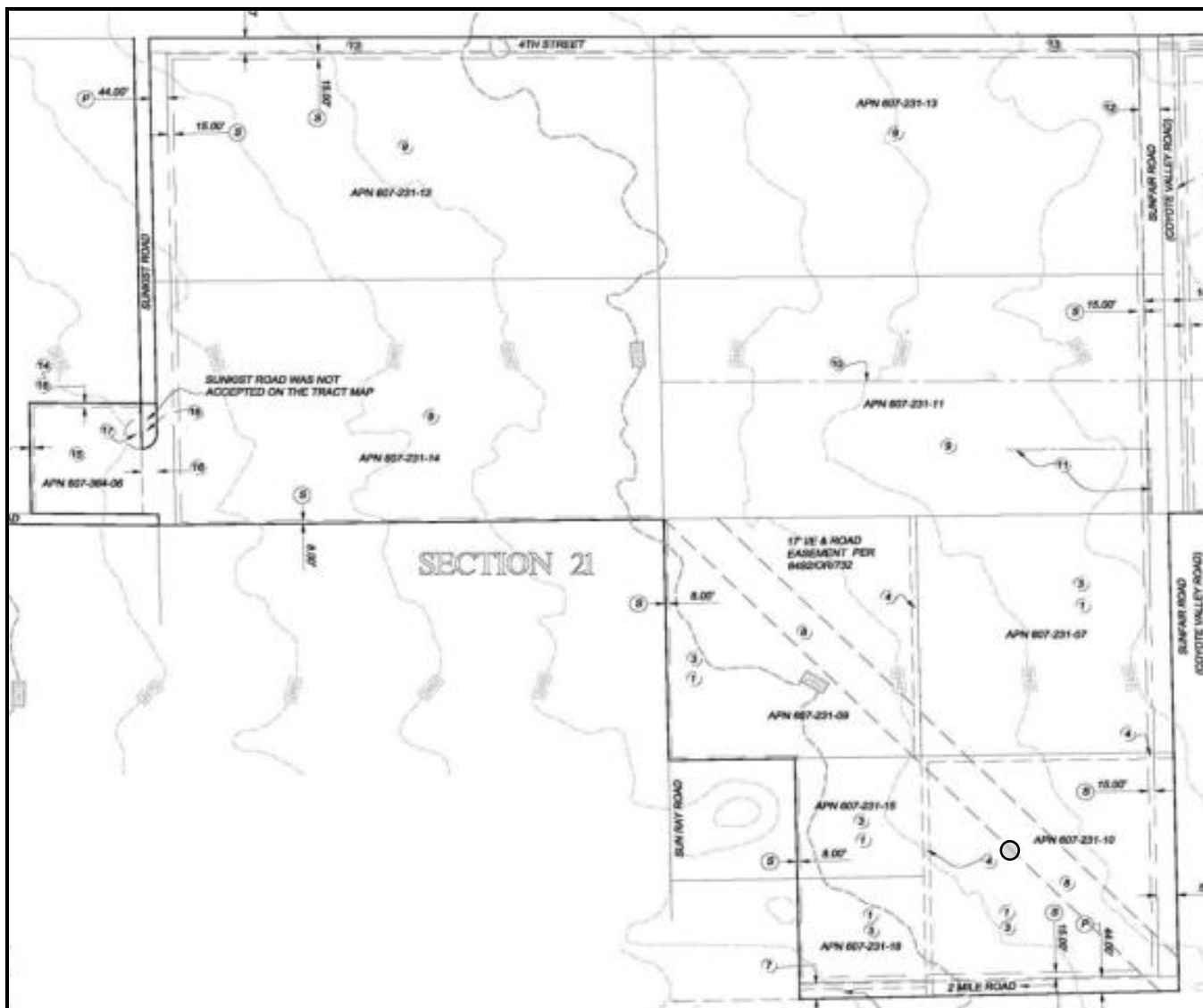
FIGURE 1: PROJECT SITE

The topography of the project site is relatively flat and ranges in elevation from approximately 2,470 feet above mean sea level on the western boundary of the site to 2,430 feet above mean sea level on the northeast corner of the site. The project site is previously developed and is accessed through Sunfair Road, a paved County road that runs along the eastern border of the site. The project site is bordered by Two Mile Road to the south, unpaved Fourth Street to the north, and vacant land to the south and west. Hi-Grade Materials Company occupies the parcel adjacent to the southwest border of the project site. The current composition of the existing land is best described as vacant land of dirt and sand with a sparse vegetative community consisting of native grasses and shrubs.

The decommissioned airport site previously consisted of several parcels totaling 115 acres as listed in Table 2 and shown on Figure 2. In the summer of 2015, nine of the parcels listed in Table 2 (excluding APN 0607-364-06-0-000) were merged together through the San Bernardino County Lot Merger process. Lot Merger P201500345 was signed on September 11, 2015 by John Oquendo, San Bernardino County, and the new APN is 060723119. Although not included in the Lot Merger, APN 0607-364-06-0-000 is still part of the JTSF project site.

**Table 2: Assessor's Parcel Number Index and Parcel Areas**

Parcel Number	Acres
0607-231-12-0-000*	20.00
0607-231-13-0-000*	19.24
0607-231-14-0-000*	20.00
0607-231-11-0-000*	19.24
0607-231-09-0-000*	10.00
0607-231-07-0-000*	10.00
0607-231-15-0-000*	2.50
0607-231-18-0-000*	2.50
0607-231-10-0-000*	9.39
0607-364-06-0-000	2.14
<b>Total</b>	<b>115.01</b>
* Included in Lot Merger P201500345 and the APN is now 060723119	



**FIGURE 2: PARCEL MAP**

## 2.2 Project Limits

The project footprint is defined by the property boundaries of the airport. The site-produced electrical energy will be collected and routed to the switchgear adjacent to the entry gate. The combined output of the plant will be routed from the switchgear through underground conductors to the southeast corner of the property where the conductors transition from underground to overhead and interconnect with SCE (grey circle, above in Figure 2). The distribution line, provided by SCE, runs due south along the west side of Sunfair Road on existing or to-be-replaced distribution structures in an existing utility easement to the main tie-in on the south side of Twentynine Palms Highway (also referred to as Hwy 62). The upgraded distribution line will be on SCE property and is outside the property boundary containing the solar arrays.

## 2.3 Facilities Overview

The overall project will have a maximum capacity of 20 MW<sub>AC</sub> using fixed tilt configuration. The preliminary Site Plan is shown below as Figure 3.

The project employs solar PV modules for energy generation, power conversion stations, and typical electrical equipment to collect the produced energy and deliver it to the point of interconnection with SCE's distribution system. The PV modules produce low-voltage Direct Current (DC) electrical power which is collected and delivered to the utility-scale inverter stations distributed throughout the site. The power conversion stations convert DC electricity to AC electricity and step it up to medium voltage of 33 kV. The power is collected at medium voltage, fed through the appropriate protective equipment, and delivered to the utility at the point of interconnection.

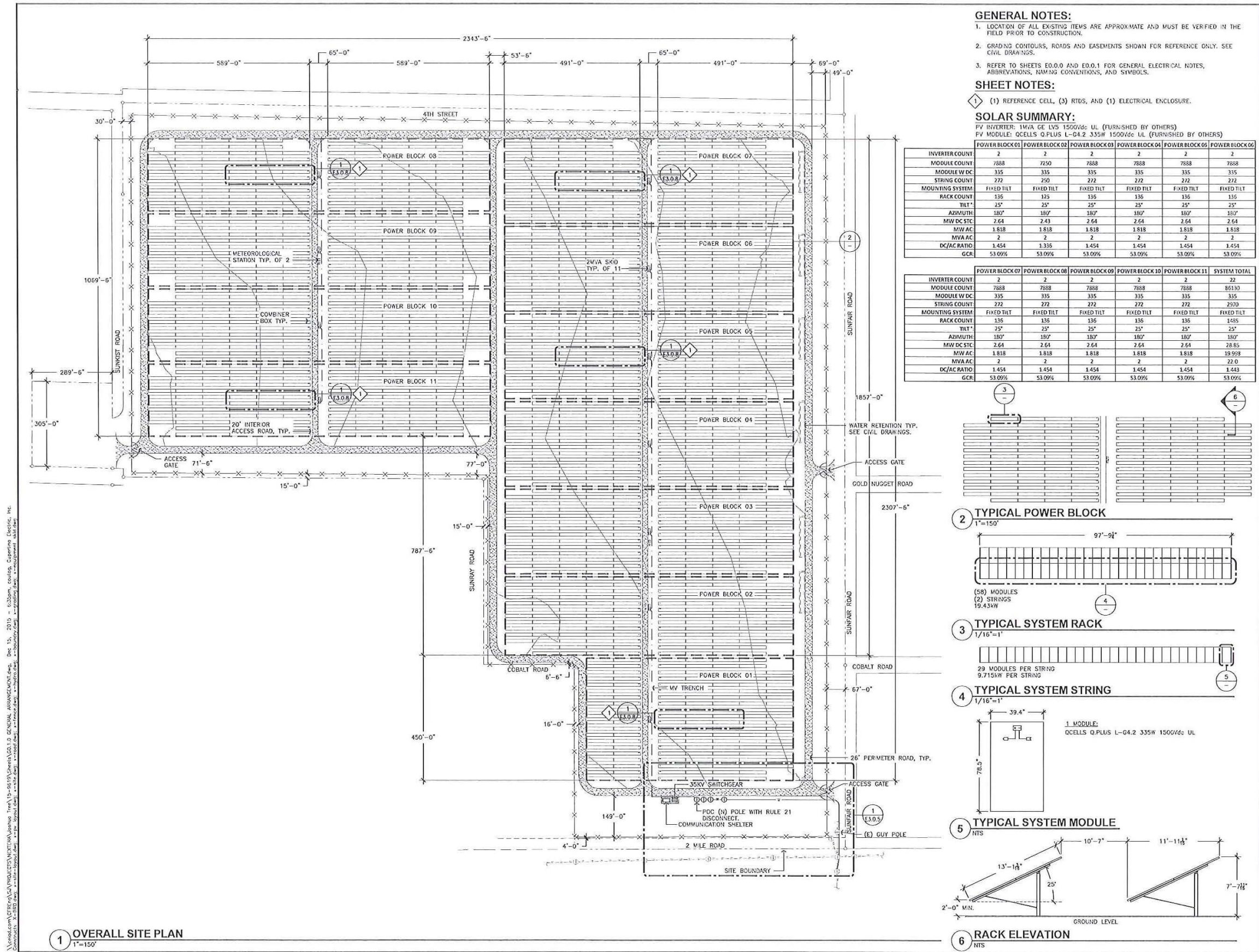


FIGURE 3 - CURRENT SITE LAN

**CUPERTINO ELECTRIC**  
1132 NORTH 7TH STREET  
SAN JOSE, CA 95112  
(408)808-8000  
C-10 UC NO. 174637

THESE DRAWINGS AND SPECIFICATIONS HAVE BEEN PREPARED BY CUPERTINO ELECTRIC, INC. FOR THEIR EXCLUSIVE USE IN ACCORD WITH SEC. 6737.3 OF THE 2015 PROFESSIONAL ENGINEERS ACT OF THE STATE OF CALIFORNIA.

**NEXTERA ENERGY RESOURCES**

**PRELIMINARY**  
NOTE: PRELIMINARY DRAWINGS SHALL BE USED FOR REFERENCE ONLY.

**KEY PLAN**

**PROJECT TITLE**  
JOSHUA TREE SOLAR PV

**PROJECT SITE**  
5500 SUNFAIR ROAD  
JOSHUA TREE,  
SAN BERNARDINO  
COUNTY, CA 92252

JOB NO. 15-9619  
DRAWN BY: JWW  
CHECKED BY: GG

REV.	DESCRIPTION	DATE
	30% ISSUE FOR OWNER	10/15/15
	60% ISSUE FOR OWNER	11/13/15
	90% ISSUE FOR OWNER	12/15/15

**SHEET TITLE**  
GENERAL ARRANGEMENT

**SHEET NUMBER**  
G0.1.0

## 2.4 Modules

The PV modules convert incoming sunlight to DC electrical energy. Modules are arranged in series to effectively increase output voltage. These series chains of modules are called “strings” in industry terms. The “string” is the basic building block of power conversion in the solar array. The chosen PV technology type will either be crystalline silicon or thin film (copper indium gallium selenide or cadmium telluride).

## 2.5 Array Mounting System

The modules will be mounted on a steel and aluminum structural system (“racking” system) which will be supported, when practical, by driven piers (piles) directly embedded in the ground. The front (south, lower) side of the arrays with fixed tilt racking will maintain a 2 foot clearance from ground level. The array height will be approximately 7-10 feet from ground level. The highest maximum height of an array (from the ground to the north, upper side) will be approximately 10.5 feet, and no higher than 12 feet.

## 2.6 Power Inverter Stations

The Inverter Stations convert the DC electrical energy from the PV arrays into AC. These stations perform three critical functions for the plant: (1) collect DC power in a central location, (2) convert the DC power into AC power, and, (3) convert low-voltage AC power to medium-voltage AC power at the appropriate grid potential.

Each inverter station consists of DC collection equipment (junction boxes and overcurrent protective devices, etc.), utility-scale inverters, and a low-to-medium-voltage transformer. The output power from the inverter stations is then fed to the AC collection system, an underground network of medium-voltage conductors and collection switchgear, discussed next. While the preliminary design is based on 750 kW<sub>AC</sub> utility-scale inverters and 1.6 MVA (megavolt amps) transformers (Figure 4), the final rating will be determined during detailed design and equipment procurement. The typical height of an inverter station is approximately 9 feet, with a maximum possible height of approximately 10.5 feet, and no higher than 12 feet.



FIGURE 4: EXAMPLE MEDIUM-VOLTAGE INVERTER STATION

## 2.7 AC Collection System

The AC collection system is 33 kV, and all related equipment will be 35 kV class. The collection system is a network of either buried or aboveground cables appropriately sized to minimize energy loss. The system will effectively collect energy from the solar panels and transfer energy to the main collection switchgear, which will allow the energy to be transmitted to the electric grid. The project's current design is an underground collection system which will terminate at the switchgear, which will be separately enclosed with a security fence and lockable access gates.

## 2.8 Distribution line improvements

The distribution line improvements are a part of this project; however, the improvements will be constructed, owned, and operated by SCE. Approval for the changes to the distribution line will come from the California Public Utilities Commission. SCE will refer to the Initial Study and CEQA process for the overall Joshua Tree Solar Project. SCE will also follow the conditions of approval for this Project.

For the section of Sunfair Road between Twentynine Palms Highway and Two Mile Road, SCE will be replacing approximately one mile of existing distribution line poles with approximately 25 new poles. The existing poles are approximately 60 feet in height. For SCE to co-locate two existing distribution lines, an estimated maximum pole height of 65 feet will be required to get adequate conductor clearances.

The system will be designed and built by SCE, so all final design and engineering decisions will be made by SCE and fully supported by the project. A photograph of a typical upgraded pole structure is shown in Figure 5.



FIGURE 5: TYPICAL  
POLE STRUCTURE

## 2.9 Access Paths and Fencing

Fencing will be installed around the perimeter of the site. The fencing is currently planned to be 8 feet tall and will be built in accordance with the County standards. Access roads will be constructed along the interior perimeter of the site and between the 1 MW block solar arrays. Primary access to the project will be via a gate on Sunfair Road.

## 2.10 Safety Lighting

Safety lighting will be installed at the entry gates and the switchgear location. A limited amount of lighting will be installed and will be designed to prevent spillover into neighboring properties. There will be operable lighting at each conversion station, but these units will be used as needed and will not typically operate at night. The entry will have fixtures to provide minimal lighting and will have additional on-demand (e.g. timer) lighting as needed or required.

## 3.0 PROJECT CONSTRUCTION

Project construction work is expected to last for approximately six months and will consist of site preparation, demolition of buildings, site improvements, system installation, and system

acceptance. The various phases of the construction cycle are outlined in the following sections.

### **3.1 Site Preparation**

Site preparation will involve the erection of a perimeter security fence, deconstruction or demolition of existing buildings, remediation of a few specific site conditions if applicable, and establishment of temporary utilities. The utility connections are already established to the site, making power and water connections readily available. Demolition of existing buildings will be the majority of site preparation. Where possible and feasible, materials from existing structures will be reused or recycled. A Construction and Demolition Waste Management Plan will be put into place prior to any demolition, with a goal of recycling 50% of total weight or volume. All concrete structures (hangar aprons, foundations, and slabs) are expected to be demolished and removed. All other paved areas, including the existing runways, are expected to be left in place.

Grubbing and grading activities will be limited due to the previous development activities and inherently sparse vegetation. Prior to or concurrently with installing the security fencing, the site may include a desert tortoise exclusionary fence or similar measures if required by the U.S. Fish and Wildlife Service or California Department of Fish and Wildlife.

### **3.2 Construction Access**

Construction vehicles will access the site via Sunfair Road on the eastern boundary of the site. The staging area and the laydown area will most likely be located just inside of the gate on the previously paved airport parking and taxi area. The main temporary logistics area of the site includes construction trailers, a first aid station, worker parking, truck loading and unloading areas, and areas for site assembly tasks. Portable toilet facilities will be installed for use by construction workers during the construction phase and will be serviced by a private company on a regular basis.

### **3.3 Storm Water and Erosion Control**

A Storm Water Pollution Prevention Plan incorporating best management practices for erosion control will be prepared prior to the start of construction. During site preparation the Storm Water Pollution Prevention Plan will be implemented and initial erosion and sedimentation controls will be installed. In addition, water truck reloading stations will be established for dust control. The project will also comply with applicable water quality requirements adopted by the Regional Water Quality Control Board and the State Water Resources Control Board.

### **3.4 Site Grading**

The previous airport development significantly reduces the need for site leveling, cut and fill, and other site modifications. Limited grading will be required for erosion or stormwater control to comply with permit conditions.

### **3.5 Facility installation**

The bulk of the project activities involve installation of major equipment, including array foundations (driven piers when practical), power stations, cable installation, and switchgear placement. Rack piers are usually driven into the ground at depths of 6 to 12 feet as dictated by the soils and the array structural design. The module racking assembly is connected to the piers. The modules are fastened to the racking assembly and electrically connected together in series strings. The strings will be routed to DC combiners at the ends of each array row and subsequently routed to the power conversion stations where the electricity is converted from DC to AC.

The AC collection system will be a series of cables, sized to minimize energy losses and to effectively collect and transfer energy to the project switchgear. The switchgear will be separately enclosed with a security fence and lockable access gates.

### **3.6 Distribution Line Improvement Construction**

SCE will be responsible for any distribution line necessary to serve the project. The distribution line improvement construction will include replacement of the utility poles along Sunfair Road along with stringing of new overhead electrical cable and a tap to the distribution line on the south side of Twentynine Palms Highway. It is anticipated that the work areas needed for replacement of this line and the stringing of the new overhead electrical cable will be entirely included within the existing SCE easement.

### **3.7 Construction Waste**

Most construction waste is expected to be non-hazardous and to consist primarily of cardboard, wood pallets, copper and aluminum wire cut-offs, scrap steel, common trash, and wooden wire spools. Construction waste will be recycled wherever possible. A Construction and Demolition Waste Management Plan will be put into place prior to construction, with a goal of recycling 50% of total weight or volume. Non-recyclable construction waste will be disposed of by a licensed contractor at an approved facility.

### **3.8 Potentially Hazardous Materials Used During Project Construction**

Construction equipment will utilize various hazardous materials such as hydraulic oil, diesel fuel, grease, lubricants, solvents, adhesives, paints, and other petroleum-based products contained in construction vehicles. All potentially hazardous materials will be contained, stored, and used in accordance with the manufacturers' instructions and handled in compliance with the applicable standards and regulations, such as those administered by the San Bernardino County Fire Department, Occupational Safety and Health Administration, and the California Occupational Safety and Health Administration.

### **3.9 Fugitive Dust Control**

Short-Term Dust Generation. Construction activities including clearing, grading, excavating, and moving of heavy equipment will create fugitive dust at the site at various rates throughout the construction cycle. Any substantial fugitive dust is expected to be short-term and limited to the time period of early construction during the limited clearing and grading activities. The

contractors will be required to comply with applicable Mojave Desert Air Quality Management District rules and policies, which includes the development of a Dust Control Plan. Dust may be controlled by covering stockpiles with tarps and water application which consists of trucks canvassing the site to apply water for dust suppression and soil conditioning. Water truck reloading stations may be established. Additionally, dust may be controlled through the use of non-hazardous soil palliatives. Palliatives are products that are mixed with water and applied directly to the soil during construction to stabilize the soil and suppress the dust. Use of a palliative would be approved by San Bernardino County. After construction and during the operations period there is expected to be a minimal amount of fugitive dust.

Long-Term Dust Generation. The long-term operations associated with the project are not anticipated to generate a significant amount of dust.

### **3.10 Construction Water Requirements**

Potable water for drinking and domestic needs will be either brought to the project site or provided by existing facilities serving the airport.

During construction, the project would use approximately 30 acre feet of water for soil conditioning and dust suppression. Pre-construction activities such as fence building and removal of structures would use approximately 4 acre feet of water. The water will likely be supplied by the Joshua Basin Water District (JBWD) through an agreement with the applicant. Under this scenario, water truck reloading stations will be established on site and will be fed by an existing waterline co-located within the western bounds of Sunfair Road.

If construction water cannot be supplied by JBWD, the applicant proposes to construct an onsite water well. Additional consideration of the proposed water supply is discussed in further detail in the Hydrology and Utilities section of the Initial Study.

### **3.11 Construction Workers, Hours, and Equipment**

The construction workers will consist of laborers, electricians, supervisory personnel, support personnel, and construction management personnel. It is expected that most workers will commute to the site from nearby communities including Joshua Tree, Yucca Valley, Twentynine Palms, and Palm Springs. It is anticipated that there will be an average of 125 workers on site during the construction period with approximately 150 workers during the peak phase. Ride sharing will be encouraged.

Construction work will generally be done during daylight hours, Monday through Saturday, 7 AM to 7 PM. Construction activities will be conducted consistent with San Bernardino County Ordinance Section 83.01.080 and 83.01.090 regarding acceptable decibel levels.

Construction activities, duration, equipment, and workers are estimated below in Table 3.

**Table 3: Estimated Construction Duration, Equipment and Workers by Activity**

Activity	Duration	Equipment	Pieces	Workers
Fencing	2 Months	Bobcat	1	2
		Trencher	1	
		Pick Up Truck	1	
Demolition – existing structures and related infrastructure	1 Month	Backhoe	2	4
		Bulldozer	1	
		5 cubic yard dump truck	2	
Site Preparation and Clearing/Grading	1 Month	Water Truck – 3 axles	3	Maximum – 150 Average – 125
		Grader	2	
		Bulldozer	1	
		25-Cubic Yard Paddle Scraper	1 (optional)	
		10-Ton Roller	2	
Utility Upgrades	Intermittent, up to 6 Months	Line truck (with spool trailer)	1	2
		Boom truck (with bucket)	2	
Underground Work	2 Months	Small Backhoe	2	6
		Small Sheepsfoot Roller	2	
		Trencher	2	
		5-Cubic Yard Dump Truck	2	
		5kW Generator	2	
System Installation	3 Months	4x4 Forklift	4	8
		Small Crane	1	
		ATV Vehicle	4	
		Pick-Up Truck	5	
		Pile Driver	2	
		5-kW Generator	4	
Testing/Commissioning	1 Month	Pick-Up Truck	2	2
Clean Up/Restoration	1 Months	Grader	2	2

The construction activities shown above in Table 3 will be overlapping in certain phases with a total construction time of approximately six months.

Truck activity will be regularly required only during the project's construction. The types of trucks, number of trucks estimated to be on site daily, and their approximate gross weight are presented below. Information on equivalent single axle loads was provided to the San Bernardino County Department of Public Works, Traffic Division. The Traffic Planning Engineer issued an approval for the project, subject to a maintenance agreement with the applicant prior to grading.

Truck Type	Average on Site Daily	Gross Weight
8,000 Gallon Water Truck	3	25 tons empty/50 tons full
5 CY Dump Truck	3	15,000 lbs
Pick-up Trucks	5	5,000 lbs
Pile Driver	2	7,500 lbs
Grader	2	40,000 lbs
Boom truck with bucket	2	16,000 lbs
Utility line service truck	1	35,000 lbs

### 3.12 Testing, Commissioning, and Acceptance

Testing will happen throughout the PV facility installation at all stages. As each 1 MW block is completed, the electrical components of the system will be tested as a subsystem at the functional level. Once all blocks are completed, the system will be interconnected to the SCE distribution system and each block will be commissioned again to test performance. This commissioning and testing period is expected to last approximately one month after interconnection to the SCE system.

### 3.13 Site Cleanup

There will be ongoing cleanup and recycling of materials during the construction phase. Industrial trash receptacles will be established in the temporary laydown area and will be emptied or interchanged throughout the construction of the project. Once the project is completed the site will be cleared of any remaining debris or materials and each will be recycled or disposed of appropriately.

## 4.0 PROJECT OPERATIONS, MAINTENANCE, AND DECOMMISSIONING

During operations, the Project facility will be primarily managed, monitored, and controlled remotely. Therefore it is assumed that the Project will have 1 to 2 employees 1 to 2 times per month on site for system inspections and 2 to 6 employees on site 1 to 2 times per month for troubleshooting and maintenance requirements.

Brief weekly inspections are planned. Ongoing maintenance is expected to occur on a monthly basis and will be scheduled to avoid peak power demand periods, and unplanned maintenance will typically be responded to as needed depending on the event. Preventative maintenance kits and certain critical spares will be stored on-site in a control enclosure, approximately 20 feet by 15 feet in size, while all other components will be readily available from a remote warehouse facility.

### 4.1 Module Cleaning

Periodic array module washings will be scheduled and completed depending on the soiling conditions that will exist at the site, which could be up to 4 times per year. It is expected that less than 2 acre feet of water will be used annually for 4 washings, which is approximately ½ acre foot for each washing. This water is expected to be supplied by the JBWD and treated

on-site to the required water quality. If a new well is installed as the water supply alternative, water for panel washing will come from the onsite well as opposed to being supplied by the JBWD.

Any necessary treatment of the groundwater would consist of a deionization process to remove minerals and other particulate matter. No chemicals or detergents are used during the module washings. All treatment equipment will be mobile. No permanent infrastructure will be required. Due to evaporation and onsite ground percolation, it is expected that no water from the washings will run offsite.

#### **4.2 Potentially Hazardous Materials Used During Project Operations**

The only potentially hazardous material within the fully operational site would be the insulating oil in the step-up transformers. The transformer oil has low toxicity and is a fully bio-neutral, biodegradable fluid. In the case of a major transformer breach, clean-up protocol would be implemented. Any seeped fluid would be removed by a certified vehicle and recapture system and the entire transformer would be replaced.

#### **4.3 Project Decommissioning**

A PV solar plant has a typical life of about 30-40 years. Once the useful life of the plant is exhausted, the plant could be refurbished to continue operating as a power plant or decommissioned and removed. If the system is to be removed, most of the materials (steel, aluminum, copper, and glass) would be recycled at nearby facilities. The materials that cannot be recycled, and those materials which contain any oil or lubricants, would be disposed of according to San Bernardino County Development Code Section 84.29.060 or other applicable development standards at the time of decommissioning. The amount of water used during decommissioning will be half of the amount used during construction, and will primarily be used for dust control. At this time, it is anticipated that the water would be provided by the JBWD, but it is difficult to anticipate who would provide water in the year 2055. The site could then be converted to other uses in accordance with applicable land use regulations.

## Initial Study – Joshua Tree Solar Farm

### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below will be potentially affected by this proposed 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 & Forestry Resources | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources     | <input type="checkbox"/> Cultural Resources               | <input type="checkbox"/> Geology / Soils                    |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials    | <input type="checkbox"/> Hydrology / Water Quality          |
| <input type="checkbox"/> Land Use / Planning      | <input type="checkbox"/> Mineral Resources                | <input type="checkbox"/> Noise                              |
| <input type="checkbox"/> Population / Housing     | <input type="checkbox"/> Public Services                  | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation / Traffic | <input type="checkbox"/> Utilities / Service Systems      | <input type="checkbox"/> Mandatory Findings of Significance |

### DETERMINATION: (To be completed by the Lead Agency)

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

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that 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"/>	I find that 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 project, nothing further is required.

Signature \_\_\_\_\_  
Signature \_\_\_\_\_

Date 1/6/2015  
Date 1/6/2016

## EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>I. AESTHETICS -- Would the project</b>				
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Aesthetics

- a) **Less than Significant Impact.** The project site is currently a decommissioned airport, which includes airport structures, hangars, and runways. The majority of project site improvements associated with the solar project will consist of the solar array. The array will generally rise to approximately 7 to 10 feet high, and will not exceed 12 feet. Due to the low nature of the panels, the project will not block views towards the mountains for surrounding residences. Visual simulations from nearby locations towards the more scenic views of the mountains show that the project will be barely visible in the foreground.

The project would alter the existing view of the project site from adjacent uses and roadways by developing 115 acres of vacant land with solar panels, ancillary equipment, and distribution line improvements. However, the site is flat and contains no significant geological or vegetation features that could be considered scenic. The solar equipment on site, consisting of solar panels and associated electrical equipment, would maintain a low profile; generally approximately 7 to 10 feet high, and will not exceed 12 feet in height. Other project features would include a switchyard and 8 foot chain link perimeter fencing. None of the onsite equipment would obstruct any viewsheds in the area. Furthermore, the project will require the removal of the existing buildings from the airport site, which will open up and enhance views of the mountains to the south for neighbors to the north of the project.

For the section of Sunfair Road between Twentynine Palms Highway and Two Mile Road, Southern California Edison (SCE) will be replacing approximately one mile of existing distribution line poles with approximately 25 new poles. The existing poles are approximately 60 feet tall. For SCE to co-locate two existing distribution lines, an estimated maximum pole height of 65' will be required to achieve adequate conductor clearances. There will be little visual change due to the replacement of the poles.

The project would be visible from higher elevations; however, this is not considered a significant change as the existing airport and ancillary structures are also visible from higher elevations. The north boundary of Joshua Tree National Park is located at the southern end of Sunfair Road, a distance of approximately 2.1 miles from the southern boundary of the project, and 2.3 miles from the entrance of the project site. While the

project will be visible from that location, there is no public access to Joshua Tree National Park from this location. The project cannot be seen from the park visitor center on the west side, nor from the Indian Cove Campground to the southeast of the project. Most of the publically accessible and popular areas within Joshua Tree National Park are located further to the south, and the topography is such that the project cannot be seen from any of the public campgrounds, designated public trails, or rock climbing areas.

- b) **Less than Significant Impact.** The project would not damage scenic resources, including those within a designated scenic highway. There are no scenic or historic resources onsite. There are no large trees or natural rock outcroppings onsite. The vegetation on the site and along the perimeter is sparse and is not unique to the immediate area and therefore is not a scenic resource.

SR-62 is depicted on the General Plan's Open Space Element Map as a County-designated scenic route. The project facilities would be virtually imperceptible from SR-62 approximately one mile south. The lack of visual impacts is due to several factors:

- The low height of project facilities, with solar panels and switchyard structures being generally approximately 7 to 10 feet in height up to a maximum of 12 feet in height. Existing distribution lines along Sunfair Road would be improved and poles may be replaced, but there is no change in the baseline viewshed.
- The presence of vegetation between the highway and project site. The presence of brush and other desert vegetation along SR-62 shields the project site from highway users and provides a visual distraction and impediment which makes the site less visible to highway travelers.

Therefore, the project would not have a substantial adverse effect on scenic resources within a scenic highway. Impacts would be less than significant and no mitigation measures are required.

- c) **Less than Significant Impact** Implementation of the project would alter the existing visual character of the project site, however, the project site is a decommissioned airport, and has little to no scenic value under the existing conditions. Project facilities have heights which are similar to or lower than those of the decommissioned airport structures and existing development in the Sunfair area, which includes features such as single-family residences, a concrete batch plant, paved roads, and transmission lines. The project would have a low profile (with a maximum height of approximately 12 feet for solar panels and switchyard equipment, and distribution lines with a height and design that is consistent with similar lines in the vicinity). The project would also have minimal lighting and, therefore, would not substantially degrade the existing visual character or quality of the site and its surroundings.

Project setbacks from the roadway will substantially reduce visual impacts. Due to the relatively low height of project facilities, vegetation beyond the project boundary would screen site features and substantially limit views. In addition, views of mountains in the background remain unimpeded.

Overall, the project would be similar in scale to existing development, and does not limit or substantially modify views of mountains. The project would be consistent with the

County's zoning requirements and development standards relative to the setbacks and height of the project. Much of the project site is already paved or disturbed as a result of the remaining airport infrastructure including runways.

The project would not have a substantial adverse effect on the visual character or quality of the site or its surroundings; impacts would be less than significant with implementation of the project setbacks.

- d) **Less than Significant Impact with Mitigation Incorporated.** The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The project proposes to use dark photovoltaic solar cells.

Any impacts resulting from lighting would be minimized through compliance with all development standards, Zoning Ordinance standards, and the goals, policies, and implementation measures of the General Plan. San Bernardino County Ordinance No. 3900 regulates glare, outdoor lighting, and night sky protection. Nighttime lighting associated with the project would be subject to County approval and compliance with San Bernardino County requirements and the provisions of Chapter 83.07 of the County Development Code.

Impacts from new sources of light or glare are expected to be less than significant. The project will not create a significant source of light. Light sources associated with the project will be minimal, and will be restricted to that required for nighttime safety and security according to county requirements. Lighting will be installed and directed downward and shielded to avoid light trespass. Additionally, lighting will be minimized via use of motion sensors or other lighting management controls.

Project components will introduce minimal amounts of glare to the existing landscape. The project PV panels are designed to absorb sunlight, and the glass panels that protect the PV surface are typically coated glass designed to allow sunlight to pass with minimal reflection.

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

#### **AESTHETICS MITIGATION MEASURES:**

- AES-1** Building Materials. As appropriate, on-site switchyard buildings shall use non-reflective materials and neutral colors as approved by the Land Use Services Department, Planning Division.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>II. AGRICULTURE AND FOREST RESOURCES:</b> <i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:</i>				
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 nonagricultural 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"/>

## Agriculture

- a) **No Impact.** The Farmland Mapping and Monitoring Program (FMMP) of the California Department of Conservation is charged with mapping Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Farmland of Local Importance (Farmland) across the state. The project is located on a decommissioned airport and would not convert Farmland, as shown on the FMMP maps, to non-agricultural use,

since the project is not designated as such. There is no impact and no further analysis is warranted.

- b) **No Impact.** The project would not conflict with existing zoning for agricultural use, and the project area is not under a Williamson Act contract. There is no impact and no further analysis is warranted.
- c) **No Impact.** The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. The project area is a decommissioned airport, which has never been designated as forest land or timberland. No rezoning of the project site would be required as the energy facility is compatible with the current zoning designations of community industrial, institutional and rural living. There is no impact and no further analysis is warranted.
- d) **No Impact.** The project would not result in the loss of forest land or conversion of forest land to non-forest use. The project site is a decommissioned airport and has sparse desert vegetation. There is no impact and no further analysis is warranted.
- e) **No Impact.** The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest land. There is no impact and no further analysis is warranted.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>III. AIR QUALITY:</b> <i>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</i>				
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Air Quality

- a) **Less than Significant Impact.** Tetra Tech prepared an Air Quality and Greenhouse Gas Technical Report in August of 2012. The air quality analysis presented in this report analyzed the potential air quality impacts associated with the project. A health risk assessment was performed to determine the health effects from construction activities to the nearest sensitive receptors. Since the project site is located within the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD), the air quality analysis followed the MDAQMD's guidelines. The project will also follow the San Bernardino County Greenhouse Gas Emissions Reduction Plan, Ordinance 4156, adopted in 2011.

This report also provided estimates of GHG emissions from the combustion of fossil fuels, primarily from construction of the facility and demonstrated that operating the facility will reduce GHG emissions. In addition, the analysis addressed the effects of GHGs on climate change. Generating power from solar energy is a substantial reduction in GHG emissions over conventional power generation from the combustion of fossil fuels. The solar energy produced by the project is estimated at 20 MW and would provide an estimated reduction 34,050 tons of CO<sub>2</sub>e per year during operation. After analyzing the project's operation emissions of 17.39 tons of CO<sub>2</sub>e annually, the net operation emissions would displace approximately 34,033 tons of CO<sub>2</sub>e each year during operation, which would provide a net benefit to the environment.

The air quality and GHG analysis concludes that emissions during short-term construction and during long-term operation of the project do not exceed the significant thresholds established by the MDAQMD.

The health risk assessment concludes that the construction activities would result in a less-than-significant impact. The project does not pose significant adverse impacts on local air quality or global climate change.

Over its lifetime, the project would not violate the regulations set forth by the MDAQMD *Rule Book or CEQA and Federal Conformity Guidelines*. Electricity generation via the use of photovoltaic systems does not generate chemical emissions that would negatively contribute to air quality.

Given that the project would not alter the population or employment projections and considering the minor emissions attributable to the project during operation, impacts associated with the air quality management plan consistency would be less than significant.

- b) **Less than Significant Impact.** The project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Air quality impacts would include construction exhaust emissions generated from diesel- and gasoline-powered equipment construction equipment, vegetation clearing, grading, construction worker commuting, and construction material deliveries (including the delivery of solar panels from out-of-state locations). Fugitive dust emissions include PM<sub>10</sub> and are a potential concern because the project is in a nonattainment area for ozone and PM<sub>10</sub>. PM<sub>2.5</sub> is also non-attainment and needs to be considered. A dust control plan will be developed prior to construction.

On an annual basis, none of the criteria pollutants would exceed the MDAQMD thresholds when enhanced dust control mitigation measures are used. The project would generate negligible air emissions during operations because the facility would be automated and would require minimal onsite personnel. Periodic repairs, equipment cleaning, and site monitoring would be conducted, but no permanent staff would be onsite. Solar panels and associated equipment would have an operating life of several decades; therefore, replacement of panels would be very infrequent. The solar panels would be cleaned up to four times per year, with each cleaning expected to take a couple of days with minimal staff. Maintenance and security personnel would visit the site weekly with maintenance visits on a monthly basis. Based on these factors, operational traffic associated with the project would be minimal.

- c) **Less than Significant Impact.** The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). As previously discussed the project's contribution to criteria pollutants during the temporary construction period would be localized and maintained below a level of significance. As also indicated, operational activities would generate insubstantial quantities of air pollutants that are not deemed cumulatively considerable. Since no other sources of potential long-term air emissions would result, impacts would be less than significant.

- d) **Less than Significant Impact.** The project would not expose sensitive receptors to substantial pollutant concentrations. There are a limited number of sensitive uses in the project vicinity. Single family residences are located to the north of the project site, and one to the east.

With regard to potentially hazardous air emissions, electricity generation via the use of photovoltaic systems does not generate chemical emissions that would negatively affect air quality. Further, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. There are no schools within the general vicinity of the facilities. For those reasons, impacts are less than significant and an assessment of potential human health risks attributable to emissions of hazardous air pollutants is not required.

- e) **Less than Significant Impact.** The project would not create objectionable odors that would affect a substantial number of people. Electricity generation via the use of photovoltaic systems does not generate emissions that would negatively contribute to air quality or produce objectionable odors. Potential odor generation associated with the project would be limited to short-term construction sources such as diesel exhaust; however, no significant odor impacts are anticipated due to the short-term duration of such emissions, as well as the intervening distance to sensitive receptors. Odor generation impacts would be less than significant and no further analysis is warranted.

**SIGNIFICANCE:** Possible adverse impacts are related to PM<sub>10</sub> and the following best management practices are required as conditions of project approval to reduce these impacts to a level below significant:

#### **AIR QUALITY BEST MANAGEMENT PRACTICES:**

**AQ-1** *AQ Operational Mitigation. Operation of all off-road and on-road diesel vehicles/equipment shall comply with the County Diesel Exhaust Control Measures [SBCC §83.01.040 (c)], including but not limited to:*

- a) Equipment/vehicles shall not be left idling for periods in excess of five minutes.*
- b) Engines shall be maintained in good working order to reduce emissions.*
- c) Onsite electrical power connections shall be made available where feasible.*
- d) Ultra low-sulfur diesel fuel shall be utilized.*
- e) Electric and gasoline powered equipment shall substituted for diesel powered equipment where feasible.*
- f) Signs shall be posted requiring all vehicle drivers and equipment operators to turn off engines when not in use.*
- g) All transportation refrigeration units (TRUs) shall be provided electric connections.*

- AQ-2** *AQ Dust Control Plan. The developer shall prepare, submit and obtain approval from County Planning of a Dust Control Plan (DCP) consistent with MDAQMD guidelines and a letter agreeing to include in any construction contracts/subcontracts a requirement that project contractors adhere to the requirements of the DCP. The DCP shall include the following elements to reduce dust production:*
- a) Exposed soils and haul roads shall be watered up to three (3) times per day to reduce fugitive dust during grading/construction activities. Inactive areas shall be treated with soil stabilizers such as hay bales or aggregate cover.*
  - b) Street sweeping shall be conducted when visible soil accumulations occur along site access roadways to remove dirt dropped by construction vehicles.*
  - c) Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday.*
  - d) Construction vehicle tires shall be cleaned prior to leaving the project site.*
  - e) All trucks hauling dirt away from the site shall be covered, and speeds on unpaved roads shall be reduced below 15 miles per hour.*
  - f) During high wind conditions (i.e., sustained wind speeds exceeding 20 mph), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall cease until wind speeds no longer exceed 20 mph.*
  - g) Storage piles that are to be left in place for more than three working days shall either be sprayed with a non-toxic soil binder, covered with plastic or revegetated.*
- AQ-3** *AQ Installation. The developer shall submit for review and obtain approval from County Planning of evidence that all air quality mitigation measures have been installed properly and that specified performance objectives are being met to the satisfaction of County Planning and County Building and Safety.*
- AQ-4** *AQ Signage. The developer shall agree to erect a sign for fugitive dust issues. The MDAQMD requires a sign to be erected not later than the commencement of construction at the project site entrance. This sign will include a phone number and contact information for anyone who wants to report dust issues resulting from the project construction.*

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES -- Would the project:</b>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and 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, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Biological Resources

- a) **Less Than Significant with Mitigation Incorporated.** Tetra Tech, Inc. conducted comprehensive field surveys for biological resources in Spring 2012 to determine the potential presence or absence of special-status species and their habitat. To update the survey data and confirm current site conditions, additional surveys for desert tortoise (*Gopherus agassizii*), burrowing owl (*Athene cunicularia*), rare plants, and other special-status wildlife were conducted in Spring 2015. The detailed methods and results of the 2012 and 2015 surveys can be found in the 2015 *Desert Tortoise Survey and General Biological Resources Assessment for the Joshua Tree Solar Farm (Airport Site)* (BRA, Tetra Tech and Karl 2015). Prior to Spring 2012 and 2015 field surveys, a target list of special-status species that might be affected by the project was developed based on available literature and databases (e.g., California Native Plant Society [CNPS], California Natural Diversity Data Base [CNDDB, see BRA Appendix B]), and consultation with local experts.

In both 2012 and 2015 surveys were conducted of an approximately 117-acre area. In 2012, all special-status species were sought concurrently with desert tortoise surveys on April 4 (gen-tie) and May 16, 2012 (plant site). In 2015, surveys were conducted on March 27 (first plant survey for early blooming species), April 1-2 (desert tortoise and other wildlife), and April 10 and 11 (plants). Burrowing owls were surveyed on April 1, April 23, and May 14, 2015; the fourth and final burrowing owl survey was conducted the first week of July, 2015. Surveys were conducted between approximately 0600 and 1900 with a break between 1245 and 1630 in May 2012 when temperatures exceeded FWS limits for desert tortoise surveys. Desert tortoise and burrowing owl buffer surveys generally were not conducted outside the survey area because of the complexity of surrounding private land ownership. However, access to several parcels was available to the south and southwest of the project. These parcels were surveyed in April 2012 and the information gathered from these areas was used to provide an understanding of the quality of habitat and biological resources present in the surrounding area. Survey methods were reviewed and approved by FWS and CDFW prior to commencing field work.

### **Vegetation Communities**

The site conditions and vegetation within the survey area were essentially identical in 2012 and 2015. The project lies on a gently sloping lower bajada at an elevation of approximately 2,440 feet above mean sea level. The major native plant community (as described by Sawyer, Keeler-Wolf, and Evens [2009]) that represents the site is a Big Galleta Grass – Creosote Bush (*Pleuraphis rigida* - *Larrea tridentata*) Shrub Steppe Alliance (Table 1a and 1b). It is dominated by big galleta grass, California croton (*Croton californicus*), and creosote bush. Silver cholla (*Cylindropuntia echinocarpa*) and beavertail cactus (*Opuntia basilaris*) are relatively common throughout. Much of the survey area has been cleared or subjected to intensive previous surface disturbance for airport operation and, where runways are absent, has regrown with croton and perennial bunch grasses – big galleta grass and Indian rice grass (*Stipa* [= *Achnatherum*] *hymenoides*). Along the east side of the cement plant in 2012, it appeared that earlier plant operations permitted effluent to flow from the plant to the runway. There is evidence of soil erosion from water flow, as well as vegetation that grows in response to a consistent water source, specifically broom baccharis (*Baccharis sarothroides*) and tamarisk (*Tamarix ramosissima*); Mexican palo verde (*Parkinsonia aculeata*), a non-native horticultural waif, was also present. It appeared that the effluent had ceased in 2015. In 2015, there appeared to be more growth of weedy species (annual burrweed [*Ambrosia acanthicarpa*]) through the cracks in the asphalt on part of the runway system. There are no obvious natural drainages on the solar plant site and drainage is mostly percolation with some flow to the northeast.

**Table 1a. Vegetation and Land Cover Acreage – Solar Plant Site**

<b>Vegetation and Other Cover - Solar Plant Site</b>	<b>Acres</b>
Previously cleared, regrowth of big galleta grass, Indian rice grass, and croton	31
Moderately intact Big Galleta Grass-Creosote Bush Scrub Steppe Alliance	19
Bladed (barren), developed, or recently bladed (early regrowth)	40
Loose – sandy soils due to adjacent disturbance	4
Big Galleta – Creosote Bush Shrub Steppe Alliance disturbed by adjacent industry	21

**Table 1b. Vegetation and Land Cover Acreage – Distribution Line Improvement**

<b>Vegetation and Other Cover – Distribution Line Improvement</b>	<b>Acres</b>
Aeolian Sand Sheets	0.4
Big Galleta – Creosote Bush Shrub Steppe Alliance	5
Big Galleta Shrub Steppe Alliance	1
Wash (includes Main Wash Channel and Bench of Channel)	1

The area surveyed for the distribution line improvement crosses several vegetation and cover types not found on the main project site. At its north end, the distribution line improvement area crosses aeolian sand sheets adjacent to both banks of a major wash. The wash extends east-west across the distribution line improvement area and Sunfair Road. The wash is generally poorly vegetated, with plant cover increasing on the benches and upslope; soils are sandy, with silty surface layers. It would be loosely considered a poor quality Big Galleta Grass – Creosote Bush Shrub Steppe Alliance. Farther south, the distribution line improvement area crosses Big Galleta Shrub Steppe Alliance dominated by big galleta grass, which transitions to Big Galleta-Creosote Bush Shrub Steppe Alliance as it nears Hwy 62. The area surveyed for the distribution line improvements was generally degraded due to its proximity to Sunfair Road.

### **Rare Plants**

Surveyors did not find any federally or state-threatened, endangered, or candidate plant species during 2012 or 2015 surveys. One CNPS-ranked plant was observed within the survey area in both survey years: Utah vine milkweed (*Funastrum utahense*) – CRPR 4. As a CRPR 4, this plant does not meet the requirements to trigger consideration under CEQA; therefore, no species-specific mitigation measures are required.

In 2012, below-average precipitation fell in Winter 2011-2012, resulting in well below-average germination and low biomass of annual forbs; virtually no native annuals germinated in 2012 at the Project. Precipitation in February 2012 was closer to average, which prompted several perennial species and a few individuals of exotic annuals to leaf out and/or bloom. Precipitation was again below average in Winter 2014/2015, especially during the most important germination period in late fall, but was average in March, which was sufficient for germination of several annual species (although fewer individuals of all species) in Spring 2015.

### **Regulated Plant Species**

Desert native plants are regulated under Division 23, California Desert Native Plants of the California Food and Agricultural Code (Section 80000 et seq.), which includes

protection for several native plant species. In addition, the San Bernardino County Development Code, Title 8, Chapter 88.01, *Plant Protection and Management*, augments and implements provisions of the California Desert Native Plants Act. Biologists observed and tallied four species protected by the CDNPA and County code during Spring 2012 surveys, three cacti species, and one yucca species (Table 2). The most numerous was beavertail cactus. One Joshua tree grew naturally within the survey area, although 19 were planted against the on-site houses and structures, but were not inventoried to respect the privacy of the tenant/caretaker of the property. As these species are perennial, surveyors did not conduct another count in 2015, with the exception of naturally occurring Joshua trees.

**Table 2. CDNPA Species found within the Survey Area**

Species	Total in Survey Area
Beavertail cactus ( <i>Opuntia basilaris</i> )	42
Buckhorn cholla ( <i>Cylindropuntia acanthocarpa</i> )	1
Joshua Tree* ( <i>Yucca brevifolia</i> )	1
Silver cholla ( <i>Cylindropuntia echinocarpa</i> )	51
Total	95

\*Landscaped Joshua trees are excluded

## Non-native Plants

Invasive plants are defined as any non-native plant species that are injurious to the public health, agriculture, recreation, wildlife habitat, or the biodiversity of native habitats. To determine which invasive species are currently present and their approximate abundance, surveyors inventoried all invasive plant species and recorded the location of concentrations. Surveyors detected six non-native noxious species during Spring 2012 and Spring 2015 surveys: Russian thistle (*Salsola tragus*) Sahara mustard (*Brassica tounefourtii*), tamarisk (*Tamarix* sp.), Mexican palo verde (*Parkinsonia aculeata*, one individual), filaree (*Erodium cicutarium*), and Mediterranean grass (*Schismus* sp.). Russian thistle and Sahara mustard were present but not abundant near the roads surrounding the survey area and adjacent to the dirt runway and cement plant in the southeastern portion of the survey area. Tamarisk and Mexican palo verde were rare and only occurred east of the cement plant, either in an area that received runoff from the cement plant or adjacent to the on-site infrastructure (tamarisk only). Mediterranean grass and filaree were common throughout the survey area and region.

## Listed Wildlife Species

Desert Tortoise: No live tortoises or their sign were observed during Spring 2012 and Spring 2015 surveys of the project site, and the entirety of the survey area is either poor quality desert tortoise habitat or developed and not habitat. The lack of recent or past

sign indicates that tortoises do not currently use the project site and have not used it in recent years. Most of the project site is highly disturbed by the development and/or operation of the airport and the cement plant. The introduction of non-native plant species and the proximity to a well-traveled paved road (Sunfair Road) further contribute to the lowered quality of the habitat. There are only small patches of relatively undisturbed Big Galleta Grass-Creosote Bush Scrub Steppe Alliance (see Figure 4 of the BRA). The version of this community that occurs at the project site is inherently poor tortoise habitat and is further compromised by the surrounding disturbance.

Desert tortoise habitat quality declines as topography flattens toward Coyote Dry Lake east of the project site due to lower cover site potential and reduced foraging opportunities. Accordingly, areas lower on the bajada likely support lower tortoise densities. Studies in the area have found tortoise sign higher on the bajada, while one study east of the airport found no sign (E. LaRue, Circle Mountain Biological Consultants, Inc., pers. comm. to A. Karl). Surveys of the Cascade Solar Project, approximately one mile northeast of the project near Coyote Dry Lake, did not detect any tortoise or tortoise sign in April 2011 (PCR 2011a). The project site is located on the lower bajada, approximately one mile from Coyote Dry Lake, and the lack of tortoise sign and poor habitat quality is consistent with these observations. Although the project site contains no tortoises and poor habitat to non-habitat, there are no barriers to prevent tortoise movement onto the project site from adjacent parcels that contain better habitat. The CNDDDB (2012) records show tortoise occurrences in the valley surrounding the project site (Appendix B), and one tortoise was observed in the vicinity of the project site approximately 0.5 mile to the southwest in an area of higher quality tortoise habitat. The possibility of transient tortoise should be considered.

The survey area is not within FWS critical habitat. FWS designated critical habitat areas for the desert tortoise in 1994 (FWS 1994) and prescribed management actions to aid recovery, with critical habitat providing legal protection. The closest critical habitat unit to the survey area is the Pinto Mountain Critical Habitat Unit, approximately 12 miles to the southeast.

### **Non-listed, Special-status Species**

Burrowing Owl: A FWS Bird of Conservation Concern and CDFW Species of Special Concern, burrowing owls occupy a wide range of habitats such as open, treeless areas within grassland, steppe, and desert biomes with low, sparse vegetation (Poulin et al. 2011). Three of the four surveys recommended by CDFW (CDFG 2012) were conducted in Spring 2015 and the fourth survey was conducted the first week of July 2015. Although the majority of the survey area and immediately adjacent parcels are considered potential habitat, surveyors did not observe any burrowing owls or sign during 2012 or 2015 surveys. Because there is suitable habitat within the survey area and immediate vicinity, and there are recorded observations approximately four miles northwest of the survey area (CNDDDB 2012, see Appendix B of BRA), it is possible that burrowing owls might inhabit the survey area in the future, even though it is currently unoccupied.

Prairie Falcon: Surveyors observed one prairie falcon (*Falco mexicanus*; Bird of Conservation Concern) perched on a tamarisk within the survey area during Spring 2012 surveys (see Table 8 and Figure 6 of BRA). No prairie falcons were observed in

2015. Prairie falcons are year-round residents of the region within which the project lies. The prairie falcon is found in a variety of habitats, but is associated primarily with desert scrub and similar open habitats where it utilizes open ledges and cliffs for perching and nesting and forages over the open terrain (Steenhof 2013). The project does not provide suitable nesting habitat, although it could provide suitable foraging habitat.

Mojave Fringe-toed Lizard: Mojave fringe-toed lizards (CDFW Species of Special Concern) are loose-sand specialists, found only in aeolian sand dunes, sand fields, hummocks, and other areas with loose sand deposits between 300 and 3,000 feet in elevation (Stebbins 2003). No Mojave fringe-toed lizards were observed during 2012 and 2015 surveys, and although sandy soils are present within the survey area, there are no loose sand deposits within the survey area that would be considered suitable Mojave fringe-toed lizard habitat. There are no documented CNDDDB occurrences within the survey area; the closest record is over 10 miles to the northeast.

Desert Kit Fox: Desert kit fox are regulated by CDFW as a protected furbearer. Suitable denning and foraging habitat for the desert kit fox occurs throughout the undeveloped portions of the survey area and kit fox sign was observed in Spring 2012 and Spring 2015. In 2012, surveyors detected one active and two inactive kit fox natal dens within the survey area (Table 8A, Figure 6A) and scat throughout. In 2015, there was no evidence of recent occupation of the Project, but four inactive natal dens were observed within the survey area (Table 8B, Figure 6B). Despite the absence of recent sign during the 2015 surveys, there is suitable habitat present and kit fox are highly mobile species; therefore, it is possible that kit fox will reinhabit the Project.

### **Nesting and Migratory Birds**

The project area could support nesting birds. Disturbing or destroying active nests would be a violation of the Migratory Bird Treaty Act (MBTA). In addition, nests and eggs are protected under Fish and Game Code Section 3503. Thus, the removal of vegetation during the breeding season is considered a potentially significant impact. The breeding season is typically considered to be from February 15 to August 31.

Golden eagles (*Aquila chrysaetos*; MBTA and Bald and Golden Eagle Protection Act; CDFW: Fully Protected) were not observed during general biology surveys and are not expected to occur on the project site but are of particular concern to FWS and CDFW and are therefore discussed in more detail. Golden eagles are found in variety of habitats but generally prefer open spaces for hunting and cliffs, trees, or other tall structures (e.g., transmission line structures) for nesting (Kochert et al. 2002). No eagles were observed during surveys and the survey area does not contain suitable nesting habitat for eagles. The nearest CNDDDB occurrence of nesting eagles is approximately eight miles southeast of the project, from 1980. The closest mountain range to the project with suitable nesting habitat is the Little San Bernardino Mountains, approximately 2.5 miles to the south-southwest. Therefore, it is possible that eagles nest in the Little San Bernardino Mountains and may hunt in the valley surrounding the project. However, it is not expected that eagles will use the project site due to the high level of existing disturbance and the nearby residential and industrial development.

Most birds are protected under the MBTA; however, significant impacts are not expected and no focused migratory bird surveys (e.g., fixed point counts) are planned because of (1) the degraded quality of the natural habitat on the project site (i.e.

previously disturbed and surrounded by roads), (2) the relatively small size of the project, and (3) the lack of nearby attractive site features such as wetlands, agricultural areas, or cliffs that are known to attract birds. The closest perennial waterbodies are the Salton Sea, which is approximately 45 miles south of the project site and the Colorado River, which is approximately 100 miles to the east. Although there have been reported avian fatalities at some of the solar facilities in the desert, it has only been hypothesized that the facilities appear as water bodies to migrating birds; there have been no empirical studies conducted on the effects of PV solar installations have on birds. Additionally, this project is substantially smaller and is located in a more disturbed and developed area than the solar projects that are reporting avian fatalities. Although any structure can pose a collision risk to birds, the project does not contain tall structures that would extend into the airspace of birds migrating at high elevations. The project also does not contain thermal components or evaporation ponds, two design features that have been found to adversely affect birds at other solar projects. For the above reasons, the project is expected to have a minimal contribution to cumulative impacts on birds. Mitigation measures BIO-1, -3, -4, -7, and -8 will help offset direct, indirect, and cumulative impacts on birds.

### Summary

The project may adversely affect special-status plants and special-status wildlife species, specifically desert tortoise, burrowing owl, and desert kit fox, although the potential for effects to these species is considered low. In addition, the project could result in adverse effects to protected nesting birds if implemented during the nesting season. Therefore, mitigation measures BIO-1 through BIO-8 are recommended to ensure potential project effects to special-status plants and wildlife species are avoided and/or minimized.

#### b) **Less Than Significant Impact:**

Sensitive Vegetation Communities: Big Galleta Shrub Steppe Alliance (G3S2) and Big Galleta-Creosote Bush Shrub Steppe Alliance (the latter is a subset of the former) are the only CNDDDB globally and state-ranked communities of special concern (G or S rank 1-3) in the survey area. The global rank is G3, the state rank is S2. CNDDDB guidelines direct project proponents to determine if project-affected stands of certain vegetation types represent high-quality occurrences of the given community to determine if there would be significant impacts to the vegetation type<sup>1</sup>. Essentially the entire survey area is within the Big Galleta-Creosote Bush Shrub Steppe Alliance (see Table 2 and Figure 4 of the BRA), with Big Galleta Shrub Steppe Alliance present only along the distribution line improvement route. Both have been substantially degraded by previous clearing, and are bordered by several anthropogenic features that directly impact the project site community through dust and trash, and the introduction of non-native noxious plant species. Because of this, and the relative commonness of these communities in the region, they are not considered high quality representations or rare in the area.

Jurisdictional Waters: Based on a review of aerial images of the site and field verification, no on-site jurisdictional drainage features were noted (see *Jurisdictional*

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<sup>1</sup> [http://www.dfg.ca.gov/biogeodata/vegcamp/natural\\_comm\\_background.asp#codes](http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_background.asp#codes)

*Delineation of Wetlands/Waters Subject to Regulatory Authority [JD Report]*, Tetra Tech, Inc. 2012). Although the Hydrology Study completed for the site confirms that storm water has the potential to flow across the site generally from the southwest to the northeast, no definable channels or drainage features were observed during the survey conducted in May, 2012. A minor degree of erosion isolated to the southern portion of the earthen runway was observed (see Photograph 4 in JD Report). This erosion may have been a result of sheet flow originating on-site or from the cement plant located up gradient on the southwestern corner of the airport property, but is not considered to be subject to regulatory jurisdiction.

The Army Corps of Engineers (ACOE) asserts jurisdiction over all waters that are in use or were used in the past or may be susceptible to use in interstate or foreign commerce, including all waters which may be subject to the ebb and flow of the tide and are defined as Traditional Navigable Waters (U.S. ACOE and Environmental Protection Agency 2007). Field observations and review of relevant aerial photographs and topographic maps confirm that there are no jurisdictional features on the site subject to regulatory authority by the ACOE.

Under Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Act, the RWQCB Colorado River Basin asserts jurisdiction over jurisdictional wetlands and those non-isolated waters associated with Traditional Navigable Waters. Based on the absence of definable channels or drainages on the site, there are no jurisdictional features subject to regulatory authority by the RWQCB-Colorado River Basin.

Under Section 1600 et. seq. of the California Department of Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream or lake, which support fish or wildlife. No definable bed and bank drainage features subject to regulatory authority by the CDFW were found on the site. Based on the absence of definable drainages within the project site, there are no jurisdictional streambeds subject to regulatory authority by the CDFW.

### Summary

The project will have a less than significant impact on sensitive vegetation communities and jurisdictional waters. Mitigation Measures BIO-1, -6, and -7 will help minimize potential impacts.

- c) **No Impact:** Based on a review of aerial images of the site and field verification, no federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) are present within the project area. (See Jurisdictional Delineation of Wetlands/Waters Subject to Regulatory Jurisdiction [JD Report], Tetra Tech 2012). Therefore, there would be no impacts to federally protected wetlands and no mitigation measures are necessary.
- d) **Less Than Significant:** There are no established wildlife corridors within the project area that would be impeded by project development. Some native wildlife species, especially those tolerant of human disturbances, may breed on the site, but no native wildlife have established nursery or breeding colonies on the site. There are no perennial water sources within the project area; therefore, there are no fish populations present.

Bighorn Sheep (CDFW Managed Game Species): CNDDB records indicate that the Little San Bernardino Mountains, approximately 2.5 miles south of the project, are occupied by bighorn sheep. Nelson's bighorn sheep require steep, rocky terrain to escape predators and raise lambs, and movement corridors among mountain ranges are important to maintaining healthy populations. However, the project site does not contain suitable bighorn sheep lambing or foraging habitat; nor is it situated in a movement corridor between important mountain ranges. Residential and industrial development in the valley, lack of steep, rocky habitat on or near the project site, and the absence of occupied mountain ranges north of the project site preclude the use of this site by bighorn sheep. The project site is not within a known bighorn sheep corridor as identified in A Linkage Design for the Joshua Tree-Twenty-nine Palms Connection (Penrod et al. 2008). No evidence of Nelson's bighorn sheep was found during field surveys.

### Summary

The project will have a less than significant impact on wildlife corridors, nursery sites, or breeding colonies. The project may inhibit, but not obstruct general movement of ground-dwelling species, but impacts will be kept to less than significant levels with the implementation of Mitigation Measures BIO-1 – BIO-8.

- e) **Less Than Significant with Mitigation Incorporated:** The San Bernardino County General Plan (Conservation Element and Open Space Element) sets forth policies relevant to the protection of natural resources. The Conservation Element provides direction regarding the conservation, development, and utilization of the County of San Bernardino's natural resources. Its objective is to prevent the wasteful exploitation, destruction and neglect of resources. The Open Space Element is interconnected, in varying degrees, to other elements of the General Plan (e.g., open space for the preservation of natural resources is directly related to the Conservation Element). The project is located in the Desert Region designated by the General Plan. In addition, San Bernardino County is in the process of writing a new section for the General Plan that addresses Renewable Energy and Conservation.

The San Bernardino County Development Code recently amended chapter 84.29 to address renewable energy generation facilities, and chapter 810.01, definitions of the San Bernardino County Development Code, relating to the regulation of commercial solar energy generation facilities. The project will respect and abide by the policies and regulations set forth in the General Plan and the Development Code.

### Summary

By abiding by the policies within the General Plan and County Code and implementing mitigation measures BIO-1 – BIO-8, impacts on natural resources will be less than significant.

- f) **No Impact:** The project and distribution line improvement area are not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan and will therefore have no impact on these areas. The project is within the Western Mohave Plan boundary; however, that plan applies only to the Federal Bureau of Land Management (BLM)-administered lands and does not apply to the project because it is on private land. The

project is not located within USFWS-designated critical habitat; therefore, there would be no impact on critical habitat. There will be no impacts to these areas; therefore, no mitigation measures are necessary

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

## **BIOLOGICAL RESOURCES MITIGATION MEASURES:**

### **BIO-1**    *General Avoidance and Minimization Measures*

- *Implement a worker environmental awareness training for all project personnel.*
- *Limit areas of disturbance to the minimum necessary for development.*
- *Salvage the topsoil containing the native seed bank and redistribute over temporarily disturbed areas to facilitate passive revegetation.*
- *The project has been designed to minimize night lighting. All outdoor lighting, including street lighting, will be provided in accordance with the County Night Sky Protection Ordinance and will only be provided as necessary to meet safety standards. Outdoor lighting will be shielded or directed away from adjacent native habitat to protect species from direct night lighting.*
- *The projected increases in noise will be reduced to the maximum extent practicable during construction activities. During all grading on-site, the construction contractors will equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards to reduce construction equipment noise to the maximum extent possible. Enforce a 15 mph speed limit on project roads.*
- *Vehicles and equipment to remain on designated roadways*
- *Standard dust control procedures will be implemented to minimize dust. If water is used as a dust suppressant, it will be administered such that pooling or ponding of water is minimized so that it does not provide a wildlife attractant.*
- *Trash will be kept in raven and coyote-proof containers and removed regularly from the project so that it does not provide a wildlife attractant.*

### **BIO-2**    *Desert Tortoise*

*There is no evidence that tortoises are using the project site or have used it in the recent past. Therefore, potential impacts to tortoises are expected to be limited to tortoises that may wander on site. If tortoises walk onto the project site, they could be injured or killed (e.g., collision with vehicles or equipment). Because of these reasons, the following mitigation measures are designed to avoid impacts to tortoises.*

- *Install permanent tortoise exclusion fencing around the perimeter of the main project site to exclude tortoise during construction and operation. Clearance surveys of the fenced site will be conducted by qualified biologists to ensure that no tortoises are inside the site. Clearance surveys will be conducted as soon as feasible after tortoise exclusion fencing is installed. Any newly installed fence will be monitored appropriately during and after fence installation to ensure that no tortoises exhibit fence walking behavior that could result in injury or death to the tortoise.*
- *Monitor and maintain the fence at appropriate intervals throughout construction and operations. This includes monitoring during storm events or other circumstances that could damage the fence.*
- *Enforce speed limits of 15 miles per hour on roads within the project site.*
- *Ensure that a biological monitor is on site during all initial surface grubbing and grading in the event that a tortoise is encountered. Biological monitors must be present during construction of the perimeter fence, during ground disturbance in unfenced areas, and during active construction in unfenced areas to properly implement mitigation measures. A biologist must be available (not onsite) during construction activities in fenced areas that have been surveyed for and cleared of tortoises and other biological resources to promptly implement protection measures for biological resources in the unlikely event that a tortoise or other biological resource is detected onsite.*

#### **BIO-3** *Burrowing Owl*

*Owls could move onto the site prior to project development, so focused burrowing owl take avoidance surveys will be completed according to CDFW (CDFG 2012) guidelines within 14 days of site grading. If owls are found on site prior to construction, a passive relocation plan may be developed to minimize impacts to onsite owls, and avoidance will adhere to CDFW guidance for avoidance buffers (CDFG 2012). Other standard measures such as speed limits, limiting the area of disturbance, and having a biological monitor present for construction outside of the fenced site will contribute toward avoiding and minimizing any potential impacts to this species and their habitat.*

#### **BIO-4** *Nesting Birds*

*Vegetation removal during construction, and construction noise and activity, could potentially adversely impact nesting birds. Therefore, to the extent feasible, vegetation removal should take place outside of the breeding season, which is typically February 15 to August 31. If construction will take place during the breeding season, pre-construction clearance surveys to locate nesting birds should be conducted immediately prior to construction. If active nests are present within the construction area, they must be avoided by establishing a non-disturbance buffer until the young fledge or the nest fails (as determined by a qualified biologist familiar with bird breeding and behavior). Nesting birds that are adjacent to active construction will also be avoided by this approved buffer. The buffer areas will be delineated and flagged to ensure avoidance.*

**BIO-5**     *Desert Kit Fox*

*Kit fox could move onto the site prior to project development, so surveys will be completed within 30 days of site grading and may be conducted concurrently with desert tortoise surveys. Depending on the results of those surveys, a plan may be developed to address individuals that are denning within the project site. Other standard measures such as speed limits, limiting area of disturbance, and having biological monitors present will contribute toward minimizing any potential impacts to this species and their habitat.*

**BIO-6**     *Protected Plants*

*Species protected by the California Desert Native Plant Protection Act and the San Bernardino County Code (beavertail cactus, buckhorn cholla, Joshua tree, and silver cholla) are present on the project site and will be directly impacted by development. Where feasible, individuals of these species will be avoided. For those that cannot be avoided, removal will comply with the California Desert Native Plant Protection Act and the San Bernardino County Code and plants will be transplanted into the perimeter landscape buffer.*

**BIO-7**     *Weed Management*

*Due to the disturbed nature of the site, there are several established non-native species (i.e., weeds) present within the project. Although eradication of these existing weeds is not considered feasible, the following best management practices will be implemented during construction and operations of the project to help control the spread of existing weeds and the introduction of new weed species:*

- Limit the size of any vegetation/ground disturbance to a minimum and limit ingress and egress to defined routes;*
- Passively reestablish vegetation on temporarily disturbed sites;*
- Prevent spread of weeds via vehicular sources by implementing methods for cleaning construction vehicles;*
- Use only certified weed-free straw, hay bales, and seed if used for erosion control and sediment barrier installations;*
- Invasive, non-native species shall not be used in landscaping plans;*
- Monitor weed invasions and rapidly implement control measures to eradicate new weed invasions.*

**BIO-8**     *Contribute to the USFWS Regional Raven Management Program to reduce raven impacts to desert tortoises. A one-time payment will be submitted the USFWS Regional Raven Management Program. The amount shall be a one-time payment of \$105 per acre for the 115-acre project site. Payment will be to the National Fish and Wildlife Foundation (NFWF).*

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES -- Would 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 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Cause a substantial change in the significance of a Tribal Cultural Resources as defined in §21074?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Cultural Resources

- a) **Less than Significant Impact with Mitigation Incorporated.** AECOM (formerly URS) prepared a Phase I Cultural Resources Assessment (Cultural Assessment) for the 115-acre project site in May and June 2012 (URS 2012). The purpose was to identify and document any cultural resources that might be located in the project's area of potential effect (APE) and to evaluate such resources pursuant to CEQA and the County's General Plan. The Cultural Assessment identified historic or archaeological properties by means of pedestrian survey and research in appropriate historical and archaeological archives.

### Phase I Literature Review and Records Search

The Cultural Assessment relied on a cultural resources records search and literature review conducted by Tetra Tech through the California Historical Resources Information System (CHRIS) San Bernardino Archaeological Information Center (SBAIC) at the San Bernardino County Museum in Redlands, California in November 2011 (Tetra Tech 2012a, 2012b, 2013). The records search also included a review of the California Points of Historical Interest (CPHI), the California Historical Landmarks (CHL), the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and the California State Historic Resources Inventory (HRI) listings.

The records search revealed that no previous cultural resources studies had been conducted and no cultural resources have been recorded within the project site. One linear survey had been conducted along the northern and eastern boundaries, but outside of the project site. Tetra Tech (2012a, 2012b, and 2013) describe the archaeological resources in the site vicinity. Per the CPHI, CHL, CRHR, NRHP, and HRI listings, one known archaeological site, a sparse prehistoric lithic scatter, was recorded adjacent to the northern boundary of the project site. Subsequent to the records search, Tetra Tech conducted cultural resource surveys on properties adjacent to the project site (Tetra Tech 2012a and 2013). These surveys identified several additional resources including 10 prehistoric isolated artifacts (isolates), 13 historic isolates, 10 prehistoric archaeological sites, and 8 historic-era archaeological sites. The prehistoric isolates include debitage and pottery, while the historic isolates are limited to

refuse. The prehistoric sites include lithic and artifact scatters and the historic sites include refuse scatters, a homestead, and a road. These resources confirm the presence of past prehistoric and historic occupation in the immediate vicinity. However, the project would not impact any of those resources due to their distance from the site.

#### Phase I NAHC Records Search and Consultation

Tetra Tech (2012a, 2012b, and 2013) provide summary accounts of the several ethnographic groups claiming affiliation to the project study area. These Native American groups include the Serrano, Chemehuevi, and Cahuilla. Accordingly, Tetra Tech commissioned a Sacred Lands File (SLF) records search in November 2011 through the California Native American Heritage Commission (NAHC), which is the State's trustee agency for the protection and preservation of Native American cultural resources. The SLF search did not indicate the presence of Native American or prehistoric cultural resources (including properties, places, or archaeological sites) within or near the project site.

The absence of listings in the SLF is not evidence that sacred resources do not exist in the area. Thus, NAHC provided Tetra Tech a list of culturally affiliated tribes and individuals that may have knowledge of the religious and cultural significance of historic properties in and near the APE. NextEra made initial contact with several area Tribes prior to 2014, in order to determine whether sensitive cultural resources were in close proximity to the site. Those prior contacts made NextEra aware of regional Tribes concerns about impacts on the Oasis of Mara, located near the entrance to Joshua Tree National Park. NextEra formally contacted representatives from seven tribes in November 2014: Chemehuevi Indian Tribe, Colorado River Indian Tribes, Fort Mojave Indian Tribe, Morongo Band of Mission Indians, Ramona Band of Cahuilla Mission Indians, San Manuel Band of Mission Indians, and Twenty-Nine Palms Band of Mission Indians. To date, NextEra has received three responses. Twenty-Nine Palms Band of Mission Indians responded verbally, and expressed interest in updates on project status. The San Manuel Band of Mission Indians provided verbal and written responses in January and February 2015. The tribe recommended that the project be monitored by a cultural team consisting of a qualified Archaeologist and Native American Cultural Resources Specialist. In addition, the tribe noted that if no cultural resources are identified during initial grading of the project site the need for a cultural crew could be suspended. San Bernardino County has been consulting with the San Manuel Tribe under the AB 52 process. Additionally, San Bernardino County has engaged in consultation with the Soboba and Morongo Tribes.

In addition to this tribal response, NextEra became aware that the Oasis of Mara is currently being evaluated for a possible nomination to the National Register of Historic Places as a Traditional Cultural Property, following up on prior efforts begun by the National Park Service. However, the Oasis of Mara is located approximately 13 miles away from the project site and is not visible from the project site.

#### Phase I Pedestrian Field Survey

To identify any previously unrecorded archaeological resources and to determine the potential for buried archaeological deposits, AECOM performed pedestrian field surveys of the project site on May 18 and June 14-15, 2012. Results of the survey are documented in URS (2012). AECOM identified two prehistoric archaeological resources

(lithic scatters), two historic-era archaeological resources (refuse scatters), and two isolates (one piece of prehistoric debitage and one piece of historic refuse) on-site during these studies. In addition, AECOM identified Roy Williams Airport itself as a historic built environment resource. Each resource has been evaluated for CRHR-eligibility based upon surface findings; subsurface testing was not conducted. None of the resources were recommended as CRHR-eligible ("historical resources") by AECOM, nor do the archaeological resources appear to be "unique archaeological resources." Therefore, impacts to the resources as a result of the project are not considered a significant effect on the environment. It should be noted, however, that the CRHR-eligibility recommendations have not yet been concurred with by the SHPO or other local agency.

Historic-era isolate JT-ISO-02<sup>2</sup> includes two church key opened beverage cans and one rotary opened sanitary. This isolate provides evidence of historic-period use of the area, but offers no further data potential. Additionally, isolated finds are considered "historically not significant" and ineligible for nomination to the CRHR. As a rule, such remains do not require further consideration within the resource management process.

Prehistoric-era isolate JT-ISO-04 consists of one black cryptocrystalline silicate secondary flake (type of debitage). This isolate provides evidence of prehistoric use of the area, but offers no further data potential. Additionally, as explained above isolated finds are considered "historically not significant," ineligible for nomination to the CRHR, and do not require further consideration within the resource management process.

Site JT-01 is a historic refuse scatter near the northeast corner of the project site. The primary cultural constituents of the site consist of historic cans, including a church key opened sanitary can (post 1935), solder dot cans (post 1840s), oil cans, crushed sanitary cans (post 1920), a paint can, glass bottle bases with various maker's marks (1896 – 1965), and metal and glass fragments (post 1930). The surface assemblage contains a total of 145 artifacts distributed throughout the site. The overall artifact density at the site is considered low. The condition of this site is fair with only slight disturbances due to activity associated with the Roy Williams Airport. Based upon the cultural constituents, the physical context, and the results of additional archival research, AECOM interpreted the site as representative of *in-situ* refuse disposal. Dates of manufacture can be determined for some of the artifacts present at JT-01, primarily dating to the post 1920 period. Nevertheless, the time between the initial use/consumption of the artifacts and their ultimate disposal cannot be known so the specific date of their disposal cannot be reliably determined. The historical significance of JT-01 within the project area was evaluated by AECOM, who recommended the site as not eligible for listing on the CRHR.

Site JT-03 consists of a historic refuse scatter near the middle of the northern project boundary. The primary cultural constituents of the site consist of historic cans and bottle glass, including vent hole cans, a metal bodied oil filter, fragments of bottle glass (post 1930), a glass ink bottle base (post 1930), a paint can, an oil can, a church-key opened

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<sup>2</sup> AECOM has not submitted URS (2012) to the SBAIC to record the resources with the SHPO and obtain Smithsonian trinomials and State Primary numbers. The temporary field numbers assigned by AECOM to each resource are therefore used here.

juice can (post 1935), a coffee tin, sanitary cans with rotary and P-38 openings (post 1920), church-key opened beverage cans (post 1935), pulltab beverage cans (post 1963), and glass bottle bases with various maker's marks (ca. 1955). The surface assemblage contains three discrete loci of artifacts and a total of 194 artifacts throughout. The condition of this site is fair with only slight alterations due to activity associated with the nearby Roy Williams Airport. AECOM has interpreted the site representative of in-situ refuse disposal. Dates of manufacture can be determined for some of the artifacts present at JT-03, primarily dating to the post 1920 period. Nevertheless, the time between the initial use/consumption of the artifacts and their ultimate disposal cannot be known so the specific date of their disposal cannot be reliably determined. The historical significance of JT-03 within the project area was evaluated by AECOM, who recommended the site as not eligible for listing on the CRHR.

Site JT-05 is a sparse prehistoric lithic scatter in the northwest quadrant of the project site. The cultural constituents observed within this site include eight pieces of cryptocrystalline silicate debitage from various stages of tool production. The overall artifact density at the site is low. The condition of this site is fair with only slight alterations due to activity associated with the nearby Roy Williams Airport. AECOM has interpreted the site as a lithic reduction locality, based upon the cultural constituents and the physical context. Based on the singular lithic material found within this site and the sparse distribution, the site appears to represent one episode or locality of lithic reduction. AECOM has recommended the site as not eligible for listing on the CRHR.

Site JT-06 is also a prehistoric lithic scatter site in the northwest quadrant of the project site. The cultural constituents observed within this site include 103 pieces of cryptocrystalline silicate debitage from various stages of tool production. The overall artifact density at the site is low. The condition of this site is fair with only slight alterations due to activity associated with the nearby Roy Williams Airport. AECOM has interpreted the site as a lithic reduction locality, based upon the cultural constituents and the physical context. Based on the varied cryptocrystalline silicate materials represented in the assemblage and the sparse distribution, the site appears to represent several episodes or localities of lithic reduction. AECOM has recommended the site as not eligible for listing on the CRHR.

The historic-era Roy Williams Airport, once known as the Hi-Desert Airport, is encompassed by the project. The site includes two runways (1928-1929, altered pre-1955 and 1973-1975), a self-service fueling area, and approximately 10 buildings (Kiosk – c. 1973-1975; Main Building – c. 1973-1975; Pool House – c. 1973-1975; Water Tower – c. 1973-1975; Guesthouse – c. 1955-1975; Open Hangars – c. 1973-1975; Enclosed Hangars – c. 1973-1975; Sheds – c. 1973-1975; and Miscellaneous Structures – c. 1973-1974). The airport was originally established as a private landing strip in 1928-29, and is still privately-owned, previously serving small aircraft as a fly-in airport to the Morongo Basin and the communities of Twentynine Palms, Sunfair, and Joshua Tree. The property footprint has a large additive rectangular form, with most of the buildings and structures clustered in the southern portion of the property. The buildings and structures do not appear to be arranged in a visual hierarchy or have a specific datum; rather, buildings were sited near one another based primarily on their functions. While the airport was first developed in the 1920s, there are no buildings or

structures at the property which convey this period of development. Therefore, the property no longer appears to be associated with early aviation events in the area. The buildings were primarily constructed less than 45 years ago (1973-1975) and are not representative of any earlier period of the property's history. They are very common examples of eclectic architecture, and do not possess high artistic value. The property as a whole has had substantial alterations and no longer is reflective of an aviation-related property from the 1920s. The Roy Williams Airport also does not appear to be associated with any significant people. Although the airport is named after Mickey Mouse Club and Disney artist Roy Williams, he does not appear to be directly associated with the airport. Rather, the airport is merely named after him, and appears to have been named only within the past 35 years. AECOM has therefore recommended the airport as not eligible for listing on the CRHR.

Despite the lack of impacts to known resources, the active depositional environment of the project site along with the distribution of archaeological resources in the surrounding area suggests there is a potential to encounter unknown archaeological resources at depth across the project site during construction-related excavation activities. To identify, evaluate, and recover buried archaeological resources that may be accidentally encountered during excavation activities, Tetra Tech has provided mitigation measures that, when implemented, would reduce impacts to potential historical resources to a level that is less than significant. See mitigation measure CR-1 below.

- b) **Less than Significant Impact with Mitigation Incorporated.** The project would not cause a substantial adverse change in the significance of a known archaeological resource pursuant to §15064.5 (see Item V.a above). The Cultural Assessment (URS 2012) has recommended that the known archaeological resources in the project area are not unique archaeological or historical resources; therefore, pending concurrence on those eligibility recommendations, the effects of the project on those resources are not considered a significant effect on the environment (CEQA Guidelines §15064.5(c)(4)). However, mitigation measures provide that the applicant shall retain a qualified archaeologist to monitor all ground-disturbing activities and excavations on the project site. In the event of the discovery of buried cultural resources, the project Archaeologist would temporarily redirect activities from the vicinity of the find in order to evaluate the significance of the resource and to provide proper management recommendations. See mitigation measure CR-1 below.
- c) **Less than Significant Impact with Mitigation Incorporated.** A paleontological study has not been conducted specifically for this project. However, such a study was conducted for the nearby Cascade Solar Project (PCR 2011b). Paleontological sensitivity of the Joshua Tree Solar project site can be inferred from that assessment, which did not identify any unique geologic features or surficial paleontological resources on or adjacent to the Cascade Solar site. Both the Cascade Solar and Joshua Tree Solar project sites are within the Mojave geomorphic province, which is characterized by eroded mountains separated by wide alluvial valleys and an abundance of playas associated with numerous drainage basins, including the Twentynine Palms Basin. This basin, which includes the project sites, dips to the east and is composed of alluvial depositional valleys separated by eroding hills. PCR (2011b) concluded the surface sediments in the area to be recent Quaternary alluvium with older Pleistocene (ca. 10,000 – 2.6 million years ago) alluvial deposits underneath. Many scientifically

important vertebrate fossils have been reported from Pleistocene sediments in the area, including ground sloths, saber-tooth cats, pumas, mammoths, badgers, horses, bison, big horn sheep, camels, llamas, deer, pronghorn, and gophers (PCR 2011b).

The documented older alluvium in the area, numerous scientifically important Pleistocene fossils recovered from the region, and presence of a modern ephemeral dry lake (Coyote Dry Lake) east of the project site suggests a high potential to retain buried paleontological resources at depth. The close proximity of Coyote Dry Lake increases the likelihood for the recovery of Pleistocene fossils. Lacustrine (lake) environments have a high potential for fossil preservation if deposition is significant enough and during times of increased precipitation, dry lakes are considered oases, attracting animals that live in an otherwise harsh environment. During the last glacial maximum (approximately 21,000 years before present), the size of Coyote Lake was presumably larger and more attractive to animals because of increased precipitation and overall cooler climatic conditions in California. Furthermore, the general trend toward finer-grained sands, silts, and clays at depths greater than two meters (5.5 to 6 feet) in this area indicates the possible presence of older (fossiliferous) alluvial sediments and lacustrine (lake) sediments at these depths.

The project-related ground-disturbing activities, such as grading and trenching, have the potential to impact buried paleontological resources. Therefore, if grading or excavation activities reach depths of two meters or more (5.5 to 6 feet), then mitigation measure PR-1 would be implemented to evaluate and recover paleontological resources. The mitigation measure would reduce impacts on non-renewable paleontological resources to a level that is less than significant.

- d) **Less than Significant Impact with Mitigation Incorporated.** The Cultural Assessment did not encounter any human remains (URS 2012). The project site is not located on or near a known cemetery, and no human remains are anticipated to be disturbed during the construction phase.
- e) **Less than Significant Impact with Mitigation Incorporated.** Tribal cultural resources will not be impacted as a result of this project being constructed with implementation of mitigation measures proposed below. There are no known cultural resources of concern to any of the Tribes who have expressed an interest in the project. An Unanticipated Discoveries Plan will be reviewed and approved by the Tribes who are consulting with the County through the AB 52 process. Tribal and Archeological monitors will be onsite during initial ground disturbing activities. Mitigation measures will be implemented as listed in the Cultural Resources Mitigation Measures listed below.

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

## **CULTURAL RESOURCES MITIGATION MEASURES:**

- CR-1** *A Tribal Cultural Resources Monitoring, Discovery, Treatment and Disposition Plan will be established prior to commencing construction. The Plan will address Tribal monitoring and evaluation/disposition of new discoveries including human remains. The Plan will allow for one or more Native American cultural resources specialists to monitor all ground-disturbing activities and excavations on the project site. If any Cultural Resources are encountered, ground-disturbing activities in the area shall be temporarily redirected from the vicinity of the find. All cultural resources encountered will be documented on the California Department of Parks and Recreation Site Forms to be filed with the CHRIS SBAIC. If any human remains are encountered unexpectedly during construction or grading activities, the Applicant will comply with State Health and Safety Code Section 7050.5 such that no further disturbance in the area of such discovery occurs until the County Coroner has made necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If any such remains are determined to be of Native American descent, the County Coroner will notify the NAHC, which is required to identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who then, in consultation with the landowner, will take additional steps, as necessary, in accordance with CEQA Guidelines Section 15064.5(e) and Public Resources Code Section 5097.98.*

## **PALEONTOLOGICAL RESOURCES MITIGATION MEASURES:**

- PR-1** *Prior to the approval of the project plans and specifications by San Bernardino County, the project shall confirm that the plans and specifications stipulate that if evidence of subsurface paleontological resources are found during construction, excavation and other construction activity in that area shall cease and the contractor shall contact a certified Paleontologist to determine the extent of the find and take proper actions.*

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>VI. GEOLOGY AND SOILS -- Would 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), 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 waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Geology

a)

### i) **Less than Significant Impact.**

The western and eastern portions of the site are mapped on the Joshua Tree North and Sunfair Quadrangles, respectively. Based on information presented in the Alquist-Priolo Earthquake Fault Zoning (AP) maps, the site is not located on a potentially active fault or within the boundaries of a fault zone requiring special studies. The nearest mapped fault zone is located approximately 2,000 feet southeast and southwest of the site. While the potential for onsite ground rupture cannot be totally discounted (e.g., unmapped faults could conceivably underlie the project corridor), the likelihood of such an occurrence is considered low due to the absence of known faults within the site.

The site is approximately 0.7 mile north of the Pinto Mountain fault zone and 1.6 miles southwest of the Coyote Mountains fault zone. The project would not include any habitable structures. Nonetheless, the design of any structures onsite would

incorporate measures to accommodate projected seismic loading, pursuant to existing California Building Code (CBC) and local building regulations. Specific measures that may be used for the project include proper fill composition and compaction; anchoring (or other means of for securing applicable structures); and the use of appropriate pipeline materials, dimensions and flexible joints. Based on the incorporation of applicable measures into project design and construction, potential project impacts associated with strong seismic ground shaking would be less than significant.

- ii) **Less than Significant Impact.** The project site is within a seismically active region and is potentially subject to strong ground acceleration from earthquake events along major regional faults. The San Andreas Fault (located 23 miles southwest of the site) as a whole is capable of generating significant seismic activity but it has not been particularly active along its southern segment. The Coyote Mountains and Pinto Mountain faults are closer to the project site, but are capable of producing much smaller earthquakes than the San Andreas fault. With the application of the California Building Code and local building requirements, potential project impacts associated with strong seismic ground shaking would be less than significant.

- iii) **Less than Significant Impact.** Liquefaction is the phenomenon whereby soils lose shear strength and exhibit fluid-like flow behavior. Other types of seismic-related ground failure include ground rupture landslides, dynamic ground subsidence (or settlement), and lateral spreading.

Loose granular soils are most susceptible to liquefaction, and the phenomenon is generally restricted to saturated or near-saturated soils at depths of less than 50 feet. The soils underlying the site include Quaternary alluvial deposits, which are composed of loose to medium-dense sands underlain by complex interbeds of fine sand, silt, and clay. A review of groundwater level measurements from well logs indicates that the groundwater level in the area is approximately 200 feet in depth. Due to the depth of groundwater below the site, the site is not considered to be susceptible to liquefaction. The potential project impacts associated with liquefaction would be less than significant and no further analysis is warranted.

- iv) **No Impact.** The project would not have any risks associated with landslides. Landslides are the downslope movement of geologic materials. The stability of slopes is related to a variety of factors, including the slope's steepness, the strength of geologic materials, and the characteristics of bedding planes, joints, faults, vegetation, surface water, and groundwater conditions. The project area is relatively flat terrain where landslides have not historically been an issue; therefore, no significant impacts are anticipated with respect to seismic-related (or other) landslide hazards, and no further analysis is warranted.

- b) **Less than Significant Impact.** Construction activities could result in soil erosion if the site is not properly designed. The potential impacts of soil erosion would be minimized through implementation of Development Code requirements. Specifically, the applicant would prepare a Stormwater Pollution Prevention Plan that would prescribe temporary Best Management Practices (BMPs) to control wind and water erosion during and shortly after construction of the project. The impact on soil erosion is less than significant and no further analysis is warranted.

- c) **Less than Significant Impact.** The Geotechnical Evaluation (February 13, 2015) described the soil conditions encountered at the boring and test pit locations at the project site as generally consisting of sand with varying amounts of silt and gravel. The sand was generally loose to medium dense. Cobbles were present in the majority of the test pits to the maximum depth explored. From a geotechnical standpoint, the site is well-suited for standard spread foundations or pier foundations to support the structures associated with the solar array. During construction, the project structural engineer would provide on-site observation of site preparation and grading, fill placement and foundation installation, thus ensuring that geotechnical conditions are as anticipated and that the contractor's work meets with the criteria in the approved plans and specifications.

Overall, adherence to the Geotechnical Investigation recommendations and implementation of San Bernardino County Development Code grading standards, as applicable, would minimize the potential impact of on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. General Plan Geologic Hazards Overlay mapping (FI23 C, Sunfair) for the project area indicates that the area is not subject to landslide or liquefaction risks. The impact of geologic instability is therefore less than significant and no further analysis is warranted.

- d) **Less than Significant Impact.** Expansive (or shrink-swell) behavior is attributable to the water-holding capacity of clay minerals and can adversely affect the structural integrity of facilities. In general, compliance with Building Code requirements would minimize potential impacts to project facilities. The surface soils are typically granular blends of sand and silt and considered non-critically expansive. Prior to placing any fills or constructing any overlying improvements, exposed soils would be scarified, moisture conditioned, and compacted according to the Geotechnical Investigation specifications. The investigation also notes that the surface soils are typically loose to medium dense, and that a potential exists for increased subsidence in site grades due to compaction efforts.

The lack of housing or permanent employees on the site ensures that risks to human safety would be minimal. Therefore, impacts would be less than significant and no further analysis is warranted.

- e) **No Impact.** The project does not propose to use septic tanks or alternative wastewater disposal systems; therefore, no impacts are would occur. No further analysis is warranted.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>VII. GREENHOUSE GAS EMISSIONS -- Would 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 checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Greenhouse Gas

- a) **Less than Significant Impact.** The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The project would comply with the San Bernardino County Greenhouse Gas Emissions Reduction Plan. In September 2006, the State enacted the Global Warming Solutions Act (Assembly Bill 32), which was created to address greenhouse gases emitted by human activity and implicated in global climate change. The Act requires that the 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 shall be accomplished through an enforceable statewide cap on GHG emissions that shall be phased in starting in 2012 and regulated by the California Air 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.

Additionally, through the California Climate Action Registry (CCAR, now called the Climate Action Reserve), general and industry-specific protocols for assessing and reporting GHG emissions have been developed. GHG sources are categorized into direct sources (i.e., from the project site itself and from activities directly associated with operations) and indirect sources (i.e., not directly associated with the project, but impacted by its operations). Direct sources include combustion emissions from on-and off-road mobile sources, and fugitive emissions. Indirect sources include off-site electricity generation and non-company owned mobile sources.

As discussed in the Air Quality section of this document, the project's primary contribution to air emissions is attributable to construction activities, including the delivery of PV panels, support structures and other project equipment to the site. Project construction would result in GHG emissions from construction equipment, panel and project equipment deliveries, and construction workers' personal vehicles traveling to and from the 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 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. During its operational life, the project would offset its operational GHG emissions since development of renewable energy resources is an integral component of the California AB 32 implementation strategy.

Generating power from solar energy is a substantial reduction in GHG emissions over conventional power generation from the combustion of fossil fuels. The solar energy produced by the project is estimated at 20 MW and would provide an estimated reduction of 34,050 tons of CO<sub>2</sub>e per year during operation. After analyzing the project's operation emissions of 17.39 tons of CO<sub>2</sub>e annually, the net operation emissions would displace approximately 34,033 tons of CO<sub>2</sub>e each year during operation, which would provide a net benefit to the environment. Therefore, project operational GHG impacts are considered beneficial.

- b) **Less than Significant Impact.** The project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. The project would also comply with the San Bernardino County Greenhouse Gas Emissions Reduction Plan.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:</b>				
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 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 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 checked="" type="checkbox"/>	<input type="checkbox"/>

## Hazards

- a) **Less than Significant Impact.** The project is not expected to result in impacts from hazards and hazardous materials with respect to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. This is because the project would not involve the routine transport, use, or disposal of hazardous materials as defined by the Hazardous Materials Transportation Uniform Safety Act. During construction, the project would involve the transport of general construction materials (i.e., concrete, wood, metal, fuel, etc.) as well as the materials necessary to construct the PV arrays. Construction activities would involve the use of hazardous materials such as fuels and greases for the fueling and servicing of construction equipment. Such substances may be stored in temporary storage

tanks/sheds that would be located on the project site. Although these types of materials are not acutely hazardous, they are classified as hazardous materials and create the potential for accidental spillage, which could expose workers. The use, storage, transport, and disposal of hazardous materials used in construction of the facility would be carried out in accordance with federal, state, and County regulations. No extremely hazardous substances (i.e., governed under Title 40, Part 335 of the Code of Federal Regulations) are anticipated to be produced, used, stored, transported, or disposed of as a result of project construction. As needed, Material Safety Data Sheets for all applicable materials present on-site would be made readily available to on-site personnel as required by the San Bernardino County Fire Department Hazardous Materials Division. During construction of the facility, non-hazardous construction debris would be generated and disposed of in local landfills. Sanitary waste would be managed using portable toilets, with waste being disposed of at approved sites.

The PV panels and inverters would produce no waste during operation. PV panels are in a solid and non-leachable state; broken PV panels would not be a source of pollution to stormwater. The only potentially hazardous material within the fully operational site would be the mineral insulating oil in the step-up transformers. The transformer oil has low toxicity and is a fully bio-neutral, biodegradable fluid. In the case of a major transformer breach, oil would be captured in a built-in oil containment system suitably sized to accommodate the maximum possible spillage. Upon leakage / failure, the seeped fluid would be removed by a certified vehicle and recapture system and the entire transformer would be replaced.

There are no designated truck routes on or immediately adjacent to the project site. The closest route is SR-62, located approximately 1.3 miles to the south of the project entrance and accessible via Sunfair Road.

The project would be required to comply with federal, state, and county laws, ordinances, and regulations including the San Bernardino Construction Waste Management Plan and the Construction and Demolition Waste Recycling Guide and Directory. Therefore, the project would result in less-than-significant impacts related to the creation of significant hazards through the routine transport, use, or disposal of hazardous materials.

- b) **Less than Significant Impact.** The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. With the exception of construction-related materials such as fuels, lubricants, adhesives, and solvents, the project would not generate or require the use or storage of significant quantities of hazardous substances. The toxicity and potential release of these materials would depend on the quantity of material, type of storage container, safety protocols used on the site, location and/or proximity to residences, frequency and duration of spills or storage leaks, and the reactivity of hazardous substances with other materials. Therefore, a complete list of all materials used on-site, how the materials would be transported, and in what form they would be used would be recorded to maintain safety and prevent possible environmental contamination or worker exposure. Compliance with regulations and standard protocols during the storage, transportation, and usage of any hazardous materials would ensure no substantial impacts would occur. The PV panels used in the project are environmentally sealed collections of PV

cells that require no chemicals and produce no waste materials. As such, there is a less-than significant impact associated with creating a significant hazard to the public or the environment.

An empty 10,000 gallon underground storage tank previously used for airport fueling was removed from the project site in October 2015. The tank removal and closure was overseen by the San Bernardino County Fire Department. No hydrocarbon contamination exists at the project site.

- c) **No Impact.** There are no existing or planned schools within one-quarter mile of the project site. The nearest schools are Copper Mountain Head Start, approximately 2 miles to the southeast, and Joshua Tree Elementary School, approximately four miles to the southwest. Additionally, operations and maintenance of the project would not produce hazardous emissions. No significant adverse impacts related to hazardous emissions or the handling of hazardous materials near schools would result from implementation of the project.
- d) **No Impact.** The project site is not located on a known site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The project would not create a significant hazard to the public or the environment. Therefore, the project would result in a less than significant impact associated with hazardous materials sites.
- e) **Less than Significant Impact.** The project area is the decommissioned Roy Williams Airport (Hi Desert Airport). No other airport is within 2 miles.

The project site lies under Military Special Use Airspace associated with the Marine Corps Air Ground Combat Center. The project is required to strictly adhere to San Bernardino County's Glare and Outdoor Lighting Ordinance to ensure that lighting from the project does not interfere with Marine Corps Air Ground Combat Center nighttime training activities.

- f) **No Impact.** The project area is not located within the vicinity of a private airstrip; therefore, it would not result in a safety hazard for people residing or working in the project area. The nearest private airstrip is the Cones Field, located approximately 11 miles to the east of the project site. There is no impact and no further analysis is warranted.
- g) **No Impact.** Activities associated with the project would not impede existing emergency response plans for the project site and/or other land uses in the project vicinity. The project would not result in any closures of existing roadways that might have an effect on emergency response or evacuation plans in the vicinity of the project site. In addition, all vehicles and stationary equipment would be staged off public roads and would not block emergency access routes. Accordingly, implementation of the project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. There is no impact and no further analysis is warranted.
- h) **Less than Significant Impact.** The project site is not within an area of high or very high fire hazard, as determined by San Bernardino County Fire. However, any development, along with the associated human activity, in previously undeveloped areas increases the potential of the occurrence of wildfires in the region. Although vegetation on the

project site consists of native grasses and shrubs, species of non-native plants (noxious weeds) included on the weed list of the California Department of Food and Agriculture (CDFA 2010) occur in the project area. In addition to posing a major threat to biological resources, the spread of noxious weeds can result in increased fire frequency by providing sufficient fuel to carry fires. As a condition of project approval, the developer shall comply with San Bernardino County weed abatement regulations [SBCC§ 23.031-23.043] and periodically clear the site of all non-complying vegetation, including weeds such as Russian thistle (tumbleweed, *Salsola tragus*), London rocket (*Sisymbrium irio*), redstem filaree (*Erodium cicutarium*), foxtail chess (*Bromus madritensis*) and cheatgrass (*Bromus tectorum*). The project shall also conform to the requirements of the Safety Element of the General Plan and the applicable portions of the San Bernardino County Code (primarily Title 2, Division 3, "Fire Protection and Explosives and Hazardous Materials"). Through compliance with these standards, the risks associated with wildfires on the project site are reduced to below a level of significance. No further analysis is warranted.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>IX. HYDROLOGY AND WATER QUALITY -- Would the project:</b>				
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 preexisting 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 which 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 stormwater 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 structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Hydrology and Water Quality

- a) **Less than Significant Impact.** The Wallace Group prepared a Preliminary Hydrology Study (Hydrology Study) for the project site in January 2015. The purpose was to analyze off-site and on-site hydrology and drainage for the pre- and post-development scenarios. The Hydrology Study was prepared using the San Bernardino County Hydrology Manual and data available through the Federal Emergency Management Agency (FEMA).

The project would not violate any water quality standards or waste discharge requirements. During the construction period, potential erosion/sedimentation and hazardous materials impacts would be avoided or reduced below a level of significance through conformance with a Stormwater Pollution Prevention Plan that would describe the various structural and nonstructural water quality management measures to be used. Measures may include installation of straw bale barriers, silt fences, stockpile coverings, sediment basins, and other similar measures.

Site Design BMPs are used to reduce stormwater runoff by minimizing the project's impervious footprint. The site design allows off-site runoff to flow through the site to preserve the existing flow patterns in the area. Impervious areas on the project site are limited to equipment pads and solar panel pier foundations, totaling less than one percent of the total project footprint. In addition, existing impervious surfaces such as concrete pads and structures are to be removed as a part of the project. The combination of minimizing impervious area and removing existing impervious surfaces minimizes offsite stormwater runoff and is consistent with Site Design BMP goals.

Source Control BMPs, both during and post-construction, are used to reduce the potential for stormwater runoff and pollutants from coming into contact with one another. Construction equipment will utilize various potential pollutants such as hydraulic oil, diesel fuel, grease, lubricants, solvents, adhesives, paints, and other petroleum-based products contained in construction vehicles. All potentially hazardous materials would be contained, stored, and used in accordance with the manufacturers' instructions and handled in compliance with the applicable standards and regulations, such as those administered by the San Bernardino County Fire Department, Occupational Safety and Health Administration, and the California Occupational Safety and Health Administration.

The only potentially hazardous material within the fully operation site would be the mineral insulating oil in the step-up transformers. The transformer oil has low toxicity and is a fully bio-neutral, biodegradable fluid. In the case of a major transformer breach, oil would be captured in a built-in oil containment system suitably sized to accommodate the maximum possible spillage. Upon leakage failure, the seeped fluid would be removed by a certified vehicle and recapture system and the entire transformer would be replaced.

Implementation of the site design BMPs, and construction and post-construction BMPs, would ensure that water quality impacts are less than significant. Please also see Items IX.c and IX.d below.

**b) Less than Significant Impact.**

The project would not substantially deplete groundwater supplies or interfere with groundwater recharge. Water demand is further described in the Utilities section of this Initial Study. At peak demand, approximately 30 acre feet of water will be needed during the six months of project construction. The water will likely be provided by the JBWD, and represents less than 2% of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year).

On October 23, 2015, JBWD issued a "Conditional Will Serve Letter" for the project in response to its inquiry for future water service. This letter states that due to the current

Declared State of Emergency in California, the JBWD must implement water service conservation measures and restrictions. Thus, future water service for the project could not be guaranteed at that time, and would be subject to meeting a number of specific conditions.

The JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. The applicant is willing to work with the JBWD to purchase water to be placed into the recharge pond, which will enhance groundwater recharge and thus ensure that the project will not cause groundwater depletions in excess of the basin's safe yield. There are ongoing discussions with JBWD to issue a standard Will Serve letter or execute a water supply agreement that will guarantee water for the project without condition.

### **New Groundwater Well**

In the event that water still cannot be obtained from the JBWD, an alternative would be to establish a new groundwater supply well on the project site, likely on the two acre parcel of land on the west portion of the site. The site at one time was served by an on-site private well.

In this scenario, San Bernardino County would issue a permit for the new well and the cost of the new well would be assumed by the applicant. Additional desktop information below shows that there is adequate groundwater supply for the project needs.

### **Basin Overview**

The project is located within the Copper Mountain Valley groundwater subbasin, one of 17 subbasins within the approximately 1,000-square mile Morongo Groundwater Basin. The regional aquifer in the Morongo basin consists of continental deposits of Quaternary and Tertiary age that extend to as much as 10,000 feet deep.<sup>3</sup> The Copper Mountain Valley subbasin is entirely within San Bernardino County and covers about 47.4 square miles (30,341 acres) directly north of the Joshua Tree subbasin. Average annual precipitation is 4 inches for the lower elevation, eastern part of the subbasin where the Project is located. The water-bearing materials consist of unconsolidated to partly consolidated Miocene to Quaternary continental deposits. The general regional groundwater flow pattern is from west to east, with local variations. Wells in the subbasin are known to reach as much as 1,000 feet depth without encountering bedrock. Yields from wells in the subbasin range from 10 to 2,450 gallons per minute (approximately 16 to 3,955 acre feet per year [af/yr]).<sup>4</sup>

In the larger Morongo basin, demands on local water supplies have created overdraft conditions in some areas of the desert.<sup>5</sup> However, in the Copper Mountain Valley

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<sup>3</sup> USGS. 2015. Mojave Water Resources. U.S. Geological Survey, Scientific Investigations Reports 2007-5097 and 2011-5234. Accessed online December 12, 2015 at <http://ca.water.usgs.gov/mojave/>.

<sup>4</sup> California Department of Water Resources (DWR). 2004. Hydrologic Region Colorado River, Copper Mountain Valley Groundwater Basin. California's Groundwater Bulletin 118. Last updated February 27, 2004. Available online at: <http://www.water.ca.gov/groundwater/bulletin118/basindescriptions/7-11.pdf>

<sup>5</sup> See Footnote 1.

groundwater subbasin, as of the late 1990s, water levels had generally remained unchanged for more than 50 years.<sup>6</sup> Groundwater in storage is estimated to be a minimum of 940,000 af. Recharge from precipitation ranges from an estimated 728 to 1,300 af/yr. Withdrawals are predominantly from urban use and were estimated at 1,010 af for the year 2000.<sup>7</sup> Overall, in 2014 the Copper Mountain Valley subbasin was ranked “very low” priority by the California Statewide Groundwater Elevation Monitoring program, indicating that it is not an area critical for groundwater management coordination.<sup>8</sup>

### **Project Area Water Levels and Wells**

According to the California Department of Water Resources (DWR) Groundwater Information Center Interactive Map Application, the estimated water depths below ground for Fall 2015 in the general Project region ranged from approximately 169.9 feet below ground surface (bgs) to 352.1 feet bgs (Figure 6).<sup>9</sup>

In the immediate Project vicinity, the DWR Water Data Library shows one well (likely the non-functioning on-site well) within the Project boundary, and four adjacent wells (Figure 7).<sup>10</sup> In this database, the well and water depth information is listed as confidential.

The SWRCB also provides data through its GeoTracker GAMA system created in response to the Groundwater Quality Monitoring Act of 2001.<sup>11</sup> In the SWRCB database, four wells in the Project vicinity appear in results for the 10-year median depth-to-water level, ranging from approximately 203.4 feet bgs to 378 feet bgs (Figure 8).

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<sup>6</sup> See Footnote 2.

<sup>7</sup> Ibid.

<sup>8</sup> DWR. 2014. CASGEM Basin Summary – Copper Mountain Valley. Available online at: [http://www.water.ca.gov/groundwater/casgem/pdfs/basin\\_prioritization/SRO%20135.pdf](http://www.water.ca.gov/groundwater/casgem/pdfs/basin_prioritization/SRO%20135.pdf)

<sup>9</sup> DWR. 2015. Groundwater Information Center Interactive Map Application. Accessed online December 1, 2015 at: <https://gis.water.ca.gov/app/gicima/>

<sup>10</sup> DWR. 2015. Water Data Library. Accessed online December 1, 2015 at <http://www.water.ca.gov/waterdatalibrary/index.cfm>

<sup>11</sup> SWRCB (State Water Resources Control Board). 2015. GeoTracker GAMA Factsheet. Office of Public Affairs. State Water Resources Control Board. October. Available online at: [http://www.waterboards.ca.gov/publications\\_forms/publications/factsheets/docs/geotrkgama\\_fs\\_2015oct.pdf](http://www.waterboards.ca.gov/publications_forms/publications/factsheets/docs/geotrkgama_fs_2015oct.pdf)

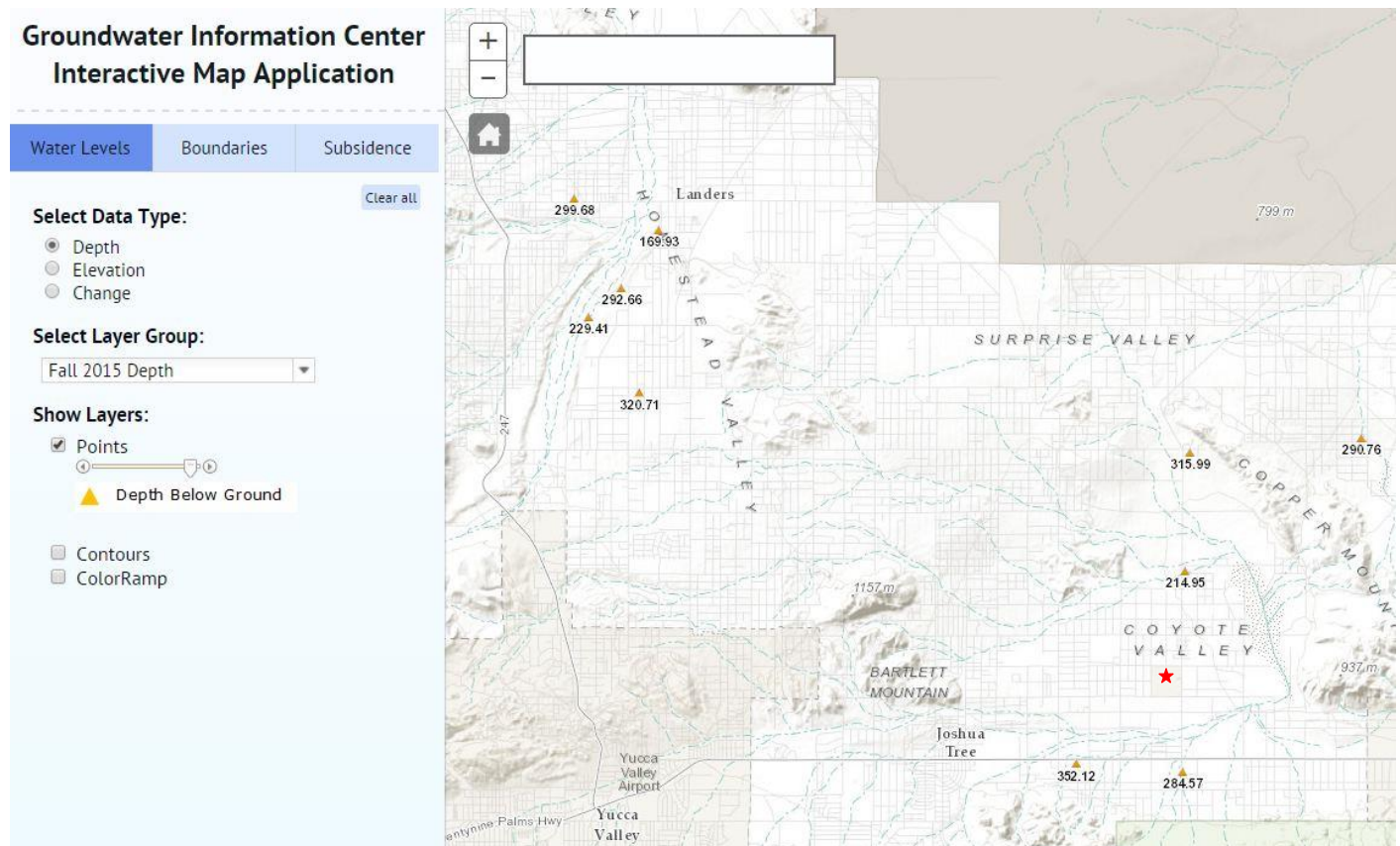


FIGURE 6. WATER DEPTH BELOW GROUND IN PROJECT REGION (PROJECT LOCATION INDICATED BY RED STAR)



FIGURE 7. WELLS IN PROJECT VICINITY (DWR WATER DATA LIBRARY)

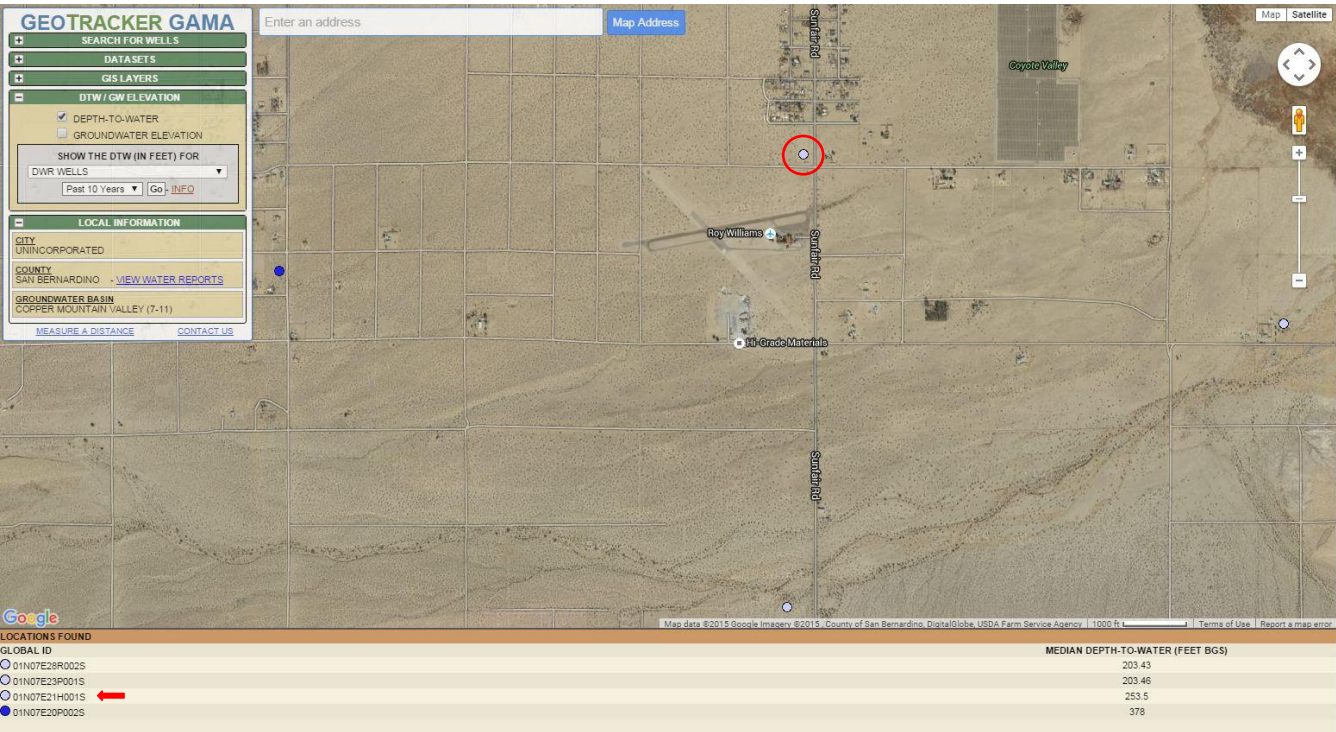


FIGURE 8. 10-YEAR MEDIAN DEPTH-TO-WATER AT FOUR WELLS IN PROJECT VICINITY

The U.S. Geological Survey (USGS) has further data about the well outside the northeast edge of the Project boundary (circled in red on Figure 8), which indicate that the depth of the well is 860 feet bgs, and the depth of the hole is 1,013 feet bgs.<sup>12</sup> Figure 9 presents the depth to water level and corresponding groundwater elevation from 2002 to 2011 for this well, which is near constant (approximately 252 to 254.5 feet bgs).

<sup>12</sup> USGS. 2015. National Water Information System. Groundwater Levels for California. USGS 340926116144901 001N007E21H001S. [http://nwis.waterdata.usgs.gov/ca/nwis/gwlevels/?site\\_no=340926116144901](http://nwis.waterdata.usgs.gov/ca/nwis/gwlevels/?site_no=340926116144901)

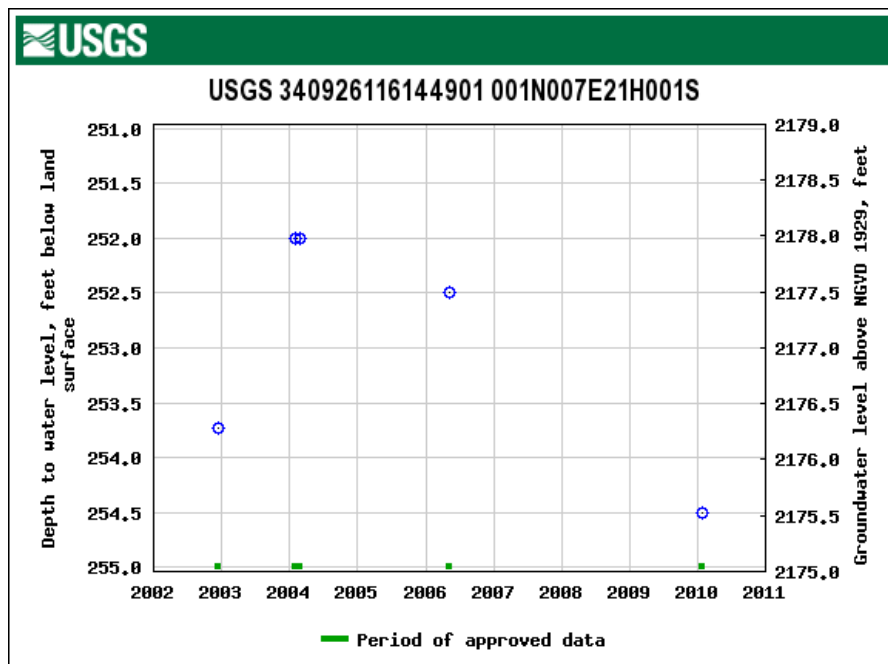


FIGURE 9. WATER DATA 2002 TO 2011 FOR WELL 001N007E21H001S (INDICATED WITH RED CIRCLE/ARROW ON FIGURE 8)

The record shows that there is adequate groundwater volume beneath the project site to serve the water demand for the project without significantly impacting water supplies. The project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the project

- c) **Less than Significant Impact.** The Hydrology Study serves as the basis for the analysis of potential erosion and siltation impacts.

The project site and surrounding land is relatively flat, with average ground slopes between 1 and 2 percent from west to east. Site drainage is characterized by shallow sheet flow conditions, with no significant drainage channels on the site. The site is mostly vacant land of dirt and sand and is sparsely vegetated with widely spaced desert shrubs and grasses. As described in Item IX.d below, the off-site watersheds to the west/southwest have soils and groundcover similar to those on-site. In a storm event, off-site runoff sheet flows and enters the site along the western border. The flat slopes both on- and off-site, combined with broad sheet flow and a lack of defined drainage channels, generally results in low potential for erosion and debris flows. The Hydrology Study found little evidence of erosion due to flows approaching the site, even though channels, culverts, or other drainage improvements are absent in the upstream, off-site watersheds. This supports the Study's statement that sheet flow on the site is typical and non-erosive during storm events.

Runoff originating on- and off-site would be allowed to sheet flow across the site as it does in existing conditions. The previous onsite development significantly reduces the need for site leveling, cut and fill, and other invasive site modifications. For the vast majority of the array area, no site grading will be employed. The limited site grading would spread areas of existing deeper sheet flow to a shallower sheet flow condition, to decrease both depth and velocity of flow across the site. This strategy reduces potential

for erosion compared to existing conditions, while maintaining the existing sheet flow drainage patterns across the site.

When the project is implemented, most of the existing on-site ground cover would be removed as a result of construction. Despite this, surface runoff and infiltration conditions would not change significantly since existing vegetation cover is relatively sparse, native site soils would be used to create the site surface, and impervious surface construction would be minimized.

Solar panels would be constructed atop piles driven between 6 and 12 feet underground. The piles are not expected to be significantly impacted by scour from water flows; however, occasional maintenance may be necessary after large storm events to repair any erosion damage and to clear fencing of windborne and waterborne debris. If deemed necessary by project engineers during the design phase, additional scour protection methods may be included, such as additional embedment depth for piles or strategic placement of rip rap to protect the ground surface.

During operation, rainwater would drain freely from the panels to the ground. The lower front side of the panels would maintain a 2 foot clearance from ground level. Based on the limited volume of water falling from each panel, and the short height of the fall, it is not expected that erosion beyond an immediate micro level would occur. It is expected that water would fall from the panels and pond at the drip point before infiltrating or gradually migrating into the existing drainage patterns. If, over time, minor erosion is noted at the drip points, a surface treatment such as aggregate base could be added along the drip line to protect the surface and help spread the water back to sheet flow conditions.

Based on these factors, the project would have a less than significant impact on existing drainage patterns, and site development would not result in substantial erosion or siltation on- or off-site.

- d) **Less than Significant Impact.** The Hydrology Study serves as the basis for analysis of drainage patterns and potential flooding impacts.

The site is mostly vacant land of dirt and sand and is sparsely vegetated with widely spaced desert shrubs and grasses. The project site and surrounding land is relatively flat, with average ground slopes between 1 and 2 percent from west to east. Site drainage is characterized by shallow sheet flow conditions, with no significant drainage channels on the site. Offsite stormwater approaches the site as sheet flow from the southwest. Some of this stormwater originates from Coyote Wash, which drains to the dry Coyote Lake. The regional Coyote Wash watershed extends west from Coyote Lake across the majority of the town of Yucca Valley, and south into the mountains between Yucca Valley and Palm Springs.

The project site has gone through significant development, so the site can be classified as “previously disturbed” and “previously developed.” The previous development significantly reduces the need for site leveling, cut and fill, and other invasive site modifications. For the vast majority of the array area, no site grading would be employed. The limited area of grading would spread existing sheet flow into a shallower sheet flow condition. The flood model prepared as a part of the Hydrology Study

demonstrates that the grading has minimal to no impact on downstream drainage patterns.

Since an increase in impervious surface area could change drainage patterns and flow volumes, the project is designed to minimize impervious coverage in several ways. Site roadways would be constructed using pervious materials, and to minimum widths necessary to meet access and fire requirements. New impervious areas on the project site would be limited to equipment pads and solar panel pier foundations, totaling less than one percent of the total project footprint. In addition, some of the existing impervious surfaces such as concrete pads and structures are to be removed as a part of the project. New impervious areas within the switchyard would be limited to small footings or pads for equipment; most of the switchyard ground would consist of native or pervious materials. Finally, the solar panels would not create a contiguous impermeable surface. While the solar panels are impervious, the panels are separated and elevated from the ground surface. Any precipitation that falls onto a solar panel would run off on the soil and either infiltrate or run off the site as it has done historically.

It is anticipated that stormwater runoff would not increase compared to existing conditions, as construction of new impervious surfaces would be minimal. Because flow and volume increases are not anticipated, the County Department of Public Works has determined that detention of post-development flows is not necessary.

The project would not substantially increase the rate or amount of surface runoff in a manner that would result in on- or offsite flooding, and project-related impacts on existing drainage patterns would be less than significant (also see discussion in Item IX.c).

**e&f) Less than Significant Impact.** The Hydrology Study serves as the basis for the analysis of the storm drain system capacity and the Project Description serves as the basis of analysis of pollutant sources.

There are no existing or planned stormwater drainage systems in the project vicinity. Regionally, stormwater flows through unimproved desert washes to the dry Coyote Lake.

The Hydrology Study determined that stormwater storage and infiltration characteristics would not change substantially with the project development, due primarily to the project's minimal impervious footprint, removal of existing impervious surfaces, and perpetuation of existing flow paths through the site. The Hydrology Study calculations are based on the design approach that no storm drain pipes or imperviously lined swales are necessary and that all impervious surfaces would drain to native soils for infiltration. The Hydrology Study demonstrates that post-development drainage patterns and flow discharges would be substantially similar to pre-development conditions (see Item IX.d).

The only potentially hazardous material within the fully operational site would be the mineral insulating oil in the step-up transformers. The transformer oil has low toxicity and is a fully bio-neutral, biodegradable fluid. In the case of a major transformer breach, oil would be captured in a built-in oil containment system suitably sized to accommodate the maximum possible spillage. Upon leakage / failure, the seeped fluid would be

removed by a certified vehicle and recapture system and the entire transformer would be replaced.

Since the project would not exceed storm drain capacities or provide substantial sources of polluted runoff, impacts would be less than significant.

- g) **No Impact.** The project is a solar energy generation facility and would not include any housing. Therefore, there would be no impact related to the placement of housing within a FEMA delineated 100-year flood zone. No further analysis is warranted.
- h) **Less than Significant Impact.** The project is in FEMA Zone X per map numbers 06071C8145H and 06071C8175H, defined as areas determined to be outside the 0.2% annual chance (500-year) flood zone. The closest FEMA defined 100-year flood zone is approximately  $\frac{1}{4}$  mile south of the site, and encompasses Coyote Wash and Coyote Dry Lake. There would be no impact related to impedance or redirection of flood flows within that 100-year flood zone, and therefore no special consideration was included in the site design to meet FEMA flood mitigation requirements.

The flood model prepared as a part of the Hydrology Study indicates that portions of the site would experience shallow sheet flow conditions during a 100-year storm event. The site structures, including the solar panel piles and equipment pads, would cover less than one percent of the site, and have a very low potential for redirecting flows due to their small footprint. In addition, existing structures are to be removed, reducing the risk of redirected flows from existing structures.

The potential impacts are less than significant, because the project is not located within a FEMA defined flood zone and the structures result in minimal risk for redirecting or impeding flows.

- i) **Less than Significant Impact.** The project would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam, because the project site is not within any identified path of a potential inundation flow that might result in the event of a dam or levee failure or that might occur from a river, stream, lake, or sheet flow situation. No further analysis is warranted.
- j) **No Impact.** The project site would not be subject to inundation by seiche, tsunami, or mudflow. A tsunami is a series of ocean waves generated in the ocean by an impulsive disturbance. Due to the inland location of the project, tsunamis are not considered a threat. A seiche is an oscillating surface wave in a restricted or enclosed body of water generated by ground motion, usually during an earthquake. Inundation from a seiche can occur if the wave overflows a containment wall or the banks of a water body. No impacts are expected to occur because the project is not adjacent to any marine or inland water bodies. The soils in the project area are moderately well drained, the terrain is relatively flat, and mudflows have not historically been an issue in the project area. No further analysis is warranted.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>X. LAND USE AND PLANNING -- Would 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"/>

## Land Use

- a) **No Impact.** The project would not physically divide an established community, because the project is located in an unincorporated part of the County that has sparse residential development and would occupy an area that is a decommissioned airport. The project would not require the abandonment or relocation of any public rights-of-way, nor would it create an impediment for residents in the project area. Therefore, there would be no impact related to the dividing of an established community. No further analysis is warranted.
- b) **No Impact.** The current General Plan land use zoning designations for the project area are Community Industrial, Institutional, and Rural Living which allow development of electrical power generation with a CUP; therefore, there is no impact associated with a conflict with the General Plan land use zoning designation for the site. The project complies with the principles and priorities of the Joshua Tree Community Plan. There is no impact and no further analysis is warranted.
- c) **No Impact.** The project area is within the boundaries of the West Mojave Plan. The West Mojave Plan is a federal land use plan amendment to the Bureau of Land Management's California Desert Conservation Area (CDCA) Plan that presents a comprehensive strategy to conserve and protect sensitive plants and animals and the natural communities of which they are a part. The West Mojave Plan is applicable only to BLM-administered public lands within the West Mojave Plan area. Although the study area is within the West Mojave Plan area, it is not encompassed within BLM lands; therefore, future development would not be subject to the requirements of the West Mojave Plan.

The Desert Renewable Energy Conservation Plan (DRECP), currently in draft form, is an ongoing effort and process by CEC, CDFW, BLM, and USFWS that the County is increasingly involved with. The project is not located in an area that is in conflict with the DRECP. The project conforms with the ideals in the plan pertaining to developing projects on previously disturbed land, as is being done with this project on the decommissioned airport. Much of the project site is already paved or disturbed as a result of the remaining airport infrastructure including runways.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XI. MINERAL RESOURCES -- Would the project:</b>				
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"/>

### Mineral Resources

- a) **No Impact.** The USGS Mineral Resources Spatial Data Mapper indicates that no metallic or nonmetallic mineral resources have been mapped on the project area. In addition, no active mines or mining claims are located on or in the immediate vicinity of the project site. Implementation of the project would not result in the loss of any known mineral resources on the site. No further analysis is warranted.
- b) **No Impact.** The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. There is no impact and no further analysis is warranted.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XII. NOISE -- Would the project result in:</b>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Noise

- a) **Less than Significant Impact.** Operation of the project would not generate noise in excess of the applicable regulations. Construction would generally occur between dawn and dusk, Monday through Saturday, 7 AM to 7 PM.

Sensitive noise receptors in the vicinity of the project site include residents to the north of the project site and one directly to the east. With implementation of the standard requirements, no significant impacts are anticipated. The requirements ensure that noise generation from construction equipment/vehicle operation would occur during daytime hours and would be localized, temporary, and transitory in nature.

- b) **Less than Significant Impact.** Groundborne vibration and groundborne noise could originate from earth movement during the construction phase of the project. The project will comply with all applicable requirements for long-term operation, as well as with measures to reduce excessive groundborne vibration and noise, to ensure that the project would not expose persons or structures to excessive groundborne vibration. Impacts would be less than significant.

- c) **Less than Significant Impact.** The project would not create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. The project would result in temporary noise increases during construction but would not create any substantial permanent increase in the ambient noise levels. Operational-period activities would include the occasional use of vehicles and the use of equipment that produce minimal noise levels at site boundaries.

Inverters would be distributed throughout the solar field. The final inverter design has not yet been determined; however, uncontrolled inverter noise is expected to be up to 75 dBA immediately adjacent (3 - 5 feet away) to the inverters. Noise would only be produced by inverters during daytime hours, when the PV panels are producing electricity. The PV panels are fixed-tilt and thus have no motors to generate noise.

Therefore, the project would not have a substantial adverse effect related to a substantial permanent increase in ambient noise levels and no mitigation measures are required.

- d) **Less than Significant Impact.** The project is adjacent to mostly undeveloped and/or vacant lands; therefore, noise generated during construction of the project could potentially result in some temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Specifically, construction of the project may potentially create some elevated short-term construction noise impacts from construction equipment. Compliance with the standard requirements would ensure that impacts are below a level of significance by requiring the muffling of construction equipment where feasible, and requiring that stationary construction equipment be placed in a manner so that emitted noise is directed away from sensitive receptors.

During operations, noise from the facility would occur periodically due to occasional maintenance activities, four annual panel washings, and periodic visits by security staff. These activities would produce limited amounts of noise from pickup trucks and other light vehicles; such impacts would be temporary. Additionally, operating vehicles would only be located at any single point on the site for a very limited duration. Maintenance, repair, and washing activities would occur exclusively during daylight hours.

Therefore, temporary or periodic noise impacts would be less-than-significant.

- e) **No Impact.** The project area is located on the decommissioned Roy Williams Airport (Hi Desert Airport). No other airport is nearby.
- f) **No Impact.** The project area is not located within the vicinity of an active private airstrip. The nearest private airstrip is Cones Field, located approximately 11 miles to the east of the project area. Due to the distance of the airstrip from the project site, there would be no noise impacts from the airstrip on workers in the area.

**SIGNIFICANCE:** Adherence with the standard requirements will keep noise at less than significant levels.

**NOISE STANDARD REQUIREMENT/CONDITION OF APPROVAL:**

- N-1**      *The developer shall submit for review and obtain approval of an agreement letter that stipulates that all construction contracts/subcontracts contain as a requirement that the following noise attenuation measures be implemented:*
- a) Noise levels of any project use or activity shall be maintained at or below adopted County noise standards (SBCC 83.01.080). The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.*
  - b) Construction equipment shall be muffled per manufacturer's specifications. Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.*
  - c) All stationary construction equipment shall be placed in a manner so that emitted noise is directed away from sensitive receptors nearest the project site.*

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XIII. POPULATION AND HOUSING -- Would 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"/>

### Population and Housing

- a) **No Impact.** The project will not induce substantial population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). Construction is anticipated to take approximately 7 months, an estimated peak workforce of 125 to 150 construction workers on the site. These workers would commute to the site from nearby communities such as Joshua Tree, Twentynine Palms, and Yucca Valley, as well as from larger population centers a greater distance away, such as Palm Springs and Banning. Ride sharing will be encouraged. There would be no permanent staffing onsite during operations. Accordingly, the project would not result in any impacts to housing or related infrastructure, nor would it require construction of additional housing. The project would not result in a substantial adverse effect related to substantial population growth in the area, and no mitigation measures are required.
- b) **No Impact.** The project would not displace existing housing. The project site is a decommissioned airport with no housing or people. There would be no impact related to displacement of housing.
- c) **No Impact.** The project would not displace local residents. The project site is a decommissioned airport with no housing or people. There would be no impact related to the displacement of people.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XIV. PUBLIC SERVICES</b>				

- 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"/>

### Public Services

- a) **Fire – Less than Significant Impact.** The project area is serviced by the San Bernardino County Fire Department.

The nearest fire station is Panorama Heights Station 35, located 1.9 miles southeast of the project site. This station houses one Type I Engine Company and one Water Tender. Joshua Tree Station 36 is located 4.5 miles southwest of the project site, in Joshua Tree. This station houses one Type I Engine Company, one Squad vehicle, and one reserve engine. The project would not substantially impact service ratios, response times, or other performance objectives related to fire protection. However, during construction, some public services including fire protection may be required; these would be short-term requirements and would not require increases in the level of public service offered or affect the agency's response time. The project would incorporate perimeter and internal access driveway systems that are accessible to emergency equipment. Entry gates would include Knox® locks or similar devices to allow 24-hour access for emergency responders.

Comprehensive safety measures that comply with federal, state, and local worker safety and fire protection codes and regulations would be implemented for the project that would minimize the potential for fires to occur during project construction and operations. Because of the low probability and short-term nature of potential fire protection needs during construction, the project would not result in significant impacts associated with fire protection.

**Police Protection – Less than Significant Impact.** The project area and other unincorporated portions of the County are served by the San Bernardino County Sheriff's Department. The project would not impact service ratios, response times, or other performance objectives related to police protection. However, during construction, some public services including police protection may be required. These would be

short-term requirements and would not require increases in the level of public service offered or affect the agency's response times. In order to protect against theft and vandalism, the project would employ its own security patrol crews to survey the project site during construction and operation of the project. Additionally, the project would incorporate security fencing, entry lighting, and security camera systems.

**Schools – No Impact.** Long-term operation of the facilities would place no demand on school services because it would not involve the construction of facilities that require such services and would not involve the introduction of a temporary or permanent human population into this area. There would be no impact on schools and no further analysis is warranted.

**Parks – No Impact.** Long-term operation of the facilities would place no demand on parks because it would not involve the construction of housing and would not involve the introduction of a temporary or permanent human population into this area. There would be no impact on parks and no further analysis is warranted.

**Other Public Facilities – No Impact.** The project would not result in an increased resident population or a significant increase in the local workforce. Based on these factors, the project would not result in any long-term impacts to other public facilities and no further analysis is warranted.

**SIGNIFICANCE:** No significant adverse impacts are identified or anticipated and no mitigation measures are required. As required by the County Development Code, payment of the Public Safety Services Impact Fees will be a condition of approval.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XV. RECREATION --</b>				
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"/>

### Recreation

- a) **No Impact.** The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. No new residences or recreational facilities would be constructed as part of the project and the project would not induce population growth in adjacent areas. No significant adverse impacts on recreation would result from implementation of the project and no further analysis is warranted.
- b) **No Impact.** The project does not include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. No new residences or recreational facilities would be constructed as part of the project. The project would not induce population growth in adjacent areas and would not increase the use of recreational facilities in surrounding neighborhoods. No significant adverse impacts on recreation would result from implementation of the project and no further analysis is warranted.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XVI. TRANSPORTATION/TRAFFIC -- Would 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 freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 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 checked="" type="checkbox"/>	<input 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"/>

### Transportation/Traffic

- a) **Less than Significant Impact.** A Trip Generation Analysis was prepared for the project by Tetra Tech (July 2012). The Trip Generation Analysis reveals that the project would not result in any decline in the performance of the area's circulation system.

At its peak, approximately 150 construction workers are expected to be on-site. Assuming an average of 1.25 workers per vehicle (carpooling factor), the anticipated passenger car equivalent (PCE) trips generated by the Project will be 120 one-way trips during both the AM and PM peak hours. Additionally, 80 one-way trips are anticipated for equipment vehicles.

During operations, the project facility will be primarily managed, monitored, and controlled remotely. Therefore it is assumed that the project will have 1 to 2 employees 1 to 2 times per month on site for system inspections and 2 to 6 employees on site 1 to 2 times per month for troubleshooting and maintenance requirements. Additionally, the panels will be washed approximately four times per year with 2 to 4 employees on site at that time.

This number of trips would have a minimal impact on access routes to the project site, including SR-62 and Sunfair Road.

Due to the rural nature of the project area, alternative means of transportation, including mass transit and pedestrian and bicycle routes, are generally sparse, and would therefore not be negatively impacted by the project. The Morongo Basin Transit Authority does have a bus route, Route #1 that traverses Twentynine Palms Highway in both an east and west direction. Currently, the nearest bus stops to the project would be the Hi-Desert Hospital and Copper Mountain College. Construction workers may be able to request a stop at the intersection of Twentynine Palms Highway and Sunfair Road. From that point, they would either walk or share rides with other construction workers north to the project site.

During operations, because the site would be unmanned, there would be no increase in demand for alternative means of transportation. Therefore, the project would not conflict with any applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. No significant adverse impacts on transportation or traffic would result from implementation of the project and no further analysis is warranted.

- b) **Less than Significant Impact.** As noted under impact. a), above, the Trip Generation Analysis prepared for the project reveals that the project would not result in any decline in the performance of the area's circulation system during either the construction or operational periods. The project would therefore not 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. The project would result in a less-than-significant increase in traffic in relation to the existing traffic load and capacity of the street system.

At the initiation of project construction, equipment that may include water trucks, backhoes, and loaders would be mobilized to the project site using Sunfair Road as shown in the table below

**Estimated Construction Duration, Equipment and Workers by Activity**

Activity	Duration	Equipment	Pieces	Workers
Fencing	2 Months	Bobcat	1	2
		Trencher	1	
		Pick Up Truck	1	
Demolition – existing structures and related infrastructure	1 Month	Backhoe	2	4
		Bulldozer	1	
		5 cubic yard dump truck	2	
Site Preparation and Clearing/Grading	1 Month	Water Truck – 3 axles	3	Maximum – 150 Average – 125
		Grader	2	
		Bulldozer	1	
		25-Cubic Yard Paddle Scraper	1 (optional)	
		10-Ton Roller	2	
Utility Upgrades	Intermittent, up to 6 Months	Line truck (with spool trailer)	1	2
		Boom truck (with bucket)	2	

**Estimated Construction Duration, Equipment and Workers by Activity**

Activity	Duration	Equipment	Pieces	Workers
Underground Work	2 Months	Small Backhoe	2	6
		Small Sheepsfoot Roller	2	
		Trencher	2	
		5-Cubic Yard Dump Truck	2	
		5kW Generator	2	
System Installation	3 Months	4x4 Forklift	4	8
		Small Crane	1	
		ATV Vehicle	4	
		Pick-Up Truck	5	
		Pile Driver	2	
		5-kW Generator	4	
Testing/Commissioning	1 Month	Pick-Up Truck	2	2
Clean Up/Restoration	1 Months	Grader	2	2

This equipment would then be stored onsite for the duration of construction and used as construction progresses. Regular deliveries of materials (including solar panels) and commuting trips by workers would also use Sunfair Road; the construction-period would have a minimal impact on area roadways. During operations, the project would be unmanned and would generate very few trips per week for security and maintenance purposes. Based on these facts, no significant adverse impacts on transportation or traffic would result from implementation of the project and no further analysis is warranted.

- c) **No Impact.** The project would not affect air traffic patterns. The project site is itself located on the decommissioned Roy Williams Airport. There are military aircraft to the east at Twentynine Palms, but no impacts are expected from this project.

Potential impacts associated with reflectivity and glare are discussed above. Based on the analysis the project would result in less-than-significant impacts related to glare. Therefore, no significant adverse impacts on air traffic patterns would result from implementation of the project and no further analysis is warranted.

- d) **No Impact.** The project would not include design features that could affect traffic safety, nor would it cause incompatible uses to be present on local roads. Project gates would be inset in accordance with County design standards to prevent vehicle stacking into public roads. No new roads are proposed as part of this project, and no significant increase in traffic is projected during project construction or operations. Therefore, no significant adverse impacts related to roadway design features or incompatible uses would result from implementation of the project and no further analysis is warranted.
- e) **Less than Significant Impact.** The project would not result in inadequate emergency access to the project area. During project construction, public roads would remain open and available for use by emergency vehicles and other traffic. The project would not result in any roadway closures in the vicinity of the project site.

Access points into the project site would be equipped with Knox® locks or similar devices to permit emergency responders to enter the site 24 hours per day. Perimeter and internal drives would be included to allow access to all points within the project site.

- f) **No Impact.** Due to the rural nature of the project area, no bicycle, or pedestrian facilities presently exist or are planned for implementation in the vicinity of the project site. The Morongo Basin Transit Authority services this area by bus with the nearest stop at Twentynine Palms Highway and the Hi-Desert Medical Center. Services on SR-62 would not be impacted by the project. No alternative transportation policies, plans, or programs have been designated for the project area. Because the project would be unmanned during operations, project implementation would not result in an increase in demand or decline in performance for public transit, bicycle, or pedestrian facilities in the region. Therefore, the project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. No significant adverse impacts would result from implementation of the project and no further analysis is warranted.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XVII. UTILITIES AND SERVICE SYSTEMS -- Would 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 checked="" type="checkbox"/>	<input 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 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"/>

### Utilities and Service Systems

- a) **No Impact.** The project would not exceed wastewater treatment requirements of the Colorado River Basin RWQCB. During construction, wastewater would be contained within portable toilet facilities and disposed of at an approved site. No employees would be permanently stationed at the site, and no permanent restrooms are planned. The project would discharge uncontaminated water that is used to clean the solar panels, with no toxicants or cleaning agents used. The County General Plan defers to applicable RWQCB water control requirements, and the project's water discharge does not require treatment or permitting according to the regulations of the Colorado River Basin RWQCB.
- b) **Less than Significant Impact.** The project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. The potential construction of a new private water well would be a less than a significant impact.
- c) **No Impact.** The project would not require the construction or expansion of storm water drainage facilities. The project would discharge uncontaminated water that is used to clean the solar panels, with no toxicants or cleaning agents used. The insubstantial

quantity of discharged water generated by cleaning would be absorbed into the soils onsite. Only a small percentage of the project site would be covered in impervious surfaces with implementation of the project.

- d) **No Impact.** A detailed discussion of water demand and water supply is provided below and in the Hydrology section of the Initial Study.

### **Water Demand**

Water is expected to be supplied by the JBWD. At peak demand, approximately 30 acre feet of water would be needed over the course of six months of project construction. This amount of water represents less than 2% of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year).

The project would require minimal water use during operations, consisting of approximately 2 acre feet of water per year to conduct four washings (1/2 acre foot per washing). Because the project would not have a permanent workforce, no toilet facilities would be required and there would be no demand for wastewater service or other onsite water. Potable water for drinking either during construction or operation, would be brought onsite by workers for their individual needs. Decommissioning, which would likely occur in the year 2055, would require approximately 12 acre feet.

### **Allocation of water for 30 acre-ft of usage during construction**

Clearing	1,200,000 gal
Demo	200,000 gal
Process Access Roads	1,290,000 gal
Trenching	300,000 gal
Access Roads & Class II Base	1,200,000 gal
Dust Control	5,280,000 gal
Total	9,470,000 gal - approximately 30 acre-feet

### **Allocation of water for 2 acre-ft of usage during operations (panel washing)**

Panel washing – 1.9 gallons per panel, 4 washings per year  
86,130 panels x 4 washings per year x 1.9 gallons per washing = 654,588 gals per year for washing  
654,588 gal = 2.009 acre feet per year for operations

### **Water Supply**

On October 23, 2015, JBWD issued a “Conditional Will Serve Letter” for the project in response to its inquiry for future water service. This letter states that due to the current Declared State of Emergency in California, the JBWD must implement water service conservation measures and restrictions. Thus, future water service for the project could not be guaranteed at that time, and would be subject to meeting a number of specific conditions.

The JBWD has a recharge program in place whereby surface water is transferred to a recharge pond through the Morongo pipeline. The applicant is willing to work with the JBWD to purchase water to be placed into the recharge pond, thus assuring that the project will not cause groundwater depletions in excess of the basin’s safe yield. There

are ongoing discussions with JBWD to issue a standard Will Serve letter or execute a water supply agreement that will guarantee water for the project without condition. In the event that water still cannot be obtained from the JBWD, the applicant proposes to establish a new groundwater supply well on the project site.

### **New Groundwater Well**

If water cannot be supplied to the project by the JBWD, the applicant proposes to install a new groundwater well on the project property, likely on the 2 acre parcel of land on the west side of the project site. The site at one time was served by an on-site private well. In this scenario, San Bernardino County would issue a permit for the new well and the cost of the new well would be assumed by the applicant.

The Hydrology section of this IS describes the groundwater baseline conditions. The record shows that there is adequate groundwater volume beneath the project site to serve the water demand for the project without significantly impacting water supplies. The project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the project.

- e) **No Impact.** The project would not require or result in the construction of new wastewater treatment facilities or the expansion of existing wastewater treatment facilities. Accordingly, no impacts are anticipated from implementation of the project.
- f) **Less than Significant Impact.** Less than significant impacts related to landfill capacity are anticipated from the project. The project largely consists of short-term construction activities (with short-term waste generation limited to minor quantities of construction debris) and would not result in long-term solid waste generation. Solid wastes associated with the project would be disposed as appropriate in a local landfill or at a recycling facility. The nearest active landfill is the Landers Sanitary Landfill, located approximately 8 miles northwest of the project site. The estimated closure of the landfill is August 2018, with a current remaining capacity of 765,098 cubic yards (source <http://www.calrecycle.ca.gov/SWFacilities/Directory/>). A Construction/Demolition Waste Management Plan will also be prepared.

The panels would eventually need to be disposed (decommissioned). Most parts of the PV system are recyclable. Panels typically consist of silicon, glass, and a metal frame. Concrete from deconstruction would be recycled through local recyclers. Metal and scrap equipment and parts that do not have free flowing oil would be sent for salvage. Equipment containing any free flowing oil would be managed as hazardous waste and be evaluated before disposal at a properly-permitted disposal facility. Oil and lubricants removed from equipment would be managed as used oil and disposed in accordance with applicable State hazardous waste disposal requirements. A Decommissioning Plan and Surety Bond will be developed to ensure that decommissioning will be performed in accordance with County and State requirements.

- g) **Less than Significant Impact.** The project would comply with all federal, state, and local statutes and regulation related to solid waste. The project would consist of short-term construction and demolition activities (with short-term waste generation limited to minor quantities of construction debris) and thus would not result in long-term solid waste generation. Solid wastes produced during the demolition and construction phases of this project, or during future decommission activity would be disposed of in accordance with all applicable statutes and regulations. Accordingly, anticipated impacts from the project related to landfill capacity are less than significant.

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

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

### Mandatory Findings of Significance

- a) **Less than Significant Impact with Mitigation Incorporated.** The 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 project would not have the potential to degrade the quality of the environment. As indicated in the foregoing analysis, with respect to all of the environmental issues analyzed, there would be less than significant impact with incorporation of the mitigation measures.

*Substantial Impacts on Biological Resources.* The 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.

It is presumed 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.

Adherence with mitigation measures will reduce impacts for loss of potential habitat to less than significant. There are no known wildlife corridors and migratory routes associated with the project. Wildlife corridors provide linkages between isolated populations and allow for genetic flow between populations. Typically, these would be associated with a drainage feature, mountain pass, or optimum habitat conditions. Due to the absence of these features within the site, or within close proximity, the project is not expected to impinge upon any migratory corridors.

Avian mortalities have been a recent topic of discussion at solar facilities in southern California. However, this project is substantially smaller and is located in a more disturbed and developed area than other solar projects. Although any structure can pose a collision risk to birds, the project does not contain tall structures that would extend into the airspace of birds migrating at high elevations. Additionally, the panels that will be used for this project are coated with a non-reflective material. The material is designed to enhance light absorption and reduce light reflection (glare), thereby reducing the likelihood that birds would identify the project site as a water body.

The solar facility would have a maximum height of 12 feet, so there is a low likelihood birds would use the panels for nesting or perching. Additionally, the panels are flat and are not a trough, which would make it difficult to build a nest in or on the panels. Therefore, it is not anticipated there would be impacts associated with perching or nesting of avian species. For the above reasons, the project is expected to have a minimal contribution to cumulative impacts on birds. Mitigation measures BIO-1, -3, -4, -7, and -8 will help offset direct, indirect, and cumulative impacts on birds.

- 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.

While there are several other photovoltaic projects recently approved or currently planned within San Bernardino County, only one is within one mile of the proposed project. The cumulative impact from the operation of these projects would be negligible since the projects are not concentrated in one area. Furthermore, the proposed project is located on already disturbed land. In addition, the construction period for this project is not expected to overlap with other planned projects. Therefore, the project's less than significant impacts related to construction (e.g., Air Quality, Noise) will not cumulate with impacts from other projects to become potentially significant.

- c) **Less than Significant Impact with Mitigation Incorporated.** The incorporation of design measures, County policies, standards, guidelines, Air Quality standard requirements to reduce particulate matter during construction, and biological mitigation measures to reduce impacts to species and habitat would ensure that there would be no substantial adverse effects on human beings, either directly or indirectly. Impacts of the project would be less than significant with the following mitigation and standard requirements that will be considered conditions of approval for the project.

#### **AESTHETICS MITIGATION MEASURES:**

- AES-1** *Building Materials.* As appropriate, on-site switchyard buildings shall use non-reflective materials and neutral colors as approved by the Land Use Services Department, Planning Division.

#### **AIR QUALITY STANDARD REQUIREMENTS/BEST MANAGEMENT PRACTICES:**

- AQ-1** *AQ Operational Mitigation.* Operation of all off-road and on-road diesel vehicles/equipment shall comply with the County Diesel Exhaust Control Measures [SBCC §83.01.040 (c)], including but not limited to:

- a) *Equipment/vehicles shall not be left idling for periods in excess of five minutes.*
- b) *Engines shall be maintained in good working order to reduce emissions.*
- c) *Onsite electrical power connections shall be made available where feasible.*
- d) *Ultra low-sulfur diesel fuel shall be utilized.*
- e) *Electric and gasoline powered equipment shall substituted for diesel powered equipment where feasible.*
- f) *Signs shall be posted requiring all vehicle drivers and equipment operators to turn off engines when not in use.*
- g) *All transportation refrigeration units (TRUs) shall be provided electric connections.*

- AQ-2** *AQ Dust Control Plan.* The developer shall prepare, submit and obtain approval from County Planning of a Dust Control Plan (DCP) consistent with MDAQMD guidelines and a letter agreeing to include in any construction contracts/subcontracts a requirement that project contractors adhere to the requirements of the DCP. The DCP shall include the following elements to reduce dust production:

- a) *Exposed soils and haul roads shall be watered up to three (3) times per day to reduce fugitive dust during grading/construction activities. Inactive areas shall be treated with soil stabilizers such as hay bales or aggregate cover.*
- b) *Street sweeping shall be conducted when visible soil accumulations occur along site access roadways to remove dirt dropped by construction vehicles.*
- c) *Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday.*

- d) *Construction vehicle tires shall be cleaned prior to leaving the project site.*
- e) *All trucks hauling dirt away from the site shall be covered, and speeds on unpaved roads shall be reduced below 15 miles per hour.*
- f) *During high wind conditions (i.e., sustained wind speeds exceeding 20 mph), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall cease until wind speeds no longer exceed 20 mph.*
- g) *Storage piles that are to be left in place for more than three working days shall either be sprayed with a non-toxic soil binder, covered with plastic or revegetated.*

**AQ-3** *AQ Installation. The developer shall submit for review and obtain approval from County Planning of evidence that all air quality mitigation measures have been installed properly and that specified performance objectives are being met to the satisfaction of County Planning and County Building and Safety.*

**AQ-4** *AQ Signage. The developer shall agree to erect a sign for fugitive dust issues. The MDAQMD requires a sign to be erected not later than the commencement of construction at the project site entrance. This sign will include a phone number and contact information for anyone who wants to report dust issues resulting from the project construction.*

## **BIOLOGICAL RESOURCES MITIGATION MEASURES:**

### **BIO-1** *General Avoidance and Minimization Measures*

- *Implement a worker environmental awareness training for all project personnel.*
- *Limit areas of disturbance to the minimum necessary for development.*
- *Salvage the topsoil containing the native seed bank and redistribute over temporarily disturbed areas to facilitate passive revegetation.*
- *The project has been designed to minimize night lighting. All outdoor lighting, including street lighting, will be provided in accordance with the County Night Sky Protection Ordinance and will only be provided as necessary to meet safety standards. Outdoor lighting will be shielded or directed away from adjacent native habitat to protect species from direct night lighting.*
- *The projected increases in noise will be reduced to the maximum extent practicable during construction activities. During all grading on-site, the construction contractors will equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards to reduce construction equipment noise to the maximum extent possible. Enforce a 15 mph speed limit on project roads.*
- *Vehicles and equipment to remain on designated roadways*
- *Standard dust control procedures will be implemented to minimize dust. If water is used as a dust suppressant, it will be administered such that pooling*

*or ponding of water is minimized so that it does not provide a wildlife attractant.*

- *Trash will be kept in raven and coyote-proof containers and removed regularly from the project so that it does not provide a wildlife attractant.*

## **BIO-2**    *Desert Tortoise*

*There is no evidence that tortoises are using the project site or have used it in the recent past. Therefore, potential impacts to tortoises are expected to be limited to tortoises that may wander on site. If tortoises walk onto the project site, they could be injured or killed (e.g., collision with vehicles or equipment). Because of these reasons, the following mitigation measures are designed to avoid impacts to tortoises.*

- *Install permanent tortoise exclusion fencing around the perimeter of the main project site to exclude tortoise during construction and operation. Clearance surveys of the fenced site will be conducted by qualified biologists to ensure that no tortoises are inside the site. Clearance surveys will be conducted as soon as feasible after tortoise exclusion fencing is installed. Any newly installed fence will be monitored appropriately during and after fence installation to ensure that no tortoises exhibit fence walking behavior that could result in injury or death to the tortoise.*
- *Monitor and maintain the fence at appropriate intervals throughout construction and operations. This includes monitoring during storm events or other circumstances that could damage the fence.*
- *Enforce speed limits of 15 miles per hour on roads within the project site.*
- *Ensure that a biological monitor is on site during all initial surface grubbing and grading in the event that a tortoise is encountered. Biological monitors must be present during construction of the perimeter fence, during ground disturbance in unfenced areas, and during active construction in unfenced areas to properly implement mitigation measures. A biologist must be available (not onsite) during construction activities in fenced areas that have been surveyed for and cleared of tortoises and other biological resources to promptly implement protection measures for biological resources in the unlikely event that a tortoise or other biological resource is detected onsite.*

## **BIO-3**    *Burrowing Owl*

*Owls could move onto the site prior to project development, so focused burrowing owl take avoidance surveys will be completed according to CDFW (CDFG 2012) guidelines within 14 days of site grading. If owls are found on site prior to construction, a passive relocation plan may be developed to minimize impacts to onsite owls, and avoidance will adhere to CDFW guidance for avoidance buffers (CDFG 2012). Other standard measures such as speed limits, limiting the area of disturbance, and having a biological monitor present for construction outside of the fenced site will contribute toward avoiding and minimizing any potential impacts to this species and their habitat.*

#### **BIO-4**    *Nesting Birds*

*Vegetation removal during construction, and construction noise and activity, could potentially adversely impact nesting birds. Therefore, to the extent feasible, vegetation removal should take place outside of the breeding season, which is typically February 15 to August 31. If construction will take place during the breeding season, pre-construction clearance surveys to locate nesting birds should be conducted immediately prior to construction. If active nests are present within the construction area, they must be avoided by establishing a non-disturbance buffer until the young fledge or the nest fails (as determined by a qualified biologist familiar with bird breeding and behavior). Nesting birds that are adjacent to active construction will also be avoided by this approved buffer. The buffer areas will be delineated and flagged to ensure avoidance.*

#### **BIO-5**    *Desert Kit Fox*

*Kit fox could move onto the site prior to project development, so surveys will be completed within 30 days of site grading and may be conducted concurrently with desert tortoise surveys. Depending on the results of those surveys, a plan may be developed to address individuals that are denning within the project site. Other standard measures such as speed limits, limiting area of disturbance, and having biological monitors present will contribute toward minimizing any potential impacts to this species and their habitat.*

#### **BIO-6**    *Protected Plants*

*Species protected by the California Desert Native Plant Protection Act and the San Bernardino County Code (beavertail cactus, buckhorn cholla, Joshua tree, and silver cholla) are present on the project site and will directly impacted by development. Where feasible, individuals of these species will be avoided. For those that cannot be avoided, removal will comply with the California Desert Native Plant Protection Act and the San Bernardino County Code and be transplanted into the perimeter landscape buffer.*

#### **BIO-7**    *Weed Management*

*Due to the disturbed nature of the site, there are several established non-native species (i.e., weeds) present within the project. Although eradication of these existing weeds is not considered feasible, the following best management practices will be implemented during construction and operations of the project to help control the spread of existing weeds and the introduction of new weed species:*

- Limit the size of any vegetation/ground disturbance to a minimum and limit ingress and egress to defined routes;*
- Passively reestablish vegetation on temporarily disturbed sites;*
- Prevent spread of weeds via vehicular sources by implementing methods for cleaning construction vehicles;*

- *Use only certified weed-free straw, hay bales, and seed if used for erosion control and sediment barrier installations;*
- *Invasive, non-native species shall not be used in landscaping plans;*
- *Monitor weed invasions and rapidly implement control measures to eradicate new weed invasions.*

**BIO-8** *Contribute to the USFWS Regional Raven Management Program to reduce raven impacts to desert tortoises. A one-time payment will be submitted the USFWS Regional Raven Management Program. The amount shall be a one-time payment of \$105 per acre for the 115-acre project site. Payment will be to the National Fish and Wildlife Foundation (NFWF)*

#### **CULTURAL RESOURCES MITIGATION MEASURES:**

**CR-1** *A Tribal Cultural Resources Monitoring, Discovery, Treatment and Disposition Plan will be established prior to commencing construction. The Plan will address Tribal monitoring and evaluation/disposition of new discoveries including human remains. The Plan will allow for one or more Native American cultural resources specialists to monitor all ground-disturbing activities and excavations on the project site. If any Cultural Resources are encountered, ground-disturbing activities in the area shall be temporarily redirected from the vicinity of the find. All cultural resources encountered will be documented on the California Department of Parks and Recreation Site Forms to be filed with the CHRIS SBAIC. If any human remains are encountered unexpectedly during construction or grading activities, the Applicant will comply with State Health and Safety Code Section 7050.5 such that no further disturbance in the area of such discovery occurs until the County Coroner has made necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If any such remains are determined to be of Native American descent, the County Coroner will notify the NAHC, which is required to identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who then, in consultation with the landowner, will take additional steps, as necessary, in accordance with CEQA Guidelines Section 15064.5(e) and Public Resources Code Section 5097.98.*

#### **PALEONTOLOGICAL RESOURCES MITIGATION MEASURES:**

**PR-1** *Prior to the approval of the project plans and specifications by San Bernardino County, the project shall confirm that the plans and specifications stipulate that if evidence of subsurface paleontological resources are found during construction, excavation and other construction activity in that area shall cease and the contractor shall a county certified Paleontologist to determine the extent of the find and take proper actions.*

#### **NOISE STANDARD REQUIREMENTS:**

**N-1** *The developer shall submit for review and obtain approval of an agreement letter that stipulates that all construction contracts/subcontracts contain as a requirement that the following noise attenuation measures be implemented:*

- a) *Noise levels of any project use or activity shall be maintained at or below adopted County noise standards (SBCC 83.01.080). The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.*
- b) *Construction equipment shall be muffled per manufacturer's specifications. Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.*
- c) *All stationary construction equipment shall be placed in a manner so that emitted noise is directed away from sensitive receptors nearest the project site.*

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## **EXHIBIT D**

### **Comments on the Initial Study & Responses to Comments**

APNs: 060723119 and 060736406  
Applicant: Joshua Tree Solar Farm, LLC  
Project #: P201400482/CUP  
March 2016

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References to the County refer to County Staff responsible for the preparation of the Initial Study and Mitigated Negative Declaration.



*APNs: 060723119 and 060736406  
Applicant: Joshua Tree Solar Farm, LLC  
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March 2016*

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APNs: 060723119 and 060736406  
 Applicant: Joshua Tree Solar Farm, LLC  
 Project #: P201400482/CUP  
 March 2016

**From:** bobby BIBLE <bobbyBIBLESTEIN@roadrunner.com>  
**Sent:** Monday, February 08, 2016 1:04 PM  
**To:** 'JOHN.oquendo@lus.sbcounty.gov.'  
**Subject:** response to letter from sb county envir. quality act impacts on my home area in joshua tree solar farm site 5500 sunfair road couple blocks from my home.

Bob engel is retired buying home in 2003 at 64816 walpi dr. Joshua tree calif near sunfair , basically 1 block west on walpi off sunfair 2 blks from solar farm project bob is ok with and responding to that effect

The old roy Williams airport not much happening and it is good to get business of any kind up here in my opinion.

IN FACT bob who is a security guard cert calif with valid guard card to 2018 renewed always wants to find work at new solar plant if possible

Night guard or even helping guard nights during construction. Am retired senior from oil refineries los angeles united steel workers union local

Some may want to keep this all as residential but due to lack of businesses up here few want to buy a home where there are no jobs

So it is poor people and old people BUT GREAT LOCATION NEAR COPPER MOUNTAIN COLLEGE THE HI DESERT HOSPITAL AND COURT HOUSE.

AGAIN I AM A HOME OWNER NO MORTGAGE PLUS REVERSE MORTGAGE SO AM RETIRED CHRISTIAN REPUBLICAN TRUMP FOR PRES CITIZEN.

US ARMY VET AND COLLEGE GRAD UNIV CAL LONG BEACH STATE 1965 with current CALIF TEACH CRED....NOT WORKING BUT MIGHT ????

PLEASE KEEP ME INFORMED OF THE PUBLIC HEARING FOR THIS PROJECT WOULD LIKE TO ATTEND .....THANKS

Bobby 'BIBLE' engel all mail to p.o. box 1217 joshua tree calif 92252...home phone 760-3661878.....use email address attached

bobby BIBLE  
 bobbyBIBLESTEIN@roadrunner.com

*W.H.M.!* Bob engel

*God Bless  
 His Son + the Sunshine!  
 Feb 8, 2016 / JRS AD! OK?*

1-1

1-2

1-3

1-4

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APNs: 060723119 and 060736406  
Applicant: Joshua Tree Solar Farm, LLC  
Project #: P201400482/CUP  
March 2016

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**Letter 1**

**Bob Engel**

**February 8, 2016**

**Response 1-1**

The County acknowledges the commenter's future residency near the Project. The County notes the commenter's approval of the Joshua Tree Solar Project.

**Response 1-2**

The County notes the commenter's opinion regarding the status of the airport. The County acknowledges the commenter's approval of new business opportunities and jobs in the area.

**Response 1-3**

The County notes the commenter's request for employment at the Joshua Tree Solar Plant. The County notes the commenter's previous occupation and employment.

**Response 1-4**

The County notes the commenter's statement regarding employment, real estate demand, and demographics in the Project area. The County notes the commenter's opinion regarding locating the Project in the area.

**Response 1-5**

The County acknowledges the commenter's retirement status, homeowner status, U.S Army veteran status, college education status, and employment status.

The County notes the commenter's opinions regarding religion and politics. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 1-6**

The County acknowledges the commenter's request to provide information regarding the public hearing for the Joshua Tree Solar Project. The County notes the commenter's address and phone number and has added the commenter's contact information to the Project email and distribution list, and interested parties' database.



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 Applicant: Joshua Tree Solar Farm, LLC  
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 March 2016

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**From:** Deb <go2joshuatree@yahoo.com>  
**Sent:** Monday, February 08, 2016 3:48 PM  
**To:** Oquendo, John  
**Subject:** Re: Opposition to the Joshua Tree Solar Farm  
**Attachments:** dust.jpg

February 8, 2016

Dear Sirs/ Madam:

I am writing in opposition to the Nextera solar farm plans near me at the Roy Williams Airport aka, The Joshua Tree Solar Farm (P201400482) Conditional Use Permit. It will have a negative effect on my health and my business since it is near my home and business.

2-1

As for my business, The Joshua Tree Astronomy Arts Theater, Nextera's operation interferes causes light and dust pollution. Lights that interfere with the dark night sky for astronomy and theater viewing. And the dust that contaminates our delicate equipment.

2-2

The health issues are immense. Increase of dust and health issue problems. Many people, such as myself, moved to and live in my area for their breathing health. Increased dust is a problem with those adults and children with asthma, COPD Enphazema and other related conditions. Not to mention disturbing the surface layers of dirt with mass grading, releases a fungus which is the cause of the increasing numbers of the INCURABLE Valley Fever cases in our area.

2-3

Please find attached a photo of the dust I have to put up with from the smaller Cascade solar farm.

2-4

In addition, because of the mass amounts of water required to keep the panels clean during a serious drought. They will be locating next to a concrete plant that in itself, has been a problem for creating dust, which also will be a problem in keeping the solar panels clean.

2-5

There has been a moratorium on solar fields in the adjacent cities of 29 Palms and Yucca Valley. Just because Joshua Tree is not considered incorporated does not mean they should be excluded in the moratorium and should be included.

2-6

This type of building should not be allowed in a National Park city. It detracts from tourism and does not fit the Joshua Tree Community Plan.

2-7

Respectfully,  
 Deborah O'Key  
 Joshua Tree Resident, Business Owner

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Applicant: Joshua Tree Solar Farm, LLC  
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March 2016

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**Letter 2****Deborah O'Key****February 8, 2016****Response 2-1**

The County acknowledges the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 2-2**

The County notes the commenter's concerns about lights at night interfering with astronomy and theatre viewing at the Joshua Tree Astronomy Arts Theatre. However, as discussed in the IS/MND, the Project would not create a new source of substantial light which would adversely affect nighttime views in the area. Any potential impacts from lighting would be minimized through compliance with all development standards, Zoning Ordinance standards, and the goals, policies, and implementation measures of the General Plan. San Bernardino County Ordinance No. 3900 regulates glare, outdoor lighting, and night sky protection. Nighttime lighting associated with the project would be subject to County approval and compliance with San Bernardino County requirements and the provisions of Chapter 83.07 of the County Development Code.

The project will not create a significant source of light. Light sources associated with the project will be minimal, and will be restricted to that required for nighttime safety and security according to county requirements. Lighting will be installed and directed downward and shielded to avoid light trespass. Additionally, lighting will be minimized via use of motion sensors or other lighting management controls.

The County notes the commenter's concerns about dust contaminating the Joshua Tree Astronomy Arts Theatre equipment. The County also notes the commenter's concerns about potential air quality impacts from the Project. The County contacted the Mojave Air Quality Management District (MDAQMD) and their response and interest in the Project was limited to a request for a Dust Control Plan. The IS/MND discusses that the Project will produce some dust during the construction phase, which will be short-term and temporary, especially since the Project site is relatively small (115 acres) and on land that is already disturbed. As with all construction projects that occur within the County, the Project will be subject to the Mojave Desert Air Quality Management District's (MDAQMD) Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically requires the preparation of a dust control plan prior to construction of the Project. Best management practices for the control of dust are included in the IS/MND and will be required as a Condition for Approval of the Project. In addition to the requirements for dust control (e.g., watering), the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

**Response 2-3**

The County notes the commenter's concerns about potential air quality impacts to health from the Project. As stated in the previous response, the Project will produce some dust during the construction phase, which will be short-term and temporary. As with all construction projects that occur within the County, the Project will be subject to the Mojave Desert Air Quality Management District's (MDAQMD) Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically requires the preparation of a dust control plan prior to construction

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of the Project. Best management practices for the control of dust are included in the IS/MND and will be required as a Condition for Approval of the Project. In addition to the requirements for dust control (e.g., watering), the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

Regarding the commenter's concerns that grading from construction of the Project would cause Valley Fever, Valley Fever spores are generally found only in unbroken, undisturbed soil crust. Since the Project site is located on a highly disturbed piece of property that was formerly developed and used as an airport, and is *not* located on desert land with old soil crust, it is extremely unlikely that these spores would exist at the Project site. Furthermore, the County Public Health Department has determined that development projects in San Bernardino County do not pose a significant risk to public health from Valley Fever.

#### **Response 2-4**

The County notes the commenter's attached photo. This comment does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 2-5**

The County notes the commenter's concerns about water supply usage for the Project. The project would require minimal water use during operations, consisting of approximately 2-acre-feet of water per year to conduct four washings (1/2-acre-foot per washing). Potable water for drinking either during construction or operation, would be brought onsite by workers for their individual needs.

The County acknowledges that there is dust created by the cement manufacturing facility.

#### **Response 2-6**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 2-7**

The County notes the commenter's concerns regarding tourism and the Joshua Tree Community Plan. The Project is sited in an area that is suitable for solar development and that the Project follows the guidance in the Solar Ordinance. The airport property has long been an industrial land use. The property is currently zoned as Community Industrial (IC) and Institutional (IN), which allows for a variety of light industrial use, therefore, the Project is in compliance with applicable community plans. Furthermore, since the Project site is located on a previous airport site, it would not conflict with nor require a change to existing land use or zoning.

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APNs: 060723119 and 060736406  
Applicant Joshua Tree Solar Farm, LLC  
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**From:** ED Gala <ed57gala@outlook.com>  
**Sent:** Tuesday, January 19, 2016 10:35 PM  
**To:** Oquendo, John  
**Subject:** RE: San Bernardino County Land Use Services Department:  
Notice of Intent and Availability for the Joshua Tree Solar Farm,  
P201400482

Project is being proposed on previously developed land. Since no open undisturbed land will be impacted, I have no land use concerns regarding this proposal. The photo-simulations seem to show no visual impacts, however they seem to be taken from a long distance from the project site. I think it would be helpful to have a photo-simulation prepared as viewed from the existing airport entrance. Also low berms surrounding the site, landscaped with native vegetation may provide site screening and further mitigation of potential visual impacts. Some things to consider. Thanks. Ed

3-1

3-2

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**Letter 3**  
**Ed Gala**  
**January 19, 2016**

### **Response 3-1**

The County acknowledges that the commenter has no land use concerns regarding the Project since it is being proposed on previously developed land.

### **Response 3-2**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project meets the all applicable requirement and findings of the County Solar Ordinance. These findings are documented in Exhibit A, Findings, of the Staff Report. The visual conditions in 2012 are not materially different than they are today, so the visual simulations are still an adequate representation of the visual environment.

This comment states that the visual photo simulations were taken from a long distance from the site and suggests a photo simulation be prepared as viewed from the existing airport entrance. The visual simulations were conducted from nearby areas and are representative of what the Project will look like.

This comment also suggested the use of berms surrounding the site and landscaped with native vegetation to provide a screen for the Project. As described in the Findings, several Project design features will act to minimize visual impacts. A proposed chain link fence around the perimeter and along Sunfair Road would be consistent in type with that of other rural properties in the area and within the maximum allowed height.

The Project site is flat and contains no significant geological features or vegetation that could be considered scenic. None of the proposed onsite equipment would obstruct any viewsheds in the area. Overall, the Project is largely obscured from view of adjacent residences. Consequently, the proposed facility would blend with and be subordinate to the environment and character of the area.

The Project's low, flat profile would not limit views across the Project to the mountains. As discussed in the IS/MND, the Project site currently consists of previously disturbed, abandoned airport property of low scenic value.

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**From:** Char Schmuck <jimchars@mchsi.com>  
**Sent:** Friday, January 15, 2016 11:18 AM  
**To:** Oquendo, John  
**Cc:** Char  
**Subject:** P 201400482/CUP

Joshua Tree Solar Farm - as an absentee out of state property owner without knowledge this proposed development may have on parcel 0607-312-02-0-000 current value I would be opposed to approval if negative and supportive if positive.  
Jim Schmuck

4-1

Sent from my iPad

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**Letter 4**

**Jim Schmuck**

**January 15, 2016**

**Response 4-1**

The County notes the commenter's concerns regarding potential impacts to property values from the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND. There is no known impact from the development renewable energy facilities on property values. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

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**From:** julio garcia <jamayjalisco2006@yahoo.com>  
**Sent:** Wednesday, January 13, 2016 11:16 PM  
**To:** Oquendo, John  
**Subject:** project p201400482/cup

the link in the mailed letter I received is either incorrect or misprinted, I hope you do your best to protect our mother earth and god bless.

] 5-1

I tried to look in to this noi /noa but the link is bad ..

] 5-2

Thank you for your valuable time. I do appreciate it. (951) 801-0540 love for this country and honesty is the only free item now. be an American idol do your patriotic part.

] 5-3

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**Letter 5**

**Julio Garcia**

**January 13, 2016**

**Response 5-1**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 5-2**

The County acknowledges the commenter's issue with the website link and has ensured it is working.

**Response 5-3**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

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**From:** Kenneth Jayes [mailto:info@jtlake.com]  
**Sent:** Sunday, January 31, 2016 4:33 PM  
**To:** Oquendo, John <John.Oquendo@lus.sbcounty.gov>  
**Subject:** Regarding the Joshua Tree Solar Farm #P201400482/CUP

To: John Oquendo, Senior Planner  
County of San Bernardino  
Land Use Services Department, Planning Division  
15900 Smoke Tree Street, Suite 131  
Hesperia, Ca 92345

Re: Joshua Tree Solar Farm

Dear Mr. Oquendo, my name is Sally Jayes and I am writing to you in opposition to the construction of the Joshua Tree Solar Farm, project # P201400482/CUP. I have been visiting the High Desert for 45 years and have had the good fortune to call Joshua Tree home for the last 30 years. Beginning in 1997 my husband and I started the restoration of what was once called the old "Fish Farm" on north Sunfair Rd. Today it is a thriving RV and tent campground offering fishing in our small pond and is home to the Joshua Tree Music Festival which is a music event for approximately 5000 people held twice per year.

6-1

We offer overflow camping for the Joshua Tree National Park during peak camping months and are open all year to support the traveling motorists' needs for camping. This results in many more visitors that are allowed to stay and play in our pristine desert area. There are approximately 15,000 people who travel up Sunfair Rd. due to the music festivals, camping and several other events yearly. Summers bring the European visitors who seek accommodations for electricity and water for their RV's.

6-2

Most, if not all of our visitors are seeking the beauty and vastness the desert has to offer. The opportunity to have an unlimited visual expanse is both breathtaking and cathartic to the mind and soul.

6-3

Our guests, neighbors, friends and family consider the Joshua Tree area an exceptional and special part of the world like no other! As a gateway community and namesake of the Joshua Tree National Park, we should be doing all that we can to preserve not only the ecology and flora/fauna but also strive for stewardship for generations to come so that they too can experience the quiet expanses and desert beauty.

6-4

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I am appalled to think that a 'few' could ruin such greatness with the installation of steel, metal, fences and total obliteration of the land. Not only would this be detrimental to our human population but to all of the native animal species that call this area home: Kit Foxes, Owls, Coyote, Bob Cats, resident and migrating birds such as the Turkey Vultures, and the list could and does go on.

6-5

I understand there is a huge monetary incentive for these folks due to government rebates and that they are trying to get this project going as soon as possible. I also understand that this solar field would not benefit any of the Morongo Basin financially. I do believe that there is a need for solar such as individual home use and am a proponent but to have it destroy our Joshua Tree valley which can be viewed from 360 degrees is an atrocity. I do not believe that there is any 'good' to come from this invasion of industry in our small and unique ecosystem.

6-6

I hope you are able to understand the complexities and genuine concern expressed in this letter. It is so hard for the 'little guy' to be heard and respected sometimes. Thank you for your time and efforts.

6-7

Sincerely,  
Sally Jayes,  
Owner:  
Joshua Tree Lake RV & Campground  
PO Box 1442  
2601 Sunfair Rd.  
Joshua Tree, Calif. 92252  
760-401-5459

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**Letter 6****Kenneth and Sally Jayes****January 31, 2016****Response 6-1**

The County acknowledges the commenter's residency near the Project. The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 6-2**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 6-3**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

**Response 6-4**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 6-5**

The County notes the commenter's concerns regarding disturbance of the land and native animal species from the Project. The Project is sited in proximity to seriously disturbed land, including an existing cement manufacturing facility. The Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a

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decommissioned airport, currently zoned for light industrial or commercial use. Previously developed land is preferred for the building location of a solar site, as opposed to building solar projects on undisturbed land. The County does have policies and goals in place to protect the desert that provides high quality habitat for desert plants and animals. However, due to the highly disturbed nature of the site, it provides very limited ecological value.

**Response 6-6**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 6-7**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

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**From:** Teresa Sitz <teresa.sitz@gmail.com>  
**Sent:** Friday, February 05, 2016 11:37 AM  
**To:** Oquendo, John  
**Subject:** Joshua Tree Solar Farm

Dear Sir:

I'm writing in regards to the NextEra solar development to be built at the old Roy Williams airport.

This project is completely inappropriate for this area. Joshua Tree attracts more than 1.6 million tourists a year, and they don't come to see solar fields blighting the natural landscape. This project is too close to the park.

7-1

We are an economically underdeveloped community, an unincorporated area. NextEra is taking advantage of our economic situation to push through a project that the people here do not want.

7-2

Government subsidies allow companies like this to engage in extractive economic practices. NextEra will take our scenic beauty, destroy habitat, create dust through blading, and give nothing back to the community. Let them build over parking lots or streets, to create shade and shelter, not lightly disturbed areas. This is nothing more than a government boondoggle. It is WE who live here who will have to pay for this project. They would never live next to this kind of blight.

7-3

7-4

7-5

Please. We are in a drought. NextEra has threatened to build a well if the JBWD will not let them have water during the drought. They have no concern for the environment or the community. WE all have to obey the restrictions but NextEra will not? What will happen to the area as they drain our irreplaceable fossil water?

7-6

This is an unprecedented time in our history when we could create free energy for everyone. Instead, companies like this come and ravage the environment to continue concentrating wealth and power in the hands of a few with no concern at all for the people who have to live next to their projects.

7-7

Please do not approve this project.

7-8

Teresa Sitz

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**Letter 7**  
**Teresa Sitz**  
**February 5, 2016**

#### **Response 7-1**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. The comment states that the Project is too close to the park. As stated in the Findings, the Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25). Similarly, at the Town of Joshua Tree's closest point on Sunburst Street, the Project will be almost 3 miles in the distance.

The north boundary of Joshua Tree National Park is located at the southern end of Sunfair Road, a distance of approximately 2.1 miles from the southern boundary of the project, and 2.3 miles from the entrance of the project site. While the Project will be visible from that location, there is no public access to Joshua Tree National Park from this location.

#### **Response 7-2**

The County notes the commenter's concerns regarding effects to the economy from the Project. This comment expresses an opinion; There is no known impact from the development renewable energy facilities on property values. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

#### **Response 7-3**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 7-4**

The County notes the commenter's concerns regarding aesthetics, habitat, air quality, and benefits to the community.

The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the

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project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

The commenter alleges that the project will destroy habitat. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to habitat.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

It should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use. The County respects the need to protect the desert that provides high quality habitat for desert plants and animals. However, this site does not have high biological value.

The County also notes the commenter's concerns about potential air quality impacts from the Project. The County contacted the Mojave Air Quality Management District (MDAQMD) and their response and interest in the Project was limited to a request for a Dust Control Plan. The IS/MND discusses that the Project will produce some dust during the construction phase, which will be short-term and temporary, especially since the Project site is relatively small (115 acres) and on land that is already disturbed. As with all construction projects that occur within the County, the Project will be subject to the Mojave Desert Air Quality Management District's (MDAQMD) Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically requires the preparation of a dust control plan prior to construction of the Project. Best management practices for the control of dust are included in the IS/MND and will be required as a Condition for Approval of the Project. In addition to the requirements for dust control (e.g., watering), the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

The county also note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. There is no known impact from the development renewable energy facilities upon surrounding property values. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

#### **Response 7-5**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 7-6**

The County notes the commenter's concerns about potential water supply impacts from the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand

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in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

#### **Response 7-7**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 7-8**

Comment noted.

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Feb.8, 2016

To John Oquendo, Senior Planner

Land Use Services Dept, Planning Division

15900 Smoke Tree St. Suite 131

Hesperia, CA 92345

Re: Joshua Tree Solar Farm P201400482/CUP

Dear Mr. Oquendo,

I live near the proposed solar installation at the defunct airport in Joshua Tree. I am absolutely opposed to this facility for the following reasons.

1. This is a residential, not an industrial area. 2. It will use an enormous amount of water from local resources which are already strained. 3. No employment or local energy benefits will result from this project, it is for private profit. 4. This project covers the beautiful natural desert with metal reflections, ugly. It disrupts the views from Joshua Tree National Park. It ruins the natural view for local residents such as me. I do not want to look at it. That is why I live here, not in a city. 5. The birds and wildlife get confused and can hit them and die. 6. There is already a solar farm near by which can be seen for miles and appears as a desolate wasteland. I am concerned about the future of this natural desert area if the wanton growth for these private, for profit installations are not regulated and limited. There are other places where they could go, out of the view of residential areas and Joshua Tree National Park. 6 What convenience is it to natural connections for the energy which is created, does that make even more destruction of our sight lines and the environment? Is enough green

8-1

8-2

8-3

8-4

8-5

8-6

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energy really created to offset the metal, wires and materials need to  
create and build it in the first place. I am very concerned about the random  
proliferation of these projects. They do not fit the vision for Joshua Tree

8-6  
Cont

8-7

Sincerely,



Margaret Kennedy

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**Letter 8**  
**Margaret Kennedy**  
**February 8, 2016**

### **Response 8-1**

The County acknowledges the commenter's residency near the Project. The County notes the commenter's concerns regarding the Joshua Tree Solar Project. The County acknowledges the commenter's statement that the area is residential and not industrial. It should be emphasized that the Project site is currently an abandoned airport site, located adjacent to a cement manufacturing plant, and is not a residential area. The airport property has long been an industrial land use. The property is currently zoned as Community Industrial (IC) and Institutional (IN), which allows for a variety of light industrial uses.

### **Response 8-2**

The County notes the commenter's concerns about potential water supply impacts from the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

### **Response 8-3**

The commenter's alleges that no local employment or energy benefits will result from the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. The Project will create employment opportunities, particularly during construction. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

The Project site is adjacent to an existing SCE electrical distribution line which will

take energy produced by the project into the grid, and will therefore enhance the public supply of energy.

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#### **Response 8-4**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

#### **Response 8-5**

The commenter claims that the Project will kill birds because they will collide with PV panels. The Applicant is committed to using a non-reflective coating on the PV panels, which will reduce the likelihood of the panels appearing as water. Additionally, it should be noted that there are no known threatened or endangered avian species living in or around the Project site, nor is there any evidence in the record demonstrating that there are localized conditions or other factors that suggest a risk of significant avian mortality associated with the Project.

#### **Response 8-6**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 8-7**

The County notes the commenter's concerns regarding the vision for Joshua Tree. The Project is sited in an area that is suitable for solar development and that the Project follows the guidance in the Solar Ordinance. The airport property has long been an industrial land use. The property is currently zoned as Community Industrial (IC) and Institutional (IN), which allows for a variety of light industrial use, therefore, the Project is in compliance with applicable community plans. Furthermore, since the Project site is located on a previous airport site, it would not conflict with nor require a change to existing land use or zoning.

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2/6/2016

Thomas Cosenza  
57495 Buena Suerte Rd.  
Yucca Valley, California 92284

John Oquendo, Senior Planner  
15900 Smoke Tree Street, Suite 131  
Hesperia, Ca. 92345

**Mr. Oquendo,**

Re: project #P201400482/ CUP.

I am writing to oppose this solar project, this will be an eyesore in our community. This is evidenced by the solar farms, already on Lear Avenue, and Indian Trail in Twentynine Palms. Not to mention the one already built, and quietly done, in a *surreptitious* manner, just off Sunfair, in Joshua Tree. It is set to earn the owners huge government rebates, then the builders are gone. **GONE** with your approval, is the pristine desert! Visitors come to this area to see the desert and its natural beauty. As you know, Joshua Tree is the Gateway to the National Park, so shouldn't be kept pristine?

9-1

This project does not benefit the Wrong() Basin. The question is.. \_who is this going to financially benefit? Just because someone "wants" to put a solar field on their property does not make it a good thing.

9-2

Please consider the local homeowners who do not want this in their backyards.

9-3

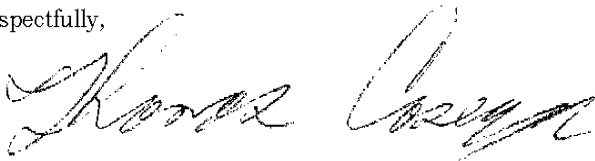
Another very sad example is in Desert Center, you should see the expanse of desert ruined by solar fields. Hopefully, you did not have anything to do with that approval.

9-4

THIS community does not want anymore solar fields. Please consider the homeowners in the Joshua Tree and Yucca Valley area, as well at the worldwide visitors that come here, and decline approval of this project.

9-5

Respectfully,



Thomas Cosenza  
57495 Buena Suerte Rd.  
Yucca Valley, California 92284

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Applicant: Joshua Tree Solar Farm, LLC  
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**Letter 9**  
**Thomas Cosenza**  
**February 6, 2016**

#### **Response 9-1**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

#### **Response 9-2**

The County notes the commenter's concerns regarding effects to the economy from the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

#### **Response 9-3**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 9-4**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 9-5**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

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## Customer Feedback

#377

**COMPLETE**

Collector: Email (Web Link)  
 Started: Saturday, January 09, 2016 1:34:05 PM  
 Last Modified: Saturday, January 09, 2016 1:54:49 PM  
 Time Spent: 00:20:43  
 IP Address: 74.62.185.1

No  
 project  
 comment

See next  
 page

## PAGE 1

Q1: What would you like to comment on?

Website Information

## PAGE 2: Website Feedback

Q2: Did you find the information that you were looking for?

No

Q3: What sections of our website did you visit?

Respondent skipped this question

Q4: What information are you looking for, please be specific?

solar farm proposal at joshua tree airport

Q5: How much time did you spend on our website?

(no label)

0 - 10 Minutes

Q6: What type of device were you using to view our website?

Personal Computer (Desktop/Laptop)

## PAGE 3

Q7: What Division(s) served you?

Respondent skipped this question

Q8: How did you interact with us?

Respondent skipped this question

Q9: Name of person(s) who assisted you:

Respondent skipped this question

Q10: Overall, the service received...

Respondent skipped this question

Q11: Please rate components of our customer service.

Respondent skipped this question

## PAGE 4: Open Ended Feedback

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## Customer Feedback

**Q12: Were your needs met? If not, please leave us a comment below.** No

**Q13: Detailed feedback helps us to improve our services. Thank you for leaving your comments/ suggestions below.**

would like information on solar farm proposal for joshua tree airport.

] 10-1

i am opposed to solar farms near communities,

] 10-2

there are plenty of existing buildings near high zones of use that could have solar farms. the developers should approach those and do not blight the landscape.

] 10-3

**Q14: If you did not receive what you wanted, then we would like another chance to help. Please leave your contact information so that Land Use Services Management may contact you.**

Name glen howard small, aid architect

Email Address glenhowardsmall@gmail.com

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**Letter 10**

**Glen Howard**

**January 9, 2016**

**Response 10-1**

The County acknowledges the commenter's request for information and will provide specific information regarding the Project if requested.

**Response 10-2**

Comment noted.

**Response 10-3**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

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 Applicant: Joshua Tree Solar Farm, LLC  
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 March 2016

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February 7, 2016

Mr. John Oquendo, Senior Planner  
 San Bernardino County Land Use Services  
 15900 Smoke Tree Street  
 Hesperia, CA 92345

Submitted Via Email: [John.Oquendo@lus.sbcounty.gov](mailto:John.Oquendo@lus.sbcounty.gov)

SUBJECT: NextEra Joshua Tree Solar Farm, LLC, 5500 Sunfair Road, Joshua Tree, CA (APN: 607-231-19 and 607-364-06)

Dear Mr. Oquendo:

Thank you for the opportunity to comment on the Initial Study for the Joshua Tree Roy Williams Airport Solar project in compliance with CEQA Guidelines.

My family, friends and I live near the project location in the "Sunfair Community" and many of us received notices on the project because we live within 1,000 feet of it.

11-1

I strongly object to the subject Project as it would negatively impact the neighborhood where I have lived and played for more than 20 years.

11-2

The project would not protect my Morongo Basin community's natural and "scenic desert qualities" and values. My quality of life as a resident of the "Sunfair Community", nor my community's "vibrant desert tourist economy", all of which the Board of Supervisors desires to protect as expressed in Section 1 of the solar ordinance and its own CountyWide Vision Statement. Surely approval of this project would not fulfill the county's intent to guide new commercial solar energy generation facilities to areas that can accommodate such facilities with fewer human and environmental resource conflicts, as also expressed in Section 1 of the ordinance.

11-3

I believe that the project has not appropriately analyzed the following issues:

- Isn't the Roy Williams Airport a place of historical significance? Isn't an airport a very specific and unique type of land use?
- The community to the north of the project is known as "Sunfair". This is a disadvantaged community with depressed property values. I am concerned that this project will further de-value my family's property located on Tonto Drive.
- It appears that the air quality report provided for public review was written in 2012. Since 2012 two solar fields have been constructed to the east of my neighborhood and the air quality seems worse to me. Shouldn't all studies be current?

11-4

11-5

11-6

The top soil around the site is generally loose sand which is naturally stabilized by native vegetation. Once the vegetation is further scarified or removed during grading the soils can easily relocate during windy conditions.

11-7

My neighbors and I have been subjected to blowing concrete particles and dust from the concrete plant to the south for many years. It's conceivable that concrete dust has settled all over the airport property and could then be remobilized during site activities. Soil samples and dust monitoring should be required to protect the neighborhood from further negative health effects during construction activities and operations.

11-8

Lastly, with each additional large scale commercial/industrial solar plant constructed in the Morongo Basin the cumulative effect of dust in the area is increased. In compliance with the California Environmental Quality Act (CEQA) an evaluation of the soils is necessary. The evaluation should include the effects of soil disturbance, mitigation of disturbed soils and mitigation for drainage and dust control. I'd like to note that the County does not require notices be posted that would allow affected neighbors to call in complaints regarding dust, debris or dead birds.

11-9

- Based on My personal experience these projects are a "blight" on the neighborhood. Having lived near the existing operating large scale solar projects to the east of the neighborhood I have experienced first-hand the negative impacts of excessive dust and propagation of non-native species and trash accumulation. My father has collected dead birds off 4<sup>th</sup> Street. I am strongly opposed to the County permitting additional such facilities while allowing neglect of the projects that have already been forced upon our neighborhood.

11-10

The photos below were taken from the public right-of-way on Broadway and off 4<sup>th</sup> Street where a very large solar complex was constructed a few years ago. Although the photos are recent the site conditions have remained unkempt for some time.

11-11

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11-11  
Cont.

In the above photo, there is a solar panel that has been laying on the fence for months.

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11-11  
 Cont.

In the above photo, dead, non-native *Russian thistle* has been allowed to grow out-of-control. It is piled so high on the fence that it is escaping over the top. Prior to these plants drying out, they cast hundreds of thousands of seeds across the native landscape in the open desert around the site. This should be prohibited and the County should be monitoring these facilities to protect our neighborhoods from the long term negative impacts of such operations.

I'd like to note that in the Palm Desert area projects have great big signs alerting the public to blowing dust/debris and that they should report such things to the City, phone number included. I'd like to note that there are no notice boards posted at the Cascade site that would alert affected neighbors to their right to complain about excessive dust, debris or even where to report the dead birds they have seen in and around the site.

11-12

A quick review of the site drawing for the Joshua Tree Solar Farm project doesn't show any meaningful buffers or setbacks from the roadways. As you can see from the photographs, these projects change our neighborhood character from rural residential to

11-13

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industrial. The Joshua Tree Airport should not be converted to an industrial scale solar development as it can never be constructed to "blend in" to the neighborhood.

11-13  
 Cont.

- The transmission line upgrades depicted on the project map and descriptions clearly place the project within 2-miles of the Joshua Tree National Park which constitutes another violation of the County's Solar Ordinance. The project proponent clearly states that the "distribution line improvements are a part of this project". This places the project within one mile (1 mile) of the boundary of Joshua Tree National Park.
- There is a growing concern regarding the "lake effect" on migratory and other birds. This facility will add to the reflective areas of the desert that resemble water and thus become an attractor for unsuspecting birds who try to come in for a water landing on fields of solar panels. CEQA should include some analysis regarding "lake effect" at this site. My neighbors and I have seen dead birds around the existing site to the east. I'd like to note that the County does not require notices be posted that would allow affected neighbors to call in complaints regarding dust, debris or dead birds.

11-14

11-15



"Cascade" Solar project from Joshua Tree National Park boundary on  
 Baseline and Mt. Shasta, Joshua Tree, CA

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- The proposed site is clearly visible from a “major highway” and thus would violate the provisions of the Solar Ordinance as to “visual qualities”. This project will impact the viewshed from all directions and is located on Highway 62, the primary travel route for visitors to Joshua Tree National Park’s Joshua Tree entrance. In fact, above ground transmission lines along portions of Highway 62, just west of this location, were recently undergrounded which has actually enhanced the viewshed along the highway corridor. Furthermore, it appears that the elevation of Highway 62 is higher than the project elevation which causes concern that the project can never be adequately shielded to protect the view northward from Highway 62. Due to the elevation differs between the site and Joshua Tree National Park, how could the site ever be disguised from view?

11-16

In addition, Two Mile Road, a county defined “major highway”, runs east / west along the southern border of the project.

- Application states that approximately 34-Acre-Feet of water will be needed to complete construction.

The application states that 0.25 Acre-Ft of water will be necessary to complete each washing of the solar panels with four cleanings projected per year but there is no data to support this claim.

11-17

There is a growing concern regarding the actual water demand for such projects. If this project is approved, water usage reporting should be required as a condition of the permit so that the water agencies can better understand the demands that may be placed on their systems by these projects.

In closing, a conditional use permit must not be approved for the subject Project, as the project as described in the application does not comply with the county solar ordinance, will cause additional hardship to the community of “Sunfair” where my family resides and its approval does not reflect the will of Morongo Basin citizens, who clearly expressed their views in development of the Ordinance.

11-18

Respectfully,

Destiny Diaz  
 P. O. Box 1495  
 Joshua Tree, CA 92252

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Applicant: Joshua Tree Solar Farm, LLC  
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**Letter 11****Destiny Diaz****February 7, 2016****Response 11-1**

The County acknowledges the commenter's residency near the Project. The County notes the commenter's concerns regarding the Joshua Tree Solar Project.

**Response 11-2**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 11-3**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

The County notes the commenter's concerns regarding tourism and the economic impacts from the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

The Project is sited in an area that is suitable for solar development and that the Project follows the guidance in the Solar Ordinance.

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**Response 11-4**

The County notes the commenter's concerns regarding land use and zoning of the Project site. The airport property has long been an industrial land use. The property is currently zoned as Community Industrial (IC) and Institutional (IN), which allows for a variety of light industrial use.

The County also notes the commenter's concerns about impacts from the Project on a historical site. However, while the airport was first developed in the 1920s, there are no buildings or structures at the property which convey this period of development. The current buildings were primarily constructed less than 45 years ago (1973-1975) and are not representative of any earlier period of the property's history. Therefore, the property no longer appears to be associated with early aviation events in the area. The Roy Williams airport does not have status as a historic property.

**Response 11-5**

The County notes the commenter's concerns regarding tourism and property values impacted by the Joshua Tree Solar Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

**Response 11-6**

The County notes the commenter's concerns regarding the date of the air quality report. The air quality report was accepted by the Mojave Desert Air Quality Management District (MDAQMD). They will require preparation and implementation of a Dust Control Plan to control dust and ensure that air quality is not worsened, both during construction and operations. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

The Project will be subject to the MDAQMD Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically requires the preparation of a dust control plan prior to construction of the Project. In addition to the requirements for dust control (e.g., watering), the Dust Control Plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617.

**Response 11-7**

The County notes the commenter's concerns about loose soils and potential air quality impacts from the Project. The County acknowledges that there are loose soils on the Project site and surrounding desert area. Minimal grading will be done on the Project site. The IS/MND discusses that the Project will produce some dust during the construction phase, which will be short-term and temporary, especially since the Project site is relatively small (115 acres) and on land that is already disturbed. As with all construction projects that occur within the County, the Project will be subject to the MDAQMD's Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically requires the preparation of a dust control plan prior to construction of the Project. Best management practices for the control of dust are included in the IS/MND and will be required as a Condition for Approval of the Project. As discussed in the previous response, the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions

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of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

#### **Response 11-8**

The County notes the commenter's concerns about the potential for concrete particles and dust from the concrete plant (that may have settled on the site) to be disturbed by the Project. The commenter also stated that soil samples and dust monitoring should be required during construction and operation.

It is acknowledged that a cement plant is located to the south of the proposed Project site. The Project will be subject to the MDAQMD's Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically re-quires the preparation of a dust control plan prior to construction of the Project. Best management practices for the control of dust are included in the IS/MND and will be required as a Condition for Approval of the Project. In addition to the requirements for dust control (e.g., watering), the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

See Responses 11-6 and 11-7 regarding dust control.

#### **Response 11-9**

The County notes the commenter's concerns about potential air quality impacts from the Project and signage for contact information. The County and the MDAQMD will require a sign for neighbors to be able to call in complaints regarding dust. See Comment 11-6. A sign requirement has been included as a best management practice (AQ-4) in the Initial Study. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

#### **Response 11-10**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 11-11**

The County acknowledges the information about a different solar project.

#### **Response 11-12**

The County acknowledges the information about a different solar project. However, the condition of a different solar project does not mean that the proposed solar project will have the same issues. The County will stand behind the Conditions of Approval for this Project and see that they are enforced.

#### **Response 11-13**

The County notes the commenter's concerns about buffer areas around the Project site. The Project will be required to be set back 15 feet from Sunfair Road with adequate fencing and screening. The property is currently zoned as Community Industrial (IC) and Institutional (IN), which allows for a variety of light industrial use, and has been used as an airport in the past, not as a residential area.

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**Response 11-14**

The commenter alleges the Project is in violation of the County Solar Ordinance and claims that the Project is within 1 mile of the boundary of the Joshua Tree National Park. Project site is just over 2 miles from the JTNP northern boundary. The transmission line is already established in the right of way along Sunfair Road. Southern California Edison (SCE) will be upgrading the line and replacing some poles. However, these poles are already in existence and do not constitute a new project feature.

**Response 11-15**

The County notes the commenter's concerns regarding the potential impacts to birds from the Project. The commenter states that the County does not require notices to be posted that allows for neighbors to call in complaints regarding dust, debris or dead birds.

The County is unaware of scientific evidence demonstrating that photovoltaic panels attract birds and cause mortalities, and the commenters have not produced any such evidence. Nevertheless, the Applicant is committed to using a non-reflective coating on the PV panels, which will reduce the likelihood of the panels appearing as water. Additionally, it should be noted that there are no known threatened or endangered avian species living in or around the Project site, nor is there any evidence in the record demonstrating that there are localized conditions or other factors that suggest a risk of significant avian mortality associated with the Project.

The County notes that the commenter has identified project characteristics that are often present at locations where the claimed type of avian mortality has occurred. Those "risk" factors have included: large size of the project, the project's proximity to large bodies of water, and highly reflective material on the panels. These factors are not present at this Project and therefore the Project is distinguishable from other solar projects where avian mortality of the type claimed by commenter has occurred.

The County and the MDAQMD will require a sign for neighbors to be able to call in complaints regarding dust. See Comment 11-6. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

**Response 11-16**

The commenter states that the Project site is clearly visible from a major highway and alleges the Project would violate the provisions of the Solar Ordinance regarding visual qualities. The County has determined the project meets the required findings for approval including findings related to visual impacts.

The Project site will not be visible from SH 62. Visual simulations were done from this location demonstrating the solar project will not be seen from the major highway. The highest feature on the Project will be no more than 12 feet high. This is roughly half the height of an average family residence. At this time, Two Mile Road is only a dirt track and not an existing transportation corridor.

**Response 11-17**

The County notes the commenter's concerns about potential water supply impacts from the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project

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construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

#### **Response 11-18**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND. The commenter also alleges that the Project does not comply with the Solar Ordinance. The Project adequately complies with all applicable provision of the County Code including the Solar Ordinance. These findings are documented in Exhibit A, Findings, of the Staff Report.

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**From:** Larry Bowden [mailto:larryb29@yahoo.com]  
**Sent:** Monday, February 08, 2016 5:12 PM  
**To:** Oquendo, John <John.Oquendo@lus.sbcounty.gov>  
**Subject:** Joshua Tree Solar Farm

February 8, 2016

Mr. John Oquendo, Senior Planner  
 County of San Bernardino  
 Land Use Services Department, Planning Division

The Simi Dabah Sculpture Foundation is opposed to the Joshua Tree Solar Farm;  
 Project number P201400482/CUP.

13-1

Our "Open Air Desert Studio" has over 700 recycled metal sculpture pieces displayed for public viewing, donating to non profits or sale to help fund the Foundation on our 8 acre property. We are located just northeast of the proposed Joshua Tree Solar Farm project directly across Sunfair Road. Our Open Air Desert Studio is open to locals, tourist, photographers and others seeking the beauty and solitude of the desert experience. Below is a website about the Simi Dabah Sculpture Foundation that is geared towards the Desert Tourist.

13-2

<http://www.joshuatree.directory/simi-dabah>

The commercial solar project of this size will block the views to the west from our site, create elevated dust situations and bring an industrial look to the area. The Cascade Site which is only 2000 feet to the east of our property has panels 10 feet in height I can only imagine this project will have the same. The JTSF project is 2 miles from Joshua Tree National Park, and will sit right beside Sunfair Road which is traveled by thousands of people on their way to and from the Joshua Tree Music Festival which is held twice a year. The local communities of Twentynine Palms, Yucca Valley and Joshua Tree have identified tourism as their major economic driver, with over 2 million visitors a year visiting Joshua Tree National Park. Undisturbed scenic views are a big part of the desert experience.

13-3

We aren't crying Not In My Neighborhood as there are already 3 commercial solar farms in our area, with the Cascade Project being right behind us. These three sites are somewhat off the major routes, unlike the JTSF proposed site, but all still very visible from State Highway 62. We aren't part of a bigger group trying to stop any and all development. We know there are some jobs that come with the building of the solar fields but no where near the long term benefits and jobs created by tourism in our area.

13-4

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We the 7 people forming the Simi Dabah Sculpture Foundation Board of Directors are very concerned and opposed to this project. We will make a formal resolution opposing the Joshua Tree Solar Farm during our next board meeting but are forced by the timing of this objection period to submit our opposition through verbal conformation only. We would ask to be informed if another opportunity to give input on the Joshua Tree Solar Farm arises in the future.	] 13-5 ] 13-6
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We thank you for the opportunity to be heard.

Sincerely,

Larry Bowden  
 President Simi Dabah Sculpture Foundation

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**Letter 13****Larry Bowden/Simi Dabah Sculpture Foundation****February 8, 2016****Response 13-1**

Comment noted.

**Response 13-2**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 13-3**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. From the east side of Sunfair, the Project view when built will be lower in height than the existing buildings currently located on the decommissioned airport property. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

The County also notes the commenter's concerns about potential air quality impacts from the Project. The County contacted the Mojave Air Quality Management District (MDAQMD) and their response and interest in the Project was limited to a request for a Dust Control Plan. The IS/MND discusses that the Project will produce some dust during the construction phase, which will be short-term and temporary, especially since the Project site is relatively small (115 acres) and on land that is already disturbed. As with all construction projects that occur within the County, the Project will be subject to the Mojave Desert Air Quality Management District's (MDAQMD) Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically requires the preparation of a dust control plan prior to construction of the Project. Best management practices for the control of dust are included in the IS/MND and will be required as a Condition for Approval of the Project. In addition to the requirements for dust control (e.g., watering), the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any

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dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

The county also note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

#### **Response 13-4**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND. Refer to Response 13-3 regarding jobs and economic concerns.

#### **Response 13-5**

Comments noted.

#### **Response 13-6**

The County acknowledges the commenter's request to be informed when there is another opportunity to provide input regarding the Joshua Tree Solar Project.

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## BLUM|COLLINS LLP

Aon Center  
 707 Wilshire Boulevard  
 Suite 4880  
 Los Angeles, California  
 90017

213.572.0400 phone  
 213.572.0401 fax

February 8, 2016

John Oquendo, Senior Planner  
 County of San Bernardino  
 Land Use Services Department, Planning Division  
 15900 Smoke Tree Street, Suite 131  
 Hesperia, CA 92345  
[john.oquendo@lus.sbcounty.gov](mailto:john.oquendo@lus.sbcounty.gov)

*Via Email & U.S. Mail*

Re: *Comments on Joshua Tree Solar Farm MND*

Dear Mr. Oquendo and the County of San Bernardino:

This letter is to serve you with comments on behalf of the SoCal Environmental Justice Alliance ("SEJA") regarding the planned Joshua Tree Solar Farm ("JTSF" or "the Project") proposed by Joshua Tree Solar Farm, LLC. The California Environmental Quality Act ("CEQA") requires an Environmental Impact Report ("EIR") "whenever it considers approval of a proposed project that *may* have a *significant* effect on the environment." *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal. App. 4th 1597, 1601, quoting Pub. Resources Code § 21100. As you also know, CEQA requires the preparation of an EIR "whenever it can be *fairly argued* on the basis of substantial evidence that the project *may* have significant environmental impact." *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal. 3d 68, 75 (emphasis added); see also *Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal. 4th 1112, 1123. There is a fair argument that the JTSF may have a significant impact on aesthetics, air quality, biological resources (in particular), cultural and paleontological resources, hazards, hydrology, noise, and traffic.

14-1

The Project should be subject to a mandatory finding of significance for three separate reasons. First, it should be subject to such a finding regarding its potential impacts on the endangered Yuma Clapper Rail, the endangered Southwestern Willow Flycatcher, and the threatened Western Yellow-Billed Cuckoo. Second, it should be subject to such a finding for its cumulative impacts regarding other solar projects in the desert. Third, the Project should be subject to a mandatory finding regarding its impacts to nearby sensitive receptors regarding particulate matter. We respectfully suggest that the agency should refuse to act on the proposed Mitigated Negative Declaration ("MND"), and should prepare an EIR for this Project.

14-2

14-3

14-4

14-5

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### Aesthetics

Regarding the CEQA checklist question, “would the project create a new source of substantial light or glare?,” the Initial Study (“IS”) says the impacts would be less than significant with mitigation. The document states at page 22 that the “project PV panels are designed to absorb sunlight, and the glass panels that protect the PV surface are *typically* coated glass designed to allow sunlight to pass with minimal reflection” (emphasis added). First, obviously, there is no requirement here that the glass panels *be* coated to allow sunlight to pass with minimal reflection. Second, even with coating there will be glare. The mitigation measure AES-1 only addresses building materials for the switchyard buildings and does not address the glare impacts during the day to the public.

14-6

### Air Quality

The IS’s Air Quality discussion cursorily concludes that the air quality impacts of the Project will be less than significant. Then, more believably, it acknowledges there may be possible adverse impacts regarding PM<sub>10</sub>, and proposes some “Best Management Practices” to reduce impacts from this pollutant. This approach was based on a flawed analysis of the construction impacts to PM<sub>10</sub> and possibly PM<sub>2.5</sub> in the area.

14-7

The Mojave Desert Air Basin (“MDAB”) has been designated as “nonattainment” for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Joshua Tree Solar Farm Conditional Use Permit Air Quality and Greenhouse Gas Technical Report (August 2012) (“Air Quality Report” or, for this section of this letter “the Report”), at 8. As the Air Quality Report concedes, particulates are a public health and welfare concern. Air Quality Report at 10. The Air Quality Report recognizes that the nearest sensitive receptor is located merely 250 feet away from the southeast corner of the Project site. Air Quality Report at 18. It states that contractors for the County did a Health Risk Assessment for Toxic Air Contaminants as a result using a “rural profile.” We would like to know whether this “rural profile” assumed there was a sensitive receptor so close to the Project site.

14-8

The Air Quality Report at 20-21 addresses cumulative impacts without referring to any other proposed or planned construction in the area, and seems limited to an analysis of Project operation. Are we to assume there are no other proposed construction projects in the region? Cumulative impacts requires analysis of projections or a list of projects; you have neither.

14-9

At 21 the Air Quality Report states that reductions in CO<sub>2</sub> attributable to the Project are “more than enough to offset the Project’s air and GHG [greenhouse gas] emissions.” This statement does not pertain to localized criteria pollutants to be emitted from constructing the Project.

14-10

At 24 the Report concludes that the Project would not conflict with or obstruct the implementation of the applicable Air Quality Management Plan (“AQMP”) because it is consistent with the population, housing and employment assumptions used in developing

14-11

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the AQMP. The Report argues that that Project would not result in a permanent regional increase in jobs and that it is therefore consistent. The Project will lead to a sharp temporary increase in jobs and more fundamentally in PM<sub>10</sub> and to a lesser degree PM<sub>2.5</sub> in the immediate vicinity of the Project. This will exacerbate the District's ability to comply with its AQMP and will have significant impacts in the immediate vicinity of the Project.

14-11  
 Cont.

At 25 the Report argues that the Project would violate no air quality standard or contribute substantially to an existing or projected air quality violation because it would not exceed Mojave Desert Air Quality Management District ("MDAQMD") significant thresholds. As Table 4 discloses, there will be daily PM<sub>10</sub> emissions of 38 *pounds* assuming there is compliance with MDAQMD Rule 403. We're not sure your mitigation measures – dubbed "best management practices" by you – will ensure compliance with Rule 403 as they merely require watering down sites "up to three times a day," which does not require that water be applied even once. Also, it is not clear if your modeling accounted for the dust not only from grading but generated by the likely parking of 120 to 150 vehicles on unpaved surfaces and then their departures daily. (Assurances that the cars will park on the paved runway would fall flat as eventual construction will preclude this.)

At 26 the Report concludes that the Project would not contribute to a *cumulatively* considerable net increase of any criteria pollutant for which the region is in nonattainment, apparently based solely on the fact that the Project *itself* would not exceed MDAQMD thresholds. The Report has not identified cumulative projects in the region so there is no way of considering whether there would be cumulatively considerable emissions.

14-12

At 26 to 27 the Report attempts to answer the question "would the project expose sensitive receptors to substantial pollutant concentrations?" in the negative, based on a Health Risk Assessment ("HRA") reflected in Table 6. We do not think the HRA assessed acute, chronic or cancer risks from PM<sub>10</sub> or PM<sub>2.5</sub> because it only purported to focus on Toxic Air Contaminants ("TACs"). We think it is beyond peradventure that this Project will expose the sensitive receptors 250 feet away to substantial quantities of PM<sub>10</sub> and PM<sub>2.5</sub>. This means there should have been a significant impact found – or at least there is a fair argument for it, based on substantial evidence in the record.

14-13

We believe the IS for the Project should have answered "yes" to the mandatory finding of significance question "Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?" See IS page 87. The sensitive receptors adjacent to the Project will clearly have significant impacts from particulate matter.

We also note that the Air Quality Report proposed mitigation measures which were not implemented as "Best Management Practices" ("BMPs") but should have been – specifically, proposed AQ-1, requiring the application of nontoxic chemical soil stabilizers or water *at least* two times a day (the IS merely states that water may be used

14-14

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up to three times a day), and proposed AQ-6, calling for carpools, vanpools or shuttles to be provided to construction employees. Because of the particulate matter concerns, these mitigation measures should have been implemented.

Regarding the BMPs that *were* proposed in the IS, we note that the Dust Control Plan (BMP AQ-2) calls for street sweeping “when visible soil accumulations occur along site access roadways.” It is our understanding that at least one of these roadways is dirt, so we don’t see how this accomplishes anything. The Dust Control Plan BMP also provides that all work will cease during high wind conditions. Do you propose to require a weather vane or some other system to determine windspeeds? Also this BMP calls for watering areas of disturbed soil hourly. Who is responsible to assure this is done? BMP AQ-2(g) states that storage piles to be left for over 3 working days will be sprayed with a non-toxic soil stabilizer, covered with plastic, or revegetated. What is to happen to the particulates emitted from these piles from the first three days (or how are we to know when you determine that a pile is to be left over three working days)? And BMP AQ-3 says the developer will submit evidence of air quality installation for review to County Planning and that specific performance objectives are being met. What specific performance objectives are these? How often is the developer to submit evidence during construction? Finally, BMP AQ-4 provides for signage at the entrance to the site providing contact information for anyone who wishes to complain. Given that the BMPs are so limited we do not see there is anything particularly enforceable that a complainant can point to.

Again, these BMPs (and the ones that were left out) should be included as mitigation measures (not BMPs) *in an EIR*, not an MND, because there is a fair argument there *may* be a significant impact.

14-14  
 Cont.

### **Biological Resources**

Regarding Biological Resources, the IS concludes regarding subparagraph (a) that the Project, with mitigations, will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans or policies or by the California Department of Fish & Game (“CDFW”) or USFWS. This conclusion is flawed; there is a fair argument that there may be a significant impact, and that you therefore should have prepared an EIR for the Project.

14-15

Our primary concern has to do with avian species, including the endangered Yuma Clapper Rail, the endangered Southwestern Willow Flycatcher, and the threatened Western Yellow-Billed Cuckoo. As you no doubt know, though you did not disclose it in the IS, a dead Yuma Clapper Rail was one of several birds recovered from the site of the First Solar Desert Sunlight Solar Farm in Riverside County, which is on the other side of the Joshua Tree National Park from the proposed Project. Scientists theorize that birds mistake a solar facility, including a solar panel facility such as Desert Sunlight or JTSE, for a water body, and die after flying into the panels. Besides the Yuma Clapper Rail, the

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endangered Southwestern Willow Flycatcher, and the threatened Western Yellow-Billed Cuckoo are at risk.

The IS gives this concern a bare mention, stating:

*Although there have been reported avian fatalities at some of the solar facilities in the desert, it has only been hypothesized that the facilities appear as water bodies to migrating birds; there have been no empirical studies on the effects of PV solar installations have on birds.*

IS at 35 (emphasis added). A federal investigation and two dead Yuma Clapper Rails (out of a total estimated population of less than 824 in the U.S.) found at two separate solar farms is more than a hypothesis. See Attachment A (Scientific American article from mid-2014). This is a significant potential impact requiring the preparation of an EIR. As an additional reason for preparing an MND rather than an EIR, you state, “this project is substantially smaller and located in a more disturbed and developed area than the solar projects that are reporting fatalities.” We beg to differ. First, the relative size of the project should not matter when avian species perceive it as a water body. Second, this Project is located adjacent to Joshua Tree National Park, which serves as a wildlife corridor for species including birds. You state that although “any structure can pose a collision risk to birds, the project does not contain tall structures that would extend into the airspace of birds migrating at high elevations.” This does not matter to avian species that perceive the panels as a water body. “The project does not contain thermal components or evaporative ponds.” Neither does Desert Sunlight, yet impacts have occurred there.

Then you conclude that “For the above reasons, the project is expected to have a minimal contribution to cumulative impacts on birds,” and that Mitigation Measures BIO-1, BIO-3, BIO-4, BIO-7, and BIO-8 will help offset direct, indirect and cumulative impacts on birds. The Mitigation Measures cited do nothing to prevent the perception of the solar farm as a water body by birds. Mitigation Measure (“MM”) BIO-1 calls for general avoidance during construction, MM BIO-3 calls for focused surveys for the burrowing owl, MM BIO-4 calls for protections for nesting birds, which we are not discussing, MM BIO-7 is a Weed Management program, and MM BIO-8 calls for contribution by the developer to a raven management program to limit impacts to the desert tortoise.

We believe this Project should have been subject to a mandatory finding of significance under IS XVIII(a) at page 85, because it threatens to degrade the quality of the environment or to reduce the number or restrict the range of a rare or endangered species. In the discussion regarding mandatory findings of significance regarding avian mortalities, you argue that the panels used for the Project “are coated with a non-reflective material” and this will reduce the likelihood that birds will identify the Project site as a water body. IS at 86. The panels will be covered with glass, which is reflective. Avian species can mistake the dark surfaces for a water body. We are unsure that the panels to be used are substantially different from those already in use at Desert Sunlight on the other side of Joshua Tree National Park.

14-16  
 Cont.

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The IS should have found significance under the mandatory finding of CEQA checklist XVIII(b) for cumulative impacts. The large number of solar projects in the desert can cause a significant impact to avian species. That there is “only one” within one mile of the proposed Project does nothing to lessen this impact. We have attached a list of mostly solar projects approved or pending approval in San Bernardino County alone. See Attachment B. The Project and many others are along a migration corridor for birds. There is a fair argument that the impacts may be significant.

14-17

Regarding the desert tortoise, though there have been none observed on the site, you are correct to include mitigation measures to prevent their endangerment. Regarding the mitigation measure you include, however, we have some problems. MM BIO-2 calls for permanent tortoise-proof fencing around the perimeter of the “main project site,” and then it calls for a biological monitor in “unfenced areas.” We are not certain what this refers to. If it refers to the gen-tie, we agree that a biological monitor should be present during ground disturbance and other construction work in this area. If it refers to anything else, we think it should be fenced in. The second problem with MM BIO-2 is that the clearance surveys should be conducted *before* the fencing is installed, and after. If a tortoise is present on the site and has to be moved this can endanger the tortoise.

14-18

Regarding the burrowing owl, MM BIO-3 says if owl are found, “a passive relocation program may be developed.” We think it should be required.

14-19

Regarding nesting birds, protected under the Migratory Bird Treaty Act, MM BIO-4 says that “to the extent feasible,” to protect nesting birds, vegetation clearance should occur outside of the breeding season. We’d like to know what limits are placed on when it is “infeasible.” MM BIO-4 continues, stating that if vegetation removal occurs during the breeding season, pre-construction surveys “should” be conducted immediately prior. The wording should be “shall,” and the surveys should be conducted by a qualified biologist.

14-20

MM BIO-5 provides for surveys for the desert kit fox and says they can be conducted contemporaneously for the desert tortoise up to 30 days before construction. We respectfully submit that 30 days is not close enough in time for excluding either species. Again the measure says that a plan “may” be developed when it should say “shall” if kit fox are found, and again it should specify that it should be prepared by a qualified wildlife biologist.

14-21

MM BIO-6 regarding protected plants states that species protected by the California Desert Native Plant Protection Act and the San Bernardino County Code will be avoided or “transplanted into the perimeter landscape buffers.” First we do not see how you can avoid them since the virtually the entire site will be covered in panels. Second, we’d like to know who will do this transplanting, where, and under what guidelines? Third, this measure should cover the Utah vine milkweed.

14-22

We dispute your findings and lack of mitigation regarding the Utah vine milkweed. You indicate that as a California Rare Plant Rank (“CRPR”) 4 species, this plant does not

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meet the requirements to trigger consideration under CEQA. The California Native Plant Society (“CNPS”) disagrees. As their website discloses, “many of them are significant locally, and we strongly recommend that California Rare Plant Rank 4 plants be evaluated for impact significance during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, based on CEQA Guidelines §15125 (c) and/or §15380.” See Attachment C. In particular, the CNPS argues that CEQA consideration is due for “populations at the periphery of a species’ range,” which would likely be true for the Utah vine milkweed at JTSF. The Biological Resource Reports you have posted indicate that surveys for solar energy developments along the I-10 corridor have disclosed the species to be more common, however, all these surveys have been done where the milkweed was likely extirpated because of the construction of the projects. The 2015 Biological Resources Assessment indicates that as a mitigation measure the topsoil from grading should be set aside and redistributed over temporarily disturbed areas to facilitate passive revegetation; we believe at a minimum this measure should be adopted.

14-22  
 Cont.

The IS addresses wildlife corridors and nursery sites, other subjects of the CEQA checklist in subsection IV(d), at page 36. It states “There are no established wildlife corridors within the project area that would be impeded by project development.” Again, the Project is immediately adjacent to Joshua Tree National Park, and particularly with respect to avian species, it presents a threat. You also have acknowledged that the Project area has been a site for breeding of the kit fox on multiple occasions. Excluding the kit fox – as you have to do – prevents the site’s use as a nursery site. Accordingly, there should have been a finding of significance.

14-23

### **Cultural and Paleontological Resources**

Regarding cultural resources, you cite to a study by AECOM which you have not included in the materials available on the website. See Attachment D (printout of webpage with materials for JTSF MND). Were this an EIR, which it should have been, this would require recirculation. We cannot assess impacts to cultural resources absent that study, and the impacts may well be significant.

14-24

Under CEQA checklist item V(c), “Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?”, you concede that “The documented older alluvium in the area, numerous scientifically important Pleistocene fossils recovered from the region, and presence of a modern ephemeral dry lake (Coyote Dry Lake) east of the project site suggests a high potential to retain buried paleontological resources at depth.” Yet you conducted no paleontological resources study, simply stating that you were relying on a study done for the Cascade Solar Project. The Cascade Solar Project was on a different site, obviously, and a paleontological resource survey should have been conducted on this site. If you were improperly relying on the study done for the Cascade Project, you should have included it in your materials available for review.

14-25

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MM PR-1 provides that prior to approval of project plans and specifications by San Bernardino County, "the project shall confirm that the plans and specifications stipulate that if evidence of subsurface paleontological resources are found during construction, excavation and other construction activity in that area shall cease and the contractor shall contact a certified Paleontologist to determine the extent of the find and take proper actions." The IS states that if grading or excavation reaches depths of 2 meters or more, this MM will be implemented. We have three problems with the MM. First, *it* should state that the measure will be implemented if excavation or other construction activity reaches depths of 2 meters or more. Second, we doubt that workers will know what to look for. The Project should have a qualified paleontologist do a training as to what to be aware of. Third and perhaps most importantly, the Project will use a pile driver. *See* IS at 14. Inherently, a pile driver goes to depths of over 2 meters and is likely to damage paleontological resources found below it. We do not think that without having assessed the site for paleontological resources you can conclude that the impact is "Less than Significant with Mitigation Incorporated." There is a fair argument that the Project may have an irreversible impact on paleontological resources.

14-25  
 Cont.

### **Hazards and Hazardous Materials**

CEQA checklist section VIII(h) asks "Would the project 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?" There are residences intermixed with wildlands near the Project site. Obviously, the Project has the potential to create electrical fires, either from the panel site itself or from the one-mile, 33-kilovolt gen-tie line. At IS 55-56 you state this will be a "less than significant impact." You claim that the impact will be eliminated through implementing weed abatement. This is preposterous. The native grasses and shrubs can provide fuel for a fire. The increased risk of wildfires from the Project should have been recognized as a significant impact.

14-26

### **Hydrology**

Under CEQA checklist item IX(b), the question is "Would the project 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 preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?" You concluded the impact would be less than significant.

14-27

As the IS notes, the Project will require 30 acre-feet ("af") of water during construction, and then another 2 acre-feet per year ("afy") during operation for washing of the panels (we suspect this is an underestimate). Joshua Basin Water District ("JBWD") said it could not guarantee delivery of this water in its will-serve letter, and you concluded that the solution was to create a well or renovate an existing well to pump groundwater from the area. You state at IS page 59 that "Additional Desktop information below shows that there is adequate groundwater for the project needs." This is not the question. The

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question is whether the Project would substantially deplete groundwater supplies. JBWD, which obtains its water from groundwater, has apparently concluded that it would. You misleadingly provide information that does not come from the JBWD to suggest that the project will not contribute to overdraft. However, that information is out of date. First, you state “in the Copper Mountain Valley groundwater subbasin, as of the late 1990s, water levels had generally remained unchanged for more than 50 years.” We are not concerned with land subsidence here, we are concerned with overdraft of the basin, and there are far more precise (and far more recent) ways of measuring it. Second, you claim that recharge from precipitation ranges between 728 and 1300 afy and that withdrawals were estimated *in 2000* at 1,010 afy. This is not JBWD’s information. They have a recharge program because, by 2009, “The current demand in the area requires that approximately 1,600 afy be pumped from the basins, but the Joshua Tree Sub-basin only receives a recharge of approximately 1,200 afy, resulting in an overdraft of approximately 400 af [per year].” See Attachment E. While the Joshua Tree subbasin is separately delineated from the Copper Mountain subbasin, the two are hydrologically connected. There is a fair argument that the Project has the potential to create or contribute to overdraft conditions.

14-27  
 Cont.

### **Noise**

CEQA checklist section XII(d) asks whether the Project would create a “substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.” The answer to this question is obviously yes, and you should have found there was a significant impact. Instead, the IS says there is a less than significant impact. This is incorrect for two reasons. First, there clearly will be a significant impact on noise (which will affect sensitive receptors adjacent to the site Monday through Saturday 7 a.m. to 7 p.m.). Second, you have concluded that the impact will be less than significant with mitigation, yet you are purporting to reduce the impact to less than significant levels *with* mitigation. Again, there is a fair argument that the Project will have a significant impact.

14-28

### **Transportation and Traffic**

Your traffic section relied on an outdated Trip Generation Analysis which underestimated the number of vehicles entering and exiting the site during the construction phase of the Project and otherwise contradicted the IS. Specifically, the IS states that at the peak of construction there would be 120 one-way trips attributable to 150 construction workers, for both the AM and PM peak periods. It also assumes there would be 80 one-way trips for equipment vehicles. IS at 77. The Trip Generation Analysis stated that the number of construction workers would range from 60 to 65 during the second half of the construction period. Trip Generation Analysis at 2. The Trip Generation Analysis further assumes there would be 30 one-way truck delivery trips, increased to a passenger car equivalent (“PCE”) of 75 based on a PCE ratio of 2.5. *Id.* It is impossible to tell from the IS whether the equipment vehicles differ from the delivery vehicles referred to in the Trip Generation Analysis, but we have to assume they are different.

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Further, the Trip Generation Analysis stated that it was excluding any consideration of water trucks because JBWD would provide the water. This is no longer a valid assumption and we believe you need to include water trucks in your analysis.

The Trip Generation Analysis at 4 simply states that Sunfair Road will have adequate capacity to accommodate the construction traffic because it has a capacity of 1600 vehicles per hour per lane ("vphpl"), and then it doubles this based on Sunfair Road's two lanes. Since one of those lanes is going in the wrong direction (all of the traffic will go on Sunfair Road in one direction during the AM and PM peak periods), it should not have doubled the vphpl. And, the Trip Generation Analysis' 4 percent figure does not rely on the proper assumptions regarding worker traffic, delivery truck traffic, equipment truck traffic, or water trucks. The analysis is also now out of date as to the baseline conditions on Sunfair Road.

The same is true regarding the analysis of impacts to SR 62: you are not relying on the proper assumptions regarding worker traffic, delivery truck traffic, equipment truck traffic, or water trucks. The analysis is further out of date as to baseline conditions. And you have failed to assess any cumulative projects in the area, which would impact traffic conditions.

Finally, the Trip Generation Analysis assumes there is adequate capacity for the eastbound construction traffic to turn left onto Sunfair Road. This is a baseless assumption. Because an estimated 80% of the AM peak traffic will be using that leftbound turn lane, we expect there will be spillover into the leftmost eastbound lane which would impede traffic flows.

The Trip Generation Analysis recommended several mitigation measures which you have not implemented because you conclude there will be no significant impact. Trip Generation Analysis at 4-5. Again, there is a fair argument that a significant impact may occur and that you should have done an EIR. Further, you should have included these mitigation measures.

We look forward to your responses. Please forward a notice regarding your action upon the IS and proposed MND to [collins@blumcollins.com](mailto:collins@blumcollins.com) and [bentley@blumcollins.com](mailto:bentley@blumcollins.com). Thank you.

Sincerely,

Craig M. Collins

attachments: A-E

14-29  
Cont.

14-30

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**Letter 14****Craig Collins/Southern California Environmental Justice Alliance****February 8, 2016****Response 14-1**

The commenter describes the parties on whose behalf he is commenting, states a legal standard, and makes a legal conclusion about the County's analysis. The legal standard for County's environmental review is set forth below in this Response 14-1. The technical justification for the County's position is presented in the following responses beginning with Response 14-6.

In conducting CEQA analysis for a project (and assuming the activity is not exempt or otherwise not subject to CEQA), the lead agency conducts an Initial Study prepared pursuant CEQA Guidelines §§ 15060-15065. The Initial Study is used to support and justify the agency's next step: adoption of a Negative Declaration, or Mitigated Negative Declaration (MND), or preparation of an EIR. CEQA Guidelines §§15063, 15371.

A MND is appropriate where the agency determines, based on an Initial Study, that no significant environmental effects will occur because revisions in the project have been made or mitigation measures will be implemented which will reduce all potentially significant impacts to less than significant levels, and where there is no substantial evidence that the Project, as revised, may have a significant effect on the environment. Pub. Resources Code §21064.5. "[T]he purpose of CEQA is not to generate paper, but to compel government at all levels to make decisions with environmental consequences in mind." *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. Preparation of a MND rather than an EIR allows an agency to fulfill this purpose and "eliminate unnecessary EIRs" (Guidelines §15063), thereby streamlining the permitting process for appropriate projects while still identifying and mitigating potential significant environmental effects.

The commenter asserts that the MND is insufficient and that an EIR must be prepared. However, CEQA does not require an EIR just because a party asserts claims of "significant effects." Rather CEQA requires a showing of "substantial evidence, in light of the whole record before [it], that a project may have a significant effect on the environment." Guidelines §15064(a)(1) (emphasis added). "Said another way, if a lead agency is presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect." Guidelines §15064(f)(1). The key inquiry is identifying what is a "fair argument" supported by "substantial evidence. The commenter urges that any opinion or claim meets the standard, when in fact, CEQA itself as well as multiple court decisions make clear that more is required.

Under CEQA, "substantial evidence" is defined as "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." Guidelines §15384. It includes "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." *Id.*

"Evidence is relevant if it has "any tendency in reason to prove or disprove any disputed fact that is of consequence to the determination of the action." *Western States Petroleum Assn. v. Sup. Ct.* (1995) 9 Cal. 4th 559, 570 (citing Evid. Code §210). Evidence is "enough" if it presents "a reasonable possibility that a project would have significant environmental effects" – which is the basic question underlying whether a "fair argument" has been made. *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1119. Substantial evidence is not "argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of

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social or economic impacts which do not contribute to or are not caused by physical impacts on the environment.” PRC §21082.2(c); Guidelines §15064(f)(5). Based on this standard, not all information or narrative put forth as “expert opinion” qualifies as substantial evidence. Indeed, expert opinions “rise only to the level of reliability and credibility as the evidence constituting the foundation for those opinions.” *Citizens’ Comm. to Save our Village v. City of Claremont* (1995) 37 Cal.App.4th 1157, 1170. This means that “expert opinion” is only substantial evidence if it is supported by credible, reliable, and relevant information.

In examining what constitutes “substantial evidence,” the courts have made clear that:

1. “[F]ears and...desires” of project opponents do not qualify as substantial evidence (*Perley v. County of Calaveras* (1982) 137 Cal.App.3d 424, 436-7);
2. “[A]n expert’s opinion which says nothing more than ‘it is reasonable to assume’ that something ‘potentially...may occur’” is not substantial evidence (*Apartment Assoc. of Greater Los Angeles v. City of Los Angeles* (2001) 90 Cal.App.4th 1162, 1176); and
3. “[A] suggestion to investigate further is not evidence, much less substantial evidence, of an adverse impact” and is therefore “insufficient to create a fair argument of a significant effect on the environment” (*Parker Shattuck Neighbors v. Berkeley City Council* (2013) 222 Cal.App.4th 768, 786).

Ultimately, it is within the County’s “discretion to determine whether evidence offered by the citizens claiming a fair argument exists meets CEQA’s definition of ‘substantial evidence,’” and the County is “given...the benefit of the doubt on any legitimate, disputed issues of credibility.” *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 928. While the commenter describes numerous disagreements with County’s environmental review and conclusions, as clarified in these responses to comments, that opinion is not based on relevant facts and therefore does not constitute substantial evidence.

#### **Response 14-2**

The commenter states a legal standard and legal conclusion. The commenter does not support its conclusion with any relevant facts.

#### **Response 14-3**

The commenter states a legal standard and legal conclusion. The commenter does not support its conclusion with any relevant fact.

#### **Response 14-4**

The commenter states a legal standard and legal conclusion. The commenter does not support its conclusion with any relevant fact.

#### **Response 14-5**

The commenter states a legal standard and legal conclusion. The commenter does not support its conclusion with any relevant fact.

#### **Response 14-6**

The commenter partially restates portions of the IS and questions whether the County’s description in the IS is accurate. The California Environmental Quality Act (CEQA) Guidelines question as stated in the comment is not complete. The complete CEQA Guidelines checklist asks “‘Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?’” The County disagrees with the commenter’s underlying assumption that *any* amount of glare would create an adverse effect on daytime views that

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would rise to a level of significance warranting the preparation of an EIR. The appropriate legal standard for preparation of an EIR is stated in Response 14-1.

In addition, the Applicant is committed to using a non-reflective coating on the PV panels which will further minimize reflection.

#### **Response 14-7**

The commenter characterizes and questions the County's air quality analysis, but puts forth no facts supporting a different analysis or conclusion. Commenter's statement is non-expert opinion without factual support, and therefore does not constitute substantial evidence. See Response 14-1 for the appropriate legal standard for what may be considered "substantial evidence."

The Initial Study air quality discussion, is a summary of an Air Quality and Greenhouse Gas Technical Report prepared by Tetra Tech in August of 2012. The air quality analysis presented in that report analyzed the potential air quality impacts associated with the Project.

The commenter alleges that the analysis of construction impacts to PM<sub>10</sub> and possibly PM<sub>2.5</sub> are flawed but provides no technical justification for this allegation. The Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

#### **Response 14-8**

The commenter questions the methodology used for County's air quality analysis. The commenter puts forth no facts supporting a different analysis or conclusion. Commenter's statement is non-expert opinion without factual support and does not constitute substantial evidence. See Response 14-1 for the appropriate legal standard for what may be considered "substantial evidence."

As stated in the Air Quality report, the exposure assessment identifies and quantifies all routes of human exposure to substances of concern. Based on land use surrounding the proposed Project and consistent with EPA guidelines, a "rural profile" was assumed. The air quality analysis did assume that a receptor was within 250 feet of the project site; however this property is not known to be currently occupied.

#### **Response 14-9**

The commenter questions the County's air quality analysis with regard to cumulative impacts, asserting that the County's IS/MND is flawed because it fails to provide a list of other proposed construction projects in the region.

Please see Responses 17-32, 17-33 and 17-34.

#### **Response 14-10**

The commenter states that greenhouse gas (GHG) emissions, as it pertains to localized criteria pollutants, have not been considered.

The commenter puts forth no facts supporting a different analysis or conclusion. Commenter's statement is non-expert opinion without factual support and does not constitute substantial evidence upon which the County will rely. See Response 14-1 for the appropriate legal standard for what may be considered "substantial evidence."

GHG was modeled and considered in the Air Quality report. Construction related emissions are temporary and finite. Furthermore, this other solar project will also contribute to an overall net reduction in GHG emissions when the benefits of its operation are taken into account.

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In addition, the project would comply with the San Bernardino County Greenhouse Gas Emissions Reduction Plan. During its operational life, the Project would offset its operational GHG emissions since development of renewable energy resources is an integral component of the California AB 32 implementation strategy. Pursuant to the guidance of the CEQA Guidelines, the County's analysis of greenhouse gas emissions is intended to understand and reduce the emissions of greenhouse gases to reduce climate change rather than address localized pollution which is analyzed in the Air Quality section of the IS.

#### **Response 14-11**

The commenter restates portions of the County's air quality analysis and questions whether the analysis is accurate, whether the Project will be problematic for achieving the goals of a regional air quality management plan, and whether best management practices for air quality for the Project will ensure compliance with Rule 403. The commenter puts forth no facts supporting a different analysis or conclusion. Commenter's statement is non-expert opinion without factual support and does not constitute substantial evidence. See Response 14-1 for the appropriate legal standard for what may be considered "substantial evidence."

With regard to compliance with Rule 403, the Project will be subject to the Mojave Desert Air Quality Management District's (MDAQMD) Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically requires the preparation of a dust control plan prior to construction of the Project. In addition to the requirements for dust control (e.g., watering), the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

See also Responses 17-24 and 17-25.

#### **Response 14-12**

The commenter restates a conclusion from the County's air quality analysis and questions the County's air quality analysis with regard to cumulative impacts, asserting that the County's IS/MND is flawed because it fails to provide a list of other proposed construction projects in the region. The County disagrees with commenter's opinion that the air quality analysis is flawed on this basis as County has met the legal standard for analyzing cumulative impacts. See Response 14-9 for the legal standard on cumulative impacts and a discussion of the single closely related project, which is already constructed and will therefore not contribute to cumulative air quality impacts from the Project.

See also Responses 17-33 and 17-34.

#### **Response 14-13**

The commenter questions the County's conclusions with regard to whether the Project would expose sensitive receptors to substantial pollutant concentrations. The commenter puts forth no facts supporting a different analysis or conclusion. Commenter's statement is non-expert opinion without factual support and does not constitute substantial evidence. See Response 14-1 for the appropriate legal standard for what may be considered "substantial evidence."

An appropriate health risk assessment (HRA) was prepared as part of the Air Quality report and did consider a receptor as close as 250 feet away from the project (even though that property is considered to be vacant). Standard

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toxic air contaminants were analyzed in the HRA and it was determined that the Project would not expose sensitive receptors to substantial pollutant concentrations.

See also Response 14-8 and 17-25.

#### **Response 14-14**

The commenter challenges the adequacy of air quality best management practices (BMPs) incorporated into the Project design, arguing that (1) BMPs discussed in the Air Quality Report that were not adopted in the IS should be required for the Project, and (2) the BMPs proposed in the IS are inadequate.

The County developed the standard list of air quality BMPs listed in the IS/MND. These BMPs are industry standards for construction projects of this type. The County is required to consider and impose feasible mitigation measures that would substantially lessen or avoid the Project's significant environmental effects. Pub. Resources Code § 21002. The County did this in identifying appropriate measures to address air quality impacts, and need not evaluate or adopt additional measures. Pub. Resources Code §21081, CEQA Guidelines §15091(a) Beyond this, the County "need not, under CEQA, adopt every nickel and dime mitigation scheme brought to its attention." *San Franciscans for Reasonable Growth v. City & County of San Francisco* (1989) 209 Cal.App.3d 1502, 1519 (agency's duty to condition approval on incorporation of mitigation measures only exists when such measures would "substantially lessen" a significant environmental effect, "the agency need not, under CEQA, adopt every nickel and dime mitigation scheme brought to its attention.").

AQ-2 is the requirement for a Dust Control Plan. The details that the commenter has requested, such as who will be responsible for reading the weather vane, or determining the wind speed, will be described in the Dust Control Plan.

Also, contrary to the commenter's claims, CEQA does not require that every detail of construction-related equipment be discussed in the IS. Rather, CEQA requires environmental documents to be prepared with "sufficient detail to enable the public and the decisionmakers to understand the environmental impacts of the proposed project." *Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal. App. 4th 20, 36 (upholding mitigation measures for erosion prevention that relied on general design criteria). Thus, the County appropriately described the mitigation measures in sufficient detail such that public and decision makers can understand the Project' proponent's general obligations and can enforce them.

#### **Response 14-15**

The commenter states a legal standard and legal conclusion. The County disagrees with commenter's stated legal standard and conclusion as described in the responses, including in Response 14-1 and the Responses beginning with 14-16.

#### **Response 14-16**

The commenter alleges that birds, including endangered species, will be killed because they will mistake the panels for a water body and fly into the solar panels. Commenter cites to the fact that dead Yuma Clapper Rails have been found at two separate solar farms and then states a number of opinions about whether the Project should be further analyzed for a potential to endanger birds. Commenter's speculation is based on facts that are not relevant to and are distinguishable from this Project, as described below. Commenter's speculation about the Project's potential impacts does not constitute substantial evidence. See Response 14-1 for the appropriate legal standard for what may be considered "substantial evidence."

The Applicant is committed to using a non-reflective coating on the PV panels, which will reduce the likelihood of the panels appearing as water. Additionally, it should be noted that there are no known threatened or endangered

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avian species living in or around the Project site, nor is there any evidence in the record demonstrating that there are localized conditions or other factors that suggest a risk of significant avian mortality associated with the Project.

The County notes that some literature as cited by the commenter has identified common characteristics that are often present at locations where the claimed type of avian mortality has occurred. Those “risk” factors have included: large size of the project, the project’s proximity to large bodies of water, and highly reflective material on the panels. These factors are not present at this Project and therefore the Project is distinguishable from other solar projects where avian mortality of the type claimed by commenter has occurred.

#### **Response 14-17**

The commenter states that the cumulative impacts should have considered additional solar projects approved or pending approval in San Bernardino County. Cumulative impacts have been appropriately addressed in the initial study.

For the Project, there is only one closely related past, present and reasonably foreseeable probable future project in the area. While there are several other photovoltaic projects recently approved or currently planned within San Bernardino County, only one is closely related to the Project. That project is within one mile of the proposed Project. However, there are no anticipated cumulative effects arising from the Project in conjunction with this other project. None of the proposed or approved solar projects will be built at the same time. Thus, there will be no overlapping construction activities resulting from these projects at the time the Project is being constructed. Therefore, the Project’s less than significant impacts related to construction (e.g., air quality, noise) will not be experienced cumulatively with construction impacts from the other solar projects such that there is a potentially significant cumulative impact.

During operation of the Project, there will be no significant cumulative impact relating to operation of these other solar projects because the projects are not concentrated in one area. Operation of the Project is essentially a passive use, so the only potential effects of the Project are visual impacts and low water use (i.e., for panel washing). In terms of cumulative visual impacts, the other solar projects that will be built are distributed throughout the County, and will not be aggregated near the Project, and thus there is no potentially significant cumulative visual impact.

See also responses 17-32 and 17-33.

#### **Response 14-18**

The commenter poses questions with regard to exclusionary fencing for desert tortoises.

Mitigation Measure BIO-2 in the IS/MND proposes that a desert tortoise fence will be built to restrict desert tortoise movements into the Project site.

Desert tortoise surveys will be performed prior to fence erection to locate any unlikely tortoises that may be enclosed within the fence. Based on the disturbed nature of the site, the entirety of the Project area is either poor quality desert tortoise habitat or developed and not habitat. For these reasons, desert tortoise is presumed absent from the Project site; regardless adequate precautions will be taken to ensure there will be no impact to desert tortoise.

#### **Response 14-19**

The commenter states an opinion about requiring a passive relocation program for burrowing owl. The County notes the commenter’s opinion. For clarification, a relocation program will be develop, in the unlikely event that a burrowing owl is found on the Project site prior to construction.

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**Response 14-20**

The commenter poses questions with regard to MM BIO-4. As stated in BIO-4, if active nests are present within the construction area, they must be avoided by establishing a non-disturbance buffer until the young fledge or the nest fails (as determined by a qualified biologist familiar with bird breeding and behavior). Nesting birds that are adjacent to active construction will also be avoided by this approved buffer. The buffer areas will be delineated and flagged to ensure avoidance.

**Response 14-21**

The commenter states an opinion about performing surveys for desert kit fox before construction. The County notes the commenter's opinion. The commenter puts forth no facts supporting a modification to the mitigation measures. Commenter's statement is non-expert opinion without factual support and does not constitute substantial. See Response 14-1 for the appropriate legal standard for what may be considered "substantial evidence."

**Response 14-22**

The commenter poses questions with regard to MM BIO-6 and states that the County should require mitigation for potential impacts to the Utah vine milkweed. The commenter discusses statements made by the California Native Plant Society ("CNPS) and County's own analysis, but puts forth no facts supporting a different analysis or conclusion that the Utah vine milkweed is significant in the location of the Project. Commenter's statement is non-expert opinion without factual support and does not constitute substantial evidence. See Response 14-1 for the appropriate legal standard for what may be considered "substantial evidence."

It should be emphasized that the Project site is a decommissioned airport, currently zoned for light industrial or commercial use. While there is a potential for Utah vine milkweed to be found onsite prior to construction, BIO-6, allows for removal of individual species, which will be transplanted to the perimeter landscape buffer. The removal and transfer will be done by qualified biologists.

**Response 14-23**

The commenter states conclusions from the IS and states a legal conclusion. The commenter puts forth no facts supporting a different analysis or conclusion. Commenter's statement is non-expert opinion without factual support and does not constitute substantial evidence. See Response 14-1 for the appropriate legal standard for what may be considered "substantial evidence."

**Response 14-24**

The commenter states that the AECOM study on cultural resources is not available for review. The cultural resource report is confidential and is available to qualified archeologists and Tribes for review. It is important to note that the AB52 process has been carried out between the County and the Tribes with an interest in the Project.

**Response 14-25**

The commenter states language from the IS and suggests paleontology has not been adequately addressed in the IS. The County does not believe that this is the case and does not agree that another study is warranted. The commenter puts forth no facts whatsoever supporting a different analysis or conclusion. Commenter's statement is entirely non-expert opinion without reference to factual support, and therefore does not constitute substantial evidence upon which the County will rely. See Response 14-1 for the appropriate legal standard for what may be considered "substantial evidence."

As described in the Initial Study, a paleontology study was conducted for the nearby Cascade Solar Project (PCR 2011b) which did not reveal any paleontological resources. Based on a similar geologic position (up-gradient and

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within the same alluvial fan drainage), and the same surface materials (Quaternary alluvium), the Project area appears to be extremely similar if not identical to the surveyed Cascade Solar Project area. A Geotechnical Evaluation for the Joshua Tree Project shows similar subsurface materials. The results and recommendations of the Cascade Solar Project Paleontological Resources Assessment would be applicable to the Joshua Tree Solar Project area. Additionally, there is currently a mitigation measure that would protect paleontological resources if they should be discovered at the Project site during construction.

#### **Response 14-26**

The commenter alleges that there is a significant risk of loss, injury or death involving wildland fires due to the Project but provides no evidence to support this allegation. Commenter's statement is non-expert opinion without factual support and does not constitute substantial evidence. See Response 14-1 for the appropriate legal standard for what may be considered "substantial evidence."

The project site is not within an area of high or very high fire hazard, as determined by San Bernardino County Fire Department which services the Project area. There are two fire stations within 5 miles of the Project site.

The potential for fire exists with any electrical installation but the risk with photovoltaic projects is low in general and is reduced further by eliminating installation errors and proper maintenance. The Project will include comprehensive safety measures that comply with federal, state, and local worker safety and fire protection codes and regulations would be implemented for the project that would minimize the potential for fires to occur during project construction and operations resulting in a low fire probability. Through compliance with these standards, the risks associated with wildfires on the project site are reduced to below a level of significance.

#### **Response 14-27**

The commenter states that the County's analysis of impacts to hydrology is inadequate because the Project will result in overdraft. See Response 14-1 for the appropriate legal standard for what may be considered "substantial evidence."

See also Responses 17-12 and 18-4.

#### **Response 14-28**

The commenter disputes the County's analysis and conclusions with regard to the Project's noise impacts. commenter puts forth no facts supporting a different analysis or conclusion. Commenter's statement is non-expert opinion without factual support and does not constitute substantial evidence. See Response 14-1 for the appropriate legal standard for what may be considered "substantial evidence."

It should be noted that the Project site is a decommissioned airport and the property is currently zoned for light industrial or commercial use which would result in existing ambient noise in absence of the Project. Operation of the project would not generate noise in excess of the applicable regulations.

Noise is discussed in the Noise section of the IS/MND. Adherence with the standard requirements, such as construction hours limited to Monday through Saturday, 7 AM to 7 PM, will keep noise to less than significant levels. BIO-1 also contains provisions for noise reduction.

#### **Response 14-29**

The commenter questions the estimates used in the Trip Generation Analysis. The commenter questions these estimates but does not put forth any new or conflicting evidence that would warrant the County changing its conclusions, and therefore the comment is not substantial evidence. See Response 14-1 for the appropriate legal standard for "substantial evidence." As contemplated by CEQA, an IS is prepared early in the design phase of a

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project, and therefore some project components and estimates may undergo further refining throughout the permitting process. Guidelines §15063(c)(4).

The traffic study that was prepared for the Project is thorough and adequate because the estimates of vehicles and truck traffic needed during construction and operations are consistent with other similar projects of this size and type. There will be variations in the traffic estimates and vehicle types over time. As the Project proceeds, the Applicant will be meeting with the County Road Department to ensure that adequate provisions are in place for additional traffic during construction. Additionally, this is a relatively small project and the amount of construction traffic will be minimal and of short duration (6 months). Traffic during operations will be practically nonexistent.

**Response 14-30**

Thank you for your comments. They will become part of the record and will be considered by the County in making its decision on the Project.

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Sensible Solar Action Group

Recipient: John Oquendo

Letter: Greetings,

Stop NextEra's Joshua Tree Solar Farm at the Hi Desert Airport site

As residents and visitors to the community of Joshua Tree, we are strongly opposed to NextEra's industrial solar development on approx. 115 acres at the Hi-Desert (Roy Williams) Airport site. Located in close proximity to the Joshua Tree National Park, these projects are highly visible, will NOT create lasting local jobs and WILL have a negative impact on:

15-1

Water Resources

Wildlife (this area is a wildlife corridor connecting the National Park with the 29 Palms Marine Base and on to Mojave Natl. Preserve)

Air Quality

The View Shed

Native Soils

Property Values

Tourism and the Local Economy

We cannot accept that the necessity for renewable energy must be at the sacrifice of our beautiful desert and its surrounding communities! We support distributed rooftop solar in the built environment as the most environmentally, culturally and economically responsible alternative that will replace the need for these destructive projects that endanger the environment and the well-being of our local community.

15-2

APNs: 060723119 and 060736406  
 Applicant: Joshua Tree Solar Farm, LLC  
 Project #: P201400482/CUP  
 March 2016

## Comments

Name	Location	Date	Comment	
Teresa Sitz	Wonder Valley, CA	2016-02-04	This development does not belong here.	15-3
Gloria Putnam	Valyermo, CA	2016-02-04	We don't need to destroy desert habitat to benefit from solar. Solar belongs on the roofs of existing buildings.	15-4
Susan Burnett	Pioneertown, CA	2016-02-04	The area slated for this development is highly populated and a corridor for wildlife between the JTNP and the Mojave Preserve.	15-5
Mucio Martinez	Bakersfield, CA	2016-02-04	I don't feel that marring the beauty of the desert is worth a few kW of power. there are plenty of ways that these farms could be built on existing buildings inside of urban areas for much less and have direct connection to the electrical grid. Stop closing off our open spaces!	15-6
morris laslo	yucca valley, CA	2016-02-04	I believe that rooftop solar is necessary for many reasons as I believe that ground based solar farms covering this beautiful desert is destructive on many levels.	15-7
tom johnson	queen creek, AZ	2016-02-04	As a high desert inhabitant and a daily commuter along Highway 62. I wish not to see the aesthetic appeal of this beautiful part of the desert ruined by solar farms. The desert is very large. Surely there is a more suitable location.	15-8
Mindy Kaufman	Joshua Tree, CA	2016-02-04	This solar project is not appropriate in this Gateway Community. It is an eyesore and sits within an existing community and close to the highway. An awful welcome for this tourist reliant community and gateway to beautiful Joshua tree National Park	15-9
spencer hunt	Yucca Valley, CA	2016-02-04	There is a ton of available land for solar that will not industrialize land visible from a national park and in the middle of a thriving community. In fact, the growing community will likely have housing values and growth potential negatively impacted.	15-10
Eva Soltes	Joshua Tree, CA	2016-02-04	This project does nothing but take away from the local and regional community: the potential for tourism, the property values, air quality and views. Why is the County even considering this option? What does the County stand to gain? As far as I understand they would be exempt from paying property taxes. This is a foolish enterprise that should be stopped.	15-11
Laraine Turk	Joshua Tree, CA	2016-02-04	I don't want my community industrialized with this kind of project. We had one project slip through, to the detriment of our landscape and residential comfort. Rooftop solar, parking lot solar panel structures, and hopefully the development of a community choice aggregation plan describe the way we want to go forward in support of renewable energy. Joshua Tree is the wrong place for industrialized solar for company profit at the expense of a very vibrant and conservation-minded community.	15-12
Joanne Watts	Joshua Tree, CA	2016-02-04	It is foolish and short sighted. Solar in Joshua Tree should be roof-top!	15-13
Ken Sitz	Los Angeles, CA	2016-02-04	Utility scale solar facilities do not belong in rural residential communities and will negatively impact the immediate Sunfair neighborhood, it's residents and visitors to the entire Joshua Tree area. This location is a small airport that deserves historical preservation as part of the region's homesteading history.	15-14
Deborah Hopkins	Tujunga, CA	2016-02-04	I'm totally against this in my community	15-15
Diane Owens	Covina, CA	2016-02-04	I'm apposed to the damaging effects this would cause to the desert ecosystem , especially when the same solar input can be achieved on already existing buildings.	15-16
Gregory Bevington	Los Angeles, CA	2016-02-04	Find another site!	15-17

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Annelies Kuiper	Joshua Tree, CA	2016-02-04	I pass the airport everyday on my way to school. It's a beautiful little place, full of history and stories. I remember watching planes landing, desperately trying not to fly too low over Sunfair road and hit any passing traffic. Please don't do this solar farm here. It is a terrible place. What happened to solar panels installed on already existing structures or rooftops. We cannot keep destroying land and wildlife habitat. NO SOLAR FARM ON SUNFAIR ROAD, JOSHUA TREE.	15-18
George Kopp	Joshua Tree, CA	2016-02-04	The developer gets the profits, the power, and the tax breaks. The community gets the negative impacts. No jobs, no revenue. Utility-scale solar is a boondoggle.	15-19
Kevin Wong	Joshua Tree, CA	2016-02-04	this is unnecessary! solar belongs on roof tops. Please, no more industrial solar farms that use way too much water to keep the panels clean.	15-20
Germaine Cook	Yucca Valley, CA	2016-02-05	Solar Farms are not the way to go. Solar Rooftops are.	15-21
Robert Jennings	La Quinta, CA	2016-02-05	Solar 'farms' are already an outdated method for converting the sun's energy to electricity and undeniably scar the desert landscape. Rooftop solar, coupled with urban & rural community-based energy groups is a better solution.	15-22
William Dabbs	Fullerton, CA	2016-02-05	Solar belongs on rooftops near the site of use not dumped on us in the desert.	15-23
Kevin Emmerich	Beatty, NV	2016-02-05	Nextera is an large, underhanded company. They don't care about your town, view, wildlife or public health. Big solar will trash your community and you have plenty of rooftops as a sane alternative.	15-24
Pina Kamolnick	Joshua Tree, CA	2016-02-05	I want to protect the desert from the negative impact of this project.	15-25
eva stokes	Joshua Tree, CA	2016-02-05	Stop destroying the desert and charging people for what costs nothing.	15-26
marsha straubing	Venice, CA	2016-02-05	I own property in joshua tree and plan to move there permanently in one year.	15-27
Sarah Taylor	Joshua Tree, CA	2016-02-05	Im signing because this project is going to have a negative impact on our beatiful desert, natural resources, and property values. This is too close to the park and is a corridor for wildlife. I am STRONGLY opposed to this and i vote!	15-28
will layfield	Windsor, CA	2016-02-05	I live half a mile away and I am a photographer....Its simply ugly....and the has a lot of wild animals which will be disrupted.	15-29
J.E. Tucker	Joshua Tree, CA	2016-02-05	This a terrible site for a solar farm - next to homes, next to a cement plant spewing dust and needing precious water in the desert. This company is trying to bully the citizens into giving up water so they can line the businesses pockets.	15-30
Sydney Siegmann	Joshua Tree, CA	2016-02-05	I've lived in the area and understand how fragile the ecosystem is - it's not black and white! The beauty is in the details and this size development is culturally, environmentally, and economically destructive!	15-31
Tom O'Key	Joshua Tree, CA	2016-02-05	I live in line of sight of Roy Williams Airport. (2.75 miles away) - This solar farm project goes against the will and limits of acceptability for me and all of my neighbors and must be rejected, please.	15-32
Spider Fawke	Joshua Tree, CA	2016-02-05	We don't need this project, it's next to a cement plant for a start. Re-use Roy Williams, turn it into a skate/graffiti /bmx park, something for the local kids to do, and employ vets to monitor it.	15-33
Kristin Stevens	Ithaca, NY	2016-02-05	Come visit and see how this feels, how do this looks! The Great Basin discovered for its Southern Exposure IS NOT YOURS!!!!	15-34
Laurie Kaye	Los Angeles, CA	2016-02-05	I'm signing because I've been a part time resident of Joshua Tree for 17 years, soon to be full time. I do not feel that an industrial site of any kind is appropriate for acreage so close to our national treasure, the Joshua Tree National Park.	15-35
Richard Hutchins	Santa Ana, CA	2016-02-05	Uses too much water. Too close to JTNP.	15-36

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Monica Mahoney	Rancho Cucamonga, CA	2016-02-05	Solar belongs on existing residential, institutional, and business roof tops and parking structures, not on the land. We have the technology and ingenuity as a society to set a global standard for smart renewable energy development without compromising the integrity of our community and environment.	15-37
aviram soltes	los angele, CA	2016-02-05	Solar arrays are blinding and an eye sore. I support the people of Joshua tree and the habitat.	15-38
Kathy Leonard	Randolph, VT	2016-02-05	This project will negatively affect: Water Resources Wildlife (this area is a wildlife corridor connecting the National Park with the 29Palms Marine Base and on to Mojave Natl. Preserve) Air Quality The View Shed Native Soils Property Values Tourism and the Local Economy	15-39
Karen Tracy	Joshua Tree, CA	2016-02-05	Solar utilities in residential neighborhoods are not appropriate. Disturbed desert is available with transmission capability out beyond our yards and homes.	15-40
Diane Best	Joshua Tree, CA	2016-02-05	this is a bad industrial installation in the middle of our beautiful Joshua Tree town, and too close to JT National Park....negative impact on local tourism, which our town counts on to survive.	15-41
Patti Glover	Joshua Tree, CA	2016-02-05	Industrial Solar Farms may appear to be clean, safe, unicorns and rainbows..but the destruction, the depletion of our water table...PEOPLE!!! WE ARE THE DESERT!!! This is a high water usage industry. I would rather sit in the dark before I would die of thirst! This industry is unappealing to our visitors from around the world. We, in Joshua Tree will get all of the damage and none of the benefits. If someone shoved this industry in your backyard for you to have to deal with, you wouldn't like it. Put yourselves in our place for one minute. Thanks.	15-42
carol gerratana	Joshua Tree, CA	2016-02-05	Solar farms are a blight and kill our beloved desert critters.	15-43
Deena Stein	Los Angeles, CA	2016-02-05	Not so close to Joshua Tree Village!	15-44
Randy Widmer	Rosamond, CA	2016-02-05	The Solar Companies are destroying the Joshua trees & desert wildlife in the Antelope Valley, they must be stopped or their won't be any desert left.	15-45
Darlene Lester	Joshua Tree, CA	2016-02-05	I heartily agree with the stated objections to this project!	15-46
Samantha Schwenck	Yucca Valley, CA	2016-02-05	Of all the places this could go, it doesn't belong here. I support renewable energy, just not at the cost of my local area and the beauty we are surrounded by.	15-47
Margaret reveles	Joshua Tree, CA	2016-02-05	We need to keep Joshua Tree pristine!!	15-48
Martha Mackey	Joshua Tree, CA	2016-02-05	Affects view sheds. Tourists don't come to look at another solar field. Uses water, to clean panels. Disrupts animal habitats and wildlife corridors.	15-49
Howard Knowlton	Joshua Tree, CA	2016-02-05	I am signing this because rooftop solar in cities is more efficient. Rather than tearing up the desert for profit for the few let us preserve the species diversity.	15-50
Glenn Suekiel	Palm Springs, CA	2016-02-05	I am aware of no long term economic benefit to the residents and property owners of Joshua Tree. I am aware that large infrastructure projects will appropriate more resources of (the public and environmental commons) to enrich the financial goals of the players involved without regard to the wishes of the community. I would characterize this project as a criminal overreach.	15-51

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Mark Reback	Los Angeles, CA	2016-02-05	We have two houses in nearby Landers and strongly oppose any solar farms in or around Joshua Tree. Put them out where no one lives and where there are no parks!	15-52
Carrie Dagher	Joshua Tree, CA	2016-02-05	Rooftop solar is the only responsible way to go! The desert is fragile and crucial!	15-53
Evelyn Hanna	Morongo Valley, CA	2016-02-05	There are plenty of uninhabited places to put this. Not here	15-54
John Crook	Marina Del Rey, CA	2016-02-05	I want to keep the Desert Wild and Free..no more wind power and blights on landscape like Palm Springs	15-55
Martin Cox	Los Angeles, CA	2016-02-05	Build solar nearer its use, like in cities with roof tops.	15-56
Peggy Lee Kennedy	Venice, CA	2016-02-05	I have seen confused migrating birds nearby at another one of these ill conceived projects. They kill migrating birds because it looks like a lake from the sky. They destroy habitat and create air quality problems. The developers lie about the all the drinking water they use. They have no value to the local communities. Near a national park, which should be treated as a national treasure, these developments are an awful eye sore. There is a movement to preserve wildlife linkage corridors, but big chain link fences surround the solar farms and the land is wasted for a unnecessary, water intensive bother to everyone. Except the company that will profit at the expense of all others.	15-57
Thomas C Helm	San Francisco, CA	2016-02-05	We need to preserve JT not develop it.	15-58
Shirley James	Yucca Valley, CA	2016-02-05	These solar farms negatively affect our wildlife our native plants and basically clear grades desert land. Roof top solar is much more efficient and less of an impact on our desert	15-59
Ronald Resnick	Twentynine Palms, CA	2016-02-05	This project is the wrong choice for the people of Joshua Tree and for the high Desert ecosystem.	15-60
Lisa Morgan	La Quinta, CA	2016-02-05	I want to preserve this precious community. Take it somewhere else far away from our National treasure.	15-61
Nikki Woosley	Brea, CA	2016-02-05	I believe in the preservation of the mojave desert.	15-62
Jenn Isbell	Joshua Tree, CA	2016-02-05	I don't believe we need another mega solar field so close to the national park. The beauty and preservation of the land, the wildlife, and the plant life should be the main objective of any nat'l park gateway community. Please allow us to protect our fragile environment and consider another location for your solar field.	15-63
Peter Moore	Berkeley, CA	2016-02-05	We must protect the High Desert	15-64
Maria DeLaRocha	Lancaster, CA	2016-02-05	I care about our Desert ...	15-65
Julie Glantz	San Francisco, CA	2016-02-05	I have seen what these kinds of empty promises have done to our beautiful desert. It doesn't benefit the community, it doesn't benefit the environment. I have owned property in 29 Palms for almost 20 years. The city has always adhered to a "smart growth" policy. This is anything but that.	15-66
Analise LaRue	Wrightwood, CA	2016-02-05	Solar panels belong on rooftops!	15-67
M Kaputnik	Palmdale, CA	2016-02-05	Subsidized trashing of our deserts needs to stop! Roof top solar is the answer.	15-68
Valeree Woodard	Joshua Tree, CA	2016-02-05	I can see this site from my house which is uphill and I believe it is less than 2 miles from the National Park. According to county ordinance solar farms can not be that close to the park. Our open spaces and beautiful view shed should not be traded for corporate greed!	15-69
Brooke Wickham	Olympia, WA	2016-02-05	There are better ways to enact solar energy than by putting huge solar farms in the desert. Try existing rooftops or add solar rooftops to parking lots.	15-70

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Katie Sandberg	Yucca Valley, CA	2016-02-05	The evidence is already very clear that building large-scale solar developments far from the cities they will power is not truly cost-effective for electricity customers, although it is in the short term for investors that get to tap public funds. Rooftop solar is best, but if you need the money and must allow large-scale development, please look to brown fields within the county lines and along the major freeways with transmission lines rather than degrading Joshua Tree's / the Morongo Basin's one-of-a-kind, healthy, but fragile desert ecosystem. Please look at the increasing visitor traffic to Joshua Tree National Park to see that it is time for the county to respect both the biodiversity and the tourism revenue that the Morongo Basin provides as assets to the county (see the LA Times article, "National park visits are climbing -- especially (wait for it) at Joshua Tree"). Thank you!	15-71
Mary Antico	Montreal, Canada	2016-02-05	Distributed, community-owned energy is the best option	15-72
Angel Chen	West Hollywood, CA	2016-02-05	I recently bought a house in Joshua Tree, a geodesic dome, my dome was used by planes landing at the airport as a visual marker. I moved out to rural JT from urban LA because of the magnificent pristine desert and endless uninterrupted vistas. This solar project turns a once beautiful architectural landmark tourist attraction into an eyesore which I will have to drive by daily changing this charming idyllic scene into an industrial plant which harms birds, snakes, and emits a frequency which may cause other problems. This is a serious threat to residents, wildlife, and the community that cares to protect the natural beauty of Joshua tree.	15-73
Chuck DeVitis	Desert Hot Springs, CA	2016-02-05	Johnson Valley & 29 Palms would be a better location ! Take a good @ the Entrance to Palm Springs & Desert Hot Springs ! Marred by Ugly Wind Mills & with NO benefit to local residents !	15-74
Cynthia Fagan	Yucca Valley, CA	2016-02-05	to protect our fragile desert	15-75
Linda Mackay	Lebec, CA	2016-02-05	Rooftop solar has to be the solution.	15-76
Dana Desselle	San Rafael, CA	2016-02-05	Preserve our beautiful desert!	15-77
drayton stephenson	landers, CA	2016-02-05	Isupport distributed rooftop solar in the built environment as the most environmentally, culturally and economically responsible alternative that will replace the need for these destructive projects that endanger the environment and the well-being of our local community.	15-78
Jacqueline Edwards	Schnecksville, PA	2016-02-05	The desert is fragile and beautiful and needs to be preserved.	15-79
Diana O'Donnell	Magalia, CA	2016-02-05	I have been visiting Joshua Tree since I was a child and it is the most beautiful place. Solar should be roof top, not clear cut.	15-80
Donna Russell	Yucca Valley, CA	2016-02-05	Solar fields use massive amounts of water and deplete the local water supply.	15-81
Angelis Jara	Joshua Tree, CA	2016-02-05	We're losing our land little by little	15-82
Casey Kiernan	Joshua Tree, CA	2016-02-05	This area only has income from the homes and rooms that are rented out to people who visit Joshua Tree for it's serenity. This would destroy what little income we can make. It is also across the street from a major art exhibit and sculpture garden.	15-83
Leah Cerise	Buena Vista, CO	2016-02-05	Loss of habitat and open space.	15-84
Donald Koch	Yucca Valley, CA	2016-02-05	There is so much desert to work with, but not right in town. Please find a more suitable location.	15-85
Jessica Quertermous	Barstow, CA	2016-02-05	Move it somewhere away from the towns most important income: tourists! Take that away and the town doesn't have a chance. Put it on top of buildings, near yucca valley, or maybe even morongo!	15-86

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Kyri Freeman	Barstow, CA	2016-02-05	This is in my area of the state and I oppose it. It will destroy habitat and scenic values, will not create significant numbers of jobs, and will waste our already scarce water.	15-87
Gina Orban	Yucca Valley, CA	2016-02-05	Don't change the beauty of the high desert vista.	15-88
paul ashby	Walnut Creek, CA	2016-02-05	CA PUC, utility monopolies and big solar need to see the environmental folly of paving the desert with solar panels and bird-broiling thermal arrays. Citizens are mobilizing against these monstrosities, and the companies and entities that try to create them (while attempting to de-incentivize rooftop solar) are going to find themselves on the wrong side of history.	15-89
Clive wright	Joshua tree, CA	2016-02-05	Too much water we need rooftop solar too much Eco damage	15-90
Caprice Carter	Alameda, CA	2016-02-05	Big solar should be in already industrialized areas like oil fields or roof tops. Not in pristine areas like Joshua Tree!	15-91
Tony G	Irvine, CA	2016-02-05	I grew up in Joshua Tree with an excellent view of the dry lake bed from the Friendly Hills area. It would be a shame to look out on the same valley to be met with reflections, noise, and destruction of the desert I have known all my life. There are much better suited locations East of the Village of Joshua Tree, and in the Coachella Valley.	15-92
Anne Telford	La Jolla, CA	2016-02-05	Please protect this important desert site.	15-93
Catherine Svehla	joshua Tree, CA	2016-02-05	We have to preserve what is truly valuable in the desert, longterm, for everyone.	15-94
Renee Hebert	Carson city, NV	2016-02-05	...because decimating an environment in the name of renewal energy is hypocrisy while supporting greedy investors...	15-95
James David Mancini	Palm Springs, CA	2016-02-05	Some things are best left alone...	15-96
Susan Smeltzer	San Pedro, CA	2016-02-05	Don't ruin the natural landscape of Joshua Tree. Put these panels on top of parking garages. They're already ugly.	15-97
Jennifer Ganther	Joshua Tree, CA	2016-02-05	I do not want another solar field in my direct community.	15-98
Carolyn Helser	San Francisco, CA	2016-02-05	The area is too beautiful to be littered by a solar farm. Chose somewhere less sensitive for this project.	15-99
bernard leibov	new york, NY	2016-02-05	The se solar fields are a blight on our area and squander precious water resources.	15-100
Hannah Campbell	Landers, CA	2016-02-06	We own property in landers.	15-101
Jennifer Bolande	Joshua Tree, CA	2016-02-06	I think the negative impacts of this project far outweigh the positive and will wreak lasting damage on the native ecology and community.	15-102
andrea jungert	yucca valley, CA	2016-02-06	Great idea ..... But WRONG place! A horror for the majestic landscape.	15-103
gareth doehring	tahoe city, CA	2016-02-06	I viste there every year and I can't even want to see a solar farm there.	15-104
Megan Tuttle	La Crescenta, CA	2016-02-06	The desert has to be protected from wanton industrial exploitation. Keep wild places wild!	15-105
stephen lester	Joshua Tree, CA	2016-02-06	Solar belongs on rooftops (like mine) and over parking lots, etc.	15-106
Sally Jayes	Joshua Tree, CA	2016-02-06	This area, Joshua Tree in particular, would be scared forever resulting in a poor and humiliating desert experience for hundreds of thousands visitors and permanent residents. We are a small unincorporated area trying to defend itself against a huge money hungry corporation! We love our views and our landscape and so do the native animal residents. Please, NO COMMERCIAL SOLAR here!!	15-107
Michael Miller	Glendale, CA	2016-02-06	I want to protect Joshua Trees beauty and serenity.	15-108

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Lesley Moore	Winton, CA	2016-02-06	I'm signing because I am opposed to the mass production of energy at remote sites that then has to delivered via transmission lines. The irresponsible, irreversible destruction of our deserts for this purpose is a long lasting tragedy in the making. Did policy makers learn nothing from the Dust Bowl? Bad things happen when we destroy wide swathes of natural ecosystems. Put the solar panels on rooftops and over parking lots. Leave the desert alone! Humans may not find it very habitable, but there are many other creatures who depend on it. Stop the madness!	15-109
Jayne Martin	Palm Springs, CA	2016-02-06	Leave the beauty of Joshua Tree alone.	15-110
Mark Cransron	Joshua Tree, CA	2016-02-06	I'm a reident and business owner who makes a living off of tourism in Joshua Tree. Joshua Tree has become a portal to the JT National Park. With over 1million visitors per year that come to this area to spend money and spend time in the park, not one would agree that seeing solar panels covering the land they came to see would bring them back. There are more secluded places for projects like this, not in the middle of a developing tourist gateway community. Do not allow this ridiculous project. Pick another spot that will not impact another industry and think about the money we all pay in taxes that could vanish is you continue these projects.	15-111
robert mack	los angeles, CA	2016-02-06	I'm for solar energy development, but not in this manner! thank you.	15-112
Melissa Radford	Atwater, CA	2016-02-06	Not near national park they are unsightly I've seen them	15-113
T.M. Guenther	Newport Beach, CA	2016-02-06	Having grown up in the Temecula Valley, I've seen the expansion of development which changed the landscape. We certainly don't need to further the footprint in the midst of nature's last outpost. Nothing can justify obscuring the beauty of this valley for the sake of profit and 'progress'. Its just wrong.	15-114
Steve Bardwell	Pioneertown, CA	2016-02-06	Do it on the roof!	15-115
Joshua Hilliker	Newberg, OR	2016-02-06	Although solar power is a great alternative for power resources. The Joshua Tree national park should not be a site for this. There is plenty of other areas to install a project like this.	15-116
Kathleen Rossi	Calabasas, CA	2016-02-06	I Love Nature In All Her Beauty!	15-117
Joy Armstrong	Ridgway, CO	2016-02-06	I love climbing in Joshua Tree and there are negative impacts related to this site choice. I have solar at my house and you should, too.	15-118
Jenah Rich	Yucca Valley, CA	2016-02-06	I feel this is wrong for the surrounding environment and community.	15-119
Bobby Furst	Joshua Tree, CA	2016-02-06	SAVE OUR DESERT HABITAT FROM DESTRUCTION !	15-120
Shirley Furst	Bend, OR	2016-02-06	It makes more sense to me to put solar on every roof top rather than use open land for them.	15-121
David Harris	Yucca Valley, CA	2016-02-07	I don't think we need it here.	15-122
Doug Smith	Olympia, WA	2016-02-07	Small solar not big solar	15-123
mikey allan reed	Desert Hot Springs, CA	2016-02-07	Solar is supposed to be good for the environment , not destroy it . This is the worst of placement choices.	15-124
Ruby Nicholes	Twentynine Palms, CA	2016-02-07	We must protect our desert from corperate greed!	15-125
DANI Skala	Wien, Austria	2016-02-07	10781	15-126
susan abbott	joshua tree, CA	2016-02-07	Joshua Tree is the gateway community to Joshua Tree National Park. The desert echo system hangs in a fragile balance. It and its environs need to be left alone and free of this kind of disruptive non-sustainable type of development in perpetuity.	15-127

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JACQUELINE ELLIS	Okehampton, United Kingdom	2016-02-07	I am signing because my brother lives there and we visit when we can - it will be tragic if this beautiful place is marred and spoilt by this proposed solar farm. Hands off the water too.....	15-128
Ruth Andrews	Nettleham, United Kingdom	2016-02-07	I'm tired of seeing beautiful places destroyed in favour of solar development. Why can't all the rivers energy be harnessed instead ???	15-129
jessica knox	carrollton, GA	2016-02-07	I'm signing because my family is from Joshua Tree, and we should preserve the desert and its beauty.	15-130
David Gardiner	Lancaster, CA	2016-02-07	What they're doing is wrong.	15-131
Jennifer Jungwirth	Yucca Valley, CA	2016-02-07	As a full time resident of Joshue Tree, I do not want solar farms scattered throughout this beautiful desert.	15-132
Joseph Fairbanks	Joshua Tree, CA	2016-02-07	I'm a 10+ professional Solar PV Salesperson and I cannot support any project that does not consider social or environmental responsibility and denies the self determination of the community, when we clearly do not want this project in our community.	15-133
Patrick Kearns	Landers, CA	2016-02-07	I'm against having a solar farm in Joshua Tree, where I own a home and spend 1/4 of my year.	15-134
Gregg Pasterick	Keystone, SD	2016-02-07	...leave the damn desert alone...	15-135
Parker Jones	Yucca Valley, CA	2016-02-07	Kills a lot of birds it is crazy ,it's a waste of space.Keep the desert wild and free !Maybe people will start to appreciate off-roaders more because of this too ,as we do not go off trail and ruin the desert and act like the monsters people think they ALL are. Wouldn't you rather have someone exploring nature and making childhood memories rather than someone fencing off a huge field and profiting from it ?	15-136
Kelly Crawford	Twentynine Palms, CA	2016-02-07	I do not believe that this project will benefit the community in which it will be built.	15-137
Michael Anderson	La Verne, CA	2016-02-07	Negative impact on ecosystem and native species	15-138
Kari Pope	Canoga Park, CA	2016-02-07	I'm all for solar energy, just not at the expense of our planet. Please develop on a site where the environmental impact will be lower!	15-139
brittaney harvey	Yucca Valley, CA	2016-02-07	This desert needs to stop being botherd. We don't use that much electricity. But them up on city roof tops not here. We have many at schools and on houses around.	15-140
Kristy Cardamone	Joshua Tree, CA	2016-02-07	No more solar farms killing our wildlife!	15-141
heather gamboa	yucca valley, CA	2016-02-07	Joshua tree is as we have left	15-142
Valerie Buck	Simi Valley, CA	2016-02-07	Joshua tree does not need this eyesore	15-143
Anonymous Not telling	Yucca Valley, CA	2016-02-07	Because the energy gather won't even go to the people who have, to live around them and that is pointless.	15-144
alyssium Moore	Joshua Tree, CA	2016-02-07	I live in Joshua Tree and it would take so much of what little natural and beautiful environment we have left	15-145
Laura Hauther	los angeles, CA	2016-02-07	Large solar farms are a destructive and inefficient way to use solar energy.	15-146
Mary Riggs	Joshua Tree, CA	2016-02-07	Stop solar profiteering at the expense of our desert. Go rooftop!	15-147
Grant Kee	Coeur d'Alene, ID	2016-02-07	Im signing to stop these solar fields from taking our beautiful desert	15-148
carol gerratana	Joshua Tree, CA	2016-02-07	Our desert is not a dead ugly space to be appropriated for harmful land use. This type of solar is an eyesore, kills our birds and critters, and uses our precious water. Put solar where it belongs, on rooftops, not for the greedy but for the environment.	15-149
Virgil Gosser	Morongo Valley, CA	2016-02-07	They should do it out by the airport on 62 past 29 palms	15-150

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Name	Location	Date	Comment	
Deborah Kulka-macellan	Aquebogue, NY	2016-02-08	I have been to this national treasure and do not believe this project needs to be located anywhere near the parklands. The impact would cause irreversible damage!	15-151
Roberta Frederick	JOSHUA TREE, CA	2016-02-08	I'm signing because this is my HOME and I don't want to see this area destroyed.	15-152
stacy doolittle	joshua tree, CA	2016-02-08	We must be leaders in the nation in rooftop solar!!	15-153
Julia Martinez	Joshua Tree, CA	2016-02-08	I'm signing this because of all the environmental issues this will bring out to the desert. Imagine all the habitats you'll destroy, the peace and serenity you'll disturb, and the beautiful land you'll stomp all over.	15-154
Victoria Hess	Corsham, United Kingdom	2016-02-08	This is one of the most amazing places I have ever seen.	15-155
David Fick	Joshua Tree, CA	2016-02-08	It's a five old renegade PPA that only makes NextEra money destroying Joshua Tree's Airport. The PPA is three times more expensive than current Solar Energy contracts. This is just NextEra taking opportunity of distant County decision-makers. It's wrong.	15-156
Meredith Kuchon	Austin, United States Minor Outlying Islands	2016-02-08	This is not smart sustainability. This is once again lining the pockets of those who do not benefit our local community. STOP THE MADNESS.	15-157
Blake Simpson	JOSHUA TREE, CA	2016-02-08	Protect & maintain our fragile ecosystem from big solar. Solar belongs on rooftops & over parking lots, not our beautiful desert.	15-158
robert robb	Joshua Tree, CA	2016-02-08	I love the desert and tourists love it too - and our income depends on tourism	15-159
Christine Lawton	Vancouver, WA	2016-02-08	Valley Fever is a real possibility, caused by stirring up the dust.	15-160
Peter Spurr	Joshua Tree, CA	2016-02-08	These projects are a blight to our area and damaging to tourism and property values. Please reconsider the location.	15-161
Diane Johnson Hydoski	New York, NY	2016-02-08	There are plenty of places for solar to go, other than next to a national park for heaven's sake!	15-162
Margaret Griffis	Miami Beach, FL	2016-02-08	NextEra prides itself on renewable sources, but if these sources harm the environment, what's the point?	15-163
Shawn Smith	Yucca Valley, CA	2016-02-08	I'm signing because I love this desert and I don't want to see anything ruin it	15-164
Cody Hanford	Joshua Tree, CA	2016-02-08	These types of solar projects are detrimental to the ecological fabric and community integrity that we all have a responsibility to maintain. Enough is enough. This project is not appropriate and not welcomed in this community.	15-165
Thomas Fjallstam	Joshua Tree, CA	2016-02-08	Solar is great when it's done right and should be located in the right place. The energy generated from this installation will be sent to customers far away, resulting in loss of energy through transmission. Water is needed to keep dust down during grading and to wash the panels regularly- this project is sited in the desert where there is limited water supply and being built during the most extreme drought in over 50 years. Grading the site creates dust and destroys native vegetation which would normally retain soil naturally. No more vegetation equals more dust. Site is in the scenic view-shed of Joshua Tree National Park where over two million people visited in 2015 to enjoy the unspoiled nature. So many more reason why this project should not happen	15-166
David Scott	Los Angeles, CA	2016-02-08	I have loved Joshua tree my whole life since first I saw it back in the '80's. DON'T let Industry ruin !!	15-167

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Name	Location	Date	Comment	
Deb O'Key	Joshua Tree, CA	2016-02-08	The health issues are immense. Increase of dust and health issue problems. Many people, such as myself, moved to and live in my area for their breathing health. Increased dust is a problem with those adults and children with asthma, COPD Emphazema and other related conditions. Not to mention disturbing the surface layers of dirt with mass grading, releases a fungus which is the cause of the increasing numbers of the INCURABLE Valley Fever cases in our area.	15-168
Mary Helen Tuttle	Joshua Tree, CA	2016-02-08	I am against industrial solar developments near neighborhoods, it should be far, far away.	15-169
Frank Schneider	Yucca Valley, CA	2016-02-09	The desert has a lot of sacred grounds. Field type solar it's killing our animals and birds. Field solar is destroying our vistas.	15-170
Matt Rucker	Joshua Tree, CA	2016-02-09	Dont ruining my home town's fantastic untouched land. The vast nature is what makes Joshua Tree such an amazing and interesting place to be.	15-171
Esther Shaw	Yucca Valley, CA	2016-02-09	Put solar on roof tops, not undisturbed land.	15-172
David McMullen	Berkeley, CA	2016-02-09	It's incredulous that habitat is about to be destroyed for solar power when there are square miles of open rooftops all over San Bernardino County. Only after every available square foot in the built environment is utilized for solar power should we even begin the discussion of whether or not to sacrifice any more habitat for human consumption.	15-173
Sally Jayes	Joshua Tree, CA	2016-02-09	Please do NOT add these so close in town. There are many other choices that could be taken away from almost downtown Joshua Tree. We have worked so hard to keep this place as a natural habitat. Please help keep it this way.	15-174
Chia Hamilton	Oakland, CA	2016-02-09	The land should stay open and non-commercial	15-175
Brenda Littleton	Yucca Valley, CA	2016-02-09	I do not want to see another solar farm in the middle of my community. This is another corporation wanting to make money at the expense of community tax payers, eco-tourism, residents who live in Joshua Tree because of the vast beauty and the psychology of the landscape. There is absolutely no benefit that this solar farms provides to the community. Take it elsewhere.	15-176
Suzanne Jett	Dallas, TX	2016-02-09	I am a native Californian and grew up going to Joshua Tree and I love it and don't want to see it ruined by NextEra!	15-177
Michael Kennedy	Joshua Tree, CA	2016-02-09	those solar fields need to be controlled and should not be in residential neighbor hoods and not within view of JT National park, a treasure in our counry and county.	15-178
kenneth Jayes	Joshua Tree, CA	2016-02-09	I am opposed to commercial solar projects in the Morongo Basin .	15-179
chris campos	Yucca Valley, CA	2016-02-09	i believe the beautiful landscape that so many love and enjoy will slowly disappear. Mostly because the desert has a very delicate ecosystem.	15-180
Alison Monroe	Oakland, CA	2016-02-09	Desert is alive, not empty	15-181
Patricia Leary	Joshua Tree, CA	2016-02-09	I believe in a future of distributive (rooftop) solar as does most everyone else in Joshua Tree~ not big energy mega projects!	15-182
Alexandra Jay	Loleta, CA	2016-02-09	the nature of my hometown shouldn't be demolished for this. It is the home to hundreds maybe thousands of animals that come through and will have a horrible impact.	15-183
Jennifer McManus	Las Vegas, NV	2016-02-09	They are doing the same here Nippton and Kelso CA Mojave Desert this needs to be stopped	15-184
Jacqui Ehrler	New York, NY	2016-02-09	Please respect our planet. I &lt;3 JT	15-185
Katie Reutter	Joshua Tree, CA	2016-02-09	I'm signing because solar panels belong on rooftops, not fragile desert land	15-186
John Davidson	San Diego, CA	2016-02-09	Nature is beautiful &lt;3	15-187

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Kelly Doherty	Fort Irwin, CA	2016-02-09	There are other places where solar panels could be located instead of near Joshua Tree National Park. There is great sun on Fort Irwin Road off of I-15 that wouldn't be an eye sore to a community and could be beneficial for the military to partake in an energy project.	15-188
kylee koepnick	Cornville, AZ	2016-02-09	The land is sacred we must begin caring for its preservation much more!!	15-189
Dairdre Kennedy	Columbus, OH	2016-02-09	i believe the beauty of this planet is just as important as using renewable energies. How about investing in solar roads? then the beauty of nature wont be destroyed and animals can still pass. All parties win!	15-190
Ted Mabbatt	San Diego, CA	2016-02-09	This solar farm is a bad idea!	15-191
Rian Rochford	Los Angeles, CA	2016-02-09	I love the desert!	15-192
Gloria Montiel	Santa Ana, CA	2016-02-09	The desert is our treasure and protecting it is our responsibility.	15-193
Alexa Walker	Carlsbad, CA	2016-02-09	Joshua tree is my sanctuary!!	15-194
jason venzor	los angeles, CA	2016-02-09	Keep Joshua Tree and the immediate surrounding area the local, natural treasure it is, and develop energy sources elsewhere.	15-195
susan hogervorst	joshua tree, CA	2016-02-09	I signed.. We have a few of these in the area. They are horrible to look at and you can see them from a few miles away, ruining the desert views just outside the JT National Park near my home.	15-196
Ramona Loynd	Riverside, CA	2016-02-09	I'm signing beacuse the desert has a very fragile ecosystem. It is not a wasteland yo be used for profit. It is an area that needs to be preserved for its unique environment for the enjoyment of all American people and the preservation of animal and plant species found nowhere else on Earth.	15-197
Sharon Viedma-Aguilar	West Toluca Lake, CA	2016-02-09	I believe in this cause, and I believe in David Fick.	15-198
kelsey walker	Suisun City, CA	2016-02-09	Let be reasonable now y'all.	15-199
Megan Perry	Imperial Beach, CA	2016-02-09	I love the pristine beauty and small town feel surrounding Joshua Tree.	15-200
bree wallen	joshua tree, CA	2016-02-09	I live in JT and house (roof) soaring would be much better Shen taking away our beautiful desert!!!!!!	15-201
Nikcole Thompson	Edgewood, NM	2016-02-09	There are better places to put solar farms. Plain and simple.	15-202
Michaelene Granberg	Tahoe City, CA	2016-02-09	I love and respect the desert and all that call it home	15-203
wendy boyce	New York, NY	2016-02-09	I don't want interruption to this beautiful land (environment).	15-204
Sheridan De Lay	Castle Rock, CO	2016-02-09	Because I will be moving to Joshua Tree very soon and do not wish to see this happen! ☹	15-205
Athena Wilson	San Diego, CA	2016-02-09	I grew up in Joshua Tree and want it to stay as pristine as possible.	15-206
Monica Brett	Las Vegas, NV	2016-02-09	Rooftop solar is the most efficient, cost effective and resilient way forward. Large solar arrays are not necessary.	15-207
Sarah Renner	Yucca Valley, CA	2016-02-09	I live here	15-208
Bryan Wynwood	Joshua Tree, CA	2016-02-09	Keep JT beautiful!	15-209
melissa bacall	yucca valley, CA	2016-02-09	I	15-210
tonisha ryan	Yucca Valley, CA	2016-02-09	save the desert	15-211
stacy magurn	joshua tree, CA	2016-02-09	I car about wild life	15-212
Rynda Laurel	Los Angeles, CA	2016-02-09	This should not happen.	15-213
Roy Ross	Aascadero, CA	2016-02-09	I'm signing because, I lived in and own properties in this area, since 1977.	15-214
Greg Hall	Anderson, IN	2016-02-09	This area is pristine and wild. A solar farm will destroy the natural beauty and is unnecessary. There has to be a better alternative.	15-215

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Tatiana Alonso	Joshua Tree, United States Minor Outlying Islands	2016-02-09	take only pictures & leave only footprints!	15-216
Kristi Adams	Yucca Valley, CA	2016-02-09	I do not want the color panels. It destroys wild life and a eye sore.	15-217
Judy Kulp	N. Cape May, NJ	2016-02-09	We don't have anything nearing the spectacular beauty here in NJ. You have a duty to our children to keep the natural spaces natural.	15-218
Kathryn McPherson	Los Angeles, CA	2016-02-09	To protect the birds and preserve natural resources	15-219
Stephanie amos	Laguna Beach, CA	2016-02-09	Keep it natural	15-220
Sierra Weiss	Dallas, TX	2016-02-09	Creating and using alternative energy does no good if we destroy our habitats in the process. We must find a way to preserve the ecosystem while implementing sustainable energy design.	15-221
Janet Newcomb	Bermuda Dunes, CA	2016-02-09	The thought of it makes me want to scream.	15-222
Alex Harrison	Los Angeles, CA	2016-02-09	I care about preserving wildlife corridors	15-223
Annette Hanschild	Twentynine Palms, CA	2016-02-09	This will scar the beauty of our land. This is wrong.	15-224
Kim Stringfellow	Joshua Tree, CA	2016-02-09	Solar needs to be on our rooftops!	15-225
Ana Sanchez	Pasadena, CA	2016-02-09	I love Joshua tree	15-226
Joshua Mattson	Joshua Tree, CA	2016-02-09	I live here so I don't have to see that. The desert isn't the city. That's why we're here. No need for big solar to have 115 acres lol. It's almost laughable. There are plenty of unincorporated areas in Nevada and CA on 15/40. This isn't the spot for a project of that magnitude.	15-227
Francisca Reyes-Acosta	La Quinta, CA	2016-02-09	I support conserving local resources, land, and wildlife.	15-228
Sarah Jones	Landers, CA	2016-02-09	I live up here in the Hi-Desert & visit JT & the magnificent park frequently. I solar development would only serve to cheapen the beauty of Joshua Tree & the entire Hi-Desert community!	15-229
James Faulkner	Yucca Valley, CA	2016-02-09	The desert is my home and with that being said I have the purest, deepest love for the beauty it holds. This is an area that people who are not from here travel to in order to find peace, enjoy the raw beauty, and nourish their souls. For years and years Joshua Tree has been a sanctuary of a sort for thousands of people for it's natural, unobstructed beauty. We should not need to destroy the natural beauty this place holds. There are far too many downfalls to this project and we cannot allow big solar to destroy our home.	15-230
Allie Cressy	joshua tree, CA	2016-02-09	I'm signing because I live across the street from the airport and it would be such an injustice to our beautiful desert to add ANOTHER huge solar field and destroy the airport.	15-231
Mark Reback	Los Angeles, CA	2016-02-09	We should be focusing on rooftop solar on existing and future buildings, not giant farms near National Parks and housing developments!	15-232
Mary Innenberg	Yucca Valley, CA	2016-02-09	No to Big Solar! To help save our properties, environment & views!	15-233
Julia Dole	Santa Monica, CA	2016-02-09	This project is a boondoggle with terrible land and local water use impacts. Please max out local capture/ rooftop/ parking lot solar FIRST. Minimize negative impact and maximize local energy delivery. ALSO consider maximizing micro onsite/rooftop wind, for the same reasons, and at possibly lower costs.	15-234
Elizabeth Tartikoff	Valencia, CA	2016-02-09	Build up not out, guys come on..	15-235
Iris Fox	El Paso, TX	2016-02-09	I'd like to keep my home town the way it was growing up.	15-236
Carly Fauls	Joshua Tree, CA	2016-02-09	The desert is home to a wide variety of wild life and needs to be preserved, it is no place to just be taken over for city people.	15-237

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James Foundoulis	Los Angeles, CA	2016-02-09	Joshua Tree has been my favorite outdoor destination since I was a child and I would hate to see a development like this anywhere near it. Keep this gorgeous desert wild.	15-238
Drew Reese	Joshua Tree, CA	2016-02-09	We don't need another Solar Farm and it hurts tourism in Joshua Tree. 2 million people come to the National Park every year. They don't want to see solar farms on the highway.	15-239
Francoise Frigola	Idyllwild, CA	2016-02-09	It is way too destructive to the environment. I do not want to see solar panels when I visit Joshua Tree NM	15-240
Phillip Rosenberg	Joshua Tree, CA	2016-02-09	Industrial Solar in Joshua Tree is a mistake. It is the gateway to the Joshua Tree National Park and a large solar installation here would be antithetical to the mission of our National Park system.	15-241
ryan jost	Cathedral City, CA	2016-02-09	Lets keep j tree beautiful	15-242
Kaitie Marie	San Diego, CA	2016-02-10	Why would you destroy a natural desert habitat when you can just cover parking garages and malls with solar panels? Worst idea ever!	15-243
Vera Topinka	Joshua Tree, CA	2016-02-10	I support rooftop solar, not solar farms that will disrupt our community, endanger wildlife, and adversely affect our tourism industry!	15-244
mary effron	santa monica, CA	2016-02-10	The solar farms create a major impact on the environment. The 'side effects' are caustic. The land is graded and denuded of the natural vegetation that has been growing there for hundreds of years, and replaced with reflective panels that cause the death of many birds and other species. The use of virgin desert land for this purpose is so unnecessary. The scattering of these 'farms' impact not only the land but the people who live close by. Where are the zoning laws? Let's put solar in urban areas. Why not require new commercial buildings and housing to include solar for their use? The folks out in the desert are a small voice and outside money talks. Don't let the developers ruin the desert. There are better alternatives. Thank you.	15-245
Tiffany Bolton	Moreno Valley, CA	2016-02-10	I have grandparents who live there and I like the view to stay the way it is.	15-246
Mary Ellen Hogan	Joshua Tree, CA	2016-02-10	It will destroy the natural environment in Joshua Tree. Solar farms do not belong in these areas. Place solar panels on existing buildings or on shaded car lots like Walmart where there would be less impact to the natural beauty of Joshua Tree.	15-247
Melinda Laben	Bomoseen, VT	2016-02-10	Solar panels are not sustainable energy if we destroy endless tracts of land to use them.	15-248
conor Kilroe	Bristol, United Kingdom	2016-02-10	I live in Joshua Tree and can see the black strip of the latest solar farm from my house. They irreversibly damage this fragile ecosystem and we should have the capacity to provide all the energy we need from rooftop solar.	15-249
Josh Kibbey	Bellevue, WA	2016-02-10	Although I don't live there currently, I grew up in the area and am very protective of the natural beauty of the desert and feel that growth and progress doesn't need to come at the expense of nature and wildlife. We can and should do better.	15-250
Julianne Miller-Boyer	Moreno Valley, CA	2016-02-10	Our desert is not the dumping ground for everything people don't want in their backyards!	15-251
Walter Anderson	Palm Springs, CA	2016-02-10	This industrial solar development enriches the developer at the expense of our community.	15-252
melisa edge	Sequim, WA	2016-02-10	To help preserve our pristine jt desert, our family spent many years in that beautiful area	15-253

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Name	Location	Date	Comment	
Devin Eden	Azusa, CA	2016-02-10	to stop industrial development	15-254
Tim and Gilly Smith	Joshua Tree, CA	2016-02-10	Unightly, and ruining the desert. Large companies think they can come into small towns put in Cell Towers, Solar Farms and Windmills, it is ruining beautiful areas of desert.	15-255
Jennifer Itani	Pittsburgh, PA	2016-02-10	This is not our world to act on before we understand it. Let's be humble and realize we have yet to understand.	15-256
Nelson Day	Joshua Tree, CA	2016-02-10	Big solar has no place near this national park. It will disrupt and destroy natural habitat for native animals. Roof top subsidies should replace subsidies for construction of large and inefficient solar fields.	15-257
Charlotte Manton	Goleta, CA	2016-02-10	We need to protect what little environment is left! Put solar panels in urban areas/not in deserts and natural spaces	15-258
J C	NATIONAL CITY, CA	2016-02-10	JT prides itself on being able to remain free of large corporate greed. Joshua Tree is a place of escape from the city life. Keep it that way.	15-259

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**Letter 15****Michael Cicero/Change.org, Sensible Solar Action Group****February 2016****Response 15-1**

This response addresses several concerns presented by the commenter. The County notes the commenter's opposition to the project. The commenter alleges the project will have a negative impact on water resources, wildlife, air quality, view shed (aesthetics), native soils, property values, and tourism and local economy. Responses to these concerns are included below.

The County notes the commenter's concerns about potential water supply impacts from the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

The commenter alleges that the project would have a negative impact to wildlife and states that the area is a wildlife corridor. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to wildlife.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. Neither the CDFW nor the USFWS mentioned the presence of wildlife corridors or expressed concerns regarding wildlife corridors. The Project's potential biological impacts have been adequately evaluated.

It should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use. The County respects the need to protect the desert that provides high quality habitat for desert plants and animals. However, this site does not have high biological value.

The County also notes the commenter's concerns about potential air quality impacts from the Project. The County contacted the Mojave Air Quality Management District (MDAQMD) and their response and interest in the Project was limited to a request for a Dust Control Plan. The IS/MND discusses that the Project will produce some dust

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during the construction phase, which will be short-term and temporary, especially since the Project site is relatively small (115 acres) and on land that is already disturbed. As with all construction projects that occur within the County, the Project will be subject to the Mojave Desert Air Quality Management District's (MDAQMD) Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically requires the preparation of a dust control plan prior to construction of the Project. Best management practices for the control of dust are included in the IS/MND and will be required as a Condition for Approval of the Project. In addition to the requirements for dust control (e.g., watering), the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

The County also notes the commenter's concerns about potential impacts to view shed from the Project. Potential impacts of the Project to aesthetics and view sheds have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

The commenter alleges that the project will have a negative impact on native soils. Again, it is important to emphasize that the site is a decommissioned airport, currently zoned for light industrial or commercial use. The County respects the need to protect native soils.

The county also note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

## **Response 15-2**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

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**Response 15-3**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-4**

The commenter alleges that habitat will be destroyed at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to habitat.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

**Response 15-5**

The commenter alleges that the Project area is highly populated and a corridor for wildlife. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to wildlife.

The project site and surrounding area is not populated. The project site is a decommissioned airport, currently zoned for light industrial or commercial use.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. Neither the CDFW nor the USFWS mentioned the presence of wildlife corridors or expressed concerns regarding wildlife corridors. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

**Response 15-6**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-7**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-8**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

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The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

#### **Response 15-9**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-10**

The County notes the commenter's concerns regarding housing values and growth potential impacted by the Joshua Tree Solar Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

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Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

#### **Response 15-11**

The County notes the commenter's concerns regarding tourism and property values impacted by the Joshua Tree Solar Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

The County also notes the commenter's concerns about potential air quality impacts from the Project. The County contacted the Mojave Air Quality Management District (MDAQMD) and their response and interest in the Project was limited to a request for a Dust Control Plan. The IS/MND discusses that the Project will produce some dust during the construction phase, which will be short-term and temporary, especially since the Project site is relatively small (115 acres) and on land that is already disturbed. As with all construction projects that occur within the County, the Project will be subject to the Mojave Desert Air Quality Management District's (MDAQMD) Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically requires the preparation of a dust control plan prior to construction of the Project. Best management practices for the control of dust are included in the IS/MND and will be required as a Condition for Approval of the Project. In addition to the requirements for dust control (e.g., watering), the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

The County also notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

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**Response 15-12**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-13**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-14**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

The County also notes the commenter's concerns about impacts from the Project on a historical site. However, while the airport was first developed in the 1920s, there are no buildings or structures at the property which convey this period of development. The current buildings were primarily constructed less than 45 years ago (1973-1975) and are not representative of any earlier period of the property's history. Therefore, the property no longer appears to be associated with early aviation events in the area.

**Response 15-15**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project location. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-16**

The commenter alleges that the project would have damaging effects to the desert ecosystem. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to habitat.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

**Response 15-17**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-18**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-19**

The county also note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with

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the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

**Response 15-20**

The County notes the commenter's concerns about potential water supply impacts from the Project.

As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

**Response 15-21**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-22**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-23**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-24**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-25**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-26**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

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**Response 15-27**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-28**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

The county also note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

The commenter alleges that the project area is a wildlife corridor. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to wildlife corridors.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. Neither the CDFW nor the USFWS mentioned the presence of wildlife corridors or expressed concerns regarding wildlife corridors. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

**Response 15-29**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be

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emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

The County notes the commenter's concerns about potential wildlife impacts from the Project. The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

### **Response 15-30**

The County notes the commenter's concerns about potential air quality impacts from the Project. The County contacted the Mojave Air Quality Management District (MDAQMD) and their response and interest in the Project was limited to a request for a Dust Control Plan. The IS/MND discusses that the Project will produce some dust during the construction phase, which will be short-term and temporary, especially since the Project site is relatively small (115 acres) and on land that is already disturbed. As with all construction projects that occur within the County, the Project will be subject to the Mojave Desert Air Quality Management District's (MDAQMD) Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically requires the preparation of a dust control plan prior to construction of the Project. Best management practices for the control of dust are included in the IS/MND and will be required as a Condition for Approval of the Project. In addition to the requirements for dust control (e.g., watering), the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

The County notes the commenter's concerns about potential water supply impacts from the Project.

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As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

#### **Response 15-31**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-32**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-33**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-34**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

#### **Response 15-35**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-36**

The County notes the commenter's concerns about potential water supply impacts from the Project.

As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

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Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

#### **Response 15-37**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-38**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-39**

The County notes the commenter's concerns about potential water supply impacts from the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

The commenter alleges that the Project area is a wildlife corridor. The County did not identify the Project area as such.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

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Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

The County notes the commenter's concerns about potential air quality impacts from the Project. The County contacted the Mojave Air Quality Management District (MDAQMD) and their response and interest in the Project was limited to a request for a Dust Control Plan. The IS/MND discusses that the Project will produce some dust during the construction phase, which will be short-term and temporary, especially since the Project site is relatively small (115 acres) and on land that is already disturbed. As with all construction projects that occur within the County, the Project will be subject to the Mojave Desert Air Quality Management District's (MDAQMD) Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically re-quires the preparation of a dust control plan prior to construction of the Project. Best management practices for the control of dust are included in the IS/MND and will be required as a Condition for Approval of the Project. In addition to the requirements for dust control (e.g., watering), the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

The County also notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

The county also note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

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**Response 15-40**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-41**

The county note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

**Response 15-42**

The County notes the commenter's concerns about potential water supply impacts from the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

**Response 15-43**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-44**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-45**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-46**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

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**Response 15-47**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-48**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-49**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

The county also note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

The County notes the commenter's concerns about potential water supply impacts from the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield

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or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

The commenter alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

#### **Response 15-50**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-51**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-52**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-53**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-54**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-55**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-56**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

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**Response 15-57**

The commenter alleges that birds will be killed because they will collide the solar panels. The Applicant is committed to using a non-reflective coating on the PV panels, which will reduce the likelihood of the panels appearing as water. Additionally, it should be noted that there are no known threatened or endangered avian species living in or around the Project site, nor is there any evidence in the record demonstrating that there are localized conditions or other factors that suggest a risk of significant avian mortality associated with the Project.

The commenter also alleges that there are biological concerns at the Project site. Project specific analysis does not indicate this.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

The County also notes the commenter's concerns about water supply concerns related to the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

**Response 15-58**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-59**

The commenter alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

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The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

**Response 15-60**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-61**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-62**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-63**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-64**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-65**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-66**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-67**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-68**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-69**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

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The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

#### **Response 15-70**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-71**

The commenter alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

The commenter also questions the impact of increasing traffic. This is a relatively small project and the amount of construction traffic will be minimal and of short duration (6 months). Traffic during operations will be practically nonexistent.

#### **Response 15-72**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-73**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND.

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It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

The commenter also alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

#### **Response 15-74**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-75**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

#### **Response 15-76**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-77**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

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**Response 15-78**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-79**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-80**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-81**

The County notes the commenter's concerns about potential water supply impacts from the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

**Response 15-82**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-83**

The county note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

**Response 15-84**

The commenter alleges that there would be loss of habitat at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to habitat.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

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Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

**Response 15-85**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-86**

The county note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

**Response 15-87**

The commenter alleges that habitat will be destroyed at the Project site. The analysis contained in the Initial Study and its background reports does indicate any significant impact related to habitat loss.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

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Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

The county also note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

The County also notes the commenter's concerns about water supply concerns related to the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

#### **Response 15-88**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

#### **Response 15-89**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

#### **Response 15-90**

The County notes the commenter's concerns about potential water supply impacts from the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield

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or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

#### **Response 15-91**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-92**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

#### **Response 15-93**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-94**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

#### **Response 15-95**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

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**Response 15-96**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-97**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-98**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-99**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-100**

The County notes the commenter's concerns about potential water supply impacts from the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

**Response 15-101**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-102**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-103**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

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**Response 15-104**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-105**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-106**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-107**

The county note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

The County also notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

The commenter also alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

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Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

**Response 15-108**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-109**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-110**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-111**

The county note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

The County also notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

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It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

**Response 15-112**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

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**Response 15-113**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

**Response 15-114**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

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**Response 15-115**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-116**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-117**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-118**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-119**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-120**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-121**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-122**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-123**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-124**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-125**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-126**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project..

**Response 15-127**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

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**Response 15-128**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

The County also notes the commenter's concerns about water supply concerns related to the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

**Response 15-129**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

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**Response 15-130**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-131**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-132**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-133**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-134**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-135**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-136**

The commenter alleges that birds will be killed because they will collide the solar panels. The Applicant is committed to using a non-reflective coating on the PV panels, which will reduce the likelihood of the panels appearing as water. Additionally, it should be noted that there are no known threatened or endangered avian species living in or around the Project site, nor is there any evidence in the record demonstrating that there are localized conditions or other factors that suggest a risk of significant avian mortality associated with the Project.

**Response 15-137**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-138**

The commenter alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

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**Response 15-139**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-140**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-141**

The commenter alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

**Response 15-142**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-143**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

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Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

**Response 15-144**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-145**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-146**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-147**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-148**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-149**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

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The commenter alleges that birds will be killed because they will collide the solar panels. The Applicant is committed to using a non-reflective coating on the PV panels, which will reduce the likelihood of the panels appearing as water. Additionally, it should be noted that there are no known threatened or endangered avian species living in or around the Project site, nor is there any evidence in the record demonstrating that there are localized conditions or other factors that suggest a risk of significant avian mortality associated with the Project.

The commenter also alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

The County also notes the commenter's concerns about water supply concerns related to the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

#### **Response 15-150**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-151**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

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**Response 15-152**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-153**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-154**

The commenter alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

**Response 15-155**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-156**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-157**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-158**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-159**

The county note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

**Response 15-160**

The County notes the commenter's concerns about potential air quality impacts from the Project. The County contacted the Mojave Air Quality Management District (MDAQMD) and their response and interest in the Project was limited to a request for a Dust Control Plan. The IS/MND discusses that the Project will produce some dust during the construction phase, which will be short-term and temporary, especially since the Project site is relatively small (115 acres) and on land that is already disturbed. As with all construction projects that occur within the County,

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the Project will be subject to the Mojave Desert Air Quality Management District's (MDAQMD) Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically re-quires the preparation of a dust control plan prior to construction of the Project. Best management practices for the control of dust are included in the IS/MND and will be required as a Condition for Approval of the Project. In addition to the requirements for dust control (e.g., watering), the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

In regards to the comment about the potential for valley fever and air borne spores created during construction, again, the Project is not taking place on desert land with old soil crust. It is a highly disturbed piece of property that was formerly used as an airport. Valley fever spores are generally found in unbroken soil crust and are extremely unlikely to be on this property.

#### **Response 15-161**

The county note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2).

#### **Response 15-162**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-163**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-164**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

#### **Response 15-165**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-166**

The County notes the commenter's concerns about potential water supply impacts from the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is

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adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

The commenter alleges that native vegetation would be destroyed. It should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use. The County respects the need to protect the desert that provides high quality habitat for desert plants and animals. However, this site does not have high biological value.

The County also notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

#### **Response 15-167**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-168**

The County notes the commenter's concerns about potential air quality impacts from the Project. The County contacted the Mojave Air Quality Management District (MDAQMD) and their response and interest in the Project was limited to a request for a Dust Control Plan. The IS/MND discusses that the Project will produce some dust during the construction phase, which will be short-term and temporary, especially since the Project site is relatively small (115 acres) and on land that is already disturbed. As with all construction projects that occur within the County,

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the Project will be subject to the Mojave Desert Air Quality Management District's (MDAQMD) Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically re-quires the preparation of a dust control plan prior to construction of the Project. Best management practices for the control of dust are included in the IS/MND and will be required as a Condition for Approval of the Project. In addition to the requirements for dust control (e.g., watering), the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

In regards to comments about the potential for valley fever and air borne spores created during construction, again, the Project is not taking place on desert land with old soil crust. It is a highly disturbed piece of property that was formerly used as an airport. Valley fever spores are generally found in unbroken soil crust and are extremely unlikely to be on this property. Furthermore, the County Public Health Department has determined that development projects in San Bernardino County do not pose a significant risk to public health from Valley Fever

#### Response 15-169

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### Response 15-170

The commenter alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

The commenter also alleges that birds will be killed because they will collide the solar panels. The Applicant is committed to using a non-reflective coating on the PV panels, which will reduce the likelihood of the panels appearing as water. Additionally, it should be noted that there are no known threatened or endangered avian species living in or around the Project site, nor is there any evidence in the record demonstrating that there are localized conditions or other factors that suggest a risk of significant avian mortality associated with the Project.

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2

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miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

#### **Response 15-171**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-172**

The commenter alleges that the land is undisturbed at the Project site. It should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use. The County respects the need to protect the desert that provides high quality habitat for desert plants and animals. However, this site does not have high biological value.

#### **Response 15-173**

The commenter alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

#### **Response 15-174**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-175**

The commenter alleges that the land at the Project site should stay open and non-commercial. It should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species.

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It is a decommissioned airport, currently zoned for light industrial or commercial use. The County respects the need to protect the desert that provides high quality habitat for desert plants and animals. However, this site does not have high biological value.

**Response 15-176**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-177**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-178**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

**Response 15-179**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-180**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-181**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

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**Response 15-182**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-183**

The commenter alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

**Response 15-184**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-185**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-186**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-187**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-188**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation

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of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

**Response 15-189**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-190**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-191**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-192**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-193**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-194**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-195**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-196**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation

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of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

**Response 15-197**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-198**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-199**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-200**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-201**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-202**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-203**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-204**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-205**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-206**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-207**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-208**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

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**Response 15-209**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-210**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-211**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-212**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-213**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-214**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-215**

The commenter alleges the Project site is pristine and wild. It should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use. The County respects the need to protect the desert that provides high quality habitat for desert plants and animals. However, this site does not have high biological value.

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

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**Response 15-216**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-217**

The commenter alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

**Response 15-218**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-219**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-220**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

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**Response 15-221**

The commenter alleges that habitat will be destroyed at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to habitat.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

**Response 15-222**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-223**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-224**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-225**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-226**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-227**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-228**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-229**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

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It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

#### **Response 15-230**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-231**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-232**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

#### **Response 15-233**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

#### **Response 15-234**

The commenter alleges that there are land use impacts at the Project site. It should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use. The County respects the need to protect the desert that provides high quality habitat for desert plants and animals. However, this site does not have high biological value.

The County notes the commenter's concerns about potential water supply impacts from the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

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In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

**Response 15-235**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-236**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-237**

The commenter alleges that there are wild life concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to wildlife concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

**Response 15-238**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-239**

The county note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

**Response 15-240**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-241**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-242**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

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**Response 15-243**

The commenter alleges that the Project site contains natural desert habitat. It should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use. The County respects the need to protect the desert that provides high quality habitat for desert plants and animals. However, this site does not have high biological value.

**Response 15-244**

The commenter alleges that there are biological concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

The county note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

**Response 15-245**

The commenter alleges that there are biological concerns at the Project site and that it is virgin desert land. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

**Response 15-246**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2

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miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

#### **Response 15-247**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-248**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

#### **Response 15-249**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

#### **Response 15-250**

The commenter alleges that there are nature and wild life concerns at the Project site. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to nature and wildlife concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

#### **Response 15-251**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

#### **Response 15-252**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

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**Response 15-253**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-254**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-255**

The County notes the commenter's concerns about potential aesthetics impacts from the Project. The aesthetic impacts of the Project have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

**Response 15-256**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

**Response 15-257**

The commenter alleges that the Project will destroy natural habitat for native animals. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to biological concerns.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. The Project's potential biological impacts have been adequately evaluated.

Again, it should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

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**Response 15-258**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.

**Response 15-259**

The commenter does not present a concern or a comment related to the Joshua Tree Solar Project.

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## change.org

### Sensible Solar Action Group

Recipient: John Oquendo

Letter: Greetings,

Stop NextEra's Joshua Tree Solar Farm at the Hi Desert Airport site

As residents and visitors to the community of Joshua Tree, we are strongly opposed to NextEra's industrial solar development on approx. 115 acres at the Hi-Desert (Roy Williams) Airport site. Located in close proximity to the Joshua Tree National Park, these projects are highly visible, will NOT create lasting local jobs and WILL have a negative impact on:

Water Resources

Wildlife (this area is a wildlife corridor connecting the National Park with the 29Palms Marine Base and on to Mojave Natl. Preserve)

Air Quality

The View Shed

Native Soils

Property Values

Tourism and the Local Economy

16-1

We cannot accept that the necessity for renewable energy must be at the sacrifice of our beautiful desert and its surrounding communities! We support distributed rooftop solar in the built environment as the most environmentally, culturally and economically responsible alternative that will replace the need for these destructive projects that endanger the environment and the well-being of our local community.

16-2



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**Letter 16****Michael Cicero/Change.org, Sensible Solar Action Group****Signature Letter-****February 2016**

This letter is the same as Letter 15 but the County is including it since it was provided separately and included 717 signatures.

**Response 16-1**

This response addresses several concerns presented by the commenter. The County notes the commenter's opposition to the project. The commenter alleges the project will have a negative impact on water resources, wildlife, air quality, view shed (aesthetics), native soils, property values, and tourism and local economy. Responses to these concerns are included below.

The County notes the commenter's concerns about potential water supply impacts from the Project. As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the 6 months of project construction; this represents less than 2 percent of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

The commenter alleges that the project would have a negative impact to wildlife and states that the area is a wildlife corridor. The analysis contained in the Initial Study and its background reports does not indicate any significant unmitigatable impact related to wildlife corridors.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were followed and agreed to by the agencies. Neither the CDFW nor the USFWS mentioned the presence of wildlife corridors or expressed concerns regarding wildlife corridors. The Project's potential biological impacts have been adequately evaluated.

It should be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use. The County respects the need to protect the desert that provides high quality habitat for desert plants and animals. However, this site does not have high biological value.

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The County also notes the commenter's concerns about potential air quality impacts from the Project. The County contacted the Mojave Air Quality Management District (MDAQMD) and their response and interest in the Project was limited to a request for a Dust Control Plan. The IS/MND discusses that the Project will produce some dust during the construction phase, which will be short-term and temporary, especially since the Project site is relatively small (115 acres) and on land that is already disturbed. As with all construction projects that occur within the County, the Project will be subject to the Mojave Desert Air Quality Management District's (MDAQMD) Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area). Rule 403.2 specifically requires the preparation of a dust control plan prior to construction of the Project. Best management practices for the control of dust are included in the IS/MND and will be required as a Condition for Approval of the Project. In addition to the requirements for dust control (e.g., watering), the dust control plan will include the contact information of a representative from the construction management team to facilitate the reporting to the MDAQMD, as well as facilitating responses to any dust related issues. Any complaints related to dust control during construction of the Project should be directed to the MDAQMD's complaint line at (800) 635-4617. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

The County also notes the commenter's concerns about potential impacts to view shed from the Project. Potential impacts of the Project to aesthetics and view sheds have been thoroughly described in the Visual Resources Report and analyzed in the IS/MND. It should be emphasized that the Project site currently is an abandoned airport site, located adjacent to a cement manufacturing plant, and thus is already disturbed from a visual/aesthetic perspective.

The Project will have low visibility from most public vantage points due to the short height of the panels and the perimeter fence that will block views for those driving along Sunfair. At the far south end of Sunfair, the Project will be visible to viewers from that height on the hill, but the Project is over 2 miles away. The Project is not within 2 miles of Joshua Tree National Park, and therefore does not violate the criteria set forth in the San Bernardino Solar Ordinance, 84.29.035 (25).

It is important to note that there is no legal access to the JTNP from the viewpoint at the northern boundary of the park. Signs at that location prohibit the public from entering or using the park from the northern property edge. The Project will not be visible from the JTNP campgrounds, visitor centers, or designated or named trails in JTNP, except from a few locations on a trail named Burro Loop. This lack of visibility is due to the topography and elevation of the mountains which would block most JTNP users from seeing the Project. Unlike Cascade, which was built on previously undisturbed land, the Joshua Tree Solar Project will be built on disturbed land. The viewshed of the project will replace an already disturbed view which was a decommissioned airport. The Project will be in the foreground, and will not change the view of the dominant feature of the mountains in the background.

Similarly, the Project will not be seen from the Town of Joshua Tree. At the town's closest point on Sunburst Street, the Project will be almost 3 miles in the distance. Again, given the low height of the panels, the Project will not be visible to residents of the Town of Joshua Tree.

The commenter alleges that the project will have a negative impact on native soils. Again, it is important to emphasize that the site is a decommissioned airport, currently zoned for light industrial or commercial use. The County respects the need to protect native soils.

The county also note's the commenter's concerns regarding the potential for negative economic impacts associated with the Project. The applicant has identified approximately 50 million dollars in total expenditures associated with the Project. In addition, pursuant to CEQA, an economic impact is not an impact on the physical environment that must be addressed in an environmental document (see Public Resources Code § 21082.2.).

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**Response 16-2**

The County notes the commenter's concerns regarding the Joshua Tree Solar Project. This comment expresses an opinion and does not specifically comment on the content or adequacy of the IS/MND.



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# ADAMS BROADWELL JOSEPH & CARDOZO

A PROFESSIONAL CORPORATION

## ATTORNEYS AT LAW

601 GATEWAY BOULEVARD, SUITE 1000  
 SOUTH SAN FRANCISCO, CA 94080-7037

TEL: (650) 589-1660

FAX: (650) 589-5062

ccaro@adamsbroadwell.com

## SACRAMENTO OFFICE

520 CAPITOL MALL, SUITE 350  
 SACRAMENTO, CA 95814-4721

TEL: (916) 444-6201

FAX: (916) 444-6209

DANIEL L. CARDOZO  
 CHRISTINA M. CARO  
 THOMAS A. ENSLOW  
 TANYA A. GULESSERIAN  
 LAURA E. HORTON  
 MARC D. JOSEPH  
 RACHAEL E. KOSS  
 JAMIE L. MAULDIN  
 ELLEN L. WEHR

February 10, 2016

### Via EMAIL and OVERNIGHT MAIL

Mr. John Oquendo, Senior Planner  
 County of San Bernardino  
 Land Use Services Department  
 385 N. Arrowhead Avenue, 1st Floor  
 San Bernardino, CA 92415  
 Fax: 760-995-8167  
 E-mail: [JohnOquendo@lus.sbcounty.gov](mailto:JohnOquendo@lus.sbcounty.gov)

### Re: Comments on the Initial Study / Mitigated Negative Declaration for the Joshua Tree Solar Farm Project (Project No: P201400482/CUP; SCH No. 2016011021)

Dear Mr. Oquendo:

These comments are submitted on behalf of Coalition for Responsible Solar regarding the Initial Study / Mitigated Negative Declaration ("MND") prepared by the County of San Bernardino ("County") for the Joshua Tree Solar Farm Project (Project No: P201400482/CUP; SCH No. 2016011021) ("Project"). The Project, proposed by Joshua Tree Solar Farm, LLC ("Applicant"), is a proposed 20-megawatt ("MW") photovoltaic ("PV") solar energy generating facility to be located on approximately 115 acres of partially disturbed land located 3.5 miles east of the unincorporated community of Joshua Tree and 1.3 miles north of Twentynine Palms Highway (State Route 62) in unincorporated San Bernardino County.

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The Project Site is the location of the former Hi Desert (Roy Williams) Airport ("Airport"). The site was originally developed as an airport in 1952, redeveloped with new airport features and buildings in 1972, and was closed in 2011.<sup>1</sup> The repurposing

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<sup>1</sup> See Phase I Environmental Site Assessment Joshua Tree Solar Farm, Tetra Tech, Inc. (July 3, 2012) ("Phase I ESA"); <http://www.city-data.com/airports/Roy-Williams-Airport-Joshua-Tree-California.html>; <https://www.airnav.com/airport/L80>.

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of the Airport as a solar site is likely to have several potentially significant impacts that the MND failed to adequately analyze and mitigate.

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Based on the year of construction of the existing Site buildings (1972), the Phase I Environmental Site Assessment prepared for the Project ("Phase I ESA") concludes that asbestos-containing materials ("ACMs") and lead-containing materials ("LCMs") are likely to be present in the buildings, and Polychlorinated Biphenyls ("PCBs") are likely to be present in aging transformers and light fixtures at the Project site. The MND fails to include a hazardous materials cleanup plan or any mitigation measures to address these hazards. The Airport site has also undergone remediation for multiple underground fuel storage tanks ("USTs") over the years, including a recent 2015 UST removal that is reported in the MND but for which no closure documentation was provided.

The Airport site contains two runways and a few buildings and remaining structures. According to the MND, "the remainder of the Site [is] vacant undeveloped land."<sup>2</sup> The Project Site is surrounded by residential, recreational, and vacation rental uses. The nearest home is located just 250 feet southeast of the Project Site. There are two vintage trailer hotel rental sites within view of the proposed solar facility. The Project site is located just two miles from the entrance to Joshua Tree National Park.<sup>3</sup> Local residents and business owners are concerned that the Project may adversely impact the local economy and the value of their properties.

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Project construction will last approximately six months, and will generate significant amounts of fugitive dust and construction emissions that may adversely impact the health of local residents and visitors if not properly mitigated. The Coalition's air quality experts from Soil, Water, Air Protection Enterprise ("SWAPE") reviewed the Air Quality Report prepared for the Project, and performed an independent analysis of the Project's construction emissions. SWAPE found that the MND drastically underestimated construction emissions of nitrogen oxides ("NOx") and diesel particulate matter ("DPM"), a toxic air contaminant ("TAC"). SWAPE concluded that Project emissions will vastly exceed the applicable significance thresholds set forth in the Mojave Desert Air Quality Management District

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<sup>2</sup> Phase I ESA, p. 8.

<sup>3</sup> MND, p. 20. The project is also 3 miles from the Desert View Conservation Area: <http://www.specialdistricts.org/index.aspx?page=145>.

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("MDAQMD") CEQA Guidelines,<sup>4</sup> at levels requiring mitigation under CEQA. The MND failed to adequately quantify and mitigate these significant impacts.

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Finally, expert biologist Renee Owens concluded that the County failed to conduct adequate baseline surveys to ascertain the current use of the Project site by numerous federally and state-listed special status species, failed to disclose that the Project site is located in critical recovery habitat for the federally endangered desert tortoise, and failed to address the potentially significant impacts that will be caused by avian collisions with solar panels and other facility equipment during Project operation, among other impacts.

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As discussed herein, there is substantial evidence supporting a fair argument that the Project is likely to have significant impacts from hazardous materials, the environmental consequences of economic and social changes caused by the Project, and on air quality and biological resources. The MND failed to adequately disclose and mitigate these impacts. The County must prepare an environmental impact report ("EIR") for the Project before the County may consider Project approval.

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We prepared these comments with the assistance of hazardous materials expert Matt Hagemann of SWAPE, P.G., C.Hg. former Senior Science Policy Advisor for U.S. EPA Region 9's hazardous materials program; air quality experts Jessie Jaeger and Paul Rosenfeld, PhD. of SWAPE; and expert conservation biologist and wildlife ecologist Renee Owens. SWAPE's technical comments and curriculum vitae are attached hereto as Exhibit A. Ms. Owens' technical comments and curriculum vitae are attached hereto as Exhibit B. Both comment letters and all attachments thereto are incorporated by reference as if fully set forth herein.<sup>5</sup> The City must address and respond to the comments of these experts separately.<sup>6</sup>

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<sup>4</sup> See MDAQMD CEQA Guidelines, available at <http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=1806>.

<sup>5</sup> The Coalition reserves the right to supplement these comments, and to file further comments at any and all future proceedings and hearings related to the Project. See *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1117.

<sup>6</sup> See 14 Cal. Code Regs. ("CCR") § 15088(a).

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## I. STATEMENT OF INTEREST

Coalition for Responsible Solar is a coalition of individuals and labor organizations that may be affected by the potential health and safety hazards and environmental impacts of the Project. The coalition includes Yucca Valley residents John Sutton and Matt Rios, Apple Valley resident Perry Brown, and California Unions for Reliable Energy (“CURE”), its members, and their families (collectively, “Coalition”). The Coalition was formed to advocate for responsible and sustainable solar development in the Joshua Tree area and San Bernardino County in order to protect public health and safety and the environment where the Coalition members and their families live, work and recreate.

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CURE is a coalition of labor organizations that encourages sustainable development of California’s energy and natural resources. Environmental degradation destroys cultural and wildlife areas, consumes limited fresh water resources, causes air and water pollution, and imposes other stresses on the environmental carrying capacity of the State. This in turn jeopardizes future development by causing construction moratoriums and otherwise reducing future employment opportunities for CURE’s members. Additionally, union members live, recreate and work in the communities and regions that suffer the impacts of projects that are detrimental to human health and the environment. CURE therefore has a direct interest in enforcing environmental laws to minimize the adverse impacts of projects that would otherwise degrade the environment. Finally, CURE members are concerned about projects that risk serious environmental harm without providing countervailing economic benefits.

## II. LEGAL STANDARD

CEQA is intended to provide the fullest possible protection to the environment. CEQA requires that a lead agency prepare and certify an EIR for any discretionary project that may have a significant adverse effect on the environment.<sup>7</sup> CEQA requires analysis of the “whole of an action,” including the “direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.”<sup>8</sup>

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<sup>7</sup> PRC §§ 21002.1(a), 21100(a), 21151(a); 14 CCR §§ 15064(a)(1), (f)(1), 15367.

<sup>8</sup> PRC § 21065; CEQA Guidelines § 15378(A).

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The EIR is the very heart of CEQA.<sup>9</sup> A negative declaration is improper, and an EIR must be prepared, whenever it can be fairly argued on the basis of substantial evidence that the project may have a significant environmental impact.<sup>10</sup> “[S]ignificant effect on the environment” is defined as “a substantial, or potentially substantial, adverse change in the environment.”<sup>11</sup> An effect on the environment need not be “momentous” to meet the CEQA test for significance; it is enough that the impacts are “not trivial.”<sup>12</sup> Substantial evidence, for purposes of the fair argument standard, includes “fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact.”<sup>13</sup>

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Whether a fair argument exists is a question of law that the court reviews de novo, with a preference for resolving doubts in favor of environmental review.<sup>14</sup> In reviewing a decision to prepare a negative declaration rather than an EIR, courts “do not defer to the agency’s determination.”<sup>15</sup>

The standard creates a “low threshold” for requiring preparation of an EIR, and affords no deference to the agency’s determination. Where substantial evidence supporting a fair argument of significant impacts is presented, the lead agency must prepare an EIR “even though it may also be presented with other substantial evidence that the project will not have a significant effect.”<sup>16</sup> A reviewing court must require an EIR if the record contains any “substantial evidence” suggesting that a project “may have an adverse environmental effect” -- even if contrary evidence exists to support the agency’s decision.<sup>17</sup>

<sup>9</sup> *Pocket Protectors v. City of Sacramento* (2004) 124 Cal. App.4th 903, 926-27; *Sundstrom v. County of Mendocino* (1974) 202 Cal.App.3d 296, 304.

<sup>10</sup> PRC § 21151; 14 CCR § 15064(f); *Citizens for Responsible Equitable Env’tl Dev. v. City of Chula Vista* (“*CREED*”) (2011) 197 Cal.App.4th 327, 330-31; *Communities for a Better Env’t v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 319 (“*CBE v. SCAQMD*”).

<sup>11</sup> PRC § 21068; 14 CCR § 15382; *County Sanitation Dist. No. 2 v. County of Kern* (2005) 127 Cal.App.4th 1544, 1581.

<sup>12</sup> *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 83.

<sup>13</sup> PRC § 21080(e)(1) (emphasis added); *CREED*, 197 Cal.App.4th at 331.

<sup>14</sup> *Id.*; *Pocket Protectors*, 124 Cal.App. 4th at 927.

<sup>15</sup> *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 332; *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1318.

<sup>16</sup> PRC § 21151(a); 14 CCR § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 927; *County Sanitation Dist. No. 2*, 127 Cal.App.4th at 1579 (“where the question is the sufficiency of the evidence to support a fair argument, deference to the agency’s determination is not appropriate.”) (quoting *Sierra Club*).

<sup>17</sup> *Mejia*, 130 Cal.App.4th at 332-33.

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Where experts have presented conflicting evidence on the extent of the environmental effects of a project, the agency must consider the effects to be significant and prepare an EIR.<sup>18</sup> In short, when “expert opinions clash, an EIR should be done.”<sup>19</sup> “It is the function of an EIR, not a negative declaration, to resolve conflicting claims, based on substantial evidence, as to the environmental effects of a project.”<sup>20</sup> In the context of reviewing a mitigated negative declaration, “neither the lead agency nor a court may ‘weigh’ conflicting substantial evidence to determine whether an EIR must be prepared in the first instance.”<sup>21</sup> Where such substantial evidence is presented, “evidence to the contrary is not sufficient to support a decision to dispense with preparation of an EIR and adopt a negative declaration, because it could be ‘fairly argued’ that the project might have a significant environmental impact.”<sup>22</sup>

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The fair argument test requires the preparation of an EIR where “there is substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial ... ”<sup>23</sup>

### III. THE MND FAILS TO ADEQUATELY DESCRIBE THE PROJECT

The MND does not meet CEQA’s requirements because it fails to include a complete and accurate project description, rendering the entire impact analysis inherently unreliable. An accurate and complete project description is necessary to perform an evaluation of the potential environmental effects of a proposed project.<sup>24</sup> Without a complete project description, the environmental analysis will be impermissibly narrow, thus minimizing the project’s impacts and undercutting public review.<sup>25</sup> The courts have repeatedly held that “an accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient [CEQA

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<sup>18</sup> *Pocket Protectors*, 124 Cal.App.4th at 935; *Sierra Club*, supra, 6 Cal.App.4th at 1317-18; CEQA Guidelines § 15064(f)(5).

<sup>19</sup> *Id.*, 124 Cal.App.4th at 928; *Sierra Club*, 6 Cal.App.4th at 1317-18.

<sup>20</sup> *Id.*, 124 Cal.App.4th at 935.

<sup>21</sup> *Id.* at 935.

<sup>22</sup> *Sundstrom*, 202 Cal.App.3d at 310 (citation omitted).

<sup>23</sup> 14 CCR § 15063(b)(1) (emphasis added).

<sup>24</sup> See, e.g., *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376.

<sup>25</sup> See *id.*

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document].”<sup>26</sup> 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>27</sup>

#### **A. The MND’s Project Description is Admittedly Incomplete**

CEQA requires four components, at a minimum, to be included the description of a proposed project: (1) a detailed map with the precise location and boundaries of the proposed project, (2) a statement of project objectives, (3) a general description of the project’s technical, economic, and environmental characteristics, and (4) a statement briefly describing the intended uses of the CEQA document and listing the agencies involved with, and the approvals required for, implementation.<sup>28</sup> The MND’s project description fails to satisfy the third and fourth requirement because the MND admits that the Project design is incomplete, and fails to describe the agencies and permits required for the Project with any certainty.

The MND states that, while it provides a general “project overview,” the “preliminary design” of the Project is still “underway.”<sup>29</sup> The MND explains that “[a] final selection of solar modules, inverters, mounting system, and precise dimensions will be decided during detailed design and equipment procurement.”<sup>30</sup> Thus, basic facts, such as the size and number of solar PV modules to be installed at the Project site – arguably the most basic feature of the Project – are omitted from the MND’s project description. The dimensions, location, and positioning of the solar PV modules are key factors in evaluating Project impacts to air quality and biological resources, in particular to birds. As discussed below and in the comments of Ms. Owens, avian collision with solar panels is an increasingly significant impact at solar PV project sites. The size and positioning of solar panels may impact the degree to which birds are attracted to, and collide with, the panels. The MND’s failure to include this basic information in the Project description leaves the public guessing about the extent of this impact on sensitive bird species.

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<sup>26</sup> *County of Inyo v. County of Los Angeles* (1977) 71 Cal.App.3d 185, 193.

<sup>27</sup> *Id.* at 192-193.

<sup>28</sup> 14 CCR § 15124; *California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227, 270, as modified (Oct. 1, 2010).

<sup>29</sup> MND, p. 16.

<sup>30</sup> *Id.*

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While CEQA does not require a project description to include “extensive detail” about every minor component of a project, it does require the agency to include the level of “detail needed for evaluation and review of the [project's] environmental impact.”<sup>31</sup> A project description that omits integral components of a project is likely to result in a CEQA document that fails to disclose all of the impacts of the project.<sup>32</sup> That is precisely what occurred here. Since the MND fails to describe the solar PV panels with any specificity, it is impossible for the County to accurately assess the extent of impacts the panels will have on bird species.

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The MND also fails to clearly list the permits required for the Project and to identify all permitting agencies. The MND identifies the County Conditional Use Permit (“CUP”) as the only permit required for the Project,<sup>33</sup> and fails to identify the other permits required for the Project in one location. This forces the public to dig through the Initial Study and numerous supporting technical appendices to ascertain the scope of permits required, and from which agencies.

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For example, the MND generally states that the Project would be required to comply with “applicable Mojave Desert Air Quality Management District rules and policies” but does not describe which rules apply and what permits are required from the Air District.<sup>34</sup> The reader must instead look to the middle of the Air Quality Report to find a description of the applicable rules and air permits that are required.<sup>35</sup> Similarly, the MND fails to discuss whether any incidental take permits would be required for take of any federally endangered or state-listed special status species, such as desert tortoise, kit fox, or Mojave fringe toed lizard. Instead, the reader must review the three biological resource appendices to determine whether, and to what extent, the Applicant and the County may be required to consult with U.S. Fish and Wildlife Service (“USFWS”) following Section 10 of the ESA to obtain federal incidental take permits, and the California Department of Fish and Wildlife (“CDFW”)

<sup>31</sup> 14 CCR § 15124.

<sup>32</sup> *Santiago County Water Dist v. County of Orange* (1981) 118 Cal. App. 3d 818, 829 (project description for sand and gravel mine omitted water pipelines serving project).

<sup>33</sup> MND, p. 1.

<sup>34</sup> MND, pp. 12-13.

<sup>35</sup> See e.g., Air Quality Report, p. 16 (compliance with Rule 403, Fugitive Dust), pp. 16-17 (“The proposed Project will be subject to MDAQMD’s Regulation II (Permits) and Regulation XIII (New Source Review).”).

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to obtain take permits pursuant to the California Fish and Game Code ("F&G Code").<sup>36</sup>

The MND's failure to include these permits in the Project description is a violation of CEQA's informational requirements. The courts have held that an agency's analysis of impacts and permitting requirements must be discussed in the CEQA document in sufficient detail to enable meaningful participation and criticism by the public.<sup>37</sup> "Information scattered here and there in EIR appendices, or a report buried in an appendix, is not a substitute for a good faith reasoned analysis."<sup>38</sup> That is precisely what occurred with the MND's discussion of Project permits.

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Additionally, several Project components remain undefined, such as the Project water supply, which further complicates the MND's discussion of Project permits. The MND explains that the Applicant hopes to obtain water from the Joshua Basin Water District ("JBWD").<sup>39</sup> However, the MND explains that the Applicant is still in "ongoing discussions" with JBWD, and there is no guarantee that JBWD will issue a "will serve" letter or execute a water supply agreement for the Project.<sup>40</sup> In the event JBWD does not supply water, the MND states that the Applicant would have to seek a well permit from the County to establish a new groundwater well on the Project site. No detail is provided regarding that permitting process, or whether other permits would be required for the use and disposal of water at the Project site. The lack of specificity regarding these and other Project components results in a similar lack of specificity regarding the permits required for the Project. As the court stated in *San Joaquin Raptor / Wildlife Rescue Ctr. V. County of Stanislaus*,<sup>41</sup> "an accurate project description is necessary for an intelligent evaluation of the potential environmental

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<sup>36</sup> See e.g., Spring 2015 General Biological Resources Assessment, pp. 5-7; Spring 2012 General Biological Resources Assessment, p.] 7 ("If a permit on private lands is required under the ESA, it would be conducted following Section 10 of the ESA to obtain an incidental take permit."), p. 8 (California incidental take permit), p. 28 (desert tortoise permits).

<sup>37</sup> *Laurel Heights*, 47 Cal. 3d at 405; see *EPIC v. CDF* (2008) 44 Cal. 4th 459, 494 ("The data in an EIR must not only be sufficient in quantity, it must be presented in a manner calculated to adequately inform the public and decision makers, who may not be previously familiar with the details of the project.")

<sup>38</sup> *EPIC*, 44 Cal. 4th at 494, quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442.

<sup>39</sup> MND, p. 59.

<sup>40</sup> *Id.*

<sup>41</sup> (1994) 27 Cal. App. 4th 713, 730.

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effects of a proposed activity.” An EIR must be prepared to remedy these defects in the MND’s project description.

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## **B. The MND Fails to Adequately Describe Project Decommissioning**

CEQA mandates that lead agencies must include in a project description the “whole of an action” which is being approved, including *all* components and future activities that are reasonably anticipated to become part of the project.<sup>42</sup> This includes, but is not limited to, “later phases of the project, and any secondary, support, or off-site features necessary for its implementation.”<sup>43</sup> The requirements of CEQA cannot be avoided by chopping a large project into many little ones or by excluding reasonably foreseeable future activities that may become part of the project.<sup>44</sup>

17-13

The Project would be operational for 30-40 years and has three distinct phases: construction, operation, and decommissioning.<sup>45</sup> However, the MND fails to make even a reasonable attempt to describe Project decommissioning activities in any detail. The MND contains a single paragraph discussing the decommissioning phase.<sup>46</sup> It is unclear from that discussion whether the Project will be refurbished or removed at the end of its useful life.<sup>47</sup> The MND describes the basic concept to be followed in decommissioning the Project “if the system is to be removed,”<sup>48</sup> but does not describe the length of time involved in decommissioning, nor does it include any analysis of air quality or biological impacts of this phase of the Project.

Evidence in the MND suggests that decommissioning will have impacts similar to the construction phase of the Project, and will entail removal and disposal of both ground-level and underground components, thus involving soil disturbing activities.<sup>49</sup> Since Project construction will entail the use of diesel-emitting construction equipment and numerous haul truck trips to transport equipment and facility components to the Project site, clearly decommissioning (or deconstruction) of the

<sup>42</sup> 14 CCR §15378 (emphasis added).

<sup>43</sup> *Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 283-84.

<sup>44</sup> Pub. Resources Code § 21159.27 (prohibiting piecemealing); *see also*, *Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351, 370.

<sup>45</sup> MND, pp. 10-16.

<sup>46</sup> MND, p. 16, Section 4.3, Project Decommissioning.

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

<sup>48</sup> *Id.* (“If the system is to be removed, most of the materials (steel, aluminum, copper, and glass) would be recycled at nearby facilities.”).

<sup>49</sup> MND, p. 16.

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Project will require similar equipment to remove those items from the Project site. There can be no reasonable question that, if construction activities will result in significant impacts to air quality and biological resources, then surely decommissioning activities will as well.<sup>50</sup> Nevertheless, the MND makes no attempt to quantify the number or types of construction equipment and haul trucks that will be required to remove the solar equipment from the Project site. Nor does the MND contain any mitigation measures or pre-construction survey requirements to address biological impacts that will occur during the decommissioning phase. Finally, the MND contains no discussion regarding the steps required to “refurbish” the Project, and fails to commit to any additional CEQA review at a later date to rectify the inadequate detail included in the decommissioning section.<sup>51</sup>

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As a result, the MND fails to describe the full scope of the Project being approved, and fails to disclose the full range and severity of the Project’s significant environmental impacts. This is a project-level CEQA document, not a program-level EIR. The County, as the lead agency, must analyze the whole of the Project in a single environmental review document and may not piecemeal or split the project into pieces for purposes of analysis. The steps and environmental impacts of the refurbishing and ultimate decommissioning phases of the Project must be described and analyzed in an EIR with the fullest degree of detail available in order to provide the public with sufficient information to permit “an intelligent evaluation of the potential environmental effects of [the] proposed activity.”<sup>52</sup>

#### IV. THE MND FAILS TO ACCURATELY ESTABLISH THE EXISTING ENVIRONMENTAL SETTING

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CEQA requires that an Initial Study include a description of the project’s environmental setting or “baseline.”<sup>53</sup> The CEQA “baseline” is the set of environmental conditions against which to compare a project’s anticipated impacts.<sup>54</sup>

<sup>50</sup> Recognizing the magnitude of potentially significant impacts from decommissioning a renewable energy project, other lead agencies, such as the California Energy Commission (“CEC”), regularly require extensive analyses of decommissioning in their EIRs for renewable energy projects. See Exhibit D.

<sup>51</sup> See PRC § 21166; Guidelines, § 15385; *California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227, 270 [115 Cal.Rptr.3d 631, 663], as modified (Oct. 1, 2010)

<sup>52</sup> *San Joaquin Raptor*, 27 Cal. App. 4th at 730.

<sup>53</sup> 14 CCR § 15063(d)(2).

<sup>54</sup> *CBE v. SCAQMD* (2010) 48 Cal. 4th 310, 321.

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CEQA Guidelines section 15125(a) states, in pertinent part, that a lead agency's environmental review under CEQA:

...must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time [environmental analysis] is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant.<sup>55</sup>

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The MND is inadequate because it fails to establish an accurate environmental setting surrounding the Project.

**A. The MND Relies on Inadequate and Incomplete Surveys to Establish the Environmental Setting for Biological Resources**

**1. The MND Fails to Accurately Describe the Environmental Setting Related to Desert Tortoise**

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The 2015 Desert Tortoise Survey and Biological Resources Assessment ("2015 BRA") erroneously characterizes the majority of the site as "highly disturbed...poor or non-desert tortoise habitat."<sup>56</sup> This statement is inconsistent with readily available public information from relevant regulatory agencies which identify the Project site as "high value" tortoise habitat.

As explained by Ms. Owens, her review of relevant biological databases discloses that the Project site is located within a USFWS designated Recovery Unit for desert tortoise.<sup>57</sup> Additionally, the United States Geological Survey ("USGS") designates the entire Project site and immediate surrounding area as having "high value habitat potential," and the area within a half a mile of the Project site as having

<sup>55</sup> See *Save Our Peninsula Committee v. County of Monterey* (2001) 87 Cal.App.4th 99, 124-125.

<sup>56</sup> Teta Tech, Inc. and A. Karl. June 2015. 2015 Desert tortoise survey and general biological resources assessment for the Joshua Tree Solar Farm. Retrieved from: <http://www.sbcounty.gov/Uploads/LUS/Environmental/JoshuaTreeSolarFarm/2015%20Joshua%20Tree%20Solar%20Farm%20Bio%20Report%20061215.pdf>.

<sup>57</sup> Murphy, P., Strout, N. and Darst, C. March 2013. Solar Energy and the Mojave Desert Tortoise: Modeling Impacts and Mitigation. USFWS and University of Redlands Report to the CEC.

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“high value contiguous habitat.”<sup>58</sup> The California Natural Diversity Database (“CNDDB”) designates the Project site, and the area surrounding it in all directions for a minimum of 1.5 miles, as “positive” for desert tortoise.<sup>59</sup> Finally, USFWS-approved desert tortoise biologist Ed LaRue submitted a comment letter to the County regarding the Project on February 8, 2014.<sup>60</sup> Mr. LaRue explained that he has conducted over 270 desert tortoise surveys in the vicinity of the Project site since 1989, and found desert tortoise present at every site he surveyed.<sup>61</sup> Ms. Owens concludes that “given the available data regarding the region’s use by desert tortoises and the high likelihood this site could be used as a migration corridor for federally protected tortoises, to characterize it as ‘poor or non-desert tortoise habitat’ as the BRA summary does is misleading at best.”<sup>62</sup>

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Ms. Owens’ expert opinion and the evidence obtained from USFWS, USGS, the CNDDB, and Mr. LaRue constitute substantial evidence that the Project site, and the areas immediately surrounding it, are active desert tortoise habitat. The County must revise its baseline discussion regarding the presence and use of the Project site by desert tortoise to reflect current documented conditions.

2. *The MND Fails to Accurately Describe the Environmental Setting Related to Burrowing Owl*

The baseline data provided in the BRA for burrowing owl may not accurately reflect the current environmental setting for burrowing owl at the Project site, because the County biologists failed to follow the required protocols for conducting burrowing owl surveys. Two sets of burrowing owl surveys were conducted for the Project – Spring 2012 and Spring / Summer 2015.<sup>63</sup> The BRA states that the County biologists followed the 1993 *California Burrowing Owl Consortium Guidelines* (“CBOC Guidelines”) for the Spring 2012 surveys, and the CDFW 2012 *Staff Report on Burrowing Owl Mitigation* for the Spring/Summer 2015 surveys (“CDFW 2012

17-16

<sup>58</sup> See Exhibit B, Owens Comments, p. 8, Attachment C and D; Desert Tortoise Data Explorer <http://www.spatial.redlands.edu/dtro/dataexplorer/>.

<sup>59</sup> See Exhibit B, Owens Comments, p. 8, Attachment C.

<sup>60</sup> *Id.* at p. 8, Attachment A; see also Exhibit E..

<sup>61</sup> *Id.*

<sup>62</sup> *Id.* at p. 3.

<sup>63</sup> See Burrowing Owl Survey Report for the Joshua Tree Solar Farm, Tetra Tech, Inc. (July 2015) (“Burrowing Owl Report”), p. ES-1.

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Guidelines”).<sup>64</sup> The Burrowing Owl Report goes on to explain that the 2012 and 2015 surveys did not detect any owls or signs of owls, and that these results were used “to determine whether and to what extent this species would be affected by Project development.”<sup>65</sup> The MND concluded that the Project will have a less than significant impact on burrowing owls with minimal mitigation.<sup>66</sup>

17-16  
Cont.

Ms. Owens reviewed the Burrowing Owl Report. Based on the description of protocols followed by the County biologists in conducting the surveys provided in the Report, Ms. Owens concludes that the County biologists failed to follow the survey protocol required by either the CBOC Guidelines or the CDFW 2012 Guidelines. As a result, the County’s burrowing owl surveys are flawed and unreliable. In particular, the County surveys failed to include a 150 meter buffer zone; failed to conduct surveys at the times required by the CBOC Guidelines and CDFW 2012 Guidelines (namely two hours before sunset and one after, or one hour before sunrise to two hours after); failed to conduct a Phase II survey following the detection of potential owl burrows; and conducted the surveys using a single biologist, rather than two biologists, as required by the Guidelines.<sup>67</sup> These errors in the County’s survey methods render the MND’s burrowing owl surveys unreliable. In order to accurately describe the environmental setting for burrowing owls, new surveys must be conducted at the Project site following the protocol required under the CDFW 2012 Guidelines.

### 3. *The MND Fails to Accurately Describe the Environmental Setting Related to Non-Native Plant Species*

17-17

The MND explains that non-native weedy species introduced and spread by Project activities would have the potential to “pose a major threat to biological resources.”<sup>68</sup> However, the MND fails to quantify the extent of non-native weeds already present at the Project site. As a result, the MND’s subsequent discussion of weed abatement fails to estimate the extent to which the Project will exacerbate weed proliferation, and is unable to define any clear criteria for weed abatement success throughout the life of the Project based on the extent of existing weed issues.<sup>69</sup> A threshold analysis of non-native plant species at the Project site must be performed in

<sup>64</sup> *Id.*

<sup>65</sup> *Id.*

<sup>66</sup> MND, pp. 33, 89.

<sup>67</sup> See Exhibit B, Owens Comments, pp. 9-10.

<sup>68</sup> MND, p. 56.

<sup>69</sup> See Exhibit B, Owens Comments, p. 23.

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order to allow the County, and the public, to determine what mitigation measures are necessary to reduce Project weed impacts to less than significant levels.

17-17  
 Cont.

**B. The MND Fails to Disclose that Project Site Soils May Contain *Coccidioides immitis* (Valley Fever) Spores**

The MND does not even mention Valley Fever, which has become endemic in California, and reported in San Bernardino County in recent years.<sup>70</sup> It is well established that Valley Fever spores are stirred up during earthmoving and other construction activities like the Project, and may cause incidents of Valley Fever in construction workers, local residents, and other persons who come into contact with the airborne spores.<sup>71</sup> The MND's omission of any discussion of this significant air quality and health impact is inexcusable.<sup>72</sup>

17-18

In 2013, the California Department of Public Health recognized Valley Fever as a "serious concern in California" and recommended that specific on-site mitigation measures be adopted at construction sites to reduce the likelihood of exposure to Valley Fever.<sup>73</sup> SWAPE similarly concludes that, without adequate mitigation, Valley Fever is likely to be a significant impact of Project construction.<sup>74</sup> SWAPE explains that standard dust control measures designed to reduce particulate matter ("PM") pollution are insufficient to protect against Valley Fever.<sup>75</sup> Rather, specific mitigations focused on preventing exposure to Valley Fever spores, as recommended by the Department of Public Health, must be adopted in order to reduce impacts to less than significant. These mitigation measures include, at a minimum:

1. Determine if the worksite is in an area where Valley Fever is consistently present. Check with your local health department to determine whether cases have been known to occur in the proximity of your work area.
2. Encourage workers to report respiratory symptoms that last more than a week to a crew leader, foreman, or supervisor.

<sup>70</sup> See Exhibit J, [https://www.vfce.arizona.edu/resources/pdf/The\\_Epidemiology\\_of\\_Coccidioidomycosis\\_%20Collaborative\\_County\\_Report.pdf](https://www.vfce.arizona.edu/resources/pdf/The_Epidemiology_of_Coccidioidomycosis_%20Collaborative_County_Report.pdf), p. 46.

<sup>71</sup> See Exhibit A, pp. 14-16.

<sup>72</sup> *Berkeley Jets*, 91 Cal.App.4th at 1355.

<sup>73</sup> See Exhibit D (June 2013 CDH report).

<sup>74</sup> Exhibit A, SWAPE Comments, pp. 6-10.

<sup>75</sup> *Id.* at p. 8.

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3. Suspend work during heavy wind or dust storms and minimize amount of soil disturbed.
4. Make sure workers keep the windows closed in heavy construction equipment and equip with high efficiency particulate air (HEPA) filters. Two-way radios can be used for communication so that the windows can remain closed but allow communication with other workers.
5. When digging a trench or fire line or performing other soil-disturbing tasks, position workers upwind when possible.
6. Place sleeping quarters and dining halls, away from sources of dust such as roadways.
7. Provide NIOSH-approved respiratory protection with particulate filters rated as N95, N99, N100, P100, or HEPA. Household materials such as washcloths, bandanas, and handkerchiefs do not protect workers from breathing in dust and spores. Respirators for employees must be used within a Cal/OSHA compliant respiratory protection program that covers all respirator wearers and includes medical clearance to wear a respirator, fit testing, training, and procedures for cleaning and maintaining respirators. Different classes of respirators provide different levels of protection according to their Assigned Protection Factor (see table below). Powered air-purifying respirators have a battery-powered blower that pulls air in through filters to clean it before delivering it to the wearer's breathing zone. PAPRs will provide a high level of worker protection, with an APF of 25 or 1000 depending on the model. When PAPRs are not available, provide a well-fitted NIOSH-approved full-face or half-mask respirator with particulate filters.
8. Fit-tested half-mask or filtering face-piece respirators are expected to reduce exposure by 90% while still allowing about 10% face-seal leakage which can result in an unacceptable risk of infection when digging where Valley Fever spores are present.<sup>76</sup>

17-18  
Cont.

SWAPE concludes that these Valley Fever mitigation measures would be both feasible and effective to reduce human exposure and the likelihood of individuals

<sup>76</sup> Exhibit A, SWAPE Comments, pp. 8-9.

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contracting Valley Fever on or off the Project site during construction.<sup>77</sup> An EIR must be prepared to analyze Valley Fever and incorporate these, or other equally effective, mitigation measures.

17-18  
Cont.

**C. The MND Fails to Accurately Describe the Environmental Setting for Hazardous Materials at the Project Site**

The MND fails to adequately describe and document the reported 2015 closure of a UST at the Project site. The MND states that “[a]n empty 10,000-gallon underground storage tank previously used for airport fueling was removed from the project site in October 2015.”<sup>78</sup> The MND goes on to state that the tank removal and closure was overseen by the San Bernardino County Fire Department, and concludes that no hydrocarbon contamination exists at the project site.<sup>79</sup> The results of an October 22, 2015 San Bernardino County inspection report provided by the County explain that the tank had been removed, but no closure documentation has been provided. The County therefore lacks substantial evidence to support the MND’s conclusion that there is no existing hydrocarbon contamination at the Project site.

17-19

The reported UST closure occurred long after the Phase I ESA was prepared in 2012. The accuracy of the MND’s statements and conclusions regarding the UST removal are therefore not supported by any evidence in the MND. An EIR should be prepared to include documentation that the UST was removed, that no contamination was detected, and that the San Bernardino County Fire Department granted closure.<sup>80</sup>

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<sup>77</sup> Exhibit A, SWAPE Comments, p. 10.

<sup>78</sup> MND, p. 55.

<sup>79</sup> *Id.*; See Exhibit A, SWAPE Comments, p. 2.

<sup>80</sup> See Exhibit A, SWAPE Comments, p. 2.

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**V. SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THAT THE PROJECT MAY RESULT IN SIGNIFICANT IMPACTS THAT REQUIRE THE COUNTY TO PREPARE AN ENVIRONMENTAL IMPACT REPORT**

17-20

Under CEQA, 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>81</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>82</sup> An agency’s decision not to require an EIR can be upheld only when there is no credible evidence to the contrary.<sup>83</sup> Substantial evidence can be provided by technical experts or members of the public.<sup>84</sup> “If a lead agency is presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect.”<sup>85</sup>

As discussed below, there is a fair argument, supported by substantial evidence, that the Project may result in significant impacts from hazardous materials, on air quality and public health, on biological resources, and from urban decay. The County is required to prepare an EIR to evaluate the Project’s impacts and propose all

<sup>81</sup> Pub. Resources Code § 21082.2; CEQA Guidelines § 15064(f), (h); *Laurel Heights Improvement Ass’n v. Regents of the University of California* (1993) 6 Cal. 4th 1112, 1123; *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal. 3d 68, 75, 82; *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-151; *Quail Botanical Gardens Foundation, Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1601-1602.

<sup>82</sup> *Citizens Action to Serve All Students v. Thornley* (1990) 222 Cal.App.3d 748, 754.

<sup>83</sup> *Sierra Club v. County of Sonoma*, (1992) 6 Cal.App.4th, 1307, 1318; see also *Friends of “B” Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 1002 [“If there was substantial evidence that the proposed project might have a significant environmental impact, evidence to the contrary is not sufficient to support a decision to dispense with preparation of an [environmental impact report] and adopt a negative declaration, because it could be ‘fairly argued’ that the project might have a significant environmental impact”].

<sup>84</sup> See, e.g., *Citizens for Responsible and Open Government v. City of Grand Terrace* (2008) 160 Cal.App.4th 1323, 1340 [substantial evidence regarding noise impacts included public comments at hearings that selected air conditioners are very noisy]; see also *Architectural Heritage Ass’n v. County of Monterey*, 122 Cal.App.4th 1095, 1117-1118 [substantial evidence regarding impacts to historic resource included fact-based testimony of qualified speakers at the public hearing]; *Gabric v. City of Rancho Palos Verdes* (1977) 73 Cal.App.3d 183, 199.

<sup>85</sup> CEQA Guidelines § 15062(f).

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mitigation measures that are necessary to reduce those impacts to a less-than-significant level.

17-20  
Cont.

**A. Substantial Evidence Supports a Fair Argument that the Project May Result in Potentially Significant, Unmitigated Impacts from Project Disturbance of Hazardous Materials**

The MND states that the Project will not result in significant impacts from hazards or hazardous materials, and fails to include any hazardous materials mitigation measures.<sup>86</sup> This conclusion is unsupported, and is contradicted by evidence contained in both the Phase I ESA and Mr. Hagemann's comments.

17-21

*1. Asbestos and Lead Containing Materials*

The Phase I ESA identified potential hazards associated with building materials in the existing structures at the Project site based on the date of construction (1972), including asbestos and lead. Since these structures will be demolished as part of the Project, the Phase I ESA recommended further inspections and removal of asbestos- and lead-containing materials "prior to demolition, remodeling, and/or renovation activities."<sup>87</sup> The Initial Study fails to mention this potential asbestos or lead contamination, and fails to propose any mitigation measures to incorporate the Phase I ESA's recommendations.

Mr. Hagemann concludes that the disturbance of asbestos and lead containing materials during Project construction would pose potentially significant public health and safety risks if not properly mitigated. He explains:

**Asbestos**

The IS is mute on any plans to sample for ACMs. Because of the failure to provide for sampling, construction workers and nearby residents may be exposed during demolition of the existing Project buildings. Asbestos is made up of microscopic fibers that may become airborne when ACMs are disturbed if present in these buildings. When these fibers get into the air they may be inhaled into the lungs, where they can cause significant health problems, including:

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<sup>86</sup> MND, pp. 53-56.

<sup>87</sup> Phase I ESA, pp. 4-5.

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- Asbestosis
- Mesothelioma
- Pleural plaques
- Lung cancer
- Other cancers such as esophageal, stomach, colorectal, kidney, nose, throat.

If found to be present in the buildings to be demolished for the Project, ACMs would require abatement prior to demolition or renovation. If not properly abated in advance of demolition or renovation, workers, nearby off-site residents and local visitors may be exposed to friable (easily crumbled) asbestos.<sup>88</sup>

### Lead

According to the US EPA, lead can affect almost every organ and system in the human body. Adults exposed to lead can suffer from:

- Cardiovascular effects, increased blood pressure and incidence of hypertension
- Decreased kidney function
- Reproductive problems (in both men and women).

The IS does not recognize potential lead hazards associated with the Project and no mitigation that would require a lead survey or a removal of lead materials is included as mitigation. If not properly surveyed in advance of demolition or renovation, workers and residents may be exposed to lead. If found to be present in the buildings to be demolished for the Project, ACMs would require abatement and proper disposal by a licensed contractor prior to demolition or renovation.<sup>89</sup>

An EIR must be prepared to include effective mitigation to reduce the potentially significant hazards to construction workers and nearby residents, some as close as 250 feet, who may come into contact with these materials during the demolition phase of Project construction.

17-21  
Cont.

<sup>88</sup> Exhibit A, SWAPE Comments, pp. 2-3.

<sup>89</sup> *Id.* at pp. 3-4.

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## 2. Polychlorinated biphenyls (PCBs)

The Phase I ESA identified the presence of a pad-mounted electrical transformer on the Project site and concluded it could contain “small quantities of PCBs.”<sup>90</sup> The Phase I ESA also identified the potential for PCBs to be present in florescent light ballasts at the site.<sup>91</sup> However, the Initial Study fails to mention these findings and fails to include any proposed mitigation measures to ensure that potential PCB-containing materials, including the transformer and light ballasts, are properly removed and disposed in a way that protects the health of construction workers and others who may be exposed to the contaminants during Project construction. Instead, the MND mistakenly concludes that “the project would not involve the routine transport, use, or disposal of hazardous materials as defined by the Hazardous Materials Transportation Uniform Safety Act.”<sup>92</sup> To the contrary, given the presence of PCB-contaminated components at the Project site, the Project is certain to involve the transport of PCB-containing materials in order to facilitate their removal.

17-22

PCBs are highly toxic manufactured organic chemicals that are listed as a hazardous substance under the Hazardous Materials Transportation Uniform Safety Act.<sup>93</sup> PCBs are also considered a “restricted hazardous waste” under California law, and have been classified as carcinogenic to humans by the Environmental Protection Agency (“EPA”) and International Agency for Research on Cancer (“IARC”), respectively.<sup>94</sup> Mr. Hagemann concludes that, absent proper mitigation, the handling and disposal of PCBs removed from the Project site could pose significant health and safety risks to people and the environment.<sup>95</sup> He recommends that an EIR be prepared to provide for mitigation that would require testing of the transformer and light ballasts prior to demolition of the buildings, and mitigation that would require any PCB-containing materials that are detected through testing to be transported and disposed in accordance with state and federal regulations.<sup>96</sup>

<sup>90</sup> See Phase I ESA, p. 12.

<sup>91</sup> *Id.*

<sup>92</sup> *Id.* at p. 53.

<sup>93</sup> See

[http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Hazmat/Alpha\\_Hazmat\\_Table.xls](http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Hazmat/Alpha_Hazmat_Table.xls).

<sup>94</sup> See H&S Code section 25122.7(b)(4); <http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=140&tid=26>.

<sup>95</sup> See Exhibit A, SWAPE Comments, p. 4.

<sup>96</sup> See Exhibit A, p. 4.

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The MND's failure to discuss the removal of PCB-containing materials from the Project site, and failure to incorporate appropriate hazardous materials mitigation measures to ensure that the Applicant will comply with proper handling and disposal of PCBs, is a violation of CEQA.

In *McQueen v. Bd. Of Directors*,<sup>97</sup> the court emphasized the need for timely CEQA review and remediation not only of soil contamination in general, but specifically for PCBs, a hazardous contaminant identified at this Project site. Recognizing that PCB is a "known carcinogen, dangerous to humans and animals," the *McQueen* court held that an agency cannot avoid mitigation of PCB contamination or defer it to a future time, even where no specific project is contemplated on the property.<sup>98</sup> The court stated:

We are aware of no exception allowing a governmental agency to avoid consideration of and compliance with PCB regulations until after purchase and pending a final decision on use of property containing PCB. At the very least the district itself began storing PCB when it acquired the property, whether or not it had any plan to use or remove it. The district could not knowingly acquire property containing PCB without simultaneously assuming the grave responsibility to store, use, or dispose of it legally.<sup>99</sup>

Similarly here, when the Applicant acquired the Project property in 2011, it began "storing" existing PCB contamination at the site. If the County proposes to approve the Project, it must first ensure that the Project's CEQA document includes enforceable mitigation measures requiring the Applicant to dispose of PCB-containing equipment in a legally compliant and health-protective manner. By failing to mention PCBs in the Initial Study, the County has failed to comply with this mandatory duty. The County should require the Applicant to adopt a hazardous materials handling and cleanup plan to address this contamination, and must prepare an EIR to fully analyze and mitigate the potentially significant impacts from the disturbance of PCBs during Project construction.

17-22  
Cont.

<sup>97</sup> (1988) 202 Cal.App.3d 1136.

<sup>98</sup> 202 Cal.App.3d at 1145.

<sup>99</sup> *Id.* at 1146.

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**B. Substantial Evidence Supports a Fair Argument That the Project May Result in Significant Air Quality and Public Health Impacts From Construction Emissions.**

17-23

1. *There is Substantial Evidence Supporting a Fair Argument that Project Construction Will Result in Significant NOx Emissions that the MND Fails to Identify and Mitigate*

The MND significantly underestimated the Project's construction NOx emissions and, as a result, inaccurately concluded that "emissions during short-term construction and during long-term operation of the Project do not exceed the significance thresholds established by the MDAQMD."<sup>100</sup> As explained by SWAPE, the MND's conclusion is patently incorrect because the Air Quality Report relied on inaccurate data for construction equipment and incorrect values for vehicle and truck trips required for construction of the Project, and failed to account for fugitive dust generated by demolition of existing structures at the Project site.<sup>101</sup>

a. Errors and Omissions in the Air Quality Report

17-24

The MND's Air Quality Report relied on input values that were purported to relate to the Project, but which are either inaccurate when compared to the MND's description of Project components, or are simply unsupported by any evidence in the record. First, the equipment list used in the Air Quality Report's URBEMIS model is inconsistent with the equipment identified in the MND. As SWAPE explains, the Air Quality Report assumed that a total of 13 pieces of off-road equipment would be needed to complete construction of the entire 115-acre Project site.<sup>102</sup> However, Table 3 of the MND's Initial Study indicates that Project construction will require a total of 51 pieces of equipment.<sup>103</sup> There is no logical basis for the Air Quality Report's assumption that only 13 pieces of equipment would be used.

<sup>100</sup> See Air Quality Report, pp. 25-26.

<sup>101</sup> See Exhibit A, SWAPE Comments, pp. 4-11. As explained by SWAPE, the Air Quality Report also utilized an outdated planning level emissions estimating software, URBEMIS, to calculate Project emissions. The modeling software currently recommended for use by state regulatory agencies, including Cal EPA, to model project emissions, is the California Emissions Estimator Model Version CalEEMod.2013.2.2 ("CalEEMod"). <http://www.caleemod.com/>.

<sup>102</sup> See Air Quality Report, p. 14; See Exhibit A, SWAPE Comments, p. 5.

<sup>103</sup> *Id.*

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Second, the trip lengths and number of trips used in the Air Quality Report's URBEMIS model for each phase of construction are inconsistent with the trip lengths and number of trips provided in the Initial Study section of the MND and the MND's Trip Generation Analysis. The "Phase Assumptions" provided in the URBEMIS output files<sup>104</sup> suggest that a total of 150 vehicle miles traveled ("VMT") will occur during the "Demolition" phase, and that a total of approximately 2,343 miles will occur during the "Mass Grading" phase.<sup>105</sup> The Air Quality Report fails to provide any explanation as to how these values were derived. The origin of these values is therefore unclear and unsupported.

17-24  
Cont.

By contrast, SWAPE compared the trip assumptions in the Air Quality Report with the trips discussion in the Project description and Initial Study sections of the MND. According to the MND, "there will be an average of 125 workers on site during the construction period..."<sup>106</sup> Furthermore, according to the Project's Trip Generation Analysis "approximately 5 deliveries per day will be required for material and equipment during the 6-month construction period..."<sup>107</sup> Therefore, SWAPE concludes that, "at the very least, an average of 125 worker trips per day and an average of 5 vendor trips per day should have been utilized within the air model."<sup>108</sup>

Finally, the Air Quality Report estimated, without citing any reference for the assumption, that the existing structures to be demolished would be equal to approximately 5,000 cubic feet.<sup>109</sup> Demolition of existing structures is a factor which contributes to the Project's fugitive dust emissions, which are regulated under MDAQMD Rule 403. SWAPE measured the total square footage of the existing on-site structures at the Project site using Google Earth mapping and the building size information provided in the Phase I ESA.<sup>110</sup> SWAPE's measurements indicated a total building area of approximately 31,585 square feet.<sup>111</sup> The volume calculated by SWAPE is substantially larger than the 5,000 cubic feet volume used in the Air Quality Report's URBEMIS model.<sup>112</sup> SWAPE concludes that demolition of these

<sup>104</sup> Appendix A of the Air Quality Report.

<sup>105</sup> See Air Quality Report, p. 37.

<sup>106</sup> MND, p. 13.

<sup>107</sup> *Id.* at p. 2.

<sup>108</sup> See Exhibit A, SWAPE Comments, p. 7.

<sup>109</sup> Air Quality Report, pp. 37-38.

<sup>110</sup> See Exhibit A, SWAPE Comments, pp. 9-10.

<sup>111</sup> *Id.* at p. 10.

<sup>112</sup> Unlike the data in the URBEMIS model, SWAPE's calculations are based on substantial evidence.

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structures is therefore likely to result in substantially higher fugitive dust emissions than estimated in the Air Quality Report.<sup>113</sup>

b. SWAPE Model

SWAPE recalculated the Project's construction emissions using CalEEmod software and corrected input values for the factors described above.<sup>114</sup> When the correct input values were used, SWAPE found that the Project's NO<sub>x</sub> emissions during construction are 361 lbs/day, which greatly exceeds the MDAQMD threshold of 137 lbs/day, and is therefore a significant impact.<sup>115</sup>

Maximum Mitigated Daily Construction Emissions <sup>116</sup>						
	ROG	NO <sub>x</sub>	CO	SO	PM <sub>10</sub>	PM <sub>2.5</sub>
<i>Construction Emissions in Pounds Per Day</i>						
IS Model	9	92	46	0	38	11
<b>Threshold</b>	<b>137</b>	<b>137</b>	<b>548</b>	<b>137</b>	<b>82</b>	<b>82</b>
<b>Exceed?</b>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
SWAPE Model Summer Emissions	34	361	216	0	39	26
SWAPE Model Winter Emissions	34	361	210	0	39	26
<b>Threshold</b>	<b>137</b>	<b>137</b>	<b>548</b>	<b>137</b>	<b>82</b>	<b>82</b>
<b>Exceed?</b>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

The County must disclose this significant impact in an EIR and identify mitigation measures to reduce these emissions to less than significant levels.

2. *There is Substantial Evidence Supporting a Fair Argument that the Project Will Cause a Significant Cancer Risk from Construction Emissions*

SWAPE reviewed the HRA included in the Air Quality Report, and performed its own independent HRA for the Project. SWAPE concluded that excess emissions of

17-24  
Cont.

17-25

<sup>113</sup> *Id.*

<sup>114</sup> *Id.* at pp. 11-14.

<sup>115</sup> *Id.* at p. 13.

<sup>116</sup> *Id.*

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DPM during Project construction are likely to cause a significant cancer risk to children and infant sensitive receptors that the MND failed to disclose and mitigate.

The Project site is located directly adjacent to several sensitive receptors, including a single-family dwelling located just 250 feet from the Project site. There are also vacation rental properties located adjacent to the Project site, which rent trailers and motel rooms for visitors to Joshua Tree National Park.<sup>117</sup>

17-25  
 Cont.

Exhaust from heavy-duty construction equipment releases DPM. DPM is a toxic air contaminant (“TAC”) that is recognized by state and federal agencies, and atmospheric scientists, as causing severe respiratory disease, lung damage, cancer, and premature death. Air districts have recently recognized that “TACs present an even greater health risk than previously thought.”<sup>118</sup> By contrast, “particulate matter,” including both PM<sub>10</sub> and PM<sub>2.5</sub>, are defined under both federal and state laws as “criteria pollutants.”<sup>119</sup> PM alone does not contain toxic chemicals. PM is simply defined as “very small solid or liquid particles that can be suspended in the atmosphere.”<sup>120</sup> TACs, by contrast, are defined as “air pollutant[s] which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal act (42 U.S.C. Sec. 7412 (b)) is a toxic air contaminant.”<sup>121</sup> Unlike particulate matter, DPM contains toxic chemicals, making it a TAC.

The Air Quality Report acknowledges that Project construction could pose a significant risk to these nearby receptors due to “toxic emissions...generated mainly from fuel combustion in the construction equipment.”<sup>122</sup> The County performed an HRA to analyze these emissions, and concluded that the health and cancer risk posed by the Project’s construction emissions would be less than significant.<sup>123</sup> As explained by SWAPE, the County’s conclusion is unsupported because the County’s HRA was

<sup>117</sup> See Exhibit C.

<sup>118</sup> *California Bldg. Industry Assn. v. Bay Area Air Quality Management Dist.* (2015) 62 Cal.4th 369, 379.

<sup>119</sup> The seven criteria air pollutants are: ozone (O<sub>3</sub>); carbon monoxide (CO); nitrogen dioxide (NO<sub>2</sub>); sulfur dioxide (SO<sub>2</sub>); PM<sub>10</sub>; PM<sub>2.5</sub>; and lead (Pb).

<sup>120</sup> *CURE v. Mojave Desert Air Qual. Mgm’t Dist.* (2009) 178 Cal. App. 4th 1225, 1231-32; see 40 C.F.R. § 50.6(c).

<sup>121</sup> H&S Code § 39655(a).

<sup>122</sup> Air Quality Report, p. 17.

<sup>123</sup> *Id.* at p. 33.

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based on the same flawed emissions analysis that resulted in underreported construction emissions in the URBEMIS model.<sup>124</sup>

SWAPE prepared an independent HRA using the construction emission estimates from SWAPE's re-modeling of Project emissions using the assumptions provided in the MND. To account for the variability in construction equipment usage over the phases of Project construction, SWAPE calculated an average DPM emission rate over the anticipated construction duration by the following equation:

$$\text{Emission Rate} \left( \frac{\text{grams}}{\text{second}} \right) = \frac{1,982.4 \text{ lbs}}{184 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lb}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3,600 \text{ seconds}} \approx 0.0566 \text{ g/s}$$

Using this equation, SWAPE calculated the excess cancer risks for the sensitive receptor locations identified in the Air Quality Report for adults, children, and infant receptors using applicable HRA methodologies prescribed by the Office of Environmental Health and Hazard Assessment ("OEHHA").<sup>126</sup> OEHHA recommends the use of Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution.<sup>127</sup> According to the OEHHA guidance, quantified cancer risk should be multiplied by a factor of ten during the first two years of life (infant), and by a factor of three for the subsequent fourteen years of life (child aged two until sixteen). The results of SWAPE's calculations found an excess cancer risk to adults, children, and infants during Project construction for sensitive receptors located 75 meters away are 6.71, 38.7, and 129 in one million, respectively. The results are shown below.<sup>128</sup>

17-25  
Cont.

<sup>124</sup> Exhibit A, SWAPE Comments, p. 20. SWAPE notes that the HRA prepared by the County also relied on an outdated emissions model, the CARB Hotspots Analysis Reporting Program (HARP) model. The SWAPE HRA used the current AERSCREEN model. As of 2011, the United States Environmental Protection Agency (USEPA) recommends AERSCREEN as the leading air dispersion model, due to improvements in simulating local meteorological conditions based on simple input parameters

<sup>125</sup> *Id.* at p. 21.

<sup>126</sup> *Id.*

<sup>127</sup> "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: [http://oehha.ca.gov/air/hot\\_spots/2015/2015GuidanceManual.pdf](http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf).

<sup>128</sup> Exhibit A, SWAPE Comments, p. 22.

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Parameter	Description	Units	Adult	Child	Infant
C <sub>air</sub>	Concentration	µg/m <sup>3</sup>	2.948	2.948	2.948
DBR	Daily breathing rate	L/kg-day	302	581	581
EF	Exposure Frequency	days/year	350	350	350
ED	Exposure Duration	years	0.5	0.5	0.5
AT	Averaging Time	days	25550	25550	25550
	Inhaled Dose	(mg/kg-day)	6.1E-06	1.2E-05	1.2E-05
CPF	Cancer Potency Factor	1/(mg/kg-day)	1.1	1.1	1.1
ASF	Age Sensitivity Factor	-	1	3	10
<b>Cancer Risk</b>			<b>6.71E-06</b>	<b>3.87E-05</b>	<b>1.29E-04</b>

17-25  
Cont.

The infantile and child exposures for the Project substantially exceed the MDAQMD threshold of 10 in one million for cancer risk. This is a significant impact, and a significant health risk, that the MND and Air Quality Report failed to disclose and mitigate. An EIR must be prepared for the Project that includes a refined HRA to further examine air quality impacts generated by Project construction. Once the risks have been further quantified, the County must implement all feasible mitigation measures to reduce the Project's significant cancer risk to less than significant levels.

**C. Substantial Evidence Supports a Fair Argument That the Project May Result in Significant Impacts to Biological Resources**

**1. Substantial Evidence Supports a Fair Argument that the Project May Result in Significant Impacts to Birds from Collisions with Solar Panels**

17-26

Substantial evidence supports a fair argument that the Project may result in significant impacts associated with birds colliding with the Project's PV panels. The MND fails to disclose, analyze or mitigate these impacts. While the reasons that solar pose a threat to birds and the extent of the threat continue to be evaluated, the presence of dead and injured birds (including numerous water birds) at solar facilities under construction in California shows that solar arrays present a collision hazard to

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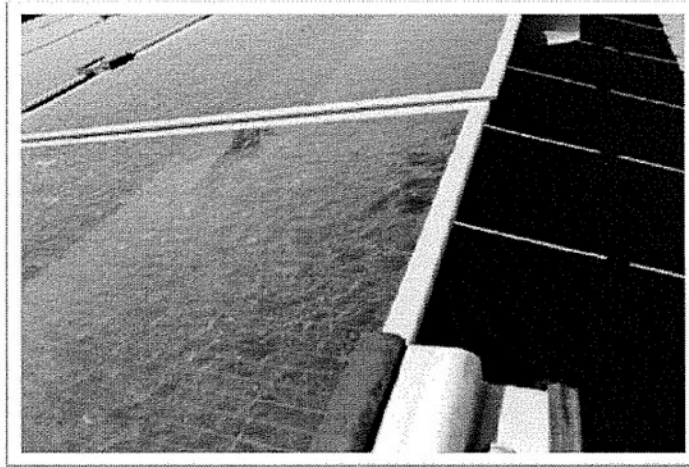
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birds.<sup>129</sup> It is reasonably believed that migrating birds mistake the broad reflective surfaces of solar arrays for water.<sup>130</sup>

Ms. Owens has personally witnessed bird kills resulting from direct collision with solar PV panels at Southern California solar sites, and concludes that the presence of large arrays of solar PV panels, particularly in the desert environment like the Project site, is likely to attract and kill migrating or foraging birds absent robust mitigation.<sup>131</sup> The Project site is located in the Pacific flyway, and is on a direct flight path for migrating birds stopping over at the Salton Sea.<sup>132</sup> Ms. Owens concludes that the Project site is therefore particularly susceptible to avian collisions.<sup>133</sup> She further observes that the MND's assertion that avian collision will be reduced by the use of "[panel] material [that] is designed to enhance light absorption and reduce light reflection (glare)" is untested and unsupported. Indeed, Ms. Owens notes that some of the bird kills she has personally witnessed were at facilities using similar glare-reduction coating on their PV panels, such as those set forth below.<sup>134</sup>

17-26  
 Cont.



**Figure 9.** Strike imprint of Virginia rail that was killed by a collision with solar panels in the Sonoran desert. Collision occurred despite the “low reflectivity” caused by an accumulation of dust, and presence of panels with “low reflection coating”.

<sup>129</sup> *Id.* at pp. 4-5.

<sup>130</sup> *Id.* at p. 5.

<sup>131</sup> See Exhibit B, Owens Comments, pp. 12-15.

<sup>132</sup> *Id.* at p. 12.

<sup>133</sup> *Id.*

<sup>134</sup> *Id.* at p. 13.

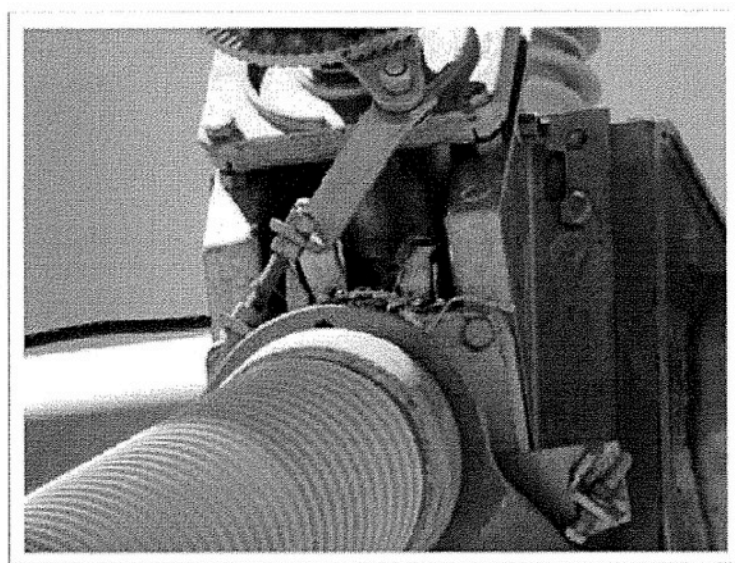
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17-26  
Cont.

**Figure 10.** Forensic (blood) evidence at site of panel collision by a sora.



**Figure 11.** Kingbirds nesting on industrial solar facility in the Mojave desert.<sup>135</sup>

<sup>135</sup> *Id.* at pp. 36-37, Figures 9-11.

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Because solar projects pose potentially significant impacts to birds from collisions, the USFWS developed monitoring methods to examine migratory bird take at solar power facilities.<sup>136</sup> In addition, the CEC has required all recently licensed solar projects to monitor the death and injury of birds from collisions with solar facility features.<sup>137</sup> Also, scientific research has identified several techniques that enable birds to avoid collisions with glass and other reflective surfaces.<sup>138</sup> Ms. Owens recommends that the County adopt these techniques, along with the monitoring program recommended by the USFWS and CEC, in an EIR for the Project as feasible mitigation measures to reduce the Project's potentially significant impacts on birds from collisions.

17-26  
Cont.

Substantial evidence supports a fair argument that the Project may result in significant impacts associated with birds colliding with the Project's PV panels. The City must prepare an EIR that adequately discloses, analyzes and mitigates the Project's potentially significant impacts associated with bird collisions. Furthermore, Ms. Owens recommends that the County require a project-specific Bird and Bat Conservation Strategy be developed for the Project that requires a detailed monitoring plan and an adaptive management program to assist in mitigation efforts.<sup>139</sup>

2. *Substantial Evidence Supports a Fair Argument that the Project May Result in Significant Impacts to Desert Tortoise*

The MND fails to adequately disclose, analyze or mitigate the Project's significant impacts to desert tortoise. As discussed above the MND erroneously concludes that the Project site is not desert tortoise habitat. As a result, the MND concluded that Project impacts on desert tortoise would be mitigated to a less-than-significant level with the implementation of a single mitigation measure, Measure BIO-2, which contains minimal protective measures.<sup>140</sup> However, because the MND's threshold determination regarding the absence of desert tortoise from the Project site is in error, the MND's significance conclusion is not supported by substantial evidence.

17-27

By contrast, substantial evidence supports a fair argument that the Project will result in significant impacts to desert tortoise that are inadequately mitigated. Five

<sup>136</sup> *Id.* at pp. 12-13.

<sup>137</sup> *Id.*

<sup>138</sup> *Id.*

<sup>139</sup> See Exhibit B, Owens Comments, p. 16.

<sup>140</sup> MND, p. 89.

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highly qualified desert tortoise experts have concluded that the Project site contains high value habitat for desert tortoise – USFWS, USGC, CNDDDB, biologist Ed LaRue, and Ms. Owens.<sup>141</sup> Mr. LaRue has observed tortoises in the immediate vicinity of the Project site.<sup>142</sup> Thus, there is substantial evidence supporting a fair argument that desert tortoise are, and will be, present at the Project site during construction and operation of the Project.

17-27  
Cont.

The BRA admits that, if tortoises were present at the Project site, Project operation would pose a potentially significant risk of injury or death to tortoises.<sup>143</sup> Mitigation Measure BIO-2 fails to account for active use of the Project site by desert tortoises, and is admittedly designed to mitigate impacts that are “expected to be negligible and encounters limited to transient tortoises.”<sup>144</sup> Thus, the MND admittedly fails to include adequate mitigation measures to ensure that the Project will not result in injury and death (i.e., take) of desert tortoise. An EIR must be prepared to analyze and mitigate these potentially significant impacts. Since the Project is likely to result in take of tortoise individuals or habitat, the applicant must also initiate consultation with USFWS regarding potential take of desert tortoise at the Project site, and the EIR must disclose the status of that consultation.

3. *Substantial Evidence Supports a Fair Argument that the Project May Result in Significant Impacts to Desert Kit Fox*

The BRA explains that, in 2012, biologists detected an active kit fox den on site, with several inactive dens, thus indicating the likelihood of kit fox use of the Project site is high.<sup>145</sup> Ms. Owens explains that the likelihood of kit fox presence at the site is especially given that the species has demonstrated a high natal site fidelity, and have been observed denning within active solar facility sites.<sup>146</sup> The MND requires pre-construction surveys for the desert kit fox “within” 30 days prior to initiation of construction activities.<sup>147</sup> However, Ms. Owens concludes that the such surveys are

17-28

<sup>141</sup> See Exhibit B, Owens Comments, pp. 8-9.

<sup>142</sup> *Id.*, Attachment A.

<sup>143</sup> BRA, p. 27 (“If tortoises walk onto the Project, they could be injured or killed (e.g., collision with vehicles or equipment).”).

<sup>144</sup> BRA, p. 27; MND, p. 89.

<sup>145</sup> See Exhibit B, Owens Comments, pp. 23-24, citing Ironwood Consulting. 2012. Third Quarterly Report For Biological Resources Monitoring First Solar Desert Sunlight Solar Project, Riverside County BLM CASE FILE NUMBER CACA48649.

<sup>146</sup> *Id.*

<sup>147</sup> MND, p. 40.

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insufficient because kit foxes are likely to construct new burrows or immigrate onto the Project site immediately before construction activities.<sup>148,149</sup> As a result, surveys conducted several days or a weeks before ground disturbance are insufficient to avoid take of kit foxes.<sup>150</sup>

17-28  
Cont.

Desert kit fox are threatened species in California, and there is a pending petition with CDFW to list the kit fox as endangered. If listed, any take of kit fox or kit fox habitat caused by future Project activities would therefore require a take permit from CDFW. Whether or not the endangerment petition is granted, the Project's potential to adversely impact desert kit fox is a potentially significant impact that the MND fails to acknowledge. In order to reduce this impact to less than significant levels, Ms. Owens recommends that County require pre-construction surveys for kit foxes immediately before all ground disturbance activities at the Project site.

4. *Substantial Evidence Supports a Fair Argument that the Project May Result in Significant Impacts to Mojave Fringe-Toed Lizard and other Reptiles*

17-29

Ms. Owens concludes that the Project is likely to result in significant impacts to Mojave Fringe-Toed Lizard and other desert reptiles from injury or death due to collision with Project construction equipment, vehicles, and water trucks at the Project site.

Ms. Owens explains that she and other biologists working on renewable energy projects (wind and industrial solar) have recently observed that lizards are "directly and immediately attracted to roads on and around construction sites where trucks spraying water and other erosion control liquids are used to reduce airborne dust."<sup>151</sup> She explains that she and other biologists have determined that this practice "serves to attract lizards of a variety of species to the higher moisture levels on the roads, resulting in increased lizard mortality and injury due to being hit by construction site

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<sup>148</sup> Girard, I. A. 1998. *The physiological ecology of a small canid, the kit fox (vulpes macrotis), in the mojave desert* (Order No. 9905548).

<sup>149</sup> Arjo, W. M., Bennett, T. J., & Kozlowski, A. J. 2003. Characteristics of current and historical kit fox (*vulpes macrotis*) dens in the great basin desert. *Canadian Journal of Zoology*, 81(1), 96-102.

<sup>150</sup> *Id.*

<sup>151</sup> See Exhibit B, Owens Comments, p. 20.

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traffic that use the roads subsequent to the water trucks passing.”<sup>152</sup>

Ms. Owens opines that lizard collisions are becoming a common phenomenon at solar projects, and identifies several reported incidents of recent lizard collisions with moisture-generating equipment at other desert solar sites. For example, within the course of one summer month in 2014, over 20 flat-tailed horned lizards (*Phrynosoma mcallii*) (a Candidate State Endangered species) were killed on one solar construction site in the southern Sonoran desert. An additional 100 flat-tailed horned lizards were relocated to avoid injury or mortality from vehicle impacts during several weeks of the construction phase of that project.<sup>153</sup> During the construction of the Sunrise Powerlink gen-tie line in the Yuha Desert, from April to November, 103 flat-tailed horned lizards were relocated and 25 mortalities were recorded.<sup>154</sup>

17-29  
Cont.

This evidence, and the expert opinion of Ms. Owens, indicate that lizards of varying species and sizes are attracted to the added moisture on the roads at solar project sites. This is a potentially significant impact that the MND fails to acknowledge or mitigate. In order to reduce these potentially significant risks to lizards with high potential to occur on site (such as the Mojave Fringe Toed Lizard), Ms. Owens recommends that the County incorporate mitigation measures for the Project which include the on-site presence of additional biologists, enhanced traffic restrictions, and a reptile relocation Plan and Monitoring Strategy during the construction phase of the Project.<sup>155</sup>

<sup>152</sup> *Id.*

<sup>153</sup> See Exhibit B, Owens Comments, pp. 18-21; citing Wilton, Ben. Tenaska (Personal communication, March 19, 2015).

<sup>154</sup> [FTHLIC] Flat-tailed Horned Lizard Interagency Coordinating Committee. (2011). Annual Progress Report: Implementation of the Flat-tailed Horned Lizard Rangeland Management Strategy, January 1, 2010 to December 31, 2010. Report prepared by the Flat-tailed Horned Lizard Interagency Coordinating Committee. Retrieved from: <https://webcache.googleusercontent.com/search?q=cache:swX3uX5D8OsJ:https://www.fws.gov/southwest/es/arizona/Documents/SpeciesDocs/FTHL/FTHL+Annual+report+2010+Final.pdf+&cd=1&hl=en&ct=clnk&gl=us>.

<sup>155</sup> See Exhibit B, Owens Comments, p. 21.

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**D. Substantial Evidence Supports a Fair Argument That the Project May Result in Significant Impacts From the Environmental Consequences of Economic and Social Changes Caused by the Project**

17-30

CEQA requires that the environmental consequences of economic and social changes caused by a project must be considered by the lead agency as part of its analysis in a negative declaration or EIR.<sup>156</sup> The courts of appeal have held that, when there is substantial evidence that a project may result in urban decay, the CEQA document must analyze this impact and propose feasible mitigation measures and alternatives.<sup>157</sup>

Local Joshua Tree residents and business owners have raised concerns that the Project may result in deterioration of local structures from lost tourism and the likelihood of local residents moving away from the Joshua Tree area to escape the increased industrial development around rural Joshua Tree.<sup>158</sup> For example, local businessman Buck Buckley, who owns a vacation trailer rental site adjacent to the Project site, has expressed concerns that installation of the Project could be a boon to the town's economy, which relies largely on out-of-town visitors drawn to Joshua Tree National Park. However, Buckley explained to the local Desert Sun newspaper that his guests come to see "unspoiled, unchanged, open space, which they don't have in large cities, and don't even have in Yucca Valley right across the way."<sup>159</sup> Those guests, Buckley said, would be disappointed by the sight of a solar power plant.<sup>160</sup>

Local Joshua Tree resident David Fick, who has lived in the town for 28 years and can see Roy Williams Airport from his living-room window, similarly reported to the Desert Sun that he has already experienced "a litany of grievances" with the nearby Cascade solar project, a 24-megawatt plant that SunEdison brought online in

<sup>156</sup> 14 CCR 15064(e); see *American Canyon Community United for Responsible Growth v. City of American Canyon* (2006) 145 Cal. App. 4th 1062, 1081-1083 (city must consider physical deterioration of commercial areas, e.g., urban decay, even outside of jurisdiction of Lead Agency that could occur from project).

<sup>157</sup> *Bakersfield Citizens for Local Control*, 124 Cal.App.4th 1184; *Citizens Association for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal. App. 3d 151, 169-171.

<sup>158</sup> See Exhibit C, available at <http://www.desertsun.com/story/news/2015/01/01/joshua-tree-nextera-airport-solar/21166567/>.

<sup>159</sup> *Id.*

<sup>160</sup> *Id.*

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late 2013, including lowered property value.<sup>161</sup> Joshua Tree residents have worried that more solar projects could lower their property values. As Fick explained to the Desert Sun, the Project would also kill any possibility of reviving the Airport. He stated "[t]hey're taking away our potential airport, when Joshua Tree is trying to promote itself as a tourist resort."<sup>162</sup>

17-30  
Cont.

The courts have held that eyewitness testimony from local residents such as these Joshua Tree residents constitute substantial evidence of the potentially significant environmental consequences of economic and social changes.<sup>163</sup> These residents' comments constitute substantial evidence that the Project may result in significant impacts from economic and social changes caused by the Project. The MND completely fails to address this issue, in violation of CEQA. An EIR must be prepared to analyze this potentially significant impact.

## VI. THE MND'S CUMULATIVE IMPACTS ANALYSIS IS INADEQUATE

17-31

A CEQA document is required to discuss the cumulative impacts of a project "when the project's incremental effect is cumulatively considerable,"<sup>164</sup> and to discuss significant impacts that the proposed project will cause in the area that is affected by the project.<sup>165</sup> "This area cannot be so narrowly defined that it necessarily eliminates a portion of the affected environmental setting."<sup>166</sup>

### A. Air Quality

17-32

The MND fails to adequately discuss or analyze the Project's cumulative air quality impacts in three key ways.

#### 1. Failure to Conduct a Geographical Analysis of Cumulative Impacts

The MND failed to conduct a geographical analysis of cumulative impacts. CEQA requires the agency to consider "past, present, and probable future projects

<sup>161</sup> *Id.*

<sup>162</sup> *Id.*

<sup>163</sup> *Pocket Protectors v. City Of Sacramento* (2004) 124 Cal.App.4th 903, 929.

<sup>164</sup> 14 CCR § 15130(a).

<sup>165</sup> *Bakersfield Citizens*, 124 Cal.App.4th at 1216 (emphasis added); see 14 CCR § 15126.2(a).

<sup>166</sup> *Id.*, 124 Cal.App.4th at 1216.

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producing related or cumulative impacts.”<sup>167</sup> The CEQA Guidelines specifically require the Lead agencies to define the “geographic scope of the area affected by the cumulative effect.”<sup>168</sup> The MND does not provide a list of cumulative solar projects, or any type other development projects, in the vicinity of the Project site. The MND similarly failed to compare the Project emissions, combined with emissions from other projects, to the MDAQMD thresholds of significance for those pollutant emissions. The Air Quality Report briefly concludes that, because the County concluded that the Project will have de minimus operational emissions, the Project’s cumulative air quality impacts will also be less than significant.<sup>169</sup> However, the MND failed to perform any quantitative analysis of other geographically related projects, in violation of CEQA. The MND therefore failed to “define the geographic scope of the area affected by the cumulative effect[s] and provide a reasonable explanation for the geographic limitation used” in violation of CEQA Guideline Section 15130(b)(1)(B)(3), and its conclusion that cumulative impacts are insignificant is unsupported. Without a quantitative assessment of cumulative impacts within the geographical vicinity of the Project, the County has no evidence, let alone substantial evidence, to support its conclusion that the Project will not have significant cumulative impacts. An EIR is required where, as here, an Initial Study fails to adequately explain why cumulative effects would not occur.<sup>170</sup>

17-32  
 Cont.

2. *The MND Incorrectly Concludes that the Project’s Air Quality Impacts Do Not Have a Significant Cumulative Impact Because They are Incrementally Minor*

17-33

The MND concludes that, because it found the Project’s construction and operational emissions would be incrementally minor, that its cumulative impacts are therefore equally insignificant.<sup>171</sup> The result is a complete dismissal of the Project’s cumulative air quality impacts by claiming that they are a “drop in a bucket” compared with other existing regional impacts. This approach has been rejected by

<sup>167</sup> PRC § 21083; 14 CCR § 15130(b)(1)(A); *CBE v. CRA*, 103 Cal.App.4th at 117.

<sup>168</sup> 14 CCR 15130(b)(1)(B)(3).

<sup>169</sup> Air Quality Report, pp. 20-21; MND, p. 26.

<sup>170</sup> See *San Bernardino Valley Audubon Soc’y v. Metropolitan Water Dist.* (1999) 71 Cal. App. 4th 382.

<sup>171</sup> Air Quality Report, pp. 20-21; 26 (“Although the Project site is located in a region that is in non-attainment for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>, the cumulative emissions associated with the Project would not be considerable as the emissions would fall below MDAQMD thresholds.”).

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the Courts, and fails to comply with CEQA's requirement that a project mitigate impacts that are "cumulatively considerable."<sup>172</sup>

In *Friends of Oroville*, the City of Oroville prepared an EIR for a retail center project. The EIR failed to analyze the project's cumulative contribution to significant GHG impacts by concluding, without analysis, that the project's "miniscule" GHG emissions were insignificant in light of the state's cumulative, state-wide GHG emissions problem. The EIR had concluded that a further analysis of the project's GHG impacts would result in "applying a meaningless, relative number to determine an insignificant impact."<sup>173</sup> The court of appeal rejected what amounted to an outright dismissal of the City's obligation to analyze the retail center's cumulative GHG impacts.<sup>174</sup>

17-33  
Cont.

Similarly, in *Kings County Farm Bureau v. City of Hanford*,<sup>175</sup> the city prepared an EIR for a 26.4-megawatt coal-fired cogeneration plant. Notwithstanding the fact that the EIR found that the project region was out of attainment for PM10 and ozone, the City failed to incorporate mitigations for the project's cumulative air quality impacts from project emissions because it concluded that the Project would contribute "less than one percent of area emissions for all criteria pollutants."<sup>176</sup> The city reasoned that, because the project's air emissions were small in ratio to existing air quality problems, that this necessarily rendered the project's "incremental contribution" minimal under CEQA. The court rejected this approach, finding it "contrary to the intent of CEQA."

By contrast, a lead agency must find that a project may have a significant effect on the environment and must therefore require an EIR if the project's potential environmental impacts, although individually limited, are cumulatively considerable.<sup>177</sup> The term "cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable

<sup>172</sup> PRC § 21083(b)(2); 14 CCR § 15130; *Friends of Oroville v. City of Oroville* (2013) 219 Cal. App. 4th 832, 841-42; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal. App. 3d 692, 721.

<sup>173</sup> 219 Cal. App. 4th at 841-42.

<sup>174</sup> *Id.*

<sup>175</sup> (1990) 221 Cal. App. 3d 692, 721.

<sup>176</sup> *Id.* at 719.

<sup>177</sup> PRC § 21083(b); 14 CCR §§ 15064(h)(1), 15065(a)(3).

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future projects.”<sup>178</sup> The MDAQMD CEQA Guidelines similarly require a finding that a project has significant cumulative impacts where its own impacts in a particular area are individually significant when combined with those of other similar projects for each type of impact.<sup>179</sup>

17-33  
Cont.

Therefore, the County cannot end its cumulative impacts analysis at the same point at which it ended its direct impacts analysis – i.e., when it determines whether or not the project will individually cause significant air emissions. That is not the intent of the cumulative impacts analysis. Rather, the County must attempt to determine whether the Project’s emissions, when combined with other similar emissions from other projects, may be significant. Under CEQA, if an adjacent project has significant air emissions, but the proposed project does not, the proposed project may still be considered to have significant cumulative impacts if its own emissions contribute to a cumulative exceedence of a particular pollutant.<sup>180</sup> The same is true for projects which may have individually insignificant impacts, but which, when combined, result in a significant impact.<sup>181</sup> The MND failed to undertake that analysis at all.

Indeed, as discussed above, there is substantial evidence supporting a fair argument that the Project will have individually significant impacts from construction NOx and TACs that greatly exceed Air District thresholds. Because the Project has significant individual impacts for these pollutants, the County must make a related finding that the Project has significant cumulative impacts for these same pollutants. An EIR must be prepared to remedy these deficiencies.

### 3. *The MND Improperly Claims “Offset” Credits for Cumulative Impacts Based on Projected GHG Emissions*

17-34

The MND asserts, by virtue of the fact that the Project is a solar PV project and not a “traditional” energy generating project such as burning coal, fuel oil, or natural gas, that the Project gets a cumulative impact “offset” credit based on its net operational CO<sub>2</sub> reductions.<sup>182</sup> This analysis is contrary to law because it contradicts

<sup>178</sup> PRC § 21083(b)(2).

<sup>179</sup> See MDAQMD CEQA Guidelines pp. 8-9, available at <http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=1806>.

<sup>180</sup> PRC § 21083(b); 14 CCR §§ 15064(h)(1), 15065(a)(3), 15130(a).

<sup>181</sup> Id.

<sup>182</sup> See Air Quality Report, p. 21.

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CEQA's basic requirements for a cumulative impact analysis, and also contradicts the clear directives of the MDAQMD CEQA Guidelines.

The State CEQA Guidelines do not contain an offset allowance for making the threshold determination of whether a cumulative impact is significant. Rather, CEQA requires that a lead agency must find that a project may have a significant effect on the environment and must therefore require an EIR if the project's potential environmental impacts, even if individually limited, are cumulatively considerable.<sup>183</sup>

17-34  
Cont.

To determine whether a project's impacts are "cumulatively considerable," the lead agency must evaluate "*the change in the existing environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.*"<sup>184</sup> The agency must then find that a cumulative impact is significant if the combined impact of the project and other projects result in a significant change in the exiting environment with regard to that impact.<sup>185</sup> In other words, even if a project's individual impact is insignificant, if the project contributes to a significant change in the environment caused by *other* projects with regard to that impact, the project will still have a significant cumulative impact. The MDAQMD CEQA Guidelines similarly require a finding that a project has significant cumulative impacts where its own impacts in a particular area are individually significant when combined with those of other similar projects for each type of impact.<sup>186</sup> As discussed above, this requires a quantitative, comparative analysis of the impacts of other regional projects.

The MND does not dispute that the Project will create new GHG emissions and other air emissions, even if minor.<sup>187</sup> Therefore, in order to determine whether or not the Project has significant cumulative air emissions, the County must combine the Project's emissions with those of other past, present, and other reasonably foreseeable projects, and determine – based on the combined emissions – whether there is an exceedance of applicable air quality standards or thresholds for each pollutant emitted

<sup>183</sup> PRC § 21083(b); 14 CCR §§ 15064(h)(1), 15065(a)(3), 15130(a)(1).

<sup>184</sup> 14 CCR § 25355(b) (emphasis added).

<sup>185</sup> 14 CCR §§ 15064(d)(1), 15065(a)(3), 15130(a)(1).

<sup>186</sup> See MDAQMD CEQA Guidelines pp. 8-9, available at

<http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=1806>.

<sup>187</sup> See MND, p. 25 (project will have annual operational emissions of 17.39 tons of CO<sub>2</sub>e); Air Quality Report, p. 25 ("the Project would contribute to local and regional air pollutant emissions")

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by the Project.<sup>188</sup> The County did not do that. Instead, the County argues that the Project does not have significant cumulative air quality impacts of any kind simply because it is a solar project rather than a refinery or other fossil fuel burning energy project. In order to reach this conclusion, the County would have to assume that the hypothetical “baseline” from which its cumulative impacts are assessed is that of an existing fossil fuel-burning facility, which, if taken offline, would reduce regional emissions of each pollutant emitted by the Project to levels that are below applicable thresholds, or which cause the air basin to reach attainment for a pollutant for which it was out of attainment at the time the Project was proposed. CEQA does not allow an agency to rely on such a hypothetical, or imaginary, baseline.<sup>189</sup>

17-34  
Cont.

Furthermore, while CEQA allows agencies to use “offsets” as offsite mitigation measures, including to mitigate a project’s significant GHG emissions,<sup>190</sup> the purpose of such “offsets” is to mitigate a project’s significant direct impacts, not to assess whether those impacts are significant in the first place. Indeed, the courts have disallowed this approach.<sup>191</sup> Rather, the determination of whether a project’s individual or cumulative impacts are significant may only be made by assessing the direct physical change in the environment caused by the project, no matter what kind of project it is.<sup>192</sup> CEQA does not distinguish between projects which have a “beneficial” effect in the environment or an “adverse” effect.<sup>193</sup> Instead, the fair

<sup>188</sup> 14 CCR §§ 15130(a), 15355; See Practice Under the California Environmental Quality Act, Kostka and Zischke (March 2-15 Update), § 13.39 (An agency may “conclude that the cumulative impact is significant even though the project-specific impact is not where...a new project will emit a relatively small quantity of an air pollutant, but overall emissions of that pollutant in the area have created a significant air quality problem in the area.”).

<sup>189</sup> *CBE v. SCAQMD*, 48 Cal.4th at 319.

<sup>190</sup> 14 CCR § 15126.4(c)(3).

<sup>191</sup> *Lotus*, 223 Cal.App.4th at 650 (Court found that because EIR had “compress[ed] the analysis of impacts and mitigation measures into a single issue, the EIR disregard[ed] the requirements of CEQA...Absent a determination regarding the significance of the impacts... it is impossible to determine whether mitigation measures are required or to evaluate whether other more effective measures than those proposed should be considered.”).

<sup>192</sup> 14 CCR § 15064(d); 15064.4(b) (in determining the significance of GHG emissions, the agency must address whether the project increases GHG emissions as compared to the existing environment).

<sup>193</sup> *California Farm Bureau Federation v. California Wildlife Conservation Bd.* (2006) 143 Cal.App.4th 173, 196 (“it cannot be assumed that activities intended to protect or preserve the environment are immune from environmental review. There may be environmental costs to an environmentally beneficial project, which must be considered and assessed. The State Agencies have not adequately shown there is “no possibility” this project, considered as a whole (Guidelines, § 15378, subd. (a)), may cause significant environmental impacts.”), citing *Davidon Homes*, 54 Cal.App.4th at p. 119, 62 Cal.Rptr.2d 612; *Dunn-Edwards Corp. v. Bay Area Air Quality Management Dist.* (1992) 9 Cal.App.4th

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argument test requires the preparation of an EIR whenever “there is substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial.”<sup>194</sup> The MND ignores this legal standard by asserting that the Project’s cumulative air quality impacts are insignificant because the Project will cause less pollution than a fossil fuel energy project.

17-34  
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Furthermore, even if the County were entitled to a cumulative impact “credit” for cumulative GHG emissions (which it is not), there could be no offsetting of the Project’s non-GHG construction emissions based on GHG reductions. The Air Quality Report attempts to claim cumulative “offset” credits for both GHGs and all other air emissions.<sup>195</sup> In addition to being legally inadequate, this conclusion is factually inaccurate. GHGs consist of a discrete set of air pollutants, including CO<sub>2</sub> and other discrete pollutants such as O<sub>3</sub> (ozone) and methane.<sup>196</sup> Construction emissions consist of numerous air pollutants, some of which are GHGs, and some of which are not. For example, TACs from DPM emissions are not GHGs. Therefore, the County cannot dismiss its duty to analyze and mitigate the Project’s cumulative TAC emissions by relying on a reduction in GHGs.

An EIR must be prepared to conduct a legally adequate and factually accurate cumulative impacts analysis of the Project’s air emissions.

## **VII. THE MND FAILS TO INCLUDED LEGALLY BINDING MITIGATION MEASURES TO REDUCE SIGNIFICANT PROJECT IMPACTS**

17-35

CEQA requires the lead agency to adopt feasible mitigation measures that will substantially lessen or avoid a project’s potentially significant environmental impacts.<sup>197</sup> Failure to include enforceable mitigation measures is considered a failure

644, 11 Cal.Rptr.2d 850, disapproved on other grounds in *Western States Petroleum Assn. v. Superior Court*, 9 Cal.4th 559, 570.

<sup>194</sup> 14 CCR § 15063(b)(1) (emphasis added).

<sup>195</sup> See Air Quality Report, p. 21 (emphasis added) (“The energy produced by the proposed 20 MW Project is estimated to displace approximately 34,050 tons of CO<sub>2</sub>e that would otherwise be emitted by fossil fuel fired power plants. This is more than enough to offset the Project’s air and GHG emissions.”).

<sup>196</sup> See MDAQMD CEQA Guidelines p. 12, available at

<http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=1806>

<sup>197</sup> CEQA §§ 21002, 21081(a) and describe those mitigation measures in the EIR. (CEQA § 21100(b)(3); CEQA Guidelines § 15126.4.

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to proceed in the manner required by CEQA that is evaluated de novo by the courts.<sup>198</sup> The court of appeal recently clarified that, to meet this requirement, mitigation measures must be incorporated directly into the MMRP to be enforceable.<sup>199</sup>

The MND is inadequate because it fails to incorporate admittedly necessary mitigations as binding, enforceable mitigation measures in its Mitigation Plan. For example, the MND states that a “Construction and Demolition Waste Management Plan will be put into place prior to any demolition.”<sup>200</sup> However, the MND does not include any hazardous materials mitigation measures. There is therefore no binding requirement that the Applicant develop or implement the Waste Management plan prior to Project approval, or at any time thereafter. And as discussed above, the Phase I ESA also recommended specific measures to detect and remove asbestos and lead-contaminated materials, and PCBs, from Project site.<sup>201</sup> The MND fails to mention any of these materials, and fails to include the recommended mitigation measures in its Mitigation Plan.

The MND similarly fails to require enforceable mitigation measures to reduce the Project’s impacts to biological resources to less than significant levels. Ms. Owens observes that the MND fails to include a Bird and Bat Monitoring Program to monitor and mitigate the potentially significant impacts from avian and bat collisions with solar panels and other above-ground equipment, including in particular, birds protected by the Migratory Bird Treaty Act.<sup>202</sup> She recommends that a Plan be required as a mandatory component of the Project, and mitigation measures adopted to directly reduce these significant impacts.

These measures must be incorporated into the Project’s Mitigation Plan as binding mitigation measures, and an EIR must be prepared to analyze the full scope of the risks posed by hazardous contamination and biological resource impacts at the Project site.

17-35  
Cont.

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<sup>198</sup> *San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal.App.4th 645, 672.

<sup>199</sup> *Lotus v. Dept of Forestry* (2014) 223 Cal. App. 4th 645, 651-52.

<sup>200</sup> MND, p. 11.

<sup>201</sup> See Phase I ESA, p. 4.

<sup>202</sup> See Exhibit B, Owens Comments, pp. 17-18, 21.

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## VIII. CONCLUSION

The MND is inadequate because it fails to accurately describe the existing environmental setting, and fails to identify and mitigate the Project's numerous potentially significant impacts from hazardous materials and environmental consequences of economic and social changes caused by the Project, and on air quality, public health, and biological resources. Due to these significant deficiencies, the County cannot conclude that the Project's potentially significant impacts have been mitigated to a less than significant level.

17-36

The CEQA Guidelines require that an EIR be prepared if there is substantial evidence supporting a fair argument that any aspect of a project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial.<sup>203</sup> As discussed in detail above, there is substantial evidence that the Project may result in significant adverse and unmitigated impacts that were not identified in the MND.

17-37

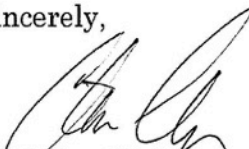
We urge the County to fulfill its responsibilities under CEQA by withdrawing the MND and preparing a legally adequate EIR to address the potentially significant impacts described in this comment letter and the attached letters. Only by complying with all applicable State and Federal laws will the County and the public be able to ensure that the Project's significant environmental impacts are mitigated to less than significant levels.

17-38

Thank you for your attention to these comments. Please include them in the record of proceedings for the Project.

17-39

Sincerely,



Christina M. Caro

CMC:ric

<sup>203</sup> CEQA Guidelines § 15063(b)(1).

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**Letter 17**

**Adams Broadwell/Coalition for Responsible Solar**

**Main Letter**

**February 10, 2016**

**Response 17-1**

The commenter describes the parties on whose behalf she is commenting and describes the Project. The commenter's description is noted.

**Response 17-2**

The commenter further describes the Project and makes a legal conclusion about the County's analysis. See responses 17-19, 17-21 and 17-22

A Demolition Plan for the existing buildings on the decommissioned airport site will be developed in accordance with County requirements. Any asbestos containing materials, lead based paint, or PCBs will be removed according to industry standards prior to demolition. The underground storage tank, which was not leaking, was removed in 2015 and documentation of the removal is in the record.

**Response 17-3**

The commenter further describes the Project's location and states that local parties are concerned about the Project's impacts. The commenter's description is noted. According to the applicant, there is a structure at that distance, but it is believed to be vacant and not used as a residence.

**Response 17-4**

The commenter summarizes the opinion of an expert consulted for the purpose of commenting on the potential air quality impacts of the Project. As described in the further responses to comments below, the County does not believe that the expert opinion put forth constitutes substantial evidence. See responses 17-24 and 17-25.

**Response 17-5**

The commenter summarizes the opinion of an expert consulted for the purpose of commenting on the potential biological impacts of the Project. As described in the further responses to comments below, the County does not believe that the expert opinion put forth constitutes substantial evidence. See responses 17-15, 17-16 and 17-17.

**Response 17-6**

The commenter states a legal conclusion. As described in the further responses to comments below, the County disagrees with commenter's legal conclusions and assertions of "substantial evidence" to support those conclusions.

**Response 17-7**

The commenter describes the qualifications of the "experts" consulted by commenter and relied on in this comment letter. The commenter further makes legal conclusions about its "expert" opinions. As described in the further responses to comments below, the County disagrees with commenter's legal conclusions and assertions of "substantial evidence" to support those conclusions.

**Response 17-8**

The commenter describes the parties on whose behalf it is making comments. The commenter's description is noted.

## Response 17-9

The commenter states legal standards and conclusions regarding the requirements for preparation of Environmental Impact Reports (EIRs) under the California Environmental Quality Act (CEQA). The commenter claims that instead of adopting a Mitigated Negative Declaration (MND), the County should prepare an EIR for the Project, and sets forth a number of legal and technical arguments to support that claim. The County disagrees with commenter's arguments, based on the legal standard for preparation of an EIR as well as the lack of substantial evidence put forth by the commenter to support her claims.

In conducting CEQA analysis for a project that is not otherwise exempt from review, the lead agency conducts an Initial Study prepared pursuant CEQA Guidelines §§ 15060-15065. The Initial Study is used to support and justify the agency's next step: adoption of a Negative Declaration, or Mitigated Negative Declaration (MNDS), or preparation of an EIR. CEQA Guidelines §§15063, 15371.

A MND is appropriate where the agency determines, based on an Initial Study, that no significant environmental effects will occur because revisions in the project have been made or mitigation measures will be implemented which will reduce all potentially significant impacts to less than significant levels, and where there is no substantial evidence that the Project, as revised, may have a significant effect on the environment. Pub. Resources Code §21064.5. "[T]he purpose of CEQA is not to generate paper, but to compel government at all levels to make decisions with environmental consequences in mind." *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. Preparation of a MND rather than an EIR allows an agency to fulfill this purpose and "eliminate unnecessary EIRs" (Guidelines §15063), thereby streamlining the permitting process for appropriate projects while still identifying and mitigating potential significant environmental effects. Consistent with this guidance, and based on the analysis of the Project's Initial Study, the County determined that it may adopt a MND for the Project.

The commenter asserts that the MND is insufficient and that an EIR must be prepared. However, CEQA does not require an EIR just because a party asserts claims of "significant effects." Rather CEQA requires a showing of "substantial evidence, in light of the whole record before [it], that a project may have a significant effect on the environment." Guidelines §15064(a)(1) (emphasis added). "Said another way, if a lead agency is presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect." Guidelines §15064(f)(1). The key inquiry is identifying what is a "fair argument" supported by "substantial evidence. The commenter urges that any opinion or claim meets the standard, when in fact, CEQA and multiple court decisions make clear that more is required.

Under CEQA, "substantial evidence" is defined as "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." Guidelines §15384. It includes "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." *Id.*

"Evidence is relevant if it has 'any tendency in reason to prove or disprove any disputed fact that is of consequence to the determination of the action.'" *Western States Petroleum Assn. v. Sup. Ct.* (1995) 9 Cal. 4th 559, 570 (citing Evid. Code §210). And evidence is "enough" if it supports "a reasonable possibility that a project would have significant environmental effects" – which is the basic question underlying whether a "fair argument" has been made. *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1119. Substantial evidence is not "argument, 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." PRC §21082.2(c); Guidelines §15064(f)(5). Based on this standard, not all narrative put forth as "expert opinion" qualifies as substantial evidence. Indeed, expert opinions "rise only to the level of reliability and credibility as the evidence constituting the foundation for those opinions." *Citizens' Comm. to Save our Village v. City of Claremont* (1995) 37

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Cal.App.4th 1157, 1170. This means that “expert opinion” is only substantial evidence if it is supported by credible, reliable, and relevant information.

In examining what constitutes “substantial evidence,” the courts have made clear that:

“[F]ears and...desires” of project opponents do not qualify as substantial evidence (*Perley v. County of Calaveras* (1982) 137 Cal.App.3d 424, 436-7);

“[A]n expert’s opinion which says nothing more than ‘it is reasonable to assume’ that something ‘potentially...may occur’” is not substantial evidence (*Apartment Assoc. of Greater Los Angeles v. City of Los Angeles* (2001) 90 Cal.App.4th 1162, 1176); and

“[A] suggestion to investigate further is not evidence, much less substantial evidence, of an adverse impact” and is therefore “insufficient to create a fair argument of a significant effect on the environment” (*Parker Shattuck Neighbors v. Berkeley City Council* (2013) 222 Cal.App.4th 768, 786).

Ultimately, it is within the County’s “discretion to determine whether evidence offered by the citizens claiming a fair argument exists meets CEQA’s definition of ‘substantial evidence,’” and the County is “given...the benefit of the doubt on any legitimate, disputed issues of credibility.” *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 928. While the commenter has put forth a large volume of expert opinion in the comment letter and attachments thereto, as clarified in these responses to comments, that opinion is not based on relevant facts and therefore does not constitute substantial evidence.

### Response 17-10

The comment details legal standards and conclusions purportedly applicable respect to the description of the Project in the IS/MND. The County disputes the commenter’s stated legal standard, and as detailed below, the Project Description is complete and accurate.

The commenter argues that the description of the Project in the IS/MND is flawed because it does not meet certain requirements set forth in CEQA. However, the commenter appears to be advocating for County to present an environmental analysis at the level of detail appropriate for an EIR rather than a MND.<sup>1</sup> Indeed, the commenter has not demonstrated that the County’s IS/MND fails to meet the *applicable* legal standards for those documents.

In contrast to the more detailed project description requirements for an EIR (see CEQA Guidelines §15124), the IS (upon which a MND relies) “shall contain in brief form....a description of the project including the location of the project.” CEQA Guidelines §15063. A Negative Declaration should include “(a) A brief description of the project, including a commonly used name for the project, if any; (b) The location of the project, preferably shown on a map, and the name of the project proponent;...” CEQA Guidelines §15071. The different legal standards applicable to an IS/MND and an EIR are in place because these documents serve different purposes. In particular, an IS/MND is intended to “facilitate environmental assessment early in the design of a project” and “eliminate unnecessary EIRs” (CEQA Guidelines §15063)....” *Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal.App.4th 1170, 1192.

As the commenter points out, the MND describes the Project’s “preliminary design” and notes that the design of the Project is still underway. MND, p.16. This closely correlates with the CEQA Guidelines, which state an IS should be prepared “early in the design” of a project. Guidelines §15071. It is understandable and expected that a project evaluated by an IS will continue to develop design-level details even after the IS is published for review. That does not make the analysis inadequate or the document misleading. The commenter argues that a fatal flaw in the Project

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<sup>1</sup> See, e.g., *Leonoff v. Monterey County Bd. of Supervisors* (1990) 222 Cal.App.3d 1337, 1347: “We are aware of no authority supporting objectors’ unstated premise that an initial study is inadequate unless it amounts to a full-blown EIR based on expert studies of all potential environmental impacts. If this were true, the Legislature would not have provided in CEQA for negative declarations.”

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description is that it does not specify exactly the size and number of solar PV panels that will be installed at the Project. While that level of specificity is not required here under CEQA, the commenter is mistaken as the IS does indeed provide the details she claims are lacking. The IS describes that the Project will have an installed capacity of 20 MWAC using fixed-tilt configuration at 15-25 degrees (IS, pg.4) and provides a detailed preliminary site plan showing the configuration—including proposed dimensions, positioning and location—of the solar PV array. IS, p.8. While the fine-grain detail of the array may be adjusted as the permitting process continues, the commenter's claim that this information is not provided is unfounded. Additionally, even assuming arguendo that the commenter were in fact correct, CEQA would not require the alleged level of detail regarding the PV panels.

#### **Response 17-11**

The commenter states that the project description in the IS/MND is flawed because it fails to compile in one location a list of permits and regulations applicable to the Project under the jurisdiction of other agencies. Response to comment 17-10 addresses the legal standards applicable to County's IS/MND with regard to its project description. Furthermore, the County disagrees that the IS/MND and supporting documents fail to inform the reviewing public of the necessary permits required for the Project and the rules by which the Project must comply. Nonetheless, in order to assist the reader, the County is providing here the requested list of permits required to construct and operate the Project.

As described in the IS, the air quality best management practices are shown as AQ-1 through AQ-4. These are standard practices which the MDAQMD issues. AQ-2 contains the requirements of the Dust Control Plan which will also be reviewed by the MDAQMD. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

In regards to biology, the Applicant is not applying for an Incidental Take Permit. There are no known threatened and endangered species occupying the Project site. The Applicant has discussed the issue of desert tortoise with both the USFWS and the CDFW, and it is understood that an Incidental Take Permit is not being applied for from either agency.

A water well permit will be applied for from San Bernardino Environmental Health Services. In the event the JBWD does not serve the Project with water, the Applicant will drill a water well onsite to serve the water needs of the Project. Other "permits" necessary for the Project include ministerial permits such as a grading permit which will be issued by the County after the CUP permit is approved.

#### **Response 17-12**

The commenter claims that the project description in the IS/MND fails to provide sufficient information regarding the source of water for the Project. Response to comment 17-10 identifies the legal standards applicable to the County's IS/MND with regard to the project description. As contemplated by CEQA, an IS is prepared early in the design phase of a project, and therefore some project components may undergo further refining throughout the permitting process. CEQA Guidelines §15063(c)(4). This is the case for the description of where and how the Project will obtain the water necessary for construction and the minimal water necessary for ongoing operation. All options for Project water have been identified and described in the IS and the potential impacts of those options have been analyzed. See the Hydrology and Utility sections of the IS for additional information.

As described in the IS, water will be provided either by a well on site or by the Joshua Basin Water District (JBWD). A well application will be submitted to the County, and the Applicant intends to drill a well to meet the Project water demand in the event that water cannot be served by the JBWD. Water demand is described in detail in the Utilities section of the IS/MND. At peak demand, approximately 30 acre feet of water will be needed during the six months

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of project construction; this represents less than 2% of the average annual water provided to the region through the JBWD (approximately 1,700 acre feet per year for the region).

Regardless of whether the Project uses water from an onsite well or from the JBWD, the impact to the groundwater basin will not be significant. The well is not in an adjudicated basin. USGS groundwater records show that there is adequate groundwater volume beneath the Project site to serve the water demand for the Project without significantly impacting water supplies. The Project would not deplete groundwater in excess of the basin's safe yield or lower the local groundwater table level. Groundwater aquifer volume and recharge would not be significantly impacted by the implementation of the Project.

In addition, the JBWD has a recharge program in place whereby surface water is transferred through the Morongo pipeline, to a recharge pond owned by JBWD, and allowed to recharge back into the underlying aquifer, essentially offsetting future groundwater withdrawals. If the Project uses water from JBWD, the Applicant will purchase water to be placed into the recharge pond -- or pay a fee that would be used by JBWD to purchase water for recharge.

#### **Response 17-13**

The commenter states that the project description in the IS/MND fails to provide sufficient detail regarding the activities that will occur following the anticipated lifetime of the Project (i.e., in 30 to 40 years). Response to comment 17-10 discusses the legal standards applicable to the County's IS/MND with regard to its project description.

Once again, the commenter is asking that the County's IS/MND contain detail and analysis equivalent to that required for an EIR, but such detail is not necessary or warranted. See, e.g., *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 502 (negative declaration properly focused on proposed drilling program, and did not need to consider uncertain potential production after initial program was completed). As discussed in the Section 4.3 of IS/MND, the Project may be decommissioned following the anticipated lifetime of the Project; however, the Project could also be refurbished at that time for continued operation, instead of being decommissioned. It is expected that refurbishment would require a new CUP or extension of the proposed CUP, which would be separately subject to review under CEQA at that time. Regardless, as a Condition of Approval, the County will require the project applicant to prepare a decommissioning plan. The decommissioning plan will address post-operation decommissioning of the project solar facilities and require the applicant to comply with all applicable Federal, State and local laws applicable at the time of decommissioning, such as those requirements set forth in San Bernardino County Development Code Section 84.29.060. Thus, for example, recyclable materials would be transported to the appropriate County facility for sorting (e.g. materials recovery facility). Non-recyclable materials would be transferred to a permitted disposal facility. These materials would be removed from the site in accordance with the procedures outlined in the project's Health and Safety Plan.

#### **Response 17-14**

The commenter states a legal standard and conclusion regarding the description of the Project's environmental setting or "baseline". As described in the further responses to comments below, the County disagrees with commenter's legal conclusions.

In order to determine whether a project's environmental effects may be significant, an agency must describe "some measure of the environment's state absent the project, a measure sometimes referred to as the 'baseline'..." *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal. 4th 310, 315; CEQA Guidelines §15063(d)(2). This "baseline" is typically described as "the physical environmental conditions in the vicinity of the project, as they exist at the time ... environmental analysis is commenced." CEQA Guidelines §15125(a); *Communities for a Better Environment*, 48 Cal.4th at 315. County's IS/MND provides the necessary description of the environmental setting for the Project.

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### Response 17-15

The commenter states that the County's description of the environmental setting with respect to the potential presence of desert tortoise is flawed. The commenter states that investigations performed by an expert identified that the Project site is active desert tortoise habitat based on descriptions provided in regional databases. See response to comment 17-14 for the applicable legal standard for describing the environmental setting. The County disagrees with the conclusions asserted by the commenter's expert, which are not supported by any new or different facts that were not disclosed in the IS. The County's description of the environmental setting with regard to desert tortoise is based on technical surveys done by qualified biologists. Furthermore, the commenter has not conducted surveys at the Project site.

No live tortoises or their sign were observed during Spring 2012 or 2015 surveys of the Project, and the entirety of the survey area is either poor quality desert tortoise habitat or developed and therefore not desert tortoise habitat. The lack of recent or past signs of tortoise indicates that tortoises do not currently use the Project and have not used it in recent years. Most of the Project is highly disturbed by the development and/or operation of the airport and the cement plant. The introduction of nonnative plant species and the proximity to a well-traveled paved road (Sunfair Road) further contribute to the lowered quality of the habitat. There are only small patches of relatively undisturbed Big Galleta Grass-Creosote Bush Scrub Steppe Alliance. The version of this community that occurs at the Project is inherently poor tortoise habitat and is further compromised by the surrounding disturbance.

The desert tortoise surveys and other biology surveys were disclosed and discussed with the USFWS and the CDFW. These agencies have reviewed and approved the surveys that were performed. There are no desert tortoises using the Project site.

The letter provided by Renee Owens is based on generalized information in California, and not site specific information. Ms. Owens has not conducted desert tortoise surveys at the Project site.

### Response 17-16

The commenter states that the County's description of the environmental setting with respect to the potential presence of burrowing owl is flawed. The commenter states that review of the Project's biological reports performed by an expert identified that County's burrowing owl surveys were unreliable. But commenter does not set forth any evidence or facts showing that burrowing owl have been or are likely to be found at the Project site; rather, the commenter merely asserts that the methodology of the surveys supporting the biological reports is flawed. Response to comment 17-14 sets forth the applicable legal standard for describing the environmental setting. The County disagrees with the conclusions asserted by the commenter's expert and determines that the commenter's expert has not put forth any reliable or relevant facts supporting their conclusions. The comment and the expert opinion upon which it relies is not substantial evidence. As the courts have determined: "an expert's opinion which says nothing more than 'it is reasonable to assume' that something 'potentially...may occur'" is not substantial evidence (*Apartment Assoc. of Greater Los Angeles v. City of Los Angeles* (2001) 90 Cal.App.4th 1162, 1176); and that "a suggestion to investigate further is not evidence, much less substantial evidence, of an adverse impact" and is therefore "insufficient to create a fair argument of a significant effect on the environment" (*Parker Shattuck Neighbors v. Berkeley City Council* (2013) 222 Cal.App.4th 768, 786).

Burrowing Owl survey protocols were reviewed and approved by CDFW. A habitat assessment, surveys according to CDFW protocols (CDFG 2012), and an impact assessment were completed and can be found in the Project's *Burrowing Owl Survey Report for the Joshua Tree Solar Farm*, prepared by Tetra Tech in July 2015. Mitigation measure BIO-3 in the IS/MND includes pre-construction take avoidance surveys and preparation of a passive relocation plan if owls are found to occupy the Project site at the time of construction. In addition, other standard measures such as speed limits, limiting the area of disturbance, and having a biological monitor present for

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construction outside of the fenced site will contribute toward avoiding and minimizing any potential impacts to this species and their habitat.

#### **Response 17-17**

The commenter states that the County's description of the environmental setting with respect to non-native plant species is flawed. The commenter requests that the County quantify the extent of non-native weeds already present at the site, but does not set forth any reason why such an analysis would further County's understanding of the Project's effects (i.e., the commenter does not state any facts indicating that a component of the Project is likely to result in weed proliferation or other undisclosed impacts). See response to comment 17-14 for the applicable legal standard for describing the environmental setting. The County disagrees with the underlying assumption that such an analysis is required to adequately assess the Project's potential impact on biological resources. The commenter disagrees with the extent of County's analysis, but has not put forth any reliable or relevant facts supporting the need for County's analysis to be expanded, and therefore the comment is not substantial evidence. As the courts have determined, "a suggestion to investigate further is not evidence, much less substantial evidence, of an adverse impact" and is therefore "insufficient to create a fair argument of a significant effect on the environment" (*Parker Shattuck Neighbors v. Berkeley City Council* (2013) 222 Cal.App.4th 768, 786).

Vegetation surveys were conducted at the Project site, including surveys for noxious weeds. The Mitigation Measure included in the IS (BIO-7) will adequately protect the site and the surrounding community from the spread of noxious weeds.

#### **Response 17-18**

The commenter states that the County's description of the environmental setting is flawed because it does not describe "Valley Fever". The commenter requests that the County impose specific mitigation measures aimed at reducing the likelihood of exposure to Valley Fever spores due to Project activities. See response to comment 17-14 for the applicable legal standard for describing the environmental setting. The County disagrees with the commenter's conclusion that such an analysis or mitigation is warranted for the Project. The commenter has not put forth any reliable or relevant facts supporting that Project activities would lead to a risk for exposure to Valley Fever spores, and therefore the comment is not substantial evidence of such a risk. As the courts have determined, "a suggestion to investigate further is not evidence, much less substantial evidence, of an adverse impact" and is therefore "insufficient to create a fair argument of a significant effect on the environment" (*Parker Shattuck Neighbors v. Berkeley City Council* (2013) 222 Cal.App.4th 768, 786). Furthermore, the County disagrees with the conclusion that it should require a mitigation measure for an unsupported potential impact. Under CEQA, the County may approve the Project once it has considered and imposed feasible mitigation measures to substantially lessen or avoid the Project's significant environmental effects. Pub. Resources Code § 21002. Once the County has adopted feasible measures that will substantially lessen or avoid the Project's significant impacts, it has met its burden—the County need not evaluate or adopt additional measures. Pub. Resources Code §21081, CEQA Guidelines §15091(a) (agency need not make further findings on the feasibility of mitigation measures if it determines that an impact is less than significant); *San Franciscans for Reasonable Growth v. City & County of San Francisco* (1989) 209 Cal.App.3d 1502, 1519 (agency's duty to condition approval on incorporation of mitigation measures only exists when such measures would "substantially lessen" a significant environmental effect, "the agency need not, under CEQA, adopt every nickel and dime mitigation scheme brought to its attention."). As described below, the Project does not present any risk factors for exposure to Valley Fever spores and therefore, the Project is unlikely to result in any such exposure. County's determination that this topic not be further evaluated is sound.

In regards to specific comments about the potential for Valley Fever and air borne spores to be created during construction, again, the Project is not taking place on desert land with old soil crust. It is a highly disturbed piece of

property that was formerly used as an airport. Valley Fever spores are generally found in unbroken soil crust and are extremely unlikely to be on this property. Furthermore, the County Public Health Department has determined that development projects in San Bernardino County do not pose a significant risk to public health from Valley Fever

#### Response 17-19

The commenter states that the County's description of the environmental setting with respect to hazardous materials is flawed. The commenter states that additional information should be provided regarding a previously removed underground storage tank. See response to comment 17-14 for the applicable legal standard for describing the environmental setting. The County disagrees that additional information regarding the removed tank is necessary to evaluate the potential impacts of the Project with regard to hazardous materials. The commenter has not put forth any reliable or relevant facts supporting the need for such additional information, and therefore the comment is not substantial evidence. As the courts have determined, "a suggestion to investigate further is not evidence, much less substantial evidence, of an adverse impact" and is therefore "insufficient to create a fair argument of a significant effect on the environment" (*Parker Shattuck Neighbors v. Berkeley City Council* (2013) 222 Cal.App.4th 768, 786 [noting that the existence of contamination is not in itself a significant impact]).

The underground storage tank was removed in 2015. There is no evidence that it leaked any hazardous materials as evidenced by the County's approval of the tank removal and clean closure of the underground storage tank. .

#### Response 17-20

The commenter describes legal standards and makes legal conclusions. The County disagrees with commenter's legal conclusions and assertions of "substantial evidence" to support those conclusions. See response to comment 17-9.

#### Response 17-21

The commenter states that the County's IS/MND is flawed because it fails to describe that Project activities will lead to potential hazards associated with asbestos and lead. Asbestos and lead based paint in the buildings will be removed pursuant to a Demolition Plan that will be developed in accordance with County requirements. Nevertheless, the commenter states that the County must require mitigation measures to reduce these undisclosed potential impacts. The commenter disagrees with the County's conclusion with regard to the Project's potential hazards, but does not put forth any new or conflicting evidence that would warrant the County changing its conclusion, and therefore the comment is not substantial evidence. In addition, the commenter has not put forth any reliable or relevant facts supporting the need for additional narrative regarding this topic. As the commenter notes, the existence of asbestos and lead is disclosed in the IS through the Phase I report upon which the IS relies. Section 3.7 of the IS states that a Demolition Plan will be prepared prior to the removal of the buildings. County disagrees that further description of these conditions in the IS is necessary to evaluate the potential impacts of the Project with regard to hazardous materials.

#### Response 17-22

The commenter states that the County's IS/MND is flawed because it fails to describe that Project activities will lead to potential hazards associated with PCBs. The commenter states that the County must require mitigation measures to reduce these undisclosed potential impacts. The commenter disagrees with the County's conclusion with regard to the Project's potential hazards, but does not put forth any new or conflicting evidence that would warrant the County changing its conclusion, and therefore the comment is not substantial evidence. In addition, the commenter has not put forth any reliable or relevant facts supporting the need for additional narrative regarding this topic. As the commenter notes, the existence of PCBs is disclosed in the IS through the Phase I report upon which the IS relies. Section 4.2 of the IS acknowledges that transformers can contain hazardous fluids. County disagrees that

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further description of these conditions in the IS is necessary to evaluate the potential impacts of the Project with regard to hazardous materials.

Commenter further cites to *McQueen v Board of Directors* (1988) 202 Cal.App.3d 1136. County disagrees that the facts or holding of that case are relevant to the facts of the Project. In the *McQueen* case, an agency failed entirely to conduct an initial study to evaluate the potential impacts of a project. The court determined that an agency had improperly concluded that categorical exemptions applied to a proposed project and required the agency to conduct review under CEQA. Here, the County evaluated the potential impacts of the Project, including due to the presence of PCBs – which are disclosed in the Phase I report on which the IS relies. Commenter's disagreement with County's conclusions is not substantial evidence of a potential impact.

PCBs are found in nearly every electrical transformer. The existing transformer located on the Project site is not known to be leaking and does not present a current hazard. Should the transformer onsite need to be changed or removed, the contractor handling the transformer would do so in accordance with all environmental, health and safety requirements pertaining to transformers.

#### **Response 17-23**

The commenter disagrees with County's conclusions with regard to air quality. County notes the commenter's opinion and disagrees with their characterization, as described in more detail in the responses below.

#### **Response 17-24**

The commenter alleges that the air quality analysis is flawed. The air quality analysis was performed according to MDAQMD guidelines and accepted by MDAQMD. The guideline specifies that project emissions should be assessed in two phases: (1) construction and (2) operation. The proposed facility employs photovoltaic panels to convert sunlight directly into power. There are minimal air emissions during operations. The construction phase mainly involves installation of the PV panels. Emissions from the construction phase are short-term and air quality issues related to PM10 and PM2.5 will be addressed through the development and implementation of a Dust Control Plan, as described in AQ-2 of the IS/MND. Additionally, the County will implement its own review of a construction and operational dust control plan per the Project Conditions of Approval. In the event of non-compliance, the County will utilize its Code Enforcement to bring the property into compliance.

The commenter states that the County's air quality analysis is flawed because the air quality report relied on an equipment list, trip assumptions, and demolition estimates that differ from those described in the IS. The commenter questions these estimates but does not put forth any new or conflicting evidence that would warrant the County changing its conclusions, and therefore the comment is not substantial evidence. As contemplated by CEQA, an IS is prepared early in the design phase of a project, and therefore some project components and estimates may undergo further refining throughout the permitting process. Guidelines §15063(c)(4). This is the case for the elements that commenter disputes.

Since the time that the air quality report was developed, the construction equipment estimates have been refined, and additional equipment necessary for construction has been identified. The commenter's comparison of 13 pieces of equipment described in the air quality report versus 51 pieces of equipment described in the Initial Study is not an accurate comparison. Many of the 51 pieces of equipment would only be used for short period of time and would not be used at the same time. In any event, despite any discrepancy in the number or pieces of equipment, the emissions results would still be below applicable thresholds set by the MDAQMD.

Additionally, the County does not agree with the calculations that SWAPE provided for the square footage of the buildings to be demolished. SWAPE estimated that there are over 30,000 square feet of buildings to be demolished and used that calculation in the model runs. In actuality, many of the alleged buildings that SWAPE

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calculated from an aerial image, are simply sheds or airplane hangars with metal roofs, do not contain asbestos or lead based paint, and will not contribute to air quality concerns. The commenter's and SWAPE's estimates are not based on project-specific facts, and are not supported by evidence. Therefore, the commenter's air quality model runs are inaccurate.

SWAPE provides inputs and calculations for the delivery trip numbers, worker numbers, and other vehicle numbers relating to air quality modeling that differ from those used in the Air Quality Report and IS. However, these numbers are just estimates, and do not provide substantial evidence of a fair argument of a potentially significant impact to air quality. In fact even using SWAPE's assumptions, the Project would not result in an exceedance of air quality emissions in excess of the thresholds set by the MDAQMD.

The County stands behind the air quality model that was run and disagrees with SWAPE's recalculation of air emissions, particularly the allegation that NO<sub>x</sub> would be exceeded. At this Project, if there were NO<sub>x</sub> emissions, they would primarily come from maintenance vehicles during operations and construction equipment during construction. However, the NO<sub>x</sub> emissions from construction are temporary because construction is short-term. AQ-1 of the IS/MND describes measures that would reduce emissions from vehicles, including compliance with County Diesel Exhaust Control Measures. A Dust Control Plan as described in AQ-2 of the IS/MND will be developed to control air quality issues related to dust during construction.

#### **Response 17-25**

The commenter states that Project emissions, based on the commenter's own models, demonstrate that the Project will result in an increased risk of cancer to children and infants. The commenter again disagrees with the County's model, but does not put forth relevant or project-specific facts that warrant the County changing its conclusions, and therefore the comment is not substantial evidence. The SWAPE model is not based on new/different substantiated facts; rather it changes input values—without justification—to create a different result. The Project's air quality model was approved by the MDAQMD and has been used for estimating emissions on other projects.

SWAPE claims that cancer risk is increased because of the potential for the buildings that will be demolished, to contain asbestos and lead based paint. SWAPE miscalculated the square footage of the buildings as discussed in 17-24. Many of the buildings included in SWAPE's calculations are simply airplane hangars or sheds, consisting of poles and metal roofs. These buildings do not contain asbestos and lead based paint. Thus, the commenter's claims of larger amounts of asbestos and lead based paint are off the mark. For the smaller set of buildings that do contain small amounts of asbestos and lead based paint, a Demolition Plan will be developed, and the buildings will be removed in accordance with all State and local requirements. Asbestos and lead based paint will not enter the environment, will not increase air emissions, and will not cause an increase in cancer risk.

Health risk impacts are conservatively assessed for all construction activities regardless of location or actual source-receptor distance. The *Health Risk Assessment* in the air quality report summarizes the health risk assessment from construction activities. Note that the CARB HARP model uses conservative assumptions; actual concentration levels are expected to be less than what was analyzed in this report. The highest residential and worker receptor risks from construction results in concentrations well below the MDAQMD Risk Significance Level. Short-term concentration levels during the construction phase do not expose sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1. Also, note that the CARB HARP model is the most detailed health risk model recommended by MDAQMD. The commenter does not state what risk model was used to make their conclusion that risk from construction exceeds the threshold limits.

SWAPE provides inputs and calculations for the delivery trip numbers, worker numbers, and other vehicle numbers relating to air quality modeling that differ from those used in the Air Quality Report and IS. However, these numbers

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are just estimates, and do not provide substantial evidence of a fair argument of a potentially significant impact to air quality. In fact even using SWAPE's assumptions, the Project would not result in an exceedance of air quality emissions in excess of the thresholds set by the MDAQMD.

As described above, construction and operation of the Project will not result in emissions of criteria pollutants in excessive of established thresholds. Because emissions of toxic air contaminants from diesel-powered construction equipment is expected to be minimal, intermittent, and of short duration, the Project is not expected to increase substantially ambient concentrations of toxic air contaminants regionally or locally. Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations.

#### **Response 17-26**

The commenter states that the Project may result in significant impacts associated with birds colliding with the Project's PV panels. The commenter's expert describes general conditions that are not Project specific. The commenter does not provide any different or relevant facts to support their speculation, and therefore their comment is not substantial evidence. "[A]n expert's opinion which says nothing more than 'it is reasonable to assume' that something 'potentially...may occur'" is not substantial evidence (*Apartment Assoc. of Greater Los Angeles v. City of Los Angeles* (2001) 90 Cal.App.4th 1162, 1176). Commenter's assertion is speculation based on distinguishable observations, not on project-specific information. There is a lack of peer-reviewed scientific literature on this subject. At this point, risk to avian species due to the presence of PV panels is speculative.

The County is unaware of scientific evidence demonstrating that photovoltaic panels attract birds and cause mortalities, and the commenters have not produced any such evidence. Nevertheless, the Applicant is committed to using a non-reflective coating on the PV panels, which will reduce the likelihood of the panels appearing as water. Additionally, it should be noted that there are no known threatened or endangered avian species living in or around the Project site, nor is there any evidence in the record demonstrating that there are localized conditions or other factors that suggest a risk of significant avian mortality associated with the Project.

The County notes that some literature as cited by the commenter has identified common characteristics that are often present at locations where the claimed type of avian mortality has occurred. Those "risk" factors have included: large size of the project, the project's proximity to large bodies of water, and highly reflective material on the panels. These factors are not present at this Project and therefore the Project is distinguishable from other solar projects where avian mortality of the type claimed by commenter has occurred.

#### **Response 17-27**

The commenter states that the Project may result in significant impacts to desert tortoise based on regional databases and observations outside the Project area. The commenter's expert describes conditions that are not Project specific. The commenter does not provide any different or relevant facts to support their speculation about the presence of desert tortoise, and therefore their comment is not substantial evidence. "[A]n expert's opinion which says nothing more than 'it is reasonable to assume' that something 'potentially...may occur'" is not substantial evidence (*Apartment Assoc. of Greater Los Angeles v. City of Los Angeles* (2001) 90 Cal.App.4th 1162, 1176). Commenter's assertion is speculation based on distinguishable observations, not on project-specific information. No desert tortoises have been found on the Project site. Three highly qualified desert tortoise experts conducted the desert tortoise surveys.

The Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey protocols were reviewed and approved by the agencies. The County and Applicant have responded to comments made by CDFW.

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The Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value. Mitigation Measure, BIO-2 in the IS/MND will completely avoid potential impacts to DT because it will ensure that no DT is present at the site and will require exclusionary fencing so that the DT cannot get onto the site.

#### **Response 17-28**

The commenter states that the Project may result in significant impacts to desert kit fox. The Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use. This site does not have high biological value.

The Project's surveys for kit fox followed appropriate protocols and were approved by CDFW. An active kit fox den was observed in 2012. However, in 2015, no active dens were found. The County understands that kit fox move quickly and may be found on the Project site. Therefore, BIO-5 has been included in the IS/MND for the protection of any potentially occurring kit fox.

BIO-5 in the IS/MND addresses avoidance and minimization measures for desert kit fox, including kit fox surveys prior to grading, and preparation of a plan to protect kit foxes should any be found during the preconstruction survey. This mitigation measure is a standard mitigation measure approved for construction projects in the area, and has been shown to be effective at minimizing impacts to desert kit fox.

#### **Response 17-29**

The commenter states that the Project may result in significant impacts to lizards and desert reptiles based on observations outside the Project area. The commenter's expert describes conditions that are not Project specific. The commenter does not provide any different or relevant facts to support their speculation about the presence of lizard and reptiles, and therefore their comment is not substantial evidence. "[A]n expert's opinion which says nothing more than 'it is reasonable to assume' that something 'potentially...may occur'" is not substantial evidence (*Apartment Assoc. of Greater Los Angeles v. City of Los Angeles* (2001) 90 Cal.App.4th 1162, 1176). The commenter's assertion is speculation based on distinguishable observations, not on project-specific information.

There is no scientific basis for Coalition's experts conclusions regarding attraction of lizards to the project. Based on several years of site-specific biological surveys, which are documented in the IS, there are no known threatened or endangered specific on the Project site, including lizards and other reptiles. The Mojave Fringe Toed Lizard is not known to occur in the area and has not been observed at the Project site. The lizard's habitat exclusively consists of fine grained wind-blown sand dunes, which are not present at the Project site. The closest known occurrence (location) of a Mojave Fringe Toed Lizard is east of the city of 29 Palms, at least 30 miles from the Project site.

The Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

#### **Response 17-30**

The commenter states that the Project may result in significant impacts to the environment because of economic and social changes in the Project area described by local residents. "Economic and social changes resulting from a project shall not be treated as significant effects on the environment." CEQA Guidelines §15064(e). While County must consider economic and social effects, it must use those effects only to determine the significance of *physical* changes in the environment due to the Project. *Id.* Furthermore, the County's analysis under CEQA is concerned

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with the impact of the Project on the environment in general, not specific impacts to particular persons. *Assoc. for the Protection of the Environmental Values v. City of Ukiah* (1991) 2 Cal.App.4th 720, 734.

The commenter recites claims of individuals with specific, and speculative, economic concerns about the Project. While the County considers the views held by members of the public in all areas affected by the Project (CEQA Guidelines §15064(c)), as required, the views and opinions expressed by the public in this area do not provide substantial evidence of a significant impact to the environment. Substantial evidence is defined in CEQA as “facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.” CEQA Guidelines §15384. Substantial evidence is not “argument, 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.” PRC §21082.2(c); CEQA Guidelines §15064(f)(5). The courts have clarified that “fears and...desires” of project opponents do not qualify as substantial evidence (*Perley v. County of Calaveras* (1982) 137 Cal.App.3d 424, 436-7). Speculation about the potential economic impact is unfounded. The Project site is highly disturbed and does not provide high quality views or habitat for desert species. It is a decommissioned airport, currently zoned for light industrial or commercial use. The Project is consistent with the sites General Plan and zoning designation.

#### **Response 17-31**

The commenter states a legal standard. County disagrees with the commenter’s description, as described in detail in the responses below.

#### **Response 17-32**

The commenter states that the County’s IS/MND is flawed because it fails to provide a list of geographically proximate projects that could result in cumulative impacts. The commenter implicitly argues that the County should evaluate potential cumulative impacts in the same manner as required in an EIR rather than an MND. Once again, the commenter is asking the County to apply the wrong legal standard. See *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1996) 42 Cal.App.4th 608, 622-23, distinguishing between the analysis of “cumulative impacts” that is appropriate in an IS vs. the more detailed requirements for an EIR.

“Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Guidelines §15355. The focus of a cumulative impacts analysis is on the incremental impact of the Project when added to other “closely related past, present, and reasonably foreseeable probably future projects.” *Id.* Other projects may be “closely related”, for example, because of their geographic proximity to the Project site, because the timing of their constructed may coincide with the Project’s construction, or because they do or will contribute similar impacts as the Project.

The commenter suggests that the County’s cumulative impact analysis was deficient with respect to air quality because the County failed to make a list of other solar projects within the County. This misses the point of a cumulative impacts analysis, and no such list is a required component of an IS. Compare CEQA Guidelines § 15064 (applicable to ISs) v. § 15130 (applicable to EIRs). In particular with regard to air quality, the most significant period for emissions is during construction of the Project – meaning that the relevant “closely related” projects are not necessarily other solar projects, but instead other projects that are geographically close and will undergo construction at or near the same time as the Project. There are no other such Projects approved or proposed in proximity to the Project at this time.

As described in the IS, there is only one closely related past, present and reasonably foreseeable probable future project in the area. While there are several other photovoltaic projects recently approved or currently planned within San Bernardino County, only one –Cascade Solar–is within geographic proximity of the proposed Project, and it is already constructed. As such, there are no anticipated cumulative effects arising from construction of the Project in

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conjunction with this other project. In addition, none of the approved or currently proposed solar projects in the County will be built at the same time as the Project. Thus, there will be no overlapping construction activities resulting from these projects at the time the Project is being constructed. Therefore, the Project's less than significant impacts related to construction (e.g., Air Quality, Noise) will not be experienced cumulatively with construction impacts from other solar projects, or other projects, such that there is a potentially significant cumulative impact necessitating an EIR.

During operation of the Project, there will be no significant cumulative impact relating to operation of these other solar projects because the projects are not concentrated in one area. Operation of the Project is essentially a passive use, so the only potential effects of the Project are visual impacts and minimal water use (i.e., for panel washing). In terms of cumulative visual impacts, the other solar projects that will be built are distributed throughout the County, and will not be aggregated near the Project.

#### **Response 17-33**

The commenter states that the County's IS/MND is flawed because it fails to account for the incremental impacts of the Project with respect to air quality. See response to comment 17-32 for the appropriate legal standard for considering cumulative impacts. The cases cited to by commenter describe the requirements for a cumulative impact analysis appropriate for an EIR, not an IS/MND.

As described in the IS/MND, Appendix G, Air quality, c., the Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). The Project's contribution to criteria pollutants during the temporary construction period will be localized and maintained below a level of significance. As also indicated, operational activities will generate insubstantial quantities of air pollutants that are not deemed cumulatively considerable. Since no other sources of potential long-term air emissions will result, the Project's individual impacts will be less than significant.

#### **Response 17-34**

The commenter states that the County's cumulative impact analysis is flawed because the analysis of the Project's air quality impacts considers the net benefit of reducing GHG emissions. Commenter misstates the applicable legal standard for a cumulative impacts analysis in an IS/MND and fails to consider that there are no "closely related" projects that would create a cumulative impact with the Project. See response to comment 17-32 for the correct legal standard for cumulative impacts analysis. As described above, there is only one "closely related" project for consideration of cumulative impacts. However, construction related emissions, which are temporary and finite, will not be cumulatively considerable. Furthermore, this other solar project will also contribute to an overall net reduction in GHG emissions when the benefits of its operation are taken into account.

Generating power from solar energy reduces GHG emissions in comparison to conventional power generation from the combustion of fossil fuels. The solar energy produced by the proposed Project is estimated at 20 MW and would provide an estimated reduction 34,050 tons of CO<sub>2</sub>e per year during operation. After analyzing the Project's operation emissions of 17.39 tons of CO<sub>2</sub>e annually, the net operation emissions would displace approximately 34,033 tons of CO<sub>2</sub>e each year during operation, which would provide a net benefit to the environment.

#### **Response 17-35**

The commenter states that the Project does not incorporate or require sufficient mitigation measures and states legal conclusions with regard to the legal standards for mitigation. The County disagrees with the commenter's legal conclusions and asserts that the mitigation measures incorporated into the Project, which will be required as

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conditions of approval, are adequate and enforceable. Furthermore, the mitigation measures that the commenter asks for the County to add to the Project have been determined to be unnecessary, as described in prior responses to comments regarding commenter's letter. CEQA does not require mitigation measures for impacts that are not significant. Pub. Resources Code §21081, Guidelines §15091(a) (agency need not make further findings on the feasibility of mitigation measures if it determines that an impact is less than significant); *San Franciscans for Reasonable Growth v. City & County of San Francisco* (1989) 209 Cal.App.3d 1502, 1519 (agency's duty to condition approval on incorporation of mitigation measures only exists when such measures would "substantially lessen" a significant environmental effect, "the agency need not, under CEQA, adopt every nickel and dime mitigation scheme brought to its attention.").

**Response 17-36**

The commenter states a legal conclusion. The County disagrees with commenter's legal conclusions as described in the responses to comments above.

**Response 17-37**

The commenter states a legal conclusion. The County disagrees with commenter's legal conclusions as described in the responses to comments above.

**Response 17-38**

Thank you for your comments. They will become part of the record and will be considered by the County in making its decision on the Project.

**Response 17-39**

Thank you for your comments. They will become part of the record and will be considered by the County in making its decision on the Project.

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Technical Consultation, Data Analysis and  
Litigation Support for the Environment

2656 29<sup>th</sup> Street, Suite 201  
Santa Monica, CA 90405

Matt Hagemann, P.G., C.Hg.  
(949) 887-9013  
[mhagemann@swape.com](mailto:mhagemann@swape.com)

February 10, 2016

Christina Caro  
Adams Broadwell Joseph & Cardozo  
601 Gateway Blvd., Suite 1000  
South San Francisco, CA 94080

**Subject: Comments on the Joshua Tree Solar Farm (Project No. P201400482/CUP)**

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Dear Ms. Caro:

We have reviewed the January 2016 Initial Study (IS) for the Joshua Tree Solar Farm Project ("Project"), as well as the August 2012 Joshua Tree Solar Farm Conditional Use Permit Air Quality and Greenhouse Gas Technical Report ("Air Quality Report") and the August 2012 Trip Generation Analysis ("Trip Generation Analysis"). The Project proposes to construct a 20 megawatt (MW) alternating current solar photovoltaic (PV) generating facility on approximately 115 acres of land, atop the former Hi Desert Airport nearby the Joshua Tree community in San Bernardino County. The proposed solar facility would consist of solar PV modules in a fixed tilt configuration, power conversion stations, and typical electrical equipment to collect, produce, and deliver energy to the Southern California Edison distribution system.

Our review concludes that the IS fails to adequately evaluate the Project's Hazards and Hazardous Materials and Air Quality impacts. First, the IS does not provide proper documentation of the closure of an underground storage tank that contained aviation fuel and does not consider hazards that may be associated with asbestos, lead and PCBs that may be present in Project buildings slated for demolition. Second, the IS does not consider the potential for Project construction to lead to an increase in the incidence of Valley Fever. Last, the IS relies upon an outdated, incorrect air model to estimate Project emissions, and as a result, the Project's impact on regional and local air quality is greatly underestimated. When those parameters are corrected, the Project is shown to have a significant nitrogen oxide (NO<sub>x</sub>) impact. Therefore, the significance determinations made within the IS are incorrect. Finally, the IS relies upon incorrect emission estimates to determine the Project's health risk impact, and as a result, the cancer risk posed to nearby sensitive receptors is greatly underestimated. Due to these reasons, a Draft Environmental Impact Report (DEIR) should be prepared to address these issues and to identify appropriate mitigation.

## Hazards and Hazardous Materials

### Underground Storage Tank Closure is Undocumented

The IS states (p. 55):

An empty 10,000-gallon underground storage tank previously used for airport fueling was removed from the project site in October 2015. The tank removal and closure was overseen by the San Bernardino County Fire Department. No hydrocarbon contamination exists at the project site.

No documentation to confirm the underground storage tank closure was granted is included in the IS or in any available supporting documentation. The results of soil sampling following the tank removal and an October 22, 2015 San Bernardino County inspection report stating that the tank had been removed were posted online for the Project but no closure documentation was included. A DEIR should be prepared to include documentation that closure for the 10,000-gallon underground storage tank was granted by the San Bernardino County Fire Department.

### Phase I Recommendations not Incorporated

The Phase I Environmental Site Assessment<sup>1</sup> prepared for the Project identified potential hazards associated with building materials, including asbestos and lead. The Phase I concluded by recommending inspections and removal of asbestos- and lead-containing materials. The IS does not include any mitigation measures to incorporate these recommendations. A DEIR must be prepared to include effective mitigation to reduce hazards to construction workers and nearby residents, some as close as 250 feet, who may come into contact with these materials during demolition.

### Asbestos Hazards

The Phase I states that, based on the date of construction (1972), it is possible that asbestos-containing materials (ACMs) are present in the Project site buildings. The Phase I states that suspect ACMs in the Project buildings include drywall and drywall joint compound, carpet mastic, and roofing materials. Because of the suspected ACMs, the Phase I recommends (p. 4):

Prior to any demolition, remodeling, and/or renovation activities at the Site, untested suspect ACMs that may be disturbed should be sampled and analyzed in accordance with applicable regulations. Abatement of known and suspect ACMs should be performed prior to any demolition, remodeling, and/or renovation activities (that would disturb the ACMs) in accordance with applicable regulations.

The IS is mute on any plans to sample for ACMs. Because of the failure to provide for sampling, construction workers and nearby residents may be exposed during demolition of the existing Project buildings. Asbestos is made up of microscopic fibers that may become airborne when ACMs are disturbed if present in these buildings. When these fibers get into the air they may be inhaled into the lungs, where they can cause significant health problems, including<sup>2</sup>:

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<sup>1</sup> Phase I Environmental Site Assessment, Joshua Tree Solar Farm, Tetra Tech, July 3, 2012

<sup>2</sup> [http://www.baaqmd.gov/~media/Files/Compliance%20and%20Enforcement/Asbestos/asbestos\\_tips.ashx](http://www.baaqmd.gov/~media/Files/Compliance%20and%20Enforcement/Asbestos/asbestos_tips.ashx)

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- Asbestosis
- Mesothelioma
- Pleural plaques
- Lung cancer
- Other cancers such as esophageal, stomach, colorectal, kidney, nose, throat.

According to the Bay Area Air Quality Management District, there is no safe level of exposure to asbestos and all exposure should be avoided.<sup>3</sup>

The IS does not recognize potential asbestos hazards associated with the Project and no mitigation that would require an ACM survey or a removal action is included as mitigation. If found to be present in the buildings to be demolished for the Project, ACMs would require abatement prior to demolition or renovation. If not properly abated in advance of demolition or renovation, workers, nearby off-site residents and local visitors may be exposed to friable (easily crumbled) asbestos.

To protect construction workers, nearby residents and visitors to the Project area, a DEIR should be prepared to provide, as mitigation, proper procedures for an asbestos survey prior to demolition and for removal procedures if necessary, as described above.

#### *Lead Hazards*

The Phase I states that, based on the date of construction (1972), it is possible that lead-based paint (LBP) or other lead-containing materials (LCMs) are present in the Project site buildings. Because of the suspected presence of lead, the Phase I recommends (p. 4):

Prior to any demolition, remodeling, and/or renovation activities at the Site, untested possible LBP and other LCMs that may be disturbed should be sampled and analyzed for total lead content. Abatement of known and possible LBP and/or LCMs should be performed prior to any demolition, remodeling, and/or renovation activities (that would disturb the LBP and/or LCM) in accordance with applicable regulations.

The IS does not include any plans to sample for lead. Because of the failure to provide for sampling, construction workers and nearby residents and visitors may be exposed during demolition of the existing Project buildings.

According to the US EPA, lead can affect almost every organ and system in the human body.<sup>4</sup> Adults exposed to lead can suffer from:

- Cardiovascular effects, increased blood pressure and incidence of hypertension
- Decreased kidney function
- Reproductive problems (in both men and women).

The IS does not recognize potential lead hazards associated with the Project and no mitigation that would require a lead survey or the removal of lead materials is included as mitigation. If not properly

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<sup>3</sup> Ibid.

<sup>4</sup> <http://www.epa.gov/lead/learn-about-lead#effects>

surveyed in advance of demolition or renovation, workers and residents may be exposed to lead. If found to be present in the buildings to be demolished for the Project, ACMs would require abatement and proper disposal by a licensed contractor prior to demolition or renovation.

To protect construction workers, nearby residents and local visitors from lead hazards, a DEIR should be prepared to provide mitigation that would require a lead survey prior to demolition and for removal procedures as needed.

### PCBs not Adequately Evaluated

The Phase I ESA identified the presence of a pad-mounted electrical transformer and concluded it could contain “small quantities of PCBs” (p. 12). The Phase I also identified the potential for PCBs to be present in florescent light ballasts (p. 12). The IS make no mention of these findings and fails to include any mitigation to ensure that potential PCB-containing materials, including the transformer and light ballasts, are properly removed and disposed in a way that protects worker health. The IS mistakenly concludes (p. 53) that “the project would not involve the routine transport, use, or disposal of hazardous materials as defined by the Hazardous Materials Transportation Uniform Safety Act.” In fact, without testing, the Project may involve transport of PCB-containing materials.

PCBs are a listed hazardous substance under the Hazardous Materials Transportation Uniform Safety Act.<sup>5</sup> PCBs are also a “restricted hazardous waste” under California law<sup>6</sup>, and PCBs have been classified as probably carcinogenic, and carcinogenic to humans by the Environmental Protection Agency (EPA) and International Agency for Research on Cancer (IARC), respectively.<sup>7</sup>

A DEIR should be prepared to provide for mitigation that would require testing of the transformer and light ballasts prior to demolition of the buildings. The DEIR must include mitigation that would require any PCB-containing materials that are detected through testing to be transported and disposed in accordance with state and federal regulations.

### Valley Fever Potential has not been Evaluated

The IS does not consider the potential for Project construction to increase the incidence of Valley Fever, a disease that can be caused by inhalation of spores of a soil-dwelling fungus. The impact of Valley Fever on workers constructing large, industrial-scale solar projects has been recently documented in a study examining the October 2011–April 2014 timeframe, a period where 44 California solar construction workers were diagnosed with symptom onset.<sup>8</sup> The increase in incidence may be tied to the ongoing California drought which has increased generation of airborne dust and particles.<sup>9</sup> A DEIR must be prepared to evaluate Valley Fever impacts resulting from Project construction.

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<sup>5</sup> [http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Hazmat/Alpha\\_Hazmat\\_Table.xls](http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Hazmat/Alpha_Hazmat_Table.xls)

<sup>6</sup> H&S Code section 25122.7(b)(4))

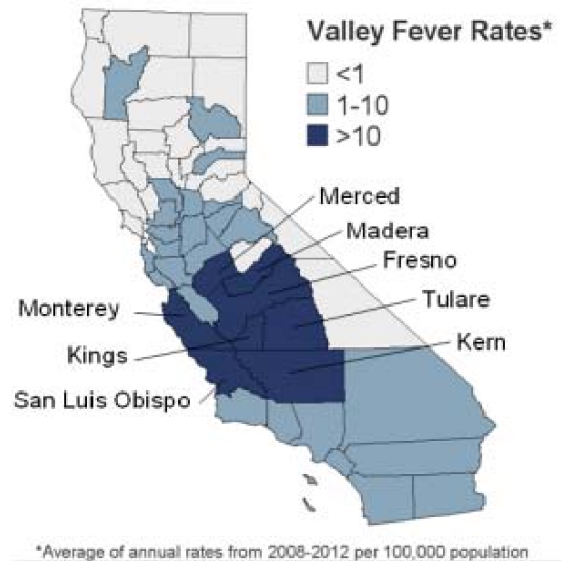
<sup>7</sup> <http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=140&tid=26>

<sup>8</sup> Coccidioidomycosis among Workers Constructing Solar Power Farms, California, USA, 2011–2014, [http://wwwnc.cdc.gov/eid/article/21/11/15-0129\\_article](http://wwwnc.cdc.gov/eid/article/21/11/15-0129_article)

<sup>9</sup> <http://www.foxnews.com/health/2013/05/06/california-arizona-see-spike-in-valley-fever-cases-as-worsening-drought-kicks.html>

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According to the California Department of Public Health, San Bernardino County is an area where the incidence of Valley Fever is elevated.<sup>10</sup>



Despite the ready availability of this information, the IS makes no mention of how soil disturbing activity conducted during Project construction and operation might increase the incidence of Valley Fever in workers and the public.

Valley Fever is caused by inhaling the spores of a soil-dwelling fungus, *Coccidioides immitis*.<sup>11</sup> The spores become airborne when infected soils are disturbed during construction activities, agricultural operations, dust storms, or during earthquakes. A 2012 study documented that between 1990 and 2008, more than 3,000 people died in the United States from Valley Fever with about half in California.<sup>12</sup> In recent years, reported Valley Fever cases in southwestern United States have increased dramatically.<sup>13</sup>

No known cure exists for the disease and there is no vaccine.<sup>14</sup> Common symptoms of Valley Fever include fatigue, fever, cough, headaches, breathing difficulties, rash, muscle aches, and joint pain. Advanced symptoms are marked by chronic pneumonia, meningitis, skin lesions and bone or joint infections. Pneumonia stemming from Valley Fever becomes evident 13 weeks after infection.<sup>15</sup>

<sup>10</sup> <https://www.cdph.ca.gov/HealthInfo/discond/Documents/EnglishValleyFeverBrochure.pdf>

<sup>11</sup> <http://www.cdc.gov/fungal/diseases/coccidioidomycosis/definition.html>

<sup>12</sup> Jennifer Y. Huang, Benjamin Bristow, Shira Shafir, and Frank Sorvillo, Coccidioidomycosis-associated Deaths, United States, 1990–2008; <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3559166/>

<sup>13</sup> Center for Disease Control; Fungal Pneumonia: A Silent Epidemic, Coccidioidomycosis (Valley Fever); <http://www.cdc.gov/fungal/pdf/cocci-fact-sheet-sw-us-508c.pdf>

<sup>14</sup> <http://www.cdc.gov/fungal/diseases/coccidioidomycosis/risk-prevention.html>.

<sup>15</sup> See, e.g., Lisa Valdivia, David Nix, Mark Wright, Elizabeth Lindberg, Timothy Fagan, Donald Lieberman, Prien Stoffer, Neil M. Ampel, and John N. Galgiani, Coccidioidomycosis as a Common Cause of Community-acquired Pneumonia, *Emerging Infectious Diseases*, v. 12, no. 6, June 2006; <http://europemc.org/articles/PMC3373055>.

Project construction and operation will generate dust which is one of the primary routes of exposure for contracting Valley Fever.<sup>16</sup> The nearest sensitive receptor to the proposed Project site is a residence located at a distance of 250 feet. Residents at that location and other nearby locations may be exposed to dust during construction. Construction workers are also susceptible to contracting Valley Fever and, as stated, are one of the most at-risk populations.<sup>17</sup> Construction workers at two solar projects in San Luis Obispo County were found to contract Valley Fever at a rate of 1.2 cases/100 workers from 2011 to 2014.<sup>18</sup>

The disease is debilitating and prevents those who have contracted Valley Fever from working.<sup>19</sup> The longest period of disability from occupational exposure in California is to construction workers, with 62% of the reported cases resulting in over 60 days of lost work.<sup>20</sup> Another study estimated the average hospital stay for each (non-construction work) case of coccidioidomycosis at 35 days.<sup>21</sup>

The potentially exposed population is much larger than construction workers on or adjacent to the Project site because dust generated during Project construction will carry the very small spores – 0.002-0.005 millimeters in diameter – into other areas, potentially exposing large segments of the public.<sup>22,23</sup>

<sup>16</sup> Rafael Laniado-Laborin, Expanding Understanding of Epidemiology of Coccidioidomycosis in the Western Hemisphere, Ann. N.Y. Acad. Sci., v. 111, 2007, pp. 20-22;  
 Frederick S. Fisher, Mark W. Bultman, Suzanne M. Johnson, Demosthenes Pappagianis, and Erik Zaborsky Coccidioides Niches and Habitat Parameters in the Southwestern United States, a Matter of Scale, Ann. N.Y. Acad. Sci., No. 1111, 2007, pp. 47-72 (“All of the examined soil locations are noteworthy as generally 50% of the individuals who were exposed to the dust or were excavating dirt at the sites were infected.”)

<sup>17</sup> Lawrence L. Schmelzer and R. Tabershaw, Exposure Factors in Occupational Coccidioidomycosis, Am. J. Public Health Nations Health, v. 58, no. 1, 1968, pp. 107-113, Table 3;  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1228046/?page=1>

<sup>18</sup> Coccidioidomycosis among Workers Constructing Solar Power Farms, California, USA, 2011–2014,  
[http://wwwnc.cdc.gov/eid/article/21/11/15-0129\\_article](http://wwwnc.cdc.gov/eid/article/21/11/15-0129_article)

<sup>19</sup> Frank E. Swatek, Ecology of *Coccidioides Immitis*, *Mycopathologia et Mycologia Applicata*, V. 40, Nos. 1-2, pp. 3-12, 1970.

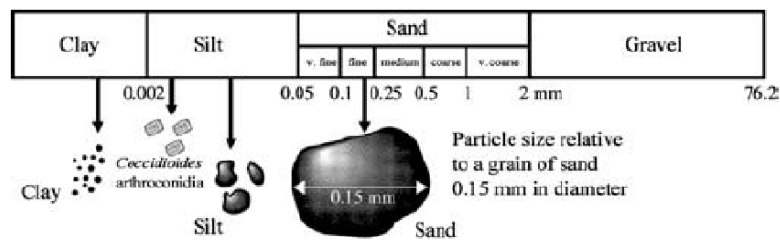
<sup>20</sup> Schmelzer and Tabershaw, 1968, Table 4.

<sup>21</sup> Demosthenes Pappagianis and Hans Einstein, Tempest from Tehachapi Takes Toll on Coccidioides Conveyed Aloft and Afar, West J. Med., v. 129, Dec. 1978, pp. 527-530;  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1238466/pdf/westjmed00256-0079.pdf>.

<sup>22</sup> Schmelzer and Tabershaw, 1968, p. 110; Pappagianis and Einstein, 1978.

<sup>23</sup> Pappagianis and Einstein, 1978, p. 527 (“The northern areas were not directly affected by the ground level windstorm that had struck Kern County but the dust was lifted to several thousand feet elevation and, borne on high currents, the soil and arthrospores along with some moisture were gently deposited on sidewalks and automobiles as “a mud storm” that vexed the residents of much of California.” The storm originating in Kern County, for example, had major impacts in the San Francisco Bay Area and Sacramento).

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**Figure 4: Size of cocci spores compared to soil particles (in mm)**  
 (from: Fisher et al., 2007, Fig. 3)

Valley Fever spores have been documented to travel as much as 500 miles<sup>24</sup> and, thus, dust raised during construction could potentially expose a large number of people hundreds of miles away.

In the past few years, several incidences of severe dust storms and reported cases of Valley Fever occurred during construction of solar projects. The construction of the First Solar Antelope Valley Solar Ranch One in Kern County was halted in April 2013 due to the company's failure to bring the facility in compliance with ambient air quality standards.<sup>25</sup> Dust from the project, in general, has led to complaints of respiratory distress by local residents and a concern of Valley Fever, as well as increased reports of Dry Land Distemper in horses.<sup>26</sup>

The current drought conditions in California were declared a State of Emergency by Governor Brown on January 17, 2013,<sup>27</sup> and may increase the occurrence of Valley Fever cases<sup>28</sup>. During drought years, the number of organisms competing with *Coccidioides ssp.* is thought to decrease while the fungus remains alive but dormant. When rain does occur, the spores germinate and multiply because of a decreased number of competing organisms.

The IS, which makes no mention of Valley Fever, includes only standard dust mitigation measures which are ineffective in reducing the incidence of Project-related Valley Fever. Dust abatement measures required by Mojave Valley Air Quality Management District, cited for general dust control in the IS (p. 28), do not consider suppression methods that would be effective for controlling and minimizing exposure to Valley Fever spores.

<sup>24</sup> David Filip and Sharon Filip, Valley Fever Epidemic, Golden Phoenix Books, 2008, p. 24.

<sup>25</sup> Herman K. Trabish, GreenTech Media, Construction Halted at First Solar's 230 MW Antelope Valley Site, April 22, 2013; <http://www.greentechmedia.com/articles/read/Construction-Halted-At-First-Solars-230-MW-Antelope-Valley-Site>.

<sup>26</sup> *Ibid.*

<sup>27</sup> State of California, Office of Governor Edmund G. Brown, Governor Brown Declares Drought State of Emergency, January 17, 2014; <http://gov.ca.gov/news.php?id=18368>.

<sup>28</sup> Gosia Wozniacka, Associated Press, Fever Hits Thousands in Parched West Farm Region, May 6, 2013, citing Prof. John Galgiani, Director of the Valley Fever Center for Excellence at the University of Arizona; <http://news.yahoo.com/fever-hits-thousands-parched-west-farm-region-202304489.html>.

Conventional dust control measures that target PM<sub>10</sub> and visible dust are not generally effective at controlling Valley Fever.<sup>29</sup> Valley Fever spores are 1 to 3 microns in diameter, and can be far smaller than particles of dust, which measure 2.5 to 100 microns in diameter. A particle 50 microns in diameter is considered to be the smallest particle visible to the eye. Therefore, because *Coccidioides* *ssp.* spores are generally smaller than dust, they have the potential to spread much farther in air than dust, without detection by human eyesight. The spores, whose size is well below what is detectable by human vision, may be present in air that appears clear and dust free.

Airborne spores with low settling rates can remain aloft for long periods and be carried hundreds of miles from their point of origin. Implementation of standard dust control measures will likely not provide sufficient protection for both site workers and the general public.

The standard dust abatement measures required by Mojave Desert Air Quality Management District, cited for general dust control in the IS, do not go nearly far enough in requiring mitigation measures that would effectively reduce the potential for contracting Valley Fever. The following Valley Fever-specific mitigation measures should be proposed in a DEIR as recommended by the California Departments of Public Health and Industrial Relations:<sup>30</sup>

1. Determine if the worksite is in an area where Valley Fever is consistently present. Check with your local health department to determine whether cases have been known to occur in the proximity of your work area.
2. Encourage workers to report respiratory symptoms that last more than a week to a crew leader, foreman, or supervisor.
3. Suspend work during heavy wind or dust storms and minimize amount of soil disturbed.
4. Make sure workers keep the windows closed in heavy construction equipment and equip with high efficiency particulate air (HEPA) filters. Two-way radios can be used for communication so that the windows can remain closed but allow communication with other workers.
5. When digging a trench or fire line or performing other soil-disturbing tasks, position workers upwind when possible.
6. Place sleeping quarters and dining halls, away from sources of dust such as roadways.
7. Provide NIOSH-approved respiratory protection with particulate filters rated as N95, N99, N100, P100, or HEPA. Household materials such as washcloths, bandanas, and handkerchiefs do not protect workers from breathing in dust and spores. Respirators for employees must be used within a Cal/OSHA compliant respiratory protection program that covers all respirator wearers and includes medical clearance to wear a respirator, fit testing, training, and procedures for cleaning and maintaining respirators. Different classes of respirators provide different levels of protection according to their Assigned Protection Factor (see table below). Powered air-purifying respirators have a battery-powered blower that pulls air in through filters to clean it

<sup>29</sup> See, e.g., Cummings and others, 2010, p. 509; Schneider et al., 1997, p. 908 ("Primary prevention strategies (e.g., dust-control measures) for coccidioidomycosis in endemic areas have limited effectiveness.").

<sup>30</sup> California Department of Public Health and California Department of Industrial Relations, Hazard Evaluation System & Information Service, Preventing Work-Related Coccidioidomycosis (Valley Fever), June 2013; available at <http://www.cdph.ca.gov/programs/hesis/documents/coccifact.pdf>

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before delivering it to the wearer's breathing zone. PAPRs will provide a high level of worker protection, with an APF of 25 or 1000 depending on the model. When PAPRs are not available, provide a well-fitted NIOSH-approved full-face or half-mask respirator with particulate filters.

Fit-tested half-mask or filtering face-piece respirators are expected to reduce exposure by 90%; however, allowing about 10% face-seal leakage can result in an unacceptable risk of infection when digging where Valley Fever spores are present.

Respiratory Protection for Reducing Dust and Spore Exposure		
Respirator Type (worn with particulate filters)	Assigned Protection Factor (APF)	Expected Reduction of Exposure to Dust and Spores (%)
No respirator	None	0
Half-mask respirator (elastomeric or filtering facepiece)	10	90
Powered air-purifying respirator with loose-fitting face covering	25	96
Full-face respirator	50	98
Some powered air-purifying respirators are designed to offer higher protection (check with manufacturer)	1000	99.9

Other studies have developed additional recommendations to minimize the incidence of Valley Fever. The U.S. Geological Survey (USGS) has developed recommendations to protect geological field workers in endemic areas.<sup>31</sup> An occupational study of Valley Fever in California workers also developed recommendations to protect those working and living in endemic areas.<sup>32</sup> These two sources identified the following measures that should be incorporated into a DEIR:

1. Pretest soils to determine if each work location is within an endemic area.
2. Implement a vigorous program of medical surveillance.
3. Implement aggressive enforcement of respiratory use where exposures from manual digging are involved.
4. Test all potential employees for previous infection to identify the immune population and assign immune workers to operations involving known heavy exposures.
5. Hire resident labor whenever available, particularly for heavy dust exposure work.
6. All workers in endemic areas should use dust masks to protect against inhalation of particles as small as 0.4 microns. Mustaches or beards may prevent a mask from making an airtight seal against the face and thus should be discouraged.
7. Establish a medical program, including skin tests on all new employees, retesting of susceptible employees, prompt treatment of respiratory illness in susceptible employees; periodic

<sup>31</sup> Fisher et al. 2000.

<sup>32</sup> Schmelzer and Tabershaw, 1968, pp. 111 - 113.

medical examination or interview to discover a history of low grade or subclinical infection, including repeated skin testing of susceptible employees.

Implementation of these mitigation measures is feasible and would significantly reduce public health impacts.

A DEIR must be prepared to acknowledge the potential impact of an increase in the incidence in Valley Fever caused by Project construction and operation. The DEIR should evaluate and include a full range of mitigation measures to reduce the incidence of Valley Fever in workers, visitors and nearby residents.

## Air Quality

### Unsubstantiated Input Parameters Used to Estimate Project Emissions

According to the IS, “emissions during short-term construction and during long-term operation of the Project do not exceed the significance thresholds established by the MDAQMD,” and as a result, the proposed Project will have a less-than-significant impact on air quality (IS, p. 25, 26). This conclusion, however, is incorrect, as it is based on flawed analyses conducted in the August 2012 Air Quality and Greenhouse Gas Technical Report (“Air Quality Report”) prepared by Tetra Tech (IS, p. 25). According to this report, the Project’s emissions were estimated using the California Air Resources Board’s (CARB) Urban Emissions Model (URBEMIS) 2007, Version 9.2.4 (Air Quality Report, p. 15). When reviewing the URBEMIS output files, we found that several of the values inputted into the model are inconsistent with information disclosed in the IS. Furthermore, we found that the IS and the Air Quality Report fail to provide justification or support documentation for certain assumptions used within the model. As a result, the Project’s construction and operational emissions are greatly underestimated. Due to these reasons, we find the Air Quality Report’s emission estimates to be unreliable and inaccurate, and therefore, should not be relied upon to determine Project significance.

### Use of Incorrect Construction Equipment List

The equipment list used in the URBEMIS model is inconsistent with the equipment identified in the IS, and as a result, emissions from Project construction are not accurately represented.

The Air Quality Report assumed that construction of the Project would occur over the following four phases: Demolition, Mass Grading, Trenching/Infrastructure Construction, and Building Construction- PV Installation (p. 22). Figure 3 of this report provides a summary of the type and amount of construction equipment used within the model for each phase (see excerpt below) (Air Quality Report, p. 23).

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Figure 3. Construction Equipment

**Joshua Tree Solar Farm Construction Equipment**

**Phase: Demolition**

2 Rubber Tired Dozers  
 1 Tractor/Loader/Backhoe

**Phase: Mass Grading**

2 Graders  
 1 Rubber Tired Dozer  
 1 Water Truck

**Phase: Trenching/Infrastructure Construction**

2 Pile Drivers (Other Equipment)  
 1 Tractor/Loader/Backhoe

**Phase: Building Construction- PV Installation**

1 Bore/Drill Rig  
 1 Crane  
 1 Tractor/Loader/Backhoe

As you can see in the figure above, the model assumed that a total of 13 pieces of off-road equipment would be needed to complete construction of the entire 115-acre site. When we compared the equipment list used within the model to the equipment list provided in the IS, however, we found that the two lists were inconsistent with each other. According to Table 3 of the IS, construction of the Project would require a total of 51 pieces of equipment, which is much greater than the amount of equipment included within the model (see excerpt below) (IS, p. 14).

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**Table 3: Estimated Construction Duration, Equipment and Workers by Activity**

Activity	Duration	Equipment	Pieces	Workers
Fencing	2 Months	Bobcat	1	2
		Trencher	1	
		Pick Up Truck	1	
Demolition – existing structures and related infrastructure	1 Month	Backhoe	2	4
		Bulldozer	1	
		5 cubic yard dump truck	2	
Site Preparation and Clearing/Grading	1 Month	Water Truck – 3 axles	3	Maximum – 150 Average – 125
		Grader	2	
		Bulldozer	1	
		25-Cubic Yard Paddle Scraper	1 (optional)	
		10-Ton Roller	2	
Utility Upgrades	Intermittent, up to 6 Months	Line truck (with spool trailer)	1	2
		Boom truck (with bucket)	2	
Underground Work	2 Months	Small Backhoe	2	6
		Small Sheepsfoot Roller	2	
		Trencher	2	
		5-Cubic Yard Dump Truck	2	
		5kW Generator	2	
System Installation	3 Months	4x4 Forklift	4	8
		Small Crane	1	
		ATV Vehicle	4	
		Pick-Up Truck	5	
		Pile Driver	2	
		5-kW Generator	4	
Testing/Commissioning	1 Month	Pick-Up Truck	2	2
Clean Up/Restoration	1 Months	Grader	2	2

In addition to the off-road equipment listed in Table 3, the IS also provides a list of the types of off-road trucks that will be needed over the course of the entire construction period, and the total amount that will be on-site daily (see table below) (IS, p. 15).

Truck Type	Average on Site Daily	Gross Weight
8,000 Gallon Water Truck	3	25 tons empty/50 tons full
5 CY Dump Truck	3	15,000 lbs
Pick-up Trucks	5	5,000 lbs
Pile Driver	2	7,500 lbs
Grader	2	40,000 lbs
Boom truck with bucket	2	16,000 lbs
Utility line service truck	1	35,000 lbs

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Therefore, in addition to the 51 pieces of off-road equipment listed in Table 3, construction of the Project will also require that a minimum of 18 off-road trucks be on-site daily. The number of off-road trucks, alone, exceeds the amount of equipment used within the URBEMIS model.

By failing to include all of the off-road equipment needed to complete construction of the entire 115-acre site, the Project's emissions are greatly underestimated. As a result, we find the URBEMIS model to be unreliable and inaccurate.

#### *Use of Incorrect Trip Lengths and Number of Daily Trips*

The trip lengths and number of trips used within the URBEMIS model for each phase of construction are inconsistent with the trip lengths and number of trips provided in the IS and Trip Generation Analysis. As a result, emissions from on-road mobile sources during construction are greatly underestimated.

The "Phase Assumptions" provided in the URBEMIS output files, which can be found in Appendix A of the Air Quality Report, suggest that a total of 150 vehicle miles traveled (VMT) will occur during the "Demolition" phase, and that a total of approximately 2,343 miles will occur during the "Mass Grading" phase (Air Quality Report, p. 37). The origin of these values, however, is unclear, as the URBEMIS output file fails to provide any explanation as to how these values were derived. Furthermore, it is unclear as to the type of trip the vehicle miles traveled for each construction phase represent, as the URBEMIS output file fails to distinguish between the worker and vendor VMT. Additionally, the "Phase Assumptions" provided in the URBEMIS output files indicate that neither the "Trenching/Infrastructure" phase nor the "Building Construction- PV Installation" phase would generate any on-road worker or vendor trips whatsoever, which is a completely unrealistic assumption (Air Quality Report, p. 37). Due to these reasons, we find the model's on-road emission estimates to be inaccurate and unreliable, as they are greatly underestimated.

According to the IS, "there will be an average of 125 workers on site during the construction period..." (p. 13). Furthermore, according to the Project's Trip Generation Analysis "approximately 5 deliveries per day will be required for material and equipment during the 6-month construction period..." (p. 2). Therefore, at the very least, an average of 125 worker trips per day and an average of 5 vendor trips per day should have been utilized within the air model.

The IS also provides some insight on the appropriate worker trip lengths that should be used within the model. According to the IS, "it is expected that most workers will commute to the site from nearby communities including Joshua Tree, Yucca Valley, Twentynine Palms, and Palm Springs" (p. 13). Using Google Earth, we measured the distance from these communities to the Project site, and estimated a weighted average roundtrip trip length of approximately 34 miles (see table below).

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Origin	% of Trips	One-Way Trip Length (miles)	Roundtrip Length (miles)
Joshua Tree	25%	5.1	10.2
Twentynine Palms	25%	12.3	24.6
Yucca Valley	25%	11.6	23.2
Palm Springs	25%	39.7	79.4
<b>Average Trip Length</b>		<b>17.2</b>	<b>34.35</b>

Applying this roundtrip distance to the total number of daily worker trips (125 trips per day) disclosed in the IS, we found that Project construction would generate an average of approximately 4,294 daily worker vehicle miles traveled.

The IS does not provide a vendor trip length. Therefore, in an effort to determine an appropriate vendor trip length, we relied upon reports prepared for similar projects within the area. The Alamo Solar Project, located in San Bernardino County approximately 12 miles north of Victorville, is a similar sized solar project that would construct a 20-MW solar energy facility on approximately 175 acres of land.<sup>33</sup> According to Table 2 of the Alamo Solar Project's Criteria Pollutant Emissions Memorandum, all construction deliveries were assumed to come from Los Angeles County.<sup>34</sup> Therefore, assuming that this is the case for the Joshua Tree Solar Project, using Google Earth, we estimated a one-way vendor trip length of approximately 82.3 miles and a roundtrip vendor trip length of approximately 164.6 miles, which represents the distance between the Project site and the outermost border of Los Angeles County. It should be noted that this distance is still most likely an underestimation of the trip length that would occur for material deliveries, as the IS anticipates that the solar panels will be delivered from out of state locations (IS, p. 26). However, assuming that material delivery trips will have a trip length equivalent to the distance between the Project site and the border of Los Angeles County, the daily VMT generated by vendors would be equal to approximately 823 miles (5 deliveries per day x 164.6 roundtrip miles).

As you can see, the average daily worker VMT of 4,294 miles, alone, exceeds the VMT used within the URBEMIS model of 150 miles and 2,343 miles for the Demolition and Mass Grading phases, respectively. When both the worker and the vendor daily VMT are combined, we find that the Project would generate approximately 5,117 miles per day.

This analysis demonstrates that the URBEMIS model greatly underestimated the number of trips and trip lengths that would occur during Project construction. As a result, the Project's on-road emissions during construction are greatly underestimated.

<sup>33</sup> "Memorandum- Criteria Pollutant Emissions from the Proposed Alamo Solar Project, San Bernardino County, California." Project Number P201300204, *available at*:

<http://www.sbcounty.gov/uploads/lus/environmental/AlamoCriteriaPollutantsMemo.pdf>

<sup>34</sup> *Ibid.*

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#### *Failure to Account for Demolition of Existing Structures*

According to the IS, site preparation will involve the erection of a perimeter security fence, demolition of existing buildings, remediation of a few specific site conditions, and establishment of temporary utilities (p. 11). The URBEMIS model assumes, without citing a reference for the assumption, that the existing structures to be demolished would be equal to approximately 5,000 cubic feet (Air Quality Report, p. 37-38).<sup>35</sup> To verify whether or not the value used within the URBEMIS model was accurate, we measured the total square footage of the existing structures on-site using Google Earth. Our measurements estimated a total building area of approximately 31,585 square feet (see figure below).



We estimated the height of the buildings using the images in Appendix A of the Phase I ESA (see excerpt below).

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<sup>35</sup> The Air Quality Report, at pp. 37-38, simply states "Building Volume Total (cubic feet): 5000," but does not explain any factual basis for this assumption.



Photograph No. 4: Southeast view of the guest house.

From the images available, all of the existing structures consist of one-story buildings. Assuming an average height of approximately 11 feet<sup>36</sup>, we conservatively estimated the volume of the existing buildings to be approximately 347,435 cubic feet (31,585 square feet x 11 feet). This volume is substantially larger than the 5,000 cubic feet volume used in the URBEMIS model. Therefore, it is clear that the URBEMIS model greatly underestimates the volume that will be demolished as part of Project construction.

It should be noted that the area measured in the figure above does not include the demolition of the additional paved areas on-site. According to the IS, "All concrete structures (hangar aprons, foundations, and slabs) are expected to be demolished and removed" (p. 11). As a result, the actual amount demolished will be even greater than what we estimated in the figure above.

The amount of material being demolished is also a key factor in determining the number of hauling trips that would be required to transport the material off-site, which would increase fugitive dust as well as other pollutant emissions associated with truck travel. As is demonstrated in the updated CalEEMod model discussed in the sections below (output files attached to this letter for reference), transport of demolished materials off-site would result in a total of approximately 144 additional hauling trips. Therefore, by underestimating the total volume the existing structures would make up, emissions from sources such as fugitive dust associated with the demolition of these structures are greatly underestimated and therefore, the Project may not comply with Rule 403. Rule 403 is to reduce man-made fugitive dust and requires that every reasonable precaution be taken to minimize fugitive dust

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<sup>36</sup> Council on Tall Buildings and Urban Habitat, *available at*:  
<http://www.ctbuh.org/HighRiseInfo/TallestDatabase/Criteria/HeightCalculator/tabid/1007/language/en-GB/Default.aspx>

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emissions from wrecking, excavation, grading, clearing of land, and solid waste disposal operations.<sup>37</sup> Due to this, we find the URBEMIS model to be unreliable and inaccurate, and as a result, it should not be relied upon to determine Project significance.

### Updated Analysis Indicates Significant Construction Emissions

In an effort to more accurately estimate the Project's emissions, we prepared an updated air model using the California Emissions Estimator Model Version CalEEMod.2013.2.2 ("CalEEMod").<sup>38</sup> CalEEMod was used to estimate emissions because it is the successor to planning level emissions estimating software, URBEMIS.<sup>39</sup> CalEEMod provides recommended default values based on site specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but CEQA requires that such changes be justified by substantial evidence.<sup>40</sup> Once all the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files, which we have included as an attachment to this letter for reference, disclose to the reader what parameters were utilized in calculating the Project's air pollution emissions, and make known which default values were changed as well as provide a justification for the values selected.<sup>41</sup>

We used a "User Defined Industrial" land use type, which is most representative of a solar facility, we used a total lot acreage of 115 acres, which represents the total Project area, and we used a rural land use setting. Using Table 3 of the IS, we were able to estimate a six-month construction schedule as well as an appropriate equipment list for each phase (p. 14). We also relied upon the table just below Table 3 to determine the number and type of off-road trucks that each phase of construction would require (p. 15). We applied the values from this table to the "Utility Upgrade" construction phase, as this phase encompasses the entire six-month construction duration. The table below summarizes the construction schedule and construction equipment used within our CalEEMod model.

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<sup>37</sup> "Rule 403 Fugitive Dust". Mojave Desert Air Quality Management District, *available at*:

<http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=313>

<sup>38</sup> CalEEMod website, *available at*: <http://www.caleemod.com/>

<sup>39</sup> While the CalEEMod model utilized for this analysis is not the same as the URBEMIS model utilized in the previous air quality analysis, the results from CalEEMod are still comparable to the results from the IS's URBEMIS model. CalEEMod is more appropriate to use and will provide more accurate emission estimates because it incorporates more up to date information such as EMFAC2011 emission factors. The differences between CalEEMod and URBEMIS are available at: <http://www.caleemod.com/>

<sup>40</sup> CalEEMod User Guide, pp. 2, 9, *available at*: <http://www.caleemod.com/>

<sup>41</sup> CalEEMod User Guide, pp. 7, 13, *available at*: <http://www.caleemod.com/> (A key feature of the CalEEMod program is the "remarks" feature, where the user explains why a default setting was replaced by a "user defined" value. These remarks are included in the report.)

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Phase Name	Start Date	End Date	Equipment Type	CalEEMod Equivalent	Number
Fencing	6/1/2016	8/1/2016	Bobcat	Other Construction Equipment	1
			Trencher	Trencher	1
			Pick Up Truck	Off-Highway Truck	1
Demolition	6/1/2016	7/1/2016	Backhoe	Tractors/Loaders/Backhoes	2
			Bulldozer	Rubber Tired Dozer	1
			5-Cubic Yard Dump Truck	Off-Highway Truck	2
Site Preparation/Grading	6/1/2016	7/1/2016	Water Truck-3 Axles	Off-Highway Truck	3
			Grader	Graders	2
			25-Cubic Yard Paddle Scraper	Scrapers	1
			10-Ton Roller	Rollers	2
Utility Upgrades	6/1/2016	12/1/2016	Line Truck	Off-Highway Truck	1
			Boom Truck	Off-Highway Truck	2
			8,000 Gallon Water Truck	Off-Highway Truck	3
			5-Cubic Yard Dump Truck	Off-Highway Truck	3
			Pick Up Truck	Other General Industrial Equipment	5
			Pile Driver	Other Construction Equipment	2
			Grader	Graders	2
Underground Work	7/1/2016	9/1/2016	Small Backhoe	Tractors/Loaders/Backhoes	2
			Small Sheepsfoot Roller	Rollers	2
			Trencher	Trencher	2
			5-Cubic Yard Dump Truck	Off-Highway Truck	2
			5kW Generator	Generator Sets	2
System Installation	9/1/2016	12/1/2016	4x4 Forklift	Forklifts	4
			Small Crane	Cranes	1
			ATV Vehicle	Other General Industrial Equipment	4
			Pickup Truck	Other General Industrial Equipment	5
			5kW Generator	Generator Sets	4
Testing/Commissioning	11/1/2016	12/1/2016	Pick Up Truck	Other General Industrial Equipment	2
Cleanup/Restoration	11/1/2016	12/1/2016	Grader	Graders	2
<b>Total</b>					<b>66</b>

We assumed that 30 acres of grading would occur, which is consistent with the value provided in the Air Quality Report (p. 22). We assumed that 31,585 square feet of buildings would be demolished because CalEEMod does not utilize building volume for its demolition parameter.

We utilized a worker trip number of 125 trips per day, and a vendor trip number of 5 trips per day for each day of construction. Again, we applied these values to the "Utility Upgrade" construction phase because it spans the entire six-month construction period. Default hauling trip values were used, as no information was provided regarding the number of hauling trips that would occur during construction. We used a worker trip length of 34.35 miles, and a vendor trip length of 164.6 miles. Because a hauling trip length was not specified, we assumed that the hauling trip length would be equivalent to the worker trip length, as construction debris from the Project will most likely be transported to disposal sites within these communities. A summary of the trip lengths and number of trips for each trip type are provided in the table below.

Trip Type	Number of Trips per Day	Trip Length (miles)
Worker Trips	125	34.35
Vendor Trips	5	164.60
Hauling Trips	Default	34.35

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When correct input parameters are used to model emissions, we find that the Project's construction-related criteria air pollutant emissions increase significantly compared to the IS's model. Furthermore, we find that the Project's construction-related NO<sub>x</sub> emissions exceed the daily threshold of 137 pounds per day set forth by the Mojave Desert Air Quality Management District (MDAQMD) (see table below).<sup>42</sup>

Maximum Mitigated Daily Construction Emissions						
	ROG	NO <sub>x</sub>	CO	SO	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Construction Emissions in Pounds Per Day</b>						
IS Model	9	92	46	0	38	11
<b>Threshold</b>	<b>137</b>	<b>137</b>	<b>548</b>	<b>137</b>	<b>82</b>	<b>82</b>
<b>Exceed?</b>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
SWAPE Model	34	361	216	0	39	26
Summer Emissions						
SWAPE Model	34	361	210	0	39	26
Winter Emissions						
<b>Threshold</b>	<b>137</b>	<b>137</b>	<b>548</b>	<b>137</b>	<b>82</b>	<b>82</b>
<b>Exceed?</b>	<i>No</i>	<b>Yes</b>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

As demonstrated in the table above, when correct modeling parameters are used, the Project's criteria air pollutant emissions increase greatly and construction-related summer and winter NO<sub>x</sub> emissions exceed the established threshold of 137 pounds per day. Due to these reasons, a DEIR should be prepared that includes an updated model to adequately estimate the Project's emissions during construction.

#### Additional Mitigation Measures Available to Reduce Construction Emissions

Our updated CalEEMod model demonstrates that when Project activities are modeled correctly, NO<sub>x</sub> construction emissions would result in a potentially significant impact. Therefore, additional mitigation measures must be identified and incorporated in a DEIR to reduce these emissions to a less-than-significant level.

Additional mitigation measures can be found in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*, which attempt to reduce Greenhouse Gas (GHG) levels, as well as reduce Criteria Air Pollutants such as NO<sub>x</sub>.<sup>43</sup> NO<sub>x</sub> is a byproduct of fuel combustion, and is emitted by on-road vehicles and by off-road construction equipment. Mitigation for criteria pollutant emissions should include consideration of the following measures in an effort to reduce NO<sub>x</sub> construction emissions to below MDAQMD thresholds.

#### Limit Construction Equipment Idling Beyond Regulation Requirements

Heavy duty vehicles will idle during loading/unloading and during layovers or rest periods with the engine still on, which requires fuel use and results in emissions. The California Air Resources Board

<sup>42</sup> "MDAQMD CEQA Guidelines." Mojave Desert Air Quality Management District, p. 10, available at: <http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=1806>

<sup>43</sup> <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

(CARB) Heavy-Duty Vehicle Idling Emissions Reduction Program limits idling of diesel-fueled commercial motor vehicles to five minutes. Reduction in idling time beyond the five minutes required under the regulation would further reduce fuel consumption and thus emissions. The Project applicant must develop an enforceable mechanism that monitors the idling time to ensure compliance with this mitigation measure.

#### *Require Implementation of Diesel Control Measures*

The Northeast Diesel Collaborative (NEDC) is a regionally coordinated initiative to reduce diesel emissions, improve public health, and promote clean diesel technology. The NEDC recommends that contracts for all construction projects require the following diesel control measures:<sup>44</sup>

- All diesel onroad vehicles on site for more than 10 total days must have either (1) engines that meet U.S. Environmental Protection Agency (EPA) 2007 onroad emissions standards or (2) emission control technology verified by EPA<sup>45</sup> or the California Air Resources Board (CARB)<sup>46</sup> to reduce PM emissions by a minimum of 85 percent.
- All diesel generators on site for more than 10 total days must be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85 percent.
- All diesel nonroad construction equipment on site for more than 10 total days must have either (1) engines meeting EPA Tier 4 nonroad emission standards or (2) emission control technology verified by EPA or CARB for use with nonroad engines to reduce PM emissions by a minimum of 85 percent for engines 50 horse power (hp) and greater and by a minimum of 20 percent for engines less than 50 hp.
- All diesel vehicles, construction equipment, and generators on site shall be fueled with ultra-low sulfur diesel fuel (ULSD) or a biodiesel blend<sup>47</sup> approved by the original engine manufacturer with sulfur content of 15 parts per million (ppm) or less.

#### *Repower or Replace Older Construction Equipment Engines*

The NEDC recognizes that availability of equipment that meets the EPA's newer standards is limited.<sup>48</sup> Due to this limitation, the NEDC proposes actions that can be taken to reduce emissions from existing equipment in the *Best Practices for Clean Diesel Construction* report.<sup>49</sup> These actions include but are not limited to:

- Repowering equipment (i.e. replacing older engines with newer, cleaner engines and leaving the body of the equipment intact).

<sup>44</sup> Diesel Emission Controls in Construction Projects, *available at*:

<http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf>

<sup>45</sup> For EPA's list of verified technology: <http://www3.epa.gov/otaq/diesel/verification/verif-list.htm>

<sup>46</sup> For CARB's list of verified technology: <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>

<sup>47</sup> Biodiesel blends are only to be used in conjunction with the technologies which have been verified for use with biodiesel blends and are subject to the following requirements:

<http://www.arb.ca.gov/diesel/verdev/reg/biodieselcompliance.pdf>

<sup>48</sup> <http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf>

<sup>49</sup> <http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf>

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Engine repower may be a cost-effective emissions reduction strategy when a vehicle or machine has a long useful life and the cost of the engine does not approach the cost of the entire vehicle or machine. Examples of good potential replacement candidates include marine vessels, locomotives, and large construction machines.<sup>50</sup> Older diesel vehicles or machines can be repowered with newer diesel engines or in some cases with engines that operate on alternative fuels (see section “Use Alternative Fuels for Construction Equipment” for details). The original engine is taken out of service and a new engine with reduced emission characteristics is installed. Significant emission reductions can be achieved, depending on the newer engine and the vehicle or machine’s ability to accept a more modern engine and emission control system. It should be noted, however, that newer engines or higher tier engines are not necessarily cleaner engines, so it is important that the Project Applicant check the actual emission standard level of the current (existing) and new engines to ensure the repower product is reducing emissions for NO<sub>x</sub>.<sup>51</sup>

- Replacement of older equipment with equipment meeting the latest emission standards.

Engine replacement can include substituting a cleaner highway engine for a nonroad engine. Diesel equipment may also be replaced with other technologies or fuels. Examples include hybrid switcher locomotives, electric cranes, LNG, CNG, LPG or propane yard tractors, forklifts or loaders.

Replacements using natural gas may require changes to fueling infrastructure.<sup>52</sup> Replacements often require some re-engineering work due to differences in size and configuration. Typically there are benefits in fuel efficiency, reliability, warranty, and maintenance costs.<sup>53</sup>

#### *Install Retrofit Devices on Existing Construction Equipment*

PM and NO<sub>x</sub> emissions from alternatively-fueled construction equipment can be further reduced by installing retrofit devices on existing and/or new equipment. The most common retrofit technologies are retrofit devices for engine exhaust after-treatment. These devices are installed in the exhaust system to reduce emissions and should not impact engine or vehicle operation.<sup>54</sup> Below is a table, prepared by the EPA, that summarizes the commonly used retrofit technologies and the typical cost and emission reductions associated with each technology.<sup>55</sup> It should be noted that actual emissions reductions and costs will depend on specific manufacturers, technologies and applications.

Technology	Typical Emissions Reductions (percent)				Typical Costs (\$)
	PM	NO <sub>x</sub>	HC	CO	
Diesel Oxidation Catalyst (DOC)	20-40	-	40-70	40-60	Material: \$600-\$4,000 Installation: 1-3 hours

<sup>50</sup> <http://www3.epa.gov/otaq/diesel/technologies/engines.htm>

<sup>51</sup> Diesel Emissions Reduction Program (DERA): Technologies, Fleets and Projects Information, *available at*: <http://www2.epa.gov/sites/production/files/2015-09/documents/420p11001.pdf>

<sup>52</sup> <http://www3.epa.gov/otaq/diesel/technologies/replacements.htm>

<sup>53</sup> <http://www3.epa.gov/otaq/diesel/technologies/engines.htm>

<sup>54</sup> <http://www3.epa.gov/otaq/diesel/technologies/index.htm>

<sup>55</sup> <http://www3.epa.gov/otaq/diesel/technologies/retrofits.htm>

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Diesel Particulate Filter (DPF)	85-95	-	85-95	50-90	Material: \$8,000-\$50,000 Installation: 6-8 hours
Partial Diesel Particulate Filter (pDPF)	up to 60	-	40-75	Oct-60	Material: \$4,000-\$6,000 Installation: 6-8 hours
Selective Catalyst Reduction (SCR)	-	up to 75	-	-	\$10,000-\$20,000; Urea \$0.80/gal
Closed Crankcase Ventilation (CCV)	varies	-	-	-	-
Exhaust Gas Recirculation (EGR)	-	25-40	-	-	-
Lean NOx Catalyst (LNC)	-	May-40	-	-	\$6,500-\$10,000

### *Use Electric and Hybrid Construction Equipment*

CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*<sup>56</sup> report also proposes the use of electric and/or hybrid construction equipment as a way to mitigate NO<sub>x</sub> emissions. When construction equipment is powered by grid electricity rather than fossil fuel, direct emissions from fuel combustion are replaced with indirect emissions associated with the electricity used to power the equipment. Furthermore, when construction equipment is powered by hybrid-electric drives, emissions from fuel combustion are also greatly reduced. Electric construction equipment is available commercially from companies such as Peterson Pacific Corporation,<sup>57</sup> which specialize in the mechanical processing equipment like grinders and shredders. Construction equipment powered by hybrid-electric drives is also commercially available from companies such as Caterpillar<sup>58</sup>. For example, Caterpillar reports that during an 8-hour shift, its D7E hybrid dozer burns 19.5 percent fewer gallons of fuel than a conventional dozer while achieving a 10.3 percent increase in productivity. The D7E model burns 6.2 gallons per hour compared to a conventional dozer which burns 7.7 gallons per hour.<sup>59</sup> Fuel usage and savings are dependent on the make and model of the construction equipment used. The Project Applicant should calculate project-specific savings and provide manufacturer specifications indicating fuel burned per hour.

### *Institute a Heavy-Duty Off-Road Vehicle Plan*

CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*<sup>60</sup> report recommends that the Project Applicant provide a detailed plan that discusses a construction vehicle inventory tracking system to ensure compliances with construction mitigation measures. The system should include strategies such as requiring hour meters on equipment, documenting the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment and daily logging of the operating hours of the equipment. Specifically,

<sup>56</sup> <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

<sup>57</sup> Peterson Electric Grinders Brochure, available at: [http://www.petersoncorp.com/wp-content/uploads/peterson\\_electric\\_grinders1.pdf](http://www.petersoncorp.com/wp-content/uploads/peterson_electric_grinders1.pdf)

<sup>58</sup> [http://www.cat.com/en\\_US/products/new/power-systems/electric-power-generation.html](http://www.cat.com/en_US/products/new/power-systems/electric-power-generation.html)

<sup>59</sup> <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

<sup>60</sup> <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

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prior to the construction of a Project the contractor should submit a certified list of all diesel vehicles, construction equipment, and generators to be used on site.<sup>61</sup> The list should include the following:<sup>62</sup>

- Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment.
- Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation.
- For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.

#### *Implement a Construction Vehicle Inventory Tracking System*

CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*<sup>63</sup> report recommends that the Project Applicant provide a detailed plan that discusses a construction vehicle inventory tracking system to ensure compliances with construction mitigation measures. The system should include strategies such as requiring engine run time meters on equipment, documenting the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment and daily logging of the operating hours of the equipment. Specifically, for each onroad construction vehicle, nonroad construction equipment, or generator, the contractor should submit to the developer's representative a report prior to bringing said equipment on site that includes:<sup>64</sup>

- Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number.
- The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level.
- The Certification Statement<sup>65</sup> signed and printed on the contractor's letterhead.

Furthermore, the contractor should submit to the developer's representative a monthly report that, for each onroad construction vehicle, nonroad construction equipment, or generator onsite, includes:<sup>66</sup>

- Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
- Any problems with the equipment or emission controls.

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<sup>61</sup> Diesel Emission Controls in Construction Projects, *available at*:

<http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf>

<sup>62</sup> USEPA's Construction Fleet Inventory Guide is a useful tool in identifying the information required.

<http://www2.epa.gov/sites/production/files/2015-09/documents/construction-fleet-inventory-guide.pdf>

<sup>63</sup> <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

<sup>64</sup> Diesel Emission Controls in Construction Projects, *available at*:

<http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf>

<sup>65</sup> Diesel Emission Controls in Construction Projects, *available at*:

<http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf> The NEDC Model Certification Statement can be found in Appendix A.

<sup>66</sup> Diesel Emission Controls in Construction Projects, *available at*:

<http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf>

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- Certified copies of fuel deliveries for the time period that identify:
  - Source of supply
  - Quantity of fuel
  - Quality of fuel, including sulfur content (percent by weight).

In addition to these measures, we also recommend that the County require the Applicant to implement the following NO<sub>x</sub> mitigation measures, called “Enhanced Exhaust Control Practices,”<sup>67</sup> that are recommended by the Sacramento Metropolitan Air Quality Management District (SMAQMD):

1. The project representative shall submit to the lead agency a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project.
  - The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment.
  - The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.
  - This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment.
  - The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.
2. The project representative shall provide a plan for approval by the lead agency demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NO<sub>x</sub> reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average.
  - This plan shall be submitted in conjunction with the equipment inventory.
  - Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
  - The District’s Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.
3. The project representative shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour.
  - Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency monthly.
  - A visual survey of all in-operation equipment shall be made at least weekly.

<sup>67</sup> [http://www.airquality.org/ceqa/Ch3EnhancedExhaustControl\\_10-2013.pdf](http://www.airquality.org/ceqa/Ch3EnhancedExhaustControl_10-2013.pdf)

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- A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.
4. The District and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other District, state or federal rules or regulations.

The SJVAPCD also recommends that Lead Agencies seek to reduce emissions from construction-related equipment exhaust, and provides feasible mitigation measures in order to do so, which are discussed in the District's *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI).<sup>68</sup> According to the GAMAQI,

"Feasible mitigation of construction exhaust emission includes use of construction-related equipment powered by engines meeting, at a minimum, Tier II emission standards, as set forth in §2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 Code of Federal Regulations, and limitations of hours of activities" (p. 119 of 125).

Furthermore, the SJVAPCD recommends that any additional mitigation measures proposed by the Lead Agency should be required as a condition of project approval. The GAMAQI states, "Lead Agencies can impose additional mitigation measures as conditions of project approval such as requirements for the project proponent to enter into a VERA with the District" (p. 119 of 125). This requirement set forth by SJVAPCD ensures that any mitigation proposed for a project will actually be implemented once the Project is approved, thus ensuring that the Project's emissions are adequately reduced.

These measures are more stringent and prescriptive than those measures identified in the IS. When combined together, these measures offer a cost-effective way to incorporate lower-emitting equipment into the Project's construction fleet, which subsequently, reduces NO<sub>x</sub> emissions released during Project construction. The addition of these new measures (listed above), incorporated with the mitigation measures already in place, will reduce the total criteria pollutant emissions, potentially to a level that does not exceed the MDAQMD thresholds. A DEIR must be prepared to include additional mitigation measures, as well as include an updated air quality assessment to ensure that the necessary mitigation measures are implemented to reduce construction emissions to below thresholds.

### Failure to Comply with Mojave Air District Rule 201

According to the Air Quality Report, "The proposed Project will be subject to MDAQMD's Regulation II (Permits) and Regulation XIII (New Source Review). These regulations ensure that all equipment with the potential to emit air pollutants (including air toxics and hazardous air pollutants) at the Project site would be subject to the MDAQMD's review and approval before installation" (p. 16-17). However, the IS does not demonstrate nor provide evidence that the applicant has applied for a permit or consulted

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<sup>68</sup> "Guidance for Assessing and Mitigating Air Quality Impacts." San Joaquin Valley Air Pollution Control District, available at: [http://www.valleyair.org/transportation/GAMAQI\\_3-19-15.pdf](http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf)

with the MDAQMD to determine that the operational equipment present on-site will not have significant operational emissions. Therefore, prior to approval, the Project must demonstrate compliance with these permits.

### *Diesel Particulate Matter Emissions Inadequately Evaluated*

The Air Quality Report used CARB's Hotspots Analysis Reporting Program (HARP) model to determine the health impacts from the Project's toxic air contaminant (TAC) emissions. According to Table 6 of the Air Quality Report, the residential cancer risk from construction of the proposed Project is approximately 3.44 in one million (Air Quality Report, p. 33). Therefore, since the cancer risk posed to nearby sensitive receptors does not exceed the 10 in one million threshold established by the MDAQMD, the Air Quality Report concludes that the Project's construction-related TAC emissions would not expose sensitive receptors to substantial pollutant concentrations (p. 27). However, this conclusion is based on a flawed analysis that uses an outdated model to estimate health risk. Furthermore, the health risk assessment conducted in the Air Quality Report relies upon emissions from a flawed emissions model (see sections above). Due to these reasons, the health risk assessment conducted in the Air Quality Report is inadequate, and should not be used to determine Project significance.

### *Use of an Outdated Health Risk Model*

According to the output files found in Appendix B of the Air Quality Report, HARP Version 1.4e was used to assess health risks (pp. 49). HARP Version 1.4e, however, is an outdated model that does not incorporate the most up to date health risk assessment guidelines. HARP Version 1.4e became available in January 2012, but has since been updated.<sup>69</sup> HARP Version 2 was became available in July 2015 and incorporates updated information presented in the 2015 Air Toxics Hotspot Program Guidance Manual for Preparation of Health Risk Assessments.<sup>70</sup> As a result, the health risk analysis conducted in the Air Quality Report is outdated and does not incorporate the most recent guidelines for a health risk, and therefore is inadequate to determine if a significant risk is posed to sensitive receptors.

### *Updated Health Risk Assessment Indicates Significant Impact*

The MND does not provide enough detailed information to allow replication of the health risk assessment conducted in the Air Quality Report using the newest version of the HARP model. Therefore, we prepared a comparative screening-level health risk assessment to determine the risk associated with construction-related diesel particulate matter (DPM) emissions. The results of our assessment, as described below, demonstrate that construction-related DPM emissions may result in a significant health risk impact.

As of 2011, the United States Environmental Protection Agency (USEPA) recommends AERSCREEN as the leading air dispersion model, due to improvements in simulating local meteorological conditions based on simple input parameters.<sup>71</sup> The model replaced SCREEN3, which is included in OEHH<sup>72</sup> and

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<sup>69</sup> Hotspots Analysis Reporting Program News. Available at: <http://www.arb.ca.gov/toxics/harp/news.htm>

<sup>70</sup> HARP News. Available at: <http://www.arb.ca.gov/toxics/harp/harp.htm>

<sup>71</sup> [http://www.epa.gov/ttn/scram/guidance/clarification/20110411\\_AERSCREEN\\_Release\\_Memo.pdf](http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf)

<sup>72</sup> "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHH, February 2015, available at: [http://oehha.ca.gov/air/hot\\_spots/2015/2015GuidanceManual.pdf](http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf)

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CAPCOA<sup>73</sup> guidance as the appropriate air dispersion model for Level 2 health risk screening assessments (HRSAs). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary health risk screening assessment of the Project's construction emissions using the estimates from our updated CalEEMod model. The CalEEMod annual emissions indicate that construction activities will generate approximately 1,982 pounds of DPM over a 184 day construction period. The AERSCREEN model relies on a continuous average emissions rate to simulate maximum downwind concentrations from point, area, and volume emission sources. To account for the variability in construction equipment usage over the phases of Project construction, we calculated an average DPM emission rate over the anticipated construction duration by the following equation.

$$\text{Emission Rate } \left( \frac{\text{grams}}{\text{second}} \right) = \frac{1,982.4 \text{ lbs}}{184 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lb}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3,600 \text{ seconds}} \approx 0.0566 \text{ g/s}$$

Construction activity was simulated as a 115 acre rectangular area source in AERSCREEN, with dimensions of 801meters by 580 meters. A release height of three meters was selected to represent the height of exhaust stacks on construction equipment, and an initial vertical dimension of 1.5 meters was used to simulate instantaneous plume dispersion upon release. A rural meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generated maximum reasonable estimates of single hour downwind DPM concentrations from the Project site. USEPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant may be estimated by multiplying the single-hour concentration by 10%.<sup>74</sup> The maximum single-hour downwind concentration in the AERSCREEN output was approximately 29.48 µg/m<sup>3</sup> DPM 75 meters downwind, a distance that is most representative of the sensitive receptor location at 76 meters (250 feet). The annualized average concentration for the sensitive receptor was estimated to be 2.948 µg/m<sup>3</sup>.

We calculated excess cancer risks for each sensitive receptor location, for adults, children, and infant receptors using applicable HRA methodologies prescribed by OEHHA. OEHHA recommends the use of Age Sensitivity Factors (ASFs) to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution.<sup>75</sup> According to the revised guidance, quantified cancer risk should be multiplied by a factor of ten during the first two years of life (infant), and by a factor of three for the subsequent fourteen years of life (child aged two until sixteen). The results of our calculations are shown below.

<sup>73</sup> [http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA\\_HRA\\_LU\\_Guidelines\\_8-6-09.pdf](http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf)

<sup>74</sup> [http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019\\_OCR.pdf](http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf)

<sup>75</sup> "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: [http://oehha.ca.gov/air/hot\\_spots/2015/2015GuidanceManual.pdf](http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf)

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Parameter	Description	Units	Adult	Child	Infant
C <sub>air</sub>	Concentration	µg/m <sup>3</sup>	2.948	2.948	2.948
DBR	Daily breathing rate	L/kg-day	302	581	581
EF	Exposure Frequency	days/year	350	350	350
ED	Exposure Duration	years	0.5	0.5	0.5
AT	Averaging Time	days	25550	25550	25550
	Inhaled Dose	(mg/kg-day)	6.1E-06	1.2E-05	1.2E-05
CPF	Cancer Potency Factor	1/(mg/kg-day)	1.1	1.1	1.1
ASF	Age Sensitivity Factor	-	1	3	10
	<b>Cancer Risk</b>		<b>6.71E-06</b>	<b>3.87E-05</b>	<b>1.29E-04</b>

The excess cancer risk to adults, children, and infants during Project construction for the sensitive receptor 75 meters away are 6.71, 38.7, and 129 in one million, respectively.<sup>76</sup> The infantile and child cancer risk for the nearest sensitive receptors therefore exceed the MDAQMD threshold of 10 in one million. This is a significant health risk that the IS fails to disclose. As a result, a refined health risk assessment must be prepared to examine air quality impacts generated by Project construction using site-specific meteorology and specific equipment usage schedules, and appropriate mitigation measures must be adopted to mitigate these risks to less than significant levels.

Our calculations demonstrate that the Project poses a significant health risk due to DPM emissions. The IS proposes to incorporate operational mitigation measures to comply with the County Diesel Exhaust Control Measures and proposes to develop a Dust Control Plan prior to construction. However, these measures are insufficient and not intended to address the excess cancer risk caused by construction emissions. Therefore, additional mitigation measures, such as the ones identified previously to reduce the Project's NO<sub>x</sub> emissions, must be adopted to reduce TAC emissions during Project construction.

Sincerely,



Matt Hagemann, P.G., C.Hg.



Paul Rosenfeld, Ph.D.

<sup>76</sup> Consistent with OEHHA guidance, exposure was assumed to begin in the infantile stage of life to provide the most conservative estimate of air quality hazards.

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A handwritten signature in black ink, appearing to be 'JJ' followed by a long horizontal stroke.

Jessie Jaeger

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**Letter 18****Adams Broadwell/Coalition for Responsible Solar****Exhibit A Letter: SWAPE, Matt Hagemann, P.G, C.Hg., Paul Rosenfeld, Ph.D., Jessie Jaeger  
February 10, 2016****Response to Adams Broadwell Exhibit A- SWAPE**

The SWAPE letter raises primarily assertions regarding air quality issues for the Project. The main issues from this letter are addressed in the responses to the comments to the Adams Broadwell Joseph & Cardozo comment letter. Please see responses to comments 17-24 and 17-25 for these responses. However, the County provides additional responses to the SWAPE comment letter herein. SWAPE asserts that documentation of the UST removal is not included in the IS/MND, that there may be asbestos, lead based paint and PCBs on site, that Valley Fever was not considered, that an outdated air model was used, and that that the health risk assessment underestimates cancer risk.

In regards to the concern about the underground storage tank, the tank was removed in 2015 and was not leaking. A closure report is available through County records.

In regards to asbestos, lead based paint, and PCBs, a Demolition Plan for the existing buildings on the decommissioned airport site will be developed in accordance with County requirements. Any asbestos containing materials, lead based paint, or PCBs will be removed according to industry standards prior to demolition.

In regard to comments about the potential for valley fever and air borne spores created during construction, the Project is not taking place on desert land with old soil crust. It is a highly disturbed piece of property that was formerly used as an airport. Valley fever spores are generally found in unbroken soil crust and are extremely unlikely to be on this property. Furthermore, the County Public Health Department has determined that development projects in San Bernardino County do not pose a significant risk to public health from Valley Fever.

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Feb 9, 2016

Christina Caro  
Adams Broadwell Joseph & Cardozo  
601 Gateway Blvd., Suite 1000  
South San Francisco, CA 94080

Subject: Comments on the Joshua Tree Solar Farm Initial Study Project Number  
P201400482/CUP

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Dear Ms. Caro:

This letter contains my comments on the Initial Study (IS) and proposed Mitigated Negative Declaration (MND) of the Joshua Tree Solar Farm development project (Project) prepared by San Bernardino (County) pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA California Environmental Quality Act (CEQA) guidelines.

The Applicant, Joshua Tree Solar, is a subsidiary of NextEra Energy (NEE). According to NextEra's company website<sup>1</sup>, they are an energy company with revenues of approximately \$17.0 billion, and their primary subsidiaries are Florida Power and Light Company (the 3<sup>rd</sup> largest electric utility in the U.S.) and Hawaiian Electric Industries.

The Applicant proposes to construct and operate an industrial solar energy facility located in unincorporated San Bernardino County, covering a total of approximately 115 acres of land in addition to construction ("improvement") activities along a mile or more of a gentle line comprising an existing section of the Southern California Edison (SCE) electrical distribution line. The generated power will be delivered to the SCE electrical grid via a 33 kilovolt (kV) interconnection to the distribution system at a point near Sunfair Road, south of State Route 62.

### **Professional Background**

I am an environmental biologist with 23 years of professional experience in wildlife ecology and natural resource management, and since 1994 have maintained U.S. Fish and Wildlife (USFWS) Recovery permits for listed species (birds and insects) under the Endangered Species Act (ESA). In addition to these I hold several California state and federal certifications for surveys and monitoring of protected and special status species. I have extensive experience monitoring and studying many species across several taxa, including reptiles and amphibians, passerines and raptors, and marine and terrestrial

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<sup>1</sup> NextEra Energy Inc. (n.d.) Retrieved May 25, 2015 from  
[http://www.nexteraenergy.com/company/our\\_company.shtml](http://www.nexteraenergy.com/company/our_company.shtml)

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mammals. I have served as a biological resources expert on over a hundred projects, many of them involving both conventional and renewable industrial scale energy projects on private, public, and military lands, many in California. The scope of work I have conducted as an independent contractor, supervisor, and full time environmental consultant employee has included assisting clients to evaluate and achieve environmental compliance, restoration, mitigation, and research as related to biological resources; as well as submitting written reports and comments for such work. This work often included assessing and reviewing actions pursuant to CEQA and the National Environmental Policy Act (NEPA), along with surveying, preparing, and contributing to Biological Reports, Assessments, and Environmental Assessments, among others.

My conservation and natural history research on highly endangered and rare vertebrate species in Latin America has received various awards, including the National Geographic Research and Exploration Award and the National Commission for Scientific and Technological Research Award for the Novel Researcher. My research on reptiles has been featured on National Geographic Television and Discovery Channel documentaries, and I have served as an on- and off-camera technical consultant for wildlife documentaries filmed by National Geographic Television, Discovery Channel, BBC, and Animal Planet.

I have a Master's degree in Ecology, and my professional experience includes college instruction at the college level since 1991. I was an adjunct instructor in Biology and Zoology at Palomar Community College and San Diego State University between 1991 and 1995, where I authored a laboratory text for Biology majors. In 1999-2000 I taught semester-long field courses in Tropical Ecology in Ecuador and the Galapagos for Boston University. In 2008 I was a Visiting Full Time Professor in Environmental Science and Botany at Imperial Valley College (IVC), and since 2012 have been teaching Environmental Science at IVC as an Adjunct Professor. At present I am enrolled in a self-designed MS degree program in Environmental Studies from Green Mountain College, focusing on developing a Program in Environmental Science field study in Belize and Venezuela.

I have gained particular knowledge of the biological resource issues associated with the Project through my work on numerous other projects in the California, including several years of surveys on nearby industrial wind and solar facilities for pre-, during, and post-construction activities. My comments are based upon first-hand observations, review of the environmental documents prepared for the Project, review of scientific literature pertaining to biological resources known to occur in and near the Project area, consultation with other biological resource experts, and the knowledge and experience I have acquired throughout my 2 years of working in the field of natural resources research and management.

Finally, pursuant the species discussions below, it is important to note that I have extensive experience conducting focused surveys for sensitive wildlife residents and migrants in California desert ecosystems (including the Mojave, Sonoran, and Yuha deserts), including such species as the desert tortoise, kit fox, fringe-toed lizard, flat-

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tailed horned lizard, burrowing owl, resident and migratory raptors including eagles, and many nesting birds protected under the Migratory Bird Treaty Act (MBTA).

### **The Initial Study's Failure To Provide Accurate And Comprehensive Evidence of Biological Resources Precludes a Thorough Assessment and Understanding Of Project Impacts**

The 2015 Desert Tortoise (DT) Survey and Biological Resources Assessment (BRA) erroneously characterizes the majority of the site as “highly disturbed ... and is poor or nondesert tortoise habitat.”<sup>2</sup> The airport runway is the previously developed part of the site along with small buildings on the southern end, all with the appearance of being decommissioned years ago. As such the site is composed of differing degrees of native habitat that has endured little disturbance, or has been re-establishing, with some invasive species present but not predominant in much of the site. However, the BRA's description generates an image of a nearly barren site with limited vegetation growth, due to its being “formerly developed” as the BRA states (not an actual habitat designation of any kind). If true, the vegetation map and associated habitat type designations should reflect this degree of non-habitat or “disturbed” habitat, however in their more accurate representation of onsite vegetation communities, they do not.

The IS states that “The current composition of the existing land is best described as *vacant land of dirt and sand* with a sparse vegetation community consisting of native grasses and shrubs”<sup>3</sup> (italics added). This unscientific portrayal could be applied to almost any desert habitat as described by a non-biologist or layperson, and the use of such language infers a desire on the part of the authors to make the site sound more lacking in biological viability than their own BRA data portray. Such a bias is inappropriate for an accurate environmental analysis. Also, given the available data (discussed below) regarding this region's use by desert tortoises and the high likelihood this site could be used as a migration corridor for federally protected tortoises, to characterize it as “poor or non-desert tortoise habitat” as the BRA summary does is misleading at best.

A 2013 National Renewal Energy Laboratory Technical Report of Solar Development on Contaminated and Disturbed Lands defines what types of land should be deemed disturbed in respect to appropriate development for commercial solar installations, specifically: contaminated lands, barren lands, invasive species-impacted lands and “others: (“e.g. recently burned, gravel pits”)<sup>4</sup>. The Project site does not fit into any of these categories, neither is accurately described as *mostly* highly disturbed. “Highly”

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<sup>2</sup> Teta Tech, Inc. and A. Karl. June 2015. 2015 Desert tortoise survey and general biological resources assessment for the Joshua Tree Solar Farm. Retrieved from: <http://www.sbcounty.gov/Uploads/LUS/Environmental/JoshuaTreeSolarFarm/2015%20Joshua%20Tree%20Solar%20Farm%20Bio%20Report%20061215.pdf>.

<sup>3</sup> Joshua Tree Solar Farm Initial Study. January 2016. Retrieved from: <http://cms.sbcounty.gov/lus/Planning/Environmental/Desert.aspx>

<sup>4</sup> Macknick et. el. Dec 2013. Solar Development on Contaminated and Disturbed Lands National Renewal Energy Laboratory Technical Report NREL/TP 6A20-58485. Retrieved from: <http://www.nrel.gov/docs/fy14osti/58485.pdf>

disturbed habitats should be predominated by over 50% of non-native plants or some other visually detectable type of disturbance to the overall habitat in question. The BRA vegetation maps, habitat types described, and photos do not bear out such an overall description, neither does the list of plants observed onsite which amount to 90 native species and 9 non-native species. If the Project Applicant wants to claim with any accuracy that the site is predominately “highly” disturbed habitat, they should provide Transect data indicating such.

The BRA for the Project states,

“Tetra Tech, Inc. (Tetra Tech) conducted comprehensive field surveys for biological resources in Spring 2012 and Spring 2015 to determine the potential presence or absence of special-status species and their habitat within and on lands surrounding the proposed Project. Surveys were also conducted on additional surrounding areas in Spring 2013. Focused surveys were conducted for these species and concurrently, a general biological resource assessment was completed. This report includes the results of the Spring 2012 and 2015 surveys and replaces the Spring 2012 *Desert Tortoise Survey and General Biological Resources Assessment* (Tetra Tech and Karl 2012). This report also satisfies the County of San Bernardino *Report Protocol for Biological Assessment Reports*.”<sup>5</sup>

It should be noted that this BRA was not posted on the San Bernardino county website - where all relevant public information for the Project is to be made available to the public - until approximately one week before the comment deadline for the Project.

Based upon the BRA’s statement above, and upon reviewing the biological summaries therein as the documentation provided to the Applicant to support all conclusions regarding summary impact analysis of biological resources for the Project, certain reporting and survey details are inadequate, completely lacking, or contradictory regarding the necessary information required and available for adequate analysis of impacts, as summarized:

1. The certification of these and similar biological technical reports are signed by the biologists (and others) conducting surveys. However, all but one signature is missing on this report including that of the primary author, instead replaced with a generic “signature forthcoming” text, thereby calling into question the validity of the entire BRA.

The BRA also does not provide the qualifications of the biologists conducting focused surveys for protected species (desert tortoise, burrowing owl, rare plants), despite the fact that USFWS recommends for such to be provided<sup>6</sup>, and because agency permits, certifications, and/or an established degree of experience are necessary not only for desert tortoises but other special status species as well.

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<sup>5</sup> Tetra Tech, Inc. and A. Karl. June 2015. 2015 Desert tortoise survey and general biological resources assessment for the Joshua Tree Solar Farm. p. ES-1

<sup>6</sup> USFWS. 2010. Preparing For Any Action That May Occur Within The Range Of The Mojave Desert Tortoise (*Gopherus Agassizii*). Retrieved from <http://www.deserttortoise.org/documents/2010DTPre-projectSurveyProtocol.pdf>

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2. The above BRA states that its format follows county protocol for Biological Assessment Reports, however no such documentation is cited nor readily available on the county website to ascertain the accuracy of this statement. If such exists, it should be cited.

3. According to above statement “Surveys were also conducted on additional surrounding areas in Spring 2013.” However, there is no detailed data provided within the BRA regarding any such surveys, therefore they cannot be considered a legitimate part of the impact analysis.

4. The BRA states that “All special-status wildlife species in Table 3 were sought concurrently with desert tortoise surveys...Survey methods were reviewed and approved by FWS and CDFW in both 2012 and 2015 prior to commencing field work.”<sup>7</sup>

This is not accurate for two reasons:

First, the confirmation referred to includes remarks by the agency (CDFW) where the agency notes that the surveyors claim that “parcels surrounding the project site are privately owned and therefore no buffer surveys are planned due to access constraints”. In response, the agency requested that documentation be provided, such as a letter or an email sent to private landowners be provided, along with a list of phone numbers of residents who were contacted. No such list or letters were provided by the biologists. Instead, one biologist asserted that, “To date, BPAE’s ability to contact the site’s private landowners has been challenging...The buffer surveys for tortoise and burrowing owl would require that BPAE contact approximately 100 landowners for permission to access their land. Therefore, buffer surveys are not logically feasible.”<sup>8</sup> And yet upon reviewing private parcels maps for the region, one can see the total properties bordering the site proposed footprint, including the proposed gen-tie line to be altered, amounts to closer to 20 private properties, not 100. Even if not all of these landowners could be reached, simply making contacting with a couple key owners could have resulted in access to parcels bordering a large percentage of the entire property. It is the burden and responsibility of the Applicant, and thus by default the environmental consultant hired by the Applicant, to pursue due diligence in attempting to retrieve what information they can regarding not just data from the site to be directly impacted, but also regarding surrounding conditions that may be indirectly impacted.

The importance of such information is further supported by the USFWS “Frequently Asked Questions” Section of their Pre-Project DT Field Survey Protocol,

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<sup>7</sup>*Ibid.* p. 9

<sup>8</sup> Teta Tech, Inc. and A. Karl. July 2012. Desert tortoise survey and general biological resources assessment for the Joshua Tree Solar Farm. Retrieved from:  
<http://www.sbcounty.gov/Uploads/LUS/Environmental/JoshuaTreeSolarFarm/2015%20Joshua%20Tree%20Solar%20Farm%20Bio%20Report%20061215.pdf>. Appendix C.

***“Why do small and linear projects where no tortoises were found have to do additional surveys at 200-m (~655-ft) intervals parallel to the project area perimeter?”***

Even though neither tortoises nor tortoise sign were found within the action area at the time of the survey, the area may be part of an animal's home range. The annual home range of a female desert tortoise averages around 0.15 to 0.16 km<sup>2</sup> (35 to 40 acres), about one third the size of male home ranges, which are variable and can be >2 km<sup>2</sup> (500 acres; O'Conner et al. 1994; Duda et al. 1999; Harless et al. 2009). Therefore, projects that are ≤0.8 km<sup>2</sup> (200 acres) or linear may overlap only part of a tortoise's annual home range and the possibility that a resident tortoise was outside the project area at the time surveys were conducted must be addressed. In these cases, three additional 10-m (~30-ft) belt transects at 200-m (~655-ft) intervals parallel to and/or encircling the project area perimeter (200-m, 400-m, and 600-m from the perimeter of the project site) should be completed.”<sup>9</sup>

Therefore the BRA nor the IS achieve the necessary requirements in conducting complete surveys for DT since they did not include any adjacent habitat (formerly referred to as a “Zone of Influence”) as required by USFWS Survey Protocol for any action that may occur within the range of the Mojave DT, specifically,

“If neither tortoises nor sign are encountered during the action area surveys and the project, or any portion of project, is ≤ 0.8 km<sup>2</sup> (200 acres) or linear, three additional 10-m (~30-ft) belt transects at 200-m (~655-ft) intervals parallel to and/or encircling the project area perimeter (200-m, 400-m, and 600-m from the perimeter of the project site) should be surveyed.”<sup>10</sup>

Also, according to the email documentation provided in the 2012 BRA that the authors refer to regarding protocol approval by the agency, within that correspondence the company did *not* ask if it was acceptable to conduct *all* species surveys concurrently with focused surveys of DT. This is a significant oversight for several reasons:

The special-status species mentioned in Table 3 include over 70 species from various taxa (birds, mammals, plants). Some of these species (i.e. rare plants, certain other sensitive species, raptors, Migratory Bird Treaty Act nesting bird species) are almost always surveyed by conducting entirely separate, focused surveys altogether. A review of any random assortment of biological technical reports prepared for the purpose of fulfilling CEQA requirements of a Biological Assessment similar to this one will show that focused surveys are conducted literally as such, where the biologist is ‘focusing’ on the species for which the protocol has been designated, and not splitting his or her time

<sup>9</sup> USFWS 2010. Preparing for any action that may occur within the range of the Mojave Desert Tortoise (*Gopherus agassizii*). Retrieved from: [https://www.dfg.ca.gov/wildlife/nongame/survey\\_monitor.html#Reptiles](https://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html#Reptiles)

<sup>10</sup> USFWS 2010. Preparing for any action that may occur within the range of the Mojave Desert Tortoise (*Gopherus agassizii*). Retrieved from: [https://www.dfg.ca.gov/wildlife/nongame/survey\\_monitor.html#Reptiles](https://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html#Reptiles)

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attempting a protocol survey while also attempting to observe the ground, vegetation, and skies all at once for all other vertebrate, invertebrate, plant and animal species that may also be present at any given time on and near the site. I have been conducting focused and general surveys for sensitive and endangered species since 1991, in desert habitats and many others, and at no time have I or any of my staff biologists found it appropriate to conduct a focused protocol survey for an elusive rare or endangered species while concurrently assuming one could also accurately detect all or the majority of all other mammals, reptiles, birds, invertebrates, and/or rare plants, all at the same time, on the same day, and all under the same weather conditions. This sort of expectation would only be made by an inexperienced or otherwise irresponsible biologist, and is not an appropriate assumption for fulfillment of a technical report and impact analysis of this nature.

It is not unusual for DT surveys to be conducted concurrently with a few other desert *burrowing* species, such as burrowing owls and/or kit fox, as these surveys all include intensive surveying of the ground for burrows and often difficult-to-detect signs (scat, tracks) of these elusive species that can spend up to 95% of their time out of sight, underground in burrows.<sup>11,12</sup> However it is this elusive nature of the DT that requires such intense focus and inevitably results in detection rate of tortoises - by even the most experienced surveyors – of anywhere between a wide range of 30 – 70% of tortoises present.<sup>13,14,15</sup> Given the nature of such protocol surveys, the expectation that all other wildlife species can accurately be detected concurrently is simply erroneous.

Also, it is widely accepted that it is the rare species that are more sensitive, require greater protection, and thus most important to detect. By definition rare species occur in lower densities, and/or have lower occurrences on average for any given occupied territory, and thus require even great attention, focus, and time dedicated to accurate observation data.

By conducting surveys for almost all species with the potential to occur on site, all concurrently, it is only logical to conclude that by doing so the biologists significantly increased the likelihood that they missed key individuals of either tortoises or other sensitive species, especially those that may be flying overhead while the biologists were busy scouring the ground for DT, Burrowing owls, or kit fox sign.

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<sup>11</sup> Cablk, M. E., & Heaton, J. S.. (2006). Accuracy and Reliability of Dogs in Surveying for Desert Tortoise (*Gopherus agassizii*). *Ecological Applications*, 16(5), 1926–1935.

<sup>12</sup> Zylstra, E. R., Steidl, R. J., & Swann, D. E. (2010). Evaluating Survey Methods for Monitoring a Rare Vertebrate, the Sonoran Desert Tortoise. *The Journal of Wildlife Management*, 74(6), 1311–1318.

<sup>13</sup> *Ibid.*

<sup>14</sup> Nussear, E. et. al. 2008. Are Wildlife Detector Dogs Or People Better At Finding Desert Tortoises (*Gopherus Agassizii*)? *Herpetological Conservation and Biology*. 3(1): 103-115.

<sup>15</sup> Frielich, J. and LaRue, E. 1998. Importance of Observer Experience in Finding Desert Tortoise. *The Journal of Wildlife Management*, 62(2): 590-596.

5. Other details call into question the accuracy of the DT survey conclusions and the author's subjective reporting on habitat suitability and likelihood of DT occurring onsite. For instance, the 2015 BRA states that "studies in the area have found tortoise sign higher on the bajada"<sup>16</sup> however no citation of such studies are provided. On the other hand, the BRA then states that "one study east of the report found no sign" and cites personal communication with permitted DT biologist Ed LaRue. The BRA then goes on to claim that surveys approximately one mile away, for the Cascade Solar Project, did not detect any tortoise sign in 2011. And yet the same biologist Ed LaRue submitted a letter to county planner Paul Delaney, with an associated map, stating in regards to the nearby solar project:

"I've performed 270 focused tortoise surveys in the area on about 11,500 acres since 1989 in the area between Yucca Valley and 29 Palms, including the project area... As you can see, every site we've surveyed in the area has had tortoises. I share this information with you because there are relatively new consultants out there performing surveys and not finding tortoise sign. Given our findings, I expect the consultants performing these surveys to find tortoise sign; if not, their results would be questionable.... We are very concerned about this project because of its proximity to the Copper Mountain College Translocation Area, which is a half mile downwind to the east of the proposed project. There are as many as 20 tortoises in that conservation area that may be affected by this project."

It is important to note that according to his map less than half a mile east of the Project gen-tie site, and about a half mile southeast of the airport Project site, Mr. LaRue has detected DTs (Attachments A-B), contrary to statement by the 2015 BRA asserting there to be no tortoises east of the site. The presence of DT within close proximity of the site is not surprising, given additional factors not mentioned in the BRA or the IS, namely:

- Despite some of it being degraded, habitat for sections of the site and especially its perimeter is appropriate for either DT foraging, burrowing, and/or as a migration or wildlife corridor,
- The CNDDDB database shows the entire site and area surrounding it in all directions, for a minimum of 1.5 miles, as designated positive for DT<sup>17</sup>
- The site is located within a USFWS designated Recovery Unit<sup>18</sup> (Attachment C),

<sup>16</sup> Teta Tech, Inc. and A. Karl. June 2015. 2015 Desert tortoise survey and general biological resources assessment for the Joshua Tree Solar Farm. Retrieved from: <http://www.sbcounty.gov/Uploads/LUS/Environmental/JoshuaTreeSolarFarm/2015%20Joshua%20Tree%20Solar%20Farm%20Bio%20Report%20061215.pdf>

<sup>17</sup> Teta Tech, Inc. and A. Karl. June 2015. 2015 Desert tortoise survey and general biological resources assessment for the Joshua Tree Solar Farm. Retrieved from: <http://www.sbcounty.gov/Uploads/LUS/Environmental/JoshuaTreeSolarFarm/2015%20Joshua%20Tree%20Solar%20Farm%20Bio%20Report%20061215.pdf>

<sup>18</sup> Murphy, P., Strout, N. and Darst, C. March 2013. Solar Energy and the Mojave Desert Tortoise: Modeling Impacts and Mitigation. USFWS and University of Redlands Report to the CEC.

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- According to the USGS the entire site and surrounding area is designated as having “high value habitat potential”, and within a half a mile as having “high value contiguous habitat”.<sup>19</sup> (Attachments C, D)

The BRA appears to go to great lengths to downplay this area’s moderate to high potential for the presence of desert tortoise, despite the database and agency information available to the contrary. The lack of focused protocol surveys as recommended by the USFWS, including failure to survey the buffer zones (Zone of Influence), failure to primarily focus on the species for which the protocol is written only, and failure to provide a comprehensive discussion the other existing conditions and research relevant to the species in this region, precludes a thorough understanding of existing conditions and the relative severity of Project impacts to the Desert Tortoise. Without such the Applicant cannot ensure that any mitigation actions are conducted at an appropriate level to reduce impacts below that of significant.

6. The Project’s burrowing owl survey 2015 Report (BUOW Report) says that site surveys in both 2012 and 2015 were conducted according to California Burrowing Owl Consortium (CBOC) Guidelines and CDFW Staff Report on Burrowing Owl Mitigation<sup>20</sup>. This is not accurate due to the following:

(a) the CBOC guidelines state that surveys should include a 150 meter buffer zone proximal to the project impact zone “to account for adjacent burrows and foraging habitat outside the project area and impacts from factors such as noise and vibration due to heavy equipment which could impact resources outside the project area.”<sup>21</sup> As with the DT protocols, the BUOW Report states that required buffer surveys were not done due to “access constraints”, yet also notes that “we had surveyed a formerly considered site south of the Project in 2012”.<sup>22</sup> So by their own admission, apparently constraints did not include a region south of the habitat, yet no attempts were made to include this area in buffer surveys or data reporting.

(b) The CBOC protocols include specific times for surveying BUOW, specifically two hours before sunset and one after, or one hour before sunrise to two hours after. The language for such is even quoted in the BUOW Report.<sup>23</sup> This serves the dual purpose of maximizing ability to detect owls while not causing undue disturbance (harassment) of the birds during key periods of the day. The CBOC also requires all time and

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<sup>19</sup>Desert Tortoise Data Explorer <http://www.spatial.redlands.edu/dtro/dataexplorer/>

<sup>20</sup> CDFW. March 2012. Staff Report on Burrowing Owl Mitigation. Retrieved from: [https://www.dfg.ca.gov/wildlife/nongame/survey\\_monitor.html](https://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html)

<sup>21</sup> California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. Retrieved from [https://www.dfg.ca.gov/wildlife/nongame/survey\\_monitor.html](https://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html), see also <http://www.safca.org/documents/Environmental%20Protections%20page%20folders/Protection.southsacstreams/CDFG.BUOWsurveyProtocol.pdf>

<sup>22</sup> Tetra Tech, Inc. and A. Karl. July 2015 burrowing Owl Survey Report for the Joshua Tree Solar Farm. p.2

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

weather data to be reported for each survey. However, the BUOW Report leaves out such data for the first survey in 2012, and also notes that Phase II of the BUOW surveys were conducted concurrently with DT surveys. As such, the surveys did not follow protocol guidelines for the times allowed to be surveying for BUOW, instead it appears biologists geared their time in the field to prioritize completion and fulfillment of DT surveys instead.

(c) The CBOC protocol guidelines stipulate that if burrows are located onsite that could be used by owls, then a Phase III survey should be conducted, specifically, “If the project site contains burrows that could be used by burrowing owls, then [Phase III] survey efforts should be directed towards determining owl presence on the site.”<sup>24</sup> The Project’s 2015 BRA described inactive kit fox dens, observed as active in 2012, were located on site. Such dens could be utilized by owls and thus are considered potential burrows, and yet the Project’s BUOW Report states that no Phase III surveys were necessary. This is in direct contradiction to protocol methodology and represents an inaccurate interpretation of such by Project biologists. The BUOW Report says that Survey methods were reviewed and approved by CDFW prior to surveys, however they provide no evidence of such, and the email correspondence (discussed above) regarding agency approval of survey methodology provided in the 2012 Project Biological Report refers only to desert tortoise, not burrowing owls or any other species.

(d) The CBOC guidelines recommend that two biologists concurrently survey projects over ~100 acres to insure maximum coverage of any given site. However, in 2015 BUOW surveys were conducted by only one individual.

In summary, the lack of focused protocol surveys as recommended by the CDFW and the CBOC precludes a thorough understanding of existing conditions and the relative severity of Project impacts to the burrowing owl. Without such the Applicant cannot ensure that any mitigation actions are conducted at an appropriate level to reduce impacts below that of significant.

7. The Project’s BRA notes various times that some plants that may be present onsite were not detected due to the notably dry conditions at the time of the surveys. It is therefore reasonable to conclude that some special status species could be significantly impacted yet were not even addressed in the discussion of impact mitigation. For instance, p. 25 of the BRA states,

“In addition to the special-status species observed during surveys, it is possible that some...special-status species could inhabit the survey area and immediately adjacent areas. These are noted in Table 3 and include species that may not have been observed during surveys because of their rarity, behavior, season of surveys (e.g., wintering birds or summer annuals), or lack of germination or above ground growth due to reduced rainfall. In addition, several annual plant species identified in Table 3 may not have been present during spring surveys because germination or growth

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<sup>24</sup>California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. Retrieved from [https://www.dfg.ca.gov/wildlife/nongame/survey\\_monitor.html](https://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html)

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occurs earlier or later in the year, or because rainfall was insufficient for germination. There are several species that have moderate potential to be present on the Project, and may be available for surveying in fall or summer.”

This assertion by the BRA raises the important question of why surveys were not conducted at different times of year, if the authors (correctly) believe that such surveys could reveal more key data regarding special status species? Even the California Native Plant Society recommends several surveys in a given year to increase detection rate of plants that germinate at different times and under varying moisture conditions. Some rare plant mitigation measures require detailed, species-specific protocols that cannot be created or assessed if the analysis of rare plant species onsite is limited or incomplete. As such, the development of clear mitigation recommendations for this IS appear to require more rare plants surveys, including at different times of year and after significant rainfall.

8. The BRA lists no invertebrates on its list of species detected or in any discussion, despite the fact that the CNDDDB lists 4 special status species observed in this region (California cuckoo bee, Coachella Valley Jerusalem cricket, Morongo desert snail, and Roberts' rhopalolemma bee). Although it is true that deserts offer lower diversity of species and lower density of individuals than other biomes, and invertebrates might be more difficult to detect (especially if the biologist conducting the survey is an expert on tortoises and not insects or arachnids), I find it hard to believe that this site - or virtually any region of the planet - is completely devoid of invertebrates. These omissions need to be addressed by more biological surveys on the site and its bordering regions, without such a thorough analysis of significant impacts to wildlife is incomplete.

According to the California Environmental Quality Act (14 CCR § 15064), the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. According to my professional opinion regarding the information provided and the summaries found in the BRA, and the additional evidence provided on behalf of other expert biologists, databases, and agencies, I do not believe the Applicant has provided all of the data necessary and available to make an accurate assessment of significant impacts of the Project, including the degree to which they must be mitigated to be reduced to that of below significant.

### **The Initial Study Fails to Clearly Indicate How Impacts to Biological Resources Will Be Reduced to Below Significant**

#### **1. Bird Impacts due to Collisions Not Mitigated Below Significant**

The IS fails to adequately assess and reduce significant impacts to migratory birds, including to raptors and water birds, that will be caused by the Project. Various birds were anecdotally detected while biologists were conducting surveys focused on the ground to detect tortoises. For instance, they noted a prairie falcon onsite during one survey. However, the complete lack of surveys with protocols prioritized for searching for migratory and nesting birds is an oversight that results in a failure to adequately report

and assess significant impacts of the Project to avian species, including the long list of birds protected under the MBTA, and special status birds known to occur within the region according to the CNDDB, including the LeConte's thrasher, Bendire's thrasher, Northern harrier, prairie falcon, and loggerhead shrike.

The IS states that "there are no known wildlife corridors and migratory routes associated with the project."<sup>25</sup> This statement is at best inaccurate provided that the site is very much part of the Pacific Flyway, and is only a few miles from migratory bird stopovers along the north south trajectory of the flyway. Bird hot spots along this section of the flyway include Barker Dam, the 29 Palms Inn, Joshua Tree National Park near Park Boulevard, Joshua Tree National Park Black Rock Campground, and Big Morongo Canyon Preserve, where bird counts of 133, 127, 149, 108, and 229 species have recently been recorded, respectively.<sup>26</sup> It is also important to note that one of the nation's largest and most important migratory bird stopovers, especially for birds traveling over dry desert habitats, is the Salton Sea, which lies directly in the flyway trajectory south of the site. This stopover includes an official USFWS checklist of over 950 species.

The IS also states that "Avian mortalities have been a recent topic of discussion at solar facilities in southern California. However, this project is substantially smaller and is located in a more disturbed and developed area than other solar projects."<sup>27</sup>

This statement is provided without context, because it ignores the **cumulative effect** of potential impacts to birds, from what is known as the "lake effect", contributed by the nearby Cascade solar facility comprised of over 150 acres of solar panels located 0.52 miles from the proposed Project site. The IS also claims,

"Although any structure can pose a collision risk to birds, the project does not contain tall structures that would extend into the airspace of birds migrating at high elevations. Additionally, the panels that will be used for this project are coated with a non-reflective material. The material is designed to enhance light absorption and reduce light reflection (glare), thereby reducing the likelihood that birds would identify the project site as a water body. The solar facility would have a maximum height of 12 feet, so there is a low likelihood birds would use the panels for nesting or perching. Therefore, it is not anticipated there would be impacts associated with perching or nesting of avian species. For the above reasons, the project is expected to have a minimal contribution to cumulative impacts on birds."

These reasons are unsupported as evidence and erroneous. As a professional consultant who has conducted numerous monitoring studies of various solar facilities in the desert for bird and bat mortalities and injuries (details below), I can attest to the fact that birds collide with solar panels and associated structures, as well as perch on them, and even nest on them, regardless of the size of the facility overall, the height of the solar panels or associated structures, the presence of (theoretically) albedo-reducing designs, and

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<sup>25</sup> Initial Study p. 86.

<sup>26</sup> Ebird observations <http://ebird.org/ebird/hotspots>

<sup>27</sup> Initial Study p. 86

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regardless of the degree of accumulated dust that cover panels over time. Indeed, these individual features have not been tested whatsoever as supporting evidence for minimizing bird impacts and use of solar panels, and therefore are inappropriately used as argument supporting the IS' claim of "no significant impact".

Additionally, the assertion that "The [panel] material is designed to enhance light absorption and reduce light reflection (glare), thereby reducing the likelihood that birds would identify the project site as a water body" presupposes two completely untested assumptions, that (a) the reason birds collide with the panels is due to the panels degree of reflectivity or "glare", and that (b) a panel design that has been developed to reduce glare for the sake of reducing visual impacts to humans will contribute to reduced bird collisions as well. Neither of these assumptions have been tested to any extent whatsoever, neither do they take into consideration the largely poorly understood field of avian vision as it differs from humans.

Therefore these assumptions are irrelevant for the task of confirming impacts to birds will be made less than significant. Dr. Christine Sheppard, a biologist with the American Bird Conservancy who has studied bird collisions with windows to an extensive degree, states that methods for reducing impacts to windows have to do with various factors related to bird vision and perception.<sup>28</sup> She postulated that solar panel collisions may be caused by various factors, one of them being the fact that the large, low lying mass of panels appears like water not just due to albedo but due to the appearance of one large, unbroken dark mass resembling a water body (pers. comm., Feb 2013). This theory is supported partially by the phenomenon whereby waterbirds collide with new or wet (i.e. dark) asphalt; especially birds whose feet are physiologically far back on the body and thus characteristically only land and take-off from a body of water (i.e. grebes, loons).<sup>29</sup> Klem (2009) and Kagan et al. (2014) discuss several techniques (e.g., UV-reflective or solid, contrasting bands spaced no further than 28 cm from each other on arrays) that enable birds to avoid collisions with windows, and presumably solar panels.<sup>30,31</sup> The techniques described by Klem and Kagan et al. are feasible, and they can and should be incorporated as required mitigation.

The IS does not adequately consider potential impacts to birds as a result of increased risk of injury and death from collisions striking panels as well as electrical wires, when in fact I have witnessed and reported bird mortalities due to collisions with electrical wires at solar facilities in the Sonoran desert. Birds include passerines like warblers, water birds

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<sup>28</sup> See <http://abcbirds.org/program/glass-collisions/>

<sup>29</sup> Sidor, I. et. al. Mortality Of The Common Loon In New England, 1987 To 2000. 2003. *Journal of Wildlife Diseases*. 39:306-315. Retrieved from: <https://www.pca.state.mn.us/sites/default/files/sidor2003.pdf>

<sup>30</sup> Klem D Jr. 2009. Preventing Bird-Window Collisions. *The Wilson Journal of Ornithology*. 121(2):314-321.

<sup>31</sup> Kagan RA, TC Viner, PW Trail, EO Espinoza. 2014. Avian Mortality at Solar Energy Facilities in Southern California: A Preliminary Analysis. National Fish and Wildlife Forensics Laboratory. 28 pp. Retrieved from: <http://alternativeenergy.procon.org/sourcefiles/avian-mortality-solar-energy-ivanpah-apr-2014.pdf>

such as grebes, and raptors including American kestrels (Figures 1- 17). Not only did birds collide with panels and other structures on a consistent basis – with increases in mortalities during migration season – but these collisions occurred on panels that also were built using design strategies that various facilities claimed would reduce or even eliminate reflectivity and glare.<sup>32</sup> Furthermore, solar facilities generate a tremendous amount of dust, which accumulates on the panels over time despite efforts to remove it by the facility workers. If reduced reflectivity was actually a primary, or only, factor causing bird-panel collisions, one would assume that the added layer of albedo-reducing dust would correlate with reduced bird collisions. However, it did not (Figures 1-10, 13).

The IS contradicts its own argument regarding impacts from bird collisions, saying such are not expected to result in significant impacts to migrating or local avian species while indicating that there is insufficient evidence to truly assess the risk associated with collisions with solar fields. Yet in the same discussion the report posits there is evidence available to determine that the solar PV modules, and other characteristics of the facility, will minimize said lake effect.<sup>33</sup>

In this discussion regarding impact to birds the IS is incomplete in its analysis and incorrect in its conclusions, and fails to properly offer effective mitigation for significant impacts to birds that may fly over the area. Scientific data does exist regarding the impact of industrial solar projects on birds. In a report by the USFWS Forensics Laboratory, an analysis of bird deaths at three different locations and different types of installations demonstrate that bird deaths due to strikes to solar panels and collisions with associated electrical wires associated do occur systematically, and are significant.

The Forensics report states that despite the type of facility or its technology, the solar facilities represent “equal-opportunity hazards for the bird species that encounter them”.<sup>34</sup> Seventy-one species were identified in the mortality report, and were not restricted to water birds by any standard. They were described as representing a broad range of ecological types from strictly aerial feeders (hummingbirds) to ground feeders (roadrunners) to raptors (hawks and owls.) The report points out that some deaths were caused by impact trauma, representing the same risk that the Project panels would pose by design, and conclude that the number of dead birds are under-represented, “perhaps vastly so”.

Further evidence of bird deaths due to strikes to solar panels or from solar installation related electrocutions has been made available to the California Energy Commission.<sup>35</sup> The data reveal that over the course of one year of monitoring, over 700 bird mortalities

<sup>32</sup>For example, see Imperial Solar Energy Center South Final EIR/EA. p. 4.1-8  
[http://www.blm.gov/style/medialib/blm/ca/pdf/elcentro/nepa/csolar\\_south.Par.27226.File.dat/4I SECs\\_EnvironmentalConsequences.pdf](http://www.blm.gov/style/medialib/blm/ca/pdf/elcentro/nepa/csolar_south.Par.27226.File.dat/4I SECs_EnvironmentalConsequences.pdf)

<sup>33</sup>*Ibid.*

<sup>34</sup>Kagan et. al. 2014 April. Avian Mortality at Solar Energy Facilities in Southern California: A Preliminary Analysis. National Fish and Wildlife Forensics Laboratory.

<sup>35</sup>H.T. Harvey and Associates, April 2015. Ivanpah Solar Electric Generating System Avian and Bat Monitoring Plan. Retrieved from: [http://docketpublic.energy.ca.gov/PublicDocuments/07-AFC-05C/TN204258\\_20150420T14](http://docketpublic.energy.ca.gov/PublicDocuments/07-AFC-05C/TN204258_20150420T14)

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were detected, including 16 days where avian mortalities numbered ten or more. Although the Ivanpah facility where this study took place is a solar collector and a different technology than the Proposed Project, the data collected is relevant to the Project site considering that 84 bird mortalities were positively identified as being the result of impacts (strikes or collisions) to the facility panels and wires, and are thus representative of the risks posed by the Project PV panel array design.

Recommendations to reduce incidences of bird deaths at solar sites (characteristic of the Project design) included retrofitting of solar panels, placement of perch deterrent devices where indicated, a two-year minimum of a well-designed monitoring protocol that includes daily surveys of all birds. A bird and bat monitoring plan is clearly an essential part of any mitigation strategy to enable better assessment of Project mortalities necessary for an appropriate Adaptive Management Plan<sup>36</sup>, or for that matter any measurable mitigation of the impacts described above, with performance criteria for what reduced impacts will mean in respect to bird (and bat) mortalities.

Finally, as mentioned above, evidence illustrating the reality of the significance of risk of bird strike impacts to solar panels and associated electrical wires has been personally observed by me and my professional colleagues. As a biological consultant I have conducted professional surveys between 2013 and 2015 as part of an ongoing mortality monitoring program on four solar industrial installations located in the Sonoran desert. Throughout these surveys, as part of scientific data collection on behalf of an established Bird and Bat Monitoring Program on desert solar facilities in southern California, I have witnessed the results of bird collisions that occurred due to the presence of PV panels or related electrical infrastructure, including but not limited to species such as the Western grebe, sora, Virginia rail, red-tailed hawk, American kestrel, McGillivray's warbler, Wilson's warbler, American coot, lesser nighthawk, and mourning dove.

Contrary to the IS claims, birds can and do perch, and nest, on the facility utilities and grounds (Figures 1- 17). None of the deaths or injuries I observed were a result of a solar flux burns as these are not part of the design of the installations where I conducted the research. It is highly likely no one would be aware of these mortalities, injuries, or nests had there been no requirement of a mitigation bird and bat monitoring project in place. Such data collection should be an essential part of any and all solar industrial facility mitigation, especially given how many new impacts to wildlife are discovered each year as more such facilities are developed across the region, and how much we have yet to learn regarding such impacts birds and bats.

Not only have I witnessed these impacts, it is important to understand for the sake of mitigation analysis that such impacts have repeatedly been underestimated and minimized in environmental impact reports for desert solar projects, resulting in a lack of impact mitigation due to too many Projects and lead agencies ignoring the Precautionary Principle, and now the evidence available, confirming that collisions are a serious impact created by solar facilities and thus must be appropriately addressed in mitigation analyses.

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<sup>36</sup>*Ibid.*, Table 10.

In their comments to the SOITEC Solar Final EIR, a project proposed in eastern San Diego county, the USFWS states that as they collect reports of collisions and mortalities at solar power facilities, including flat panel designs, they are

“noting impacts to multiple avian species including waterbirds, passerines, and diurnal/ nocturnal raptors, involving various project features, including solar panels, mirrors, heliostats, evaporation ponds, fencing, distribution lines within the facility, gen-tie lines, and metal posts within the panel arrays before the panels are installed.”<sup>37</sup>

The USFWS continues by asserting that,

“Some species of birds, such as waterbirds, may perceive the solar field as a water body (commonly referred to as the Lake effect”).<sup>38</sup> Many avian species are attracted to permanent and ephemeral water sources, especially in arid environments. Based on information collected at existing solar facilities, solar panels and other project components are likely to present a collision hazard to migratory birds.”

In regards to mitigation, the USFWS states that

“migratory birds are an important component of our natural heritage...Birds are also important economic resources, given they prey on numerous species that are considered pests...and generate income to communities through bird-watching.”

As such, the USFWS recommends a project-specific Bird and Bat Conservation Strategy be developed. They go on to state that the Strategy include a detailed monitoring plan, one that should fully address and monitor construction and operation-related mortalities at all project features. They also recommend an adaptive management program to assist in mitigation efforts.

This recommendation is not only appropriate, but belatedly necessary in respect to this Project, especially given the IS not only avoids addressing significant impacts created by its presence as a collision hazard, but the lack of recommendation of such a mitigation program for the nearby Cascade solar plant leaves this region even more vulnerable to environmental degradation due to the **cumulative impacts** to birds and bats that would result from the combined impacts of these facilities that are located only a half of a mile apart.

Seabirds, shorebirds, and any other birds attracted to wetlands may actually be more prone to suffer collisions with the facility’s PV panels (due to the “lake effect”) as a direct result of being more attracted to the area as a stopover or destination habitat due to its appearance as a water body in the midst of an arid section of a flyway. Such a

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<sup>37</sup> Goebel, K. USFWS. Dec 2014. Comments to Final SOITEC Solar Development EIR. Retrieved from: [http://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/Commentletters/F1\\_RTC.pdf](http://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/Commentletters/F1_RTC.pdf)

<sup>38</sup> *Ibid.*

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stopover could be desirable and taken advantage of by many species; potentially more so than the area would be prior to Project construction as it would appear to serve as an important temporary or permanent destination for species searching for a place to rest, forage, or even find mates. It is also important to note that migrating residents with potential to incur injury or death from collision with the Project components, throughout the life of the Project, include all birds known to occur moving through the area, including rare, threatened, and endangered species.

## **2. Impacts to MBTA Protected Birds not Mitigated Below Significant**

The need for a mitigation monitoring program for this (and all solar industrial facilities) is underscored by the fact the data collection at solar facilities - that is essential in informing our understanding of impacts to wildlife caused by such facilities - is still in its infancy. For the agencies to ensure that impacts are mitigated to the best of the ability of project applicants including this one, data collection in the form a monitoring Program is not only important but essential for future project mitigation efforts as well.

I have witnessed one such example of a previously unknown impact during my field research (outlined above). I and my colleagues discovered that ground nesting birds that are attracted to areas dominated by bare or rocky ground, sand, or soils are attracted to the shaded microhabitats underneath and bordering the solar panel arrays. However they have not evolved to anticipate the hazards of these areas as nesting sites, which are primarily collision with utility vehicles and enhanced susceptibility to overheating due to the heat generated by the panels and related infrastructure. The birds choose these nest sites in the cooler weeks of spring, but as summer heats up they not only have to deal with the natural heat stress that increases as the season temperatures rise, but they also must deal with the unanticipated additional heat caused by the presence of the solar panels. The high heats can and do appear to exceed their limits of tolerance, indicated by an unusually high rate abandonment of nests (and scrapes) containing eggs.

In the Sonoran desert birds observed to be prone to this include species like lesser nighthawks, killdeer, black-necked stilts, and doves, among others; all are species protected during nesting season under the Migratory Bird Treaty Act (MBTA). Figures 11-12, 15-19, 25-27 exemplify just a few examples of birds using facility equipment, and altered habitat, to nest, resulting in higher than normal likelihood of hazards impacting breeding, including overheating and electrocution. Thus far this phenomenon has not been widely described in the literature, not surprisingly because so few studies have been conducted that include long term observations of industrial solar facilities' impacts to wildlife. This is one major reason why mitigation must include mitigation monitoring during the life of the Project.

Even the most rigorous scientific data collection on mortality and injury to birds and bats cannot actually mitigate the significant impacts that would incur as a result of birds killed by collision impacts, including impacts to protected species including those protected under the MBTA. The IS offers no adequate detailed mitigation strategies for direct and indirect long term and cumulative impacts imposed throughout the life of the Project.

What they do offer is generic, unclear, deferred, and/or, arbitrary, and sets few performance criteria for success, and relies on very little zero scientific rigor. The mitigation proposed for reducing impacts below significant is inadequate for MBTA birds in general, and thus fails to satisfy the requirements of CEQA that necessitate a clearly defined proposal describing methods to reduce impacts to less than significant.

### 3. Impacts to Reptiles not Mitigated Below Significant, Including Impacts to Special Status Lizards

The IS fails to identify or discuss potential impacts to reptiles other than tortoises, despite the fact that impacts to various reptile species could occur and would be significant. As discussed above, the Applicant biologists failed to conduct any focused or comprehensive surveys for wildlife other than tortoises and owls, thus risking underestimating the presence and diversity of species that occur at this site and its bordering habitats. This region, and the Western Mojave desert in general, is a hot spot for many species of reptiles. The BRA notes CNDDDB observations in the region of various sensitive species including the Mojave fringe-toed lizard, Coachella Valley fringe-toed lizard, coast horned lizard, flat-tailed horned lizard, and red diamond rattlesnake. The BRA's anecdotal observations of reptiles species onsite include the Western shovel-nosed snake, Mojave green rattlesnake, desert iguana, side-blotched lizard, the desert horned lizard, and tiger whiptail. The Joshua Tree National Park perimeter lies just 2 miles south of the site, and its list of reptile species that occur within the Park comprises 18 lizard and 25 snake species, including five Species of Special Concern. Several of these species are described as occurring in the northern sections of the park.<sup>39</sup>

By nature of their cryptic nature and difficulty to detect without conducting focused surveys for such, reptiles are historically underestimated in all aspects of conservation, including surveys, monitoring, and impact analysis. I was co-researcher on the world's most extensive study in the wild of the world's largest snake species, the green anaconda (*Eunectes murinus*). This species had not been studied to any extent previously due primarily to the false belief that they were not in high abundance anywhere and thus difficult to observe for research. Even expert herpetologists recommended against commencing the study, convinced we would find very few of the snakes in the wild. However, once we began focused surveys in their known habitat, as just two researchers we caught and released over 800 green anacondas within a small region (a few square kilometers) in the course of five years. We found the snakes primarily by tactile searching (walking the shallow wetlands until we stepped on them), due to the fact that visual searching of this cryptic predator would result in missing up to 90% of the individuals we encountered.<sup>40</sup> I mention this research to underscore the reality that even one of the largest reptile species in the world can be very difficult to detect if one is not conducting focused surveys with a protocol designed for species-specific detection.

<sup>39</sup> List of Reptile Species, Joshua Tree National Park.

<http://www.nps.gov/jotr/learn/nature/upload/Reptile-Checklist.pdf>

<sup>40</sup> Rivas, J. A. (1999). *The life history of the green anaconda (Eunectes murinus), with emphasis on its reproductive biology* (Order No. 9973496). Retrieved from: <http://www.anacondas.org/diss/disser.pdf>

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Even during my research on the Orinoco crocodile – a species that can get upwards of 800 pounds – our biggest research challenge was visually locating them in known occupied habitats.<sup>41</sup>

This Project's underestimation of the impacts to reptiles falls within this sort of erroneous assumption that if individuals are not detected anecdotally, they are likely not abundant or not present. Reptiles have a wide range of preferences for heat tolerance, some being purely nocturnal, while many will retreat into shallow burrows or rapidly shuffle from side to side to burrow into the sand in order to avoid extreme heat and cold, including sensitive lizard species like the flat-tailed horned lizard, desert horned lizard, and fringe-toed lizard (Figures 22-24).

Desert habitats that reptiles use typically include more than those identified as preferred habitats or optimal foraging habitats, and as a result environmental impact analyses, including this IS, that estimate the “potential to occur” of reptiles species based only such assertions of “preferred habitat” in the literature, and not focused field reconnaissance, typically fall short of accurate site assessments regarding species presence and use.<sup>42,43,44,45</sup> For instance, I have observed flat-tailed horned lizards and fringe-toed lizards – both sensitive species that prefer small dunes and loose sandy soils, both known to occur in the region – in very rocky and disturbed habitats. The fact that the IS biologists also failed to conduct focused migratory bird or raptor surveys only reinforces the importance of reptiles surveys, as these provide an important prey item for many species of birds (as can be inferred by the presence of prairie falcon perched onsite).

Additionally, unexpected consequences of other practices on solar facility can negatively impact local species. On one such site I repeatedly observed workers spreading insecticide to kill Harvester ants under the solar panels, in areas proximal to critical habitat occupied by protected flat-tailed horned lizards whose primary prey species are harvester and related ant species (Figure 24).

Unexpected consequences of underestimating impacts to reptiles should not be overlooked as trivial. The construction process for this Project, including associated road construction and increased frequency of use of existing dirt roads, is known to result in significant physical disturbance including increased erosion, soil compaction, and large

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<sup>41</sup> Rivas, J.A. and Owens, Renee Y. 2002. Orinoco crocodile (*Crocodylus intermedius*): Age at First Reproduction. *Herpetological Review*. 33 (3): 203.

<sup>42</sup> Gerson, M. M. 2004. *Aspects of the ecology of a desert lizard, Callisaurus draconoides (blainville 1835), in Joshua Tree National Park with an emphasis on home range and diet* (Order No. 3146172).

<sup>43</sup> Heaton, J. S. 2002. *The LizLand model: Geomorphic landform and surface composition analysis of lizard habitat in the California Mojave desert* (Order No. 3029564).

<sup>44</sup> Williams, A. K. 2004. *The influence of probability of detection when modeling species occurrence using GIS and survey data* (Order No. 3123715).

<sup>45</sup> Rosen, P. C. 2000. *A monitoring study of vertebrate community ecology in the northern Sonoran desert, Arizona* (Order No. 9965915).

amounts of dust.<sup>46</sup> Dust can negatively affect wildlife, including native plants, while also decreasing solar output. Because of the reduced solar output, and restrictions imposed by air quality standards and resultant required mitigation measures, a wide variety of dust suppressants are used during construction. The ecological implications of dust suppressants are unknown, but suppressants are known to be transported through runoff and thus likely have a far-reaching impact to a variety of species including lizards and small mammals.<sup>47</sup>

New roads and access driveways are constructed to create access to solar development sites, which increases the risk of direct mortality of lizards and snakes by vehicles, causes habitat fragmentation and potential barriers to gene flow, and makes previously inaccessible areas available to vehicles including off-road vehicles. As proposed by the mitigation measures for this site, construction sites are often surrounded by fences, which may serve to exclude some individual animals, but also serves to trap or funnel other small species (especially reptiles seeking shade) within a construction site. Additionally, industrial scale solar projects are known to alter the microclimate of a region.

“It has been estimated that a concentrating solar facility can increase the albedo of a desert environment by 30%–56%, which could influence local temperature and precipitation patterns through changes in wind speed and evapotranspiration. Depending on their design, large concentrating solar facilities may also have the ability to produce significant amounts of unused heat that could be carried downwind into adjacent wildlife habitat with the potential to create localized drought conditions.”<sup>48</sup>

In light of these realities, it is not surprising that I and my biologist colleagues have witnessed yet another important phenomenon on solar and wind energy project construction sites in arid regions where lizard species are present, and pre-construction surveys required focused searches for lizards and snakes along roads and within construction zones. Specifically, I and other biologists working on renewable energy projects (wind and industrial solar) have observed that lizards are directly and immediately attracted to roads on and around construction sites where trucks spraying water and other erosion control liquids are used to reduce airborne dust. We have observed that this practice serves to attract lizards of a variety of species to the higher moisture levels on the roads, resulting in increased lizard mortality and injury due to being hit by construction site traffic that uses the roads subsequent to the water trucks passing. For instance, within the course of one month this phenomenon resulted in the mortality of over 20 flat-tailed horned lizards (*Phrynosoma mcallii*) (a Candidate State Endangered species) (FTHL) on one solar construction site in the southern Sonoran desert during the summer of 2014, and where an additional 100 or so FTHLs were relocated to avoid injury or mortality from vehicle impacts during several weeks of the

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<sup>46</sup> Lovich, J. E., & Ennen, J. R. 2011. Wildlife Conservation and Solar Energy Development in the Desert Southwest, United States. *BioScience*, 61(12), 982–992.  
doi:10.1525/bio.2011.61.12.8 / <http://www.bioone.org/doi/abs/10.1525/bio.2011.61.12.8>

<sup>47</sup> *Ibid.*

<sup>48</sup> *Ibid.*, p. 987.

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construction phase.<sup>49</sup> During the construction of the Sunrise Powerlink gen-tie line in the Yuha Desert, from just April to November, 103 flat-tailed horned lizards were relocated and 25 mortalities were recorded.<sup>50</sup>

It is key to note that one solar industrial project failed to anticipate significant impacts to lizards (impacts due primarily to the phenomenon described above), and as a result their facility construction had to completely stop work for at least a week. One independent contractor reported losing an alleged \$146,000 a week due to the unexpected delay.<sup>51</sup>

In summary, observations during the construction phase of a solar industrial site and an industrial wind facility construction in Southern California desert reveal that lizards of varying species and sizes appear to be opportunistically attracted to the added moisture on the roads. Such behavior is not restricted to any lizard species in particular. When this phenomenon was officially noted as impacting sensitive species (i.e. the FTHL), additional on-site biologists and management practices were necessary to ensure complete coverage of all construction roadways and other areas where lizards were prone to death and injury from vehicle impacts. In order to adequately mitigate for such potential risks to the sensitive lizards species with high potential to occur on site, this phenomenon must be taken into consideration, and mitigation measures to reduce resultant impacts should include additional biologists, enhanced traffic restrictions, and a reptile relocation Plan and Monitoring Strategy during the construction phase.

#### **4. Impacts to Bat Sensitive Species Are Not Mitigated Below Significant**

The need for a Bird and Bat Monitoring Program is underscored by the fact that the IS makes no attempt to adequately survey or reduce potential impacts to bats, despite the BRA noting that bats were observed onsite. What is surprising is that despite the biologists' observations of bats, they did not conduct any focused bat surveys, neither did they employ any bat detecting equipment (i.e. Anabat, Sonobat) to confirm their observation to species. Instead the BRA states, "Not all rafters or roof tiles were accessible or safe to inspect because of structural instability and out of respect for privacy of the tenants....the buildings and trees were monitored at dusk for emerging bats. If bats had been found roosting on site, a bat expert would have been consulted to determine whether and what type of additional surveys would be necessary."<sup>52</sup> This statement is

<sup>49</sup> Wilton, Ben. Tenaska (Personal communication, March 19, 2015)

<sup>50</sup> [FTHLIC] Flat-tailed Horned Lizard Interagency Coordinating Committee. (2011). Annual Progress Report: Implementation of the Flat-tailed Horned Lizard Rangewide Management Strategy, January 1, 2010 to December 31, 2010. Report prepared by the Flat-tailed Horned Lizard Interagency Coordinating Committee. Retrieved from: [https://webcache.googleusercontent.com/search?q=cache:swX3uX5D8OsJ:https://www.fws.gov/southwest/es/arizona/Documents/SpeciesDocs/FTHL/FTHL\\_Annual\\_report\\_2010\\_Final.pdf+&cd=1&hl=en&ct=clnk&gl=us](https://webcache.googleusercontent.com/search?q=cache:swX3uX5D8OsJ:https://www.fws.gov/southwest/es/arizona/Documents/SpeciesDocs/FTHL/FTHL_Annual_report_2010_Final.pdf+&cd=1&hl=en&ct=clnk&gl=us)

<sup>51</sup> Clarke, C. March 2015. Work on Solar Project Halted to Protect Lizard. KCET. Retrieved from: <http://www.kcet.org/news/redefine/rewire/solar/work-on-solar-project-halted-to-protect-lizard.html>

<sup>52</sup> Teta Tech, Inc. and A. Karl. June 2015. 2015 Desert tortoise survey and general biological resources assessment for the Joshua Tree Solar Farm.

nonsensical, given (a) the common logic that it does not require a bat expert to conclude that if bats are observed onsite, as they were, that a bat expert should be hired to conduct focused surveys, and (b) directly accessing roofs and rafters is hardly an expectation of biologists bat conducting surveys. This is why protocols, bat detecting equipment, and software have been developed by bat experts; to enable them to actually detect, survey, and monitor bats to the level of species, worldwide, in all kinds of habitats and structures, without requiring the agility or accessibility to structures as that of an actual bat.

The BRA then goes on to state, “Additionally, no bats were observed emerging from the on-site buildings or trees at dusk during focused monitoring. Up to six bats were observed flying north of the on-site structures... a canyon bat (*Parastrellus hesperus*) and probably *Myotis* sp. A swimming pool present on-site provides a water source for bats and a source of insect prey as well, which undoubtedly attracts bats to the area.” This analyses is contradictory, and inadequate, on several levels: According to other sections of their own BRA, the biologists did not conduct “focused monitoring” of bats whatsoever, in fact some of their reported survey dates coincide with their same focused desert tortoise/burrowing owl/kit fox surveys discussed previously. If they had, they would have utilized the equipment necessary to determine species (acoustic bat detectors, software, possibly mist nets), which they clearly did not do.

No bat expert would observe several bats while being satisfied with an indeterminate species detection, especially when there are abundant roosts and foraging habitat onsite and in the bordering areas, and especially knowing that the site and its perimeters indeed could provide suitable foraging and roosting habitat for most of the nine special status bat species known to occur in the area.<sup>53</sup> The USGS bat inventory for nearby Joshua Tree National park includes 14 species of bats detected.<sup>54</sup> One study in the Mojave desert found that “The existence of both native and nonnative habitat may elevate bat species richness and increase the degree of differential habitat use to levels higher than would be expected if only native habitat existed at the study site.”<sup>55</sup>

Given the high probability that a sensitive bat species could use this site for foraging and the lack of focused surveys, in addition to a species description amounting to an educated guess, the IS does not satisfy the need for clear data, and analyses of such data, for estimating degree of impacts to bats by the entire Project, and throughout the life of the Project. Based upon this one cannot claim impacts to bats have been demonstrated to be less than significant.

<sup>53</sup> *Ibid.*

<sup>54</sup> Drost, C. And Hart, J. 2008. Mammal Inventory Of The Mojave Network Parks: Death Valley And Joshua Tree National Parks, Lake Mead National Recreation Area, Manzanar National Historic Site, And Mojave National Preserve. Open-File Report 1167.p. 49. Retrieved from: <http://pubs.usgs.gov/of/2008/1167/of2008-1167.pdf>

<sup>55</sup> Williams, J. O'Farrell M., Riddle B. 2006. Habitat Use By Bats In A Riparian Corridor Of The Mojave Desert In Southern Nevada. Journal of Mammalogy 87(6):1145-1153. doi: <http://dx.doi.org/10.1644/06-MAMM-A-085R2.1> Retrieved from: <http://www.bioone.org/doi/abs/10.1644/06-MAMM-A-085R2.1?journalCode=mamm>

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## **5. Weed Management Has Not been Clearly Assessed to Reduce Impacts Below Significant**

The IS correctly identifies the non-native weedy species introduced and spread by the Project actions as having the potential to “pose a major threat to biological resources”.<sup>56</sup> They propose generic weed management mitigation, and state that, “As a condition of project approval, the developer shall comply with San Bernardino County weed abatement regulations [SBCC§ 23.031-23.043] and periodically clear the site of all non-complying vegetation, including weeds such as Russian thistle (tumbleweed, *Salsola tragus*), London rocket (*Sisymbrium itio*), redstem filaree (*Erodium cicutarium*), foxtail chess (*Bromus madritensis*) and cheatgrass (*Bromus tectorum*).”<sup>57</sup>

The proliferation of invasive weedy species and the alternative removal of all native vegetation on solar facilities that contributes to accelerated erosion and concurrent dust pollution are a major problem regarding solar industrial facilities. Personal observation and communications with solar facility managers has revealed to that the sometimes opposing requirements of erosion control and weed elimination create uncertainty on the part of managers and their responsibilities and methodologies for weed abatement, often due to a lack of clear mitigation protocols and performance criteria on existing solar facility sites.

Likewise, this IS does not set or clarify any such criteria for weed abatement performance or success throughout the life of the Project. This is despite the evidence that the risk of weedy invasions is high, based on two factors: (a) The Desert Tortoise GIS database identifies major threats to the species in this region, and on their hazard analysis for this site they indicate the threat of exotic invasion as high, especially along the edges of the site footprint (Attachment E), and (b) the existing Cascade solar facility located only 0.52 miles from the Project site demonstrates how a facility in the same area, with the same habitats presiding in the vicinity, can fail to meet necessary weed abatement standards. Figures 22-23 show the high degree of invasive weed (tumbleweed/ Russian thistle) growth within the solar facility as of February this year (2016), clearly demonstrating how *not* to reduced impacts of weedy invasives. As such a detailed mitigation and monitoring program to reduce and eliminate the chance of enhanced weedy invasions must be developed and implemented in order to consider impacts to be reduced below that of significant.

## **6. Desert Kit Fox Impact Mitigation is Inadequate**

In 2012 the biologists detected an active kit fox den on site, with several inactive dens, indicating the likelihood of kit fox use of the Project site is high, especially given this species has demonstrated a high natal site fidelity, and have been observed denning

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<sup>56</sup> Initial Study p. 56

<sup>57</sup> *Ibid.*

within active solar facilities sites.<sup>58</sup> The IS requires pre-construction surveys for the desert kit fox “within” 30 days prior to initiation of construction activities.<sup>59</sup> Kit foxes may construct new burrows or immigrate onto the Project site immediately before construction activities.<sup>60,61</sup> As a result, surveys conducted several days or a weeks before ground disturbance are not sufficient to avoid take of kit foxes. Consequently, the IS must require pre-construction surveys for kit foxes immediately before all ground disturbance activities.

## **7. The Is Lacks Mitigation for Potentially Significant Impacts that May Occur to Biological Resources During Decommissioning**

Decommissioning activities may impact burrowing owls, nesting birds, rare plants, and other sensitive biological resources that colonize or re-colonize the Project site prior to decommissioning. The IS does not require focused surveys to identify the presence of sensitive biological resources on the Project site prior to decommissioning, nor does it require any mitigation for significant impacts that may occur during the decommissioning process. Such impacts may include, but certainly are not limited to, exposure of wildlife or bordering habitat to toxic chemicals (Figure 14), disruption of nesting birds and thus violations of the MBTA (Figures 8, 11, 12, 15-17, 18-19, 27-29). This issue is confounded because the IS does not establish standards for site conditions after decommissioning. As a result, the City has not established a mechanism for ensuring Project decommissioning activities would have a less than significant impact on sensitive biological resources. To ensure Project decommissioning activities would have a less than significant impact on sensitive biological resources, prior to decommissioning the Applicant must be required to: (a) conduct focused surveys of the Project site and vicinity; (b) provide an assessment to the resource agencies and City; and (c) comply with any and all CDFW and USFWS recommendations.

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<sup>58</sup> Ironwood Consulting, 2012. Third Quarterly Report For Biological Resources Monitoring First Solar Desert Sunlight Solar Project, Riverside County BLM CASE FILE NUMBER CACA48649

<sup>59</sup> IS p. 40.

<sup>60</sup> Girard, I. A. 1998. *The physiological ecology of a small canid, the kit fox (vulpes macrotis), in the mojave desert* (Order No. 9905548).

<sup>61</sup> Arjo, W. M., Bennett, T. J., & Kozlowski, A. J. 2003. Characteristics of current and historical kit fox (*vulpes macrotis*) dens in the great basin desert. *Canadian Journal of Zoology*, 81(1), 96-102.

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## CONCLUSION

Based on the issues described in this letter, it is my professional opinion that the obligations of CEQA have not been met, and that the Project would result in significant and unmitigated impacts to several sensitive biological resources.

Sincerely,



Renée Owens, M.S.

Senior Biologist

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**Letter 19****Adams Broadwell/Coalition for Responsible Solar****Exhibit B Letter: Renée Owens, Senior Biologist****February 9, 2016****Response to Adams Broadwell Exhibit B- Renee Owens**

This comment letter challenges the biological studies that were done for the Joshua Tree Solar Farm Site. The main points from this document are argued in the comment letter from the law firm of Adams Broadwell Joseph & Cardozo, and are addressed in detail in the responses to that letter. A number of other opinions are advanced in the letter from Ms. Owens, but these opinions are not supported by substantial evidence and thus warrant no further response.

However, as a general response to this letter, it should be emphasized that the Applicant's team and environmental consultants coordinated and implemented all of the biology studies with the California Department of Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). All of the underlying biological work was done by qualified biologists, and survey protocols were followed. It should further be emphasized that the Project site is highly disturbed and does not provide high quality desert habitat for any species. It is a decommissioned airport, currently zoned for light industrial or commercial use and does not have high biological value.

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PO BOX 675  
 61750 CHOLLITA ROAD  
 JOSHUA TREE CA 92252  
 PHONE: 760.366.8438  
 FAX: 760.366.9528  
 JBWD@JBWD.COM

February 10, 2016

John Oquendo, Senior Planner  
 County of San Bernardino  
 Land Use Services Department, Planning Division  
 15900 Smoke Tree Street, Suite 131  
 Hesperia, CA 92345

Dear Mr. Oquendo,

Joshua Basin Water District's comments on the Joshua Tree Solar Farm project are as follows.

The District has been in communication with the Project proponent for several years. The District issued a will serve letter to NextEra Energy Resources, Inc., on October 23, 2015. That will serve letter stated there was an ample supply of water for the project and that water would be made available for the project when the State emergency conservation regulations were lifted.

20-1

At that time, NextEra told the District that the project was for 20 years. Water demands for the project were calculated based on a 20 year life of project. Total demand was for 49 AF of water. The Initial Study indicates that this project is potentially for 30 or 40 years, or longer, if repurposed.

20-2

It also implies that up to 2 AF per year for washing could be needed, as compared to the .35 AF per year that NextEra informed JBWD would be needed. At 40 years of operation, that is an additional 71 AF of water. Therefore the total water consumption could be as much as 120 AF, compared to 49 which was originally proposed to the District by NextEra.

20-3

As written, the Initial Study implies that NextEra would work with the District to bring recharge water into the aquifer, if the District supplies the water. There is no stipulation that NextEra would supply recharge water if they drill their own well. Unless that is clearly a requirement of this project, regardless of water source, this project will result in an additional 7 percent over draft of the Copper Mountain subbasin during the construction phase.

20-4

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The District's recent discussions with NextEra have resulted in a draft Will Serve Letter by the District to provide potable water to the Project under specified terms and conditions which include:

(1) receipt from San Bernardino County of a final discretionary approval for the Project within nine (9) months from the date the Will Serve Letter is issued ("Project Approval"), and

(2) execution of a Water Supply Agreement in the form attached to the Will Serve Letter within sixty (60) days after the Project Approval." Presently the board of directors of the District ("Board") is scheduled to take action on the proposed Will Serve Letter at its regularly scheduled meeting of February 17, 2016. The discussion set forth herein is subject to the approval by the Board of the Will Serve Letter herein described.

20-5

Under the Water Supply Agreement, Joshua Tree Solar Farm ("JT Solar"), an affiliate of NextEra, will pay the District to purchase eighty-six (86) acre-feet of water for recharge by the District. The District intends to recharge the purchased water at its existing recharge facilities in the Joshua Tree Basin. No expansion of District facilities will be required to accomplish the recharge and the volume to be recharged is within the existing operational capacity of such facilities. Under the Water Supply Agreement, the District will deliver up to eighty-six (86) acre-feet of water to the Project at an interconnection with the District's existing facilities. Minimal expansion of the District's facilities (including installation of a meter and hydrants, as needed) will be required to provide this service. The amount of water to be served is within the existing operational capacity of the District's system. The District may adjust its groundwater production between the Joshua Tree Basin and the Copper Mountain Valley Basin so that the groundwater basins will remain unaffected by the Project. JT Solar has agreed not to produce groundwater for project purposes, unless the District cannot serve the Project. Accordingly, if the Water Supply Agreement is executed, there will not be an adverse impact on the groundwater basins.

20-6

Sincerely,



Curt Sauer  
General Manager

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**Letter 20****Joshua Basin Water District****February 10, 2016****Response 20-1**

Statement of facts. No response required.

**Response 20-2**

The initial Power Purchase Agreement will last twenty years. The Project may be repurposed or may be decommissioned after the initial twenty year period. The existing owner/operator of the facility will be required to follow all current State, Federal, County, and applicable local ordinances in regards to water use and aquifer replenishment.

**Response 20-3**

The amount of water required for the construction of the plant has not substantially changed from the applicant's original proposal. The increase in water expected for use for the operation and maintenance of the plant has been scaled to a higher wash scenario so that the consideration of water use is more conservative. The 2 AF per year for operations and maintenance represents a relatively small use for a commercial / industrial facility and would not adversely affect the availability of groundwater supplies. As stated in the letter above, the subsequent increase from the original 49 AF to the 120 AF would occur over a period of 40 years as compared to 20 years originally analyzed by JBWD. The operation of the Project would not substantially deplete groundwater supplies or interfere with groundwater recharge.

**Response 20-4**

The applicant has the option either to contract with the District for the water supply or to drill a private well pursuant to its property right to put a reasonable amount of groundwater to beneficial use on overlying land. If the applicant pursues the private well option, then it will be required to permit the well through the existing County process and to follow all State, Federal, and County rules that apply to private wells. The operation of the Project would not substantially deplete groundwater supplies or interfere with groundwater recharge. Additionally, the applicant claims that claims an additional 7% overdraft is without basis. The Copper Mountain sub-basin is not an adjudicated basin, and thus there are no established limits on groundwater extraction by current or future well owners. Even if JBWD had the legal authority to do determine whether a property owner's use of groundwater for beneficial use is reasonable, and it does not, there is no way for it to attribute any potential future overdraft (assuming it were to occur) to any single well owner, including JTSF.

**Response 20-5**

Statement of facts. No response required.

**Response 20-6**

The applicant has the option either to contract with the District for the water supply or to drill a private well. Regardless of source, the operation of the Project would not substantially deplete groundwater supplies or interfere with groundwater recharge. If the JBWD he Water Supply Agreement is in its best interests, then the County would encourage the execution of an agreement as outlined in the letter.

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State of California - Natural Resources Agency  
 DEPARTMENT OF FISH AND WILDLIFE  
 Inland Deserts Region  
 3602 Inland Empire Blvd., Suite C-220  
 Ontario, CA 91764  
 (909) 484-0459  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

EDMUND G. BROWN, Jr., Governor  
 CHARLTON H. BONHAM, Director



February 8, 2016

Mr. John Oquendo, Senior Planner  
 San Bernardino County  
 Land Use Services Department  
 15900 Smoke Tree Street, Suite 131  
 Hesperia, CA 92345

**Subject: Review of Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the Joshua Tree Solar Farm, LLC. State Clearinghouse Number (SCH 2016011021).**

Dear Mr. Oquendo:

The California Department of Fish and Wildlife (Department) has reviewed the Initial Study/Mitigated Negative Declaration (IS/MND) prepared by San Bernardino County Land Use Service Department (Lead Agency) for the Joshua Tree Solar Farm, LLC (Project).

21-1

#### **Project Description and Location**

The Project is for design, construction, operation, maintenance, and decommissioning of an approximately 115-acres (ac), 20-megawatt (MW) alternating current (AC) fixed tilt configuration solar photovoltaic (PV) energy generation plant, power conversion stations, and electrical equipment to collect the produced energy and deliver it to the point of interconnection with Southern California Edison (SCE) distribution system. The Project is located on private land in San Bernardino County, California, within Section 21, Township 1 North, Range 7 East, as mapped on the United States Geological Survey 7.5-minute series Joshua Tree North, California, and Sunfair, California quadrangles. The project site is a previously developed site, the deactivated, privately owned Hi Desert (or Roy Williams) Airport. The Project is accessed through Sunfair Road, a paved County road that runs along the eastern border of the site (Figure 1). The project site is bordered by Two Mile Road to the south, unpaved Fourth Street to the north, and vacant land to the south and west. The current composition of the existing land is best described as vacant land of dirt and sand with a sparse vegetative community consisting of native grasses and shrubs.

21-2

*Conserving California's Wildlife Since 1870*

Mr. John Oquendo  
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#### **Distribution line improvements**

The distribution line improvements are a part of this project; however, the improvements will be constructed, owned, and operated by SCE. For the section of Sunfair Road between Twentynine Palms Highway and Two Mile Road, SCE will be replacing approximately one mile of existing distribution line poles with approximately 25 new poles. The existing poles are approximately 60 feet in height. For SCE to co-locate two existing distribution lines, an estimated maximum pole height of 65 feet will be required to get adequate conductor clearances.

#### **Access Paths and Fencing**

Fencing will be installed around the perimeter of the site. The fencing is currently planned to be 8 feet tall and will be built in accordance with the County standards. Access roads will be constructed along the interior perimeter of the site and between the 1 MW block solar arrays. Primary access to the project will be via a gate on Sunfair Road.

#### **AC Collection System**

The collection system is a network of either buried or aboveground cables appropriately sized to minimize energy loss. The system will effectively collect energy from the solar panels and transfer energy to the main collection switchgear, which will allow the energy to be transmitted to the electric grid. The project's current design is an underground collection system which will terminate at the switchgear, which will be separately enclosed with a security fence and lockable access gates.

#### **Safety Lighting**

Safety lighting will be installed at the entry gates and the switchgear location. A limited amount of lighting will be installed and will be designed to prevent spillover into neighboring properties. There will be operable lighting at each conversion station, but these units will be used as needed and will not typically operate at night.

#### **Department's Statutory and Common Law Responsibilities**

The Department is providing comments on the IS/MND as the State agency which has the statutory and common law responsibilities with regard to fish and wildlife resources and habitats. California's fish and wildlife resources, including their habitats, are held in trust for the people of the State by the Department (Fish and Game Code (FGC) §711.7). The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitats necessary for biologically sustainable populations of those species (Fish and Game Code §1802). The Department's fish and wildlife management functions are implemented through its administration and enforcement of the Fish and Game Code (FGC §702). The Department is a trustee agency for fish and wildlife under the California Environmental Quality Act (see CEQA Guidelines, Title 14 California Code of Regulations (CCR) §15386(a)). The Department is providing these comments in furtherance of these

21-2  
 Cont

21-3

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statutory responsibilities, as well as its common law role as trustee for the public's fish and wildlife.

21-3  
 Cont.

#### Review of Joshua Tree Solar Farm Project IS/MND.

#### **The Department offers the following comments and recommendations:**

The Project is in the range of the desert tortoise (*Gopherus agassizii*, DT), which is listed as threatened under the California Endangered Species Act (CESA) and federal Endangered Species Act; the golden eagle (*Aquila chrysaetos*, GE), which is Fully Protected Species under FGC Section 3511; Nelson's bighorn sheep (*Ovis canadensis nelsoni*, BHS), which is a Fully Protected Species under FGC Section 4700; the burrowing owl (*Athene cunicularia*, BUOW), which is a Species of Special Concern and protected under FGC Section 3503.5; Pallid Bat (*Antrozous pallidus*, PB), Townsend's Big-eared Bat (*Corynorhinus townsendii*, TBEB), Western Mastiff Bat (*Eumops perotis californicus*, WMB) all of which are Species of Special Concern and protected under FGC Section 4150; the prairie falcon (*Falco mexicanus*, PF), loggerhead shrike (*Lanius ludovicianus*, LHS), Le Conte's thrasher (*Toxostoma lecontei*, LCT), and American badger (*Taxidea taxus*, AB), all of which are listed as a State Species of Special Concern; and the desert kit fox (*Vulpes macrotis arsipus*, DKF), DKF is addressed in Title 14 of the California Code of Regulations: §460. "Fisher, marten, river otter, desert kit fox and red fox may not be taken at any time." And also within the FGC Section: §4000. "Fur-bearing mammals enumerated. The following are fur-bearing mammals: pine marten, fisher, mink, river otter, gray fox, red fox, kit fox, raccoon, beaver, badger, and muskrat."

21-4

#### **Desert tortoise**

The Desert Tortoise Survey and General Biological Resources Assessment prepared for the Joshua Tree Solar Farm dated January 2015 (DTSGBRA) and the IS/MND states there is no evidence that tortoises are using the Project site or have used the Project site in the past. The IS/MND Biological Resources Mitigation Measure BIO-2 includes the following mitigation measures to avoid impacts to tortoises:

1. Install permanent tortoise exclusion fencing around the perimeter of the main Project site to exclude tortoise during construction and operation. Clearance surveys of the fenced site will be conducted by qualified biologists to ensure that no tortoises are inside the site. Clearance surveys will be conducted as soon as feasible after tortoise exclusion fencing is installed. Any newly installed fence will be monitored appropriately during and after fence installation to ensure that no tortoises exhibit fence walking behavior that could result in injury or death to the tortoise.
2. Monitoring and maintaining the fence at appropriate intervals throughout

21-5

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construction and operations. This includes monitoring during storm events or other circumstances that could damage the fence.

3. Enforce speed limits of 15 miles per hour on roads within the project site.
4. Ensure that a biological monitor is on site during all initial surface grubbing and grading in the event that a tortoise is encountered. Biological monitors must be present during construction of the perimeter fence, during ground disturbance in unfenced areas, and during active construction in unfenced areas to properly implement mitigation measures. A biologist must be available during construction activities in fenced areas that have been surveyed for and cleared of tortoises and other biological resources to promptly implement protection measures for biological resources in the unlikely event that a tortoise or other biological resource is detected onsite.

21-5  
 Cont.

Although exclusionary fencing is an appropriate minimization measure, if a desert tortoise is found within the fenced area it may not be moved or handled unless the Permittee obtains an Incidental Take Permit from the Department. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Consequently, if a project, including project construction or any project-related activity during the life of the project, results in take of CESA-listed species, the Department recommends that the project proponent seek appropriate authorization prior to project implementation. This may include an incidental take permit (ITP) or a consistency determination in certain circumstances (Fish and Game Code, §§ 2080.1 & 2081).

21-6

Also the term clearance survey indicates that all desert tortoises will be moved or relocated out of the project impacted area (i.e. outside the exclusionary fencing). In order to move/handle a tortoise, Departments authorization which will include an Incidental Take Permit is required. Without an Incidental Take Permit desert tortoises may not be moved/handled, therefore clearance surveys should not take place unless an Incidental Take Permit is obtained from the Department by the applicant.

21-7

### **Burrowing Owl**

The IS/MND indicates that no burrowing owls were observed on site, however the Department recommends that the Lead Agency follow the recommendations and guidelines provided in the Staff Report on Burrowing Owl Mitigation (Department of Fish and Game, March 2012); available for download from the Department's website: [https://www.dfg.ca.gov/wildlife/nongame/survey\\_monitor.html](https://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html). The Department expects that San Bernardino County will follow the Staff Report on Burrowing Owl Mitigation, which specifies that the steps for project impact evaluations include:

21-8

- a. A habitat assessment;
- b. Surveys; and

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c. An impact assessment

Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86, and prohibited by sections 3503, 3503.5 and 3513. Take is defined in FGC Section 86 as "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill."

21-8  
 Cont.

If burrowing owls and/or their habitat may be impacted from the project, the Department recommends that the Lead Agency include specific mitigation in the environmental document for public review. Please note that mitigation must be roughly proportional to the level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4(a)(4)(B), 15064, 15065, and 16355). Furthermore, in order for mitigation measures to be effective, they must be specific, enforceable, and feasible actions that will improve environmental conditions. Current scientific literature supports the conclusion that mitigation for permanent burrowing owl habitat loss necessitates replacement with an equivalent or greater habitat area for breeding, foraging, wintering, dispersal, presence of burrows, burrow surrogates, presence of fossorial mammal dens, well drained soils, and abundant and available prey within close proximity to the burrow.

**Desert kit fox/American badger**

The Department recommends that the IS/MND incorporate avoidance and minimization measures for desert kit fox and American badger. Desert kit fox is a protected species as a fur-bearing mammal pursuant to Title 14 of the California Code of Regulations Section 460. Because the DTGBRA indicated that one active natal den and two inactive natal dens were observed within the Project area, the Department recommends the Applicant develop and implement a Desert Kit Fox Mitigation and Monitoring Plan (plan). The objective of the plan shall be to avoid direct impacts to the desert kit fox as a result of construction of the solar plant and linear facilities. The final plan is subject to review, comment, revision, by the Department. No fewer than 60 days prior to the start of any pre-construction site mobilization, the Applicant should provide the Department with a draft Desert Kit Fox Mitigation and Monitoring Plan.

21-9

**Nesting Birds**

It is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 et seq.). In addition, sections 3503, 3503.5, and 3513 of the Fish and Game Code (FGC) prohibit the take of all birds and their nests. Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by FGC or any regulation made pursuant thereto; Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the

21-10

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nest or eggs of any such bird except as otherwise provided by FGC or any regulation adopted pursuant thereto; and Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

21-10  
 Cont.

The Department recommends that the Lead Agency consult with a qualified ornithologist for advise in developing specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur and that the project complies with all applicable laws related to nesting birds and birds of prey, including Burrowing Owl. The Department recommends that project-specific avoidance and minimization measures include, but not be limited to: project phasing and timing, monitoring of project-related noise (where applicable), sound walls, and buffers, where appropriate

### **Bats**

The Department encourages the Applicant to consult with a biologist experienced in the ecology of bats using man-made structures, and one with experience installing exclusionary devices. This biologist should also be able to implement an appropriate monitoring and mitigation plan for bats at the Project location. The Department recommends the Applicant consult with a CDFW-approved biologist prior to construction. Using a qualified biologist will greatly assist with permitting needs, and will also be able to communicate effectively with project design and construction personnel. The Department also recommends the Lead Agency address the potential impacts to bats within the IS/MND.

The Department recommends a CDFW-approved Designated Biologist(s) survey each structure and the surrounding area that may be impacted by the project for bats. Surveys should be conducted during the appropriate season and time of day to ensure detection of bats, if present. If bats are found using any bridges, culverts, or shrubs within the project area, the biologist shall identify the bats to the species level, and evaluate the colony to determine its size and significance. The bat survey shall include: 1) the exact location of all roosting sites (location shall be adequately described and drawn on a map), 2) the number of bats present at the time of visit (count or estimate), 3) each species of bat present shall be named (include how the species was identified), 4) the location, amount, distribution and age of all bat guano shall be described and pinpointed on a map, and 5) the type of roost: night roost (rest at night while out feeding) versus a day roost (resting during the day) must also be clearly stated. If any structures house a maternity colony of bats, construction activities should not occur during the recognized bat breeding season (March 1 to October 1).

21-11

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### **Lake and Streambed Alteration (LSA)**

The IS/MND states that no definable bed and bank drainage features subject to regulatory authority by the Department were found on the Project site. Based on the absence of definable drainages within the project site, there are no jurisdictional streambeds subject to regulatory authority by the Department. However Figure 1 of IS/MND shows areas that meet the Departments criteria for jurisdictional waters on the south side of the project and along Sunfair road where the SCE distribution line will be installed.

Therefore, the Department's jurisdiction includes any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream or use material from a streambed, the project applicant (or "entity") must provide written notification to the Department pursuant to Section 1602 of the Fish and Game Code. Based on this notification and other information, the Department then determines whether a Lake and Streambed Alteration (LSA) Agreement is required. The Department's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the environmental document should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with the Department is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to <http://www.dfg.ca.gov/habcon/1600/forms.html>.

21-12

### **Future Coordination**

If you should have questions pertaining to this letter or require further coordination, please contact Wendy Campbell at (760) 258-6921 or by email at [Wendy.campbell@wildlife.ca.gov](mailto:Wendy.campbell@wildlife.ca.gov).

Sincerely,

  
Leslie MacNair  
Regional Manager  
Inland Deserts Region

Cc: Wendy Campbell  
CORR  
State Clearinghouse

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**Letter 21**  
**California Department of Fish and Wildlife**  
**February 8, 2016**

**Response 21-1**

This comment provides an opening to the comment letter, stating the California Department of Fish and Wildlife (Department) reviewed the IS/MND. No further response is necessary.

**Response 21-2**

The comment briefly describes the project and proposed improvements and does not contain any substantive comments or questions about the IS/MND. No further response is necessary.

**Response 21-3**

This comment provides a summary of the Department's role as a Trustee Agency pursuant to CEQA Guideline 15386 and a Responsible Agency pursuant to CEQA Guideline 15381. No further response is necessary.

**Response 21-4**

The County notes the State-listed species, fully protected species, and species of special concern identified by the Department within the project area. As provided on pages 29 through 40 of the IS, with the implementation of the proposed mitigation measures, the project would not result in the "take" of State-designated special status species, and the resulting possible impact to any State-listed species potentially occurring on-site would be less than significant.

**Response 21-5**

This comment provides a summary of the Desert Tortoise Survey and General Biological Resources Assessment prepared for the Project. It also summarizes the results from the Desert Tortoise Survey and General Biological Resources Assessment and the IS/MND Biological Resources Mitigation Measure BIO-2. It does not contain any substantive comments or questions about the IS/MND. No further response is necessary.

**Response 21-6**

This comment states that although exclusionary fencing is an appropriate minimization measure, if a desert tortoise is found within the fenced area it may not be moved or handled without a Take Permit from the Department. Comment noted. As previously explained, protocol-level surveys were performed which did not identify the presence of tortoises at the site. In addition, surveys will be performed in connection with the installation of an exclusionary fence, in accordance with Mitigation-Measure BIO-2, thereby ensuring that no tortoise would be fenced within the site.

**Response 21-7**

This comment states that the term clearance survey indicates that all desert tortoise will be moved or relocated out of the project impacted area (i.e. outside the exclusionary fencing), which would require an Incidental Take Permit.

The term 'clearance survey' was not intended to indicate that tortoises would be moved or handled. Surveys will be performed to identify any tortoises, not to move or handle them. In the unlikely event that a tortoise is identified, in accordance with Mitigation Measure BIO-2, the tortoise will be allowed to proceed unharmed without disturbance from Project-related activities.

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**Response 21-8**

A habitat assessment, surveys according to CDFW protocols (CDFG 2012), and an impact assessment were completed and can be found in the Project's *Burrowing Owl Survey Report for the Joshua Tree Solar Farm*, prepared by Tetra Tech in July 2015. Mitigation measure BIO-3 in the IS/MND includes pre-construction take avoidance surveys and preparation of a passive relocation plan if owls are found to occupy the project site at the time of construction. In addition, other standard measures such as speed limits, limiting the area of disturbance, and having a biological monitor present for construction outside of the fenced site will contribute toward avoiding and minimizing any potential impacts to this species and their habitat.

**Response 21-9**

BIO-5 in the IS/MND addresses avoidance and minimization measures for desert kit fox, including preparation of a plan to address kit foxes that are using the site at the time of construction. The American Badger was not found during surveys and is not included in the requirements of BIO-5.

**Response 21-10**

BIO-4 in the IS/MND includes mitigation measures to avoid take of migratory birds by conducting nesting bird surveys and establishing take avoidance buffers if nesting birds are found prior to construction.

**Response 21-11**

Bat surveys were conducted at the request of CDFW during a conference call the week of February 6, 2015. In fact, CDFW reviewed and agreed to the proposed methods for surveying bats within the Project area. The methods and the results of the bat surveys can be found in the *2015 Desert Tortoise Survey and General Biological Resources Assessment for the Joshua Tree Solar Farm (Airport Site)* prepared by Tetra Tech in June 2015. No major roosts (i.e., guano, dead bats) were detected during the spring 2015 inspection of the on-site structures and trees. No bats were observed emerging from the on-site buildings or trees at dusk during focused monitoring. There are no important maternal or communal roosts that are apparent in the onsite structures and trees. After completing CDFW-approved bat surveys that showed no presence of bats within the project site, no additional field work or evaluations are necessary or proposed.

**Response 21-12**

The Project's Hydrology Report shows an absence of definable drainages within the Project site. It is unclear what CDFW was describing in Figure 1 of the IS/MND. There is currently an existing distribution line in the right-of-way along Sunfair Rd. The SCE distribution line will not disturb a stream or lakebed. SCE will be re-conducting the transmission line in this area, but will not place any poles or fill in a potential streambed. No lakebeds exist within the SCE right-of-way along Sunfair Road. Therefore, a Lake and Streambed Alteration Agreement would not be required for this Project.

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## **EXHIBIT E**

### **Other Public Comments Received**

## **Sonick, Chrystale**

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**From:** bobbyBIBLESTEIN <bobbyBIBLESTEIN@roadrunner.com>  
**Sent:** Saturday, February 21, 2015 11:31 AM  
**To:** Creason, Tracy - LUS  
**Subject:** received letter from san bernardino county land use services planning project notice

tracy creason: mailed within time limit for reception deadline march 3,  
2015 sat. feb. 21st , 2015 A.D., OK?

OK NOTICE +  
JOB APPLICATION

'COMMENT', by bob engel home owner 64816 walpi ave, joshua tree, calif 92252; a 12 yr resident that address within 1/4 mile of project assessor parcel # 0607-231-11

YES YES YES DO IT!!! THE 20 MEG PHOTOVOLTAIC SOLAR ENERGY GEN.FACILITY ON 10 PARCELS RIGHT NEXT TO WHERE I LIVE . ol airport site on sunfair

ANY GROWTH ON THE GROUND SURFACE that is not high BUILDING WITH LEVELS THAT BLOCKS OUR VIEW OF MOUNTAINS ...= SOLAR PANELS NEAR GROUND IS OK.

ALSO PLEASE FORWARD THIS TO APPLICANT MELIN JESS / NEXTERA ENERGY RESOURCES. I bob engel am available for suitable work getting project done.

I have a calif security guard card and could help in night security during after project .....living close by

am retired oil refinery mechanic can use tools tape measure am physically strong and can work in hot heat sun all day no problems  
can drive vehicles and fork lifts .....am a senior citizen.....work cheap \$12-20/ hr ok out here .....can help set up for project etc

bob engel mail p.o. box 1217 joshua tree calif 92252 .....home owner no mortgage I own it  
64816 walpi dr. joshua tree calif 92252 1-760-3661878

perfect driving record .....non smoker CHRISTIAN/never pot or drugs even once ....no cursing ..in REFINERY WE SAY: LISTEN WHAT BOSS WANTS DONE

DO IT AS

INSTRUCTED WITHIN SPECS ON TIME UNDER BUDGET AND SAFE!!!

I WORKED AS A REFINERY DAILY MAINT MECHANIC AND CRAFTSMAN since 1990, THEN LEAD MAN THEN FOREMAN OF JOBS .....but no solar experience can take classes

OK ?? will show up and testify as home owner in area YES YES YES ANY DEVELOPMENT IS OK .....LOW LEVEL & NO BRIGHT LIGHTS NIGHTS

AM AVAILABLE FOR IMMEDIATE WORK .....INTERVIEWS ETC ....

WORKED FOR TRANSFIELD CORP SUBCONTRACTOR MAINT MAINLY AT ARCO/BP/TESORO REFINERY carson calif(L.A. ) call ray green supt ref. 1-310-8854710ext6009

worked for them since 1990 never messed up a job or got hurt or hurt anybody else either on time not miss work and SAFETY 1ST!

CONSIDERATION ON JOB .....bob engel

PROJECT YES YES YES THANKS FOR

## Sonick, Chrystale

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**From:** georganne deen <gdeen@mac.com>  
**Sent:** Thursday, February 18, 2016 6:52 AM  
**To:** Oquendo, John  
**Subject:** proposed solar field in Yucca Valley

Dear Sir,

As a resident of Yucca Valley, a town like many in the southwest today who has seen drought conditions worsened in recent years, I am asking you to please deny NextEra permission to build a solar field in our town. The residents are deeply concerned about the amount of water that would be needed to operate such an enormous project and while we all are mindful of the need for so called "cleaner energy", if it has to be done at the expense of a seriously endangered resource, how could it possibly help us?

This should not be considered at this time. Thank you and the other members of your committee for taking into account the drought and how approving a solar field would devastate our already compromised water supply. We can live without a solar field but We Cannot Live Without Water. If the price of water goes up in this area, as it most certainly will, it will simply devastate our community, which is one of the lower income communities in the desert. How could that possibly be helpful? NextEra's promise of paying for their own well is not helpful either. Many of our locals depend the aquifer. Can you see how this is not going to help our community?

Thank you all for showing your concern for the residents of Yucca Valley

Georganne Deen

59059 Juarez Drive

## Sonick, Chrystale

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**From:**  
**Sent:**  
**To:**  
**Subject:**

idavid <idavid@idavidgraphics.com>  
Monday, February 22, 2016 3:14 PM  
Oquendo, John  
Fwd: Joshua Tree Solar Farm: Comments on the MND

Begin forwarded message:

**From:** idavid <[idavid@idavidgraphics.com](mailto:idavid@idavidgraphics.com)>  
**Subject:** Re: Joshua Tree Solar Farm: Comments on the MND  
**Date:** February 10, 2016 at 4:46:35 PM PST  
**To:** "Oquendo, John" <[John.Oquendo@lus.sbcounty.gov](mailto:John.Oquendo@lus.sbcounty.gov)>

On Feb 10, 2016, at 4:39 PM, Oquendo, John  
<[John.Oquendo@lus.sbcounty.gov](mailto:John.Oquendo@lus.sbcounty.gov)> wrote:

Mr. Fick,

Please feel free to reply to this message when submitting comments for the Initial Study  
for the Joshua Tree Solar Farm project.

**John Oquendo**  
Senior Planner  
**Land Use Services Department**  
Phone: 760-995-8153  
Fax: 760-995-8167  
15900 Smoke Tree  
Hesperia, CA 92345

<image001.png>

*Our job is to create a county in which those who reside and invest can prosper and achieve  
well-being.*  
[www.SBCounty.gov](http://www.SBCounty.gov)

Please take a moment to complete our 1 Minute Satisfaction  
Survey [https://www.surveymonkey.com/r/LUS\\_Email](https://www.surveymonkey.com/r/LUS_Email)

County of San Bernardino  
Land Use Services Department  
385 N. Arrowhead Avenue, 1st Floor  
San Bernardino, CA

February 10th, 2016

Sent by email

Dear John Aguendo and Planning Commissioners,

These are my initial comments and relayed information pertaining the Joshua Tree Solar Farm. I'm a thirty year resident of Eastern Joshua Tree that is also in the area of the proposed JT Solar Farm. I was also a seven year member of the Joshua Tree Municipal Advisory Council (MAC 2006 - 2012) Land Use. I was on the JT MAC when the Cascade Solar project was approved in 2011 and very aware of the conditions of approval and it's eventual building in 2013. I've also been a board member of the Morongo Basin Conservation Association for over a decade and most of those years as an officer (currently V.P.. [www.mbconservation.org](http://www.mbconservation.org) ). I'm also Secretary of Desert Protection Society which is a California Desert regional non-profit based in Desert Center. The DPS has extensive experience with the Desert Sunlight 4,000 acres PV Solar Panel Farm installed North of Desert Center. That Industrial Solar Facility was initially First Solar and now NextEra Energy. These comments are as an individual.

This is the youtube video of the Morongo Basin MAC meeting of December 2014 where Jess Melin of NextEra gave his presentation. He starts at 1hour-34 minutes and goes a little over an hour with Q & A from the public: <https://www.youtube.com/watch?v=xfn3z0EK7TQ>

The Roy Williams Joshua Tree Airport had over six thousand flights in 2007 - the Recession of 2008 heavily injured the private aviation industry and greatly reduced use of Roy Williams Airport. Park Richardson owner/operator of the Joshua Tree Roy Williams Airport died 2010. Park Richardson's Father-in-Law was Roy Williams. This is a short history of Roy Williams: [http://www.hidesetstar.com/news/article\\_59145345-e308-5251-b422-db6d89ffe76.html](http://www.hidesetstar.com/news/article_59145345-e308-5251-b422-db6d89ffe76.html)

The Joshua Tree Airport property has far more productive uses for the County and the Joshua Tree community to function as the airport it once was and serve the growing tourism community of Joshua Tree. It can also function as an emergency landing facility being that it's centrally located in the Morongo Basin.

There have been many surrounding Utility infrastructure adaptations for safer flights to and from the Airport by both SCE and JBWD. There's minimal expense in reconditioning the airport for activity and the County still gets much more property taxes when it's an airport than when it's a blighted industrial solar field (surrounding property taxes decline also). Due to California State laws promoting solar renewable energy - there are no property taxes assessed of solar installations - only the raw land and the fence that surrounds the installation. The only reason this Joshua Tree Airport is endangered by this wayward NextEra PPA is that the original specifications for the BP SCE RAM PPA were for the 120 acres South of Two-mile Rd. and that acreage was not available to British Petroleum upon further investigation.

There's been noticed that this Initial Study doesn't make mention of the Cascade Solar 150 acre Solar Field. This project is currently in operation and 2800 feet North East of the proposed Joshua Tree Solar Farm. This is a project that was very similar in RAM PPA origination era and area. This previous existing Solar field should be added to the Initial Study in consideration of the cumulative effect on the wildlife linkage blockage, injury to property values, renewable energy generated and the Lessons learned in how a County regulates a solar development. Here's what the

**Joshua Tree community had to demand of County Building and Safety:**

[http://www.hidesertstar.com/news/article\\_e68eddd88-f103-11e2-9bb83-0019bb2963f4.html](http://www.hidesertstar.com/news/article_e68eddd88-f103-11e2-9bb83-0019bb2963f4.html)

In 2013, the local Joshua Tree community witnessed the proponent Sun Edison and the County illegally proceed clearing and grading the 150 acre Cascade Solar project by Out-of-County Contractors ([www.datelandconstruction.com](http://www.datelandconstruction.com) - over forty years experience based in Indio) without an approved grading permit for two weeks before the project was red-tagged by County Building and Safety . Upon approval of a much shorter grading permit (the original project approval was 15 times greater in soils moved and 28 pages of approval conditions) the proponents proceeded and weren't fined at all. The County spokesperson dismissed it all as a "honest misunderstanding" by a forty year contractor? Later in the summer of 2014 - Sun Edison was caught STEALING JBWD water for the cleaning of their solar panels. Besides the inept destruction of a fire hydrant and connecting main lines - they stole approximately 80,000 gallons of water from the people of Joshua Tree. It should be pointed out (contrary to the jobs jobs jobs mantra by the County) that approximately 95% of the construction monies paid for the Cascade Solar project were paid to Out-of-County entities (three dozen panel hangers were hired for two months - possibly including local workers). We have since learned that the PPA wasn't SCE as the Joshua Tree Community had been told and the Planning Commission had approved but that the PPA was a San Diego Gas and Electric RAM PPA (way out of service district - exporting ?) Joshua Tree has learned how the County lets developers have their way and wants it done differently. How about an EIR since the MND was so unobserved by both County and the Developer.

This is a link to a press release of the Cascade Solar project (please note there is NOTHING in this arrangement for the benefit of the Joshua Tree Community):

<http://www.pnnewswire.com/news-releases/sunedison-completes-24-mw-cascade-solar-power-plant-selling-power-to-san-diego-gas--electric-financing-provided-by-wells-fargo-251062161.html>

The 2011 SCE RAM PPA (that's a Southern California Edison Renewable Auction Mechanism Power Purchase Agreement - 20 MegaWatts) was applied and approved for British Petroleum with the conditions of using 120 acres SOUTH of Two-mile Rd.. BP was talking to the wrong party in acquisition of those 120 acres and there was

No agreement for sales of that property - that SCE RAM PPA should be DEAD. BP withdrew from all solar installations worldwide in 2012 and NextEra bought all the California PPAs from BP. Those 120 acres were South of Two-mile Rd which is within the County's Solar Ordinance's two mile buffer zone. Two-mile Rd is named for being two miles from Baseline Rd. which is the baseline for all the County surveys - Baseline Rd. is also the Northern border of JTNP wilderness in that part of the region. All the approved conditions of the RAM PPA were for the 120 acres SOUTH of Two-mile Rd.. NextEra looked at that RAM PPA and decided to fudge it a bit and looked North to the Roy Williams - Joshua Tree Airport's 115 acres. We need to know the details of this SCE RAM PPA because we can't trust NextEra as the PPA and it's conditions possibly expires soon. The 2011 SCE RAM PPA costs per MegaWatt (approximately \$100 - \$125 per MegaWatt) are most likely twice the rate that the current renewable energy contracts are signed. In short - It's a Mickey Mouse PPA trying to kill our Roy Williams Airport.

This is the Cascade Solar project on August 23rd, 2013 as viewed from our front yard.



Since the age of this Joshua Tree Solar Farm PPA is going on five years - the very comparable Cascade Solar "then" SCE RAM PPA - 20 MegaWatts was contracted at \$125 per MegaWatt also in 2011 (as admitted to me by Axio Power representatives). We are to assume that that would also be the approximate contracting amount for the BP PPA (since NextEra is rarely forthcoming and treats that information as confidential). That amount is at least twice - going on to three times the amount that solar energy generated electricity is being currently (no pun intended) contracted (it's

as low as \$37 per Mega Watt). That means approval of this project by County would saddle the local SCE ratepayers with much higher wholesale cost of energy than could be provided with more current renewable energy supply contracts. This issue came to the Morongo basin's (and County Land Use) attention through CDC/Morongo Basin Conservation Association's Local Energy Symposium and the very near future of possible CCAs ([http://www.mbconservation.org/annual\\_meeting\\_2016](http://www.mbconservation.org/annual_meeting_2016)). Distributed Generation is getting more feasible everyday and most don't have a dinosaur era Lock-In of twenty years that this old SCE RAM PPA has. The main appeal of this project is the higher "Old Energy Contract Prices" for NextEra and ONLY NextEra as there's nothing in it for the Joshua Tree Community. Current SCE RAM PPAs are in their 6th generation of applications.

The NextEra JT project has already had much history with Joshua Basin Water District and it's getting towards abusive. The February 3rd, 2016 JBWD board meeting had the extortionist threat by NextEra and their lawyer to give them water service NOW (they already have a conditional will serve letter) or they will drill their own High Yield Well (400 gallons per minute) and thwart Joshua Tree's California State mandated conservation levels of 28% - extended till October 2016 and now 20% conservation. JBWD has been precariously within and sometimes over the 28% conservation mandate this past year. The demands by NextEra for thirty acre feet of water in thirty days during the summer months shows what little concern for Joshua Tree and physical logistics of supplying that amount of water that rapidly. For JBWD to actually try and supply that would seriously jeopardize pumping energy contract agreements with SCE and could financially injure JBWD (and their JT ratepayers) with higher energy fees for the rest of the year after the occurrence NextEra would force. NextEra doesn't care. Does the County?

Speaking of water, I witnessed the scraping, clearing, grading and solar panel installation of the 150 acre Cascade Solar project from a distance of three and a half miles North from my living room view window. Cascade Solar used about 38 acre feet of JBWD 'bought' water and that wasn't near enough. Cascade Solar started the illegal grading July 5th, 2013 and finished sometime late September/October which brings the question "Why" and why do any major projects clearing ground are started in a Desert Summer? I have photos of a three thousand foot tall Dust Devil coming off the project site. I have photos of dust flying off the Cascade Solar site in the wind in the summer of 2013. For actual dust suppression of a solar site of a hundred-fifteen acres would take approximately 45 acre feet of water and to meet what's in the approval conditions by the County (three times a day in high winds? they don't have enough water trucks) it would take at least 60 acre feet. During a Drought?

We've talked about 'Real Water', now let's talk about 'Fake Water'. A 'Lake' of solar panels brings down the migratory water fowl to their demise very often. People living near the Cascade Solar project have witnessed dead waterfowl and the addition of another hundred and fifteen acres of Fake Lake could possibly multiply the cumulative effect. There will be far more complete comments on this 'lake effect' and it's consequences from others. It happens. The wildlife without the wings find the

Cascade Solar as a major block to their wildlife linkages - if the Joshua Tree Solar Farm has their way - it creates a much larger block of cyclone fence enclosed acres of blockage for the wildlife.

There will be more comments concerning this project from me in the near future. In meeting the February 10th, 2016 deadline for comments I'll be closing with a short summary before submission of this email. Having had a relatively close up and personal experience with the "paper" conditions of the Cascade Solar and how the County and Proponent carried through with building a different project than what was approved in December 2011 - I don't have much trust in these current presentations of the Initial Study. This project would obliterate a close to functioning Joshua Tree Airport (of benefit to the Joshua Tree Community) and replace it with another unneeded Industrial Solar field for the opportunistic benefit of NextEra with little to NO benefit of San Bernardino County and/or the Joshua Tree Community.

Thank you for the consideration of these comments and Please Just Say No to Industrial Solar in residential zones.

David Fick

Joshua Tree

(760) 366-9862

[www.idavidgraficks.com](http://www.idavidgraficks.com)

[idavid@idavidgraficks.com](mailto:idavid@idavidgraficks.com)

## Sonick, Chrystale

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**From:** idavid <idavid@idavidgraficks.com>  
**Sent:** Monday, February 22, 2016 3:13 PM  
**To:** Oquendo, John  
**Subject:** The iPage Dog ate my homework so I'm resending my Comments to NextEra Joshua Tree Solar Farm

Dear John Oquendo,

I talked to you on February 10th about 4:00 pm when I wanted to get your email address. You sent me your's for the accurate reply. I sent my Comments for the NextEra Joshua Tree Solar Farm to the correct address. My Mac Mail system 'says' that the email had been sent.

I was later corresponding about this Nextera topic about a week later and it seems the County systems acknowledges with a reply - I didn't get one. I then sent the same email to a friend and that didn't go through either so?.....on February 17th, I called my domain, website host and email provider iPage and told them of the problem with this particular email. I then went through four to five days of pressing iPage for the remedy to this problem.

It seems the iPage email system somehow identified the email as 'spam' and was knocked down by the "Spam Core". After many testings and contacts with iPage Tech Support - it's been fixed. This is the only instance I know of where this happened to any of my emails in sixteen years. iPage has readjusted the 'Spam Core' so this hopefully won't happen again. I'll be forwarding the February 10th email after this email.

Thank you,

David Fick (760) 366-9862

[idavid@idavidgraficks.com](mailto:idavid@idavidgraficks.com)

[www.idavidgraficks.com](http://www.idavidgraficks.com)

## **Sonick, Chrystale**

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**From:** Idavid Graficks <idavidgraficks@earthlink.net>  
**Sent:** Tuesday, March 03, 2015 5:00 PM  
**To:** Creason, Tracy - LUS  
**Cc:** Rahhal, Terri; Hudson, Tom  
**Subject:** P201400482/CUP - Joshua Tree Airport Solar Farm proposal -0607-231-11  
**Attachments:** Next Era project notice.pdf; Referral - Agency.pdf

Dear Tracy,

These are only the preliminary comments towards the **P201400482/CUP - Joshua Tree Airport Solar Farm proposal** since this deadline for this first comment period is **ONLY** fifteen days (March 3rd, 2015). Again, it's a half fast inept notification from the San Bernardino County Planning Department with a map on the second page of Downtown San Bernardino which we all agree is **VERY DISTURBED LAND**.

This is the BAD Planning notification

This is the re-issued Good Planning notification by SB County Planner Tracy Creason on Tuesday, February 24th, 2015

Any more information about this project "was" eighty miles away in Hesperia or Downtown San Bernardino which would be a day of downtime and a traveling budget of at least twenty dollars. I've attained some information (Letter of Intent) through my alternative information network, but the Joshua Tree Community deserves a better conduit of proposed projects that directly effect Joshua Tree through County Planning.

I've been to both public presentations by Nextera's Jess Melin (MB MAC and MB MAC Land Use Committee) and I knew a bit about the British Petroleum PPA through SCE when I was on the Joshua Tree Municipal Advisory Council (2006-2012). In 2011, BP thought they had arranged use of 120-160 acres **SOUTH** of two mile road and West of Sunfair Rd.. The SCE PPA through the SCE ARM program was for 3-20 MegaWatts which was the same program that allowed Sun Edison's Cascade Solar project. Those 120-160 acres would be in violation of the County Solar Ordinance since two mile road is "two miles" North of Baseline Rd. that is also the Northern border of Joshua Tree National Park. The PPA that Nextera bought from BP is determined on those 120-160 acres. Two Mile Rd. is the Southern boundary of the proposed Joshua Tree Solar Farm. On page twenty of the "Letter of Intent", Nextera says their proposed project is 1.3 miles from Hwy 62 when most everybody knows Two Mile Rd. is **EXACTLY TWO MILES FROM THE NATIONAL PARK**. So much for facts in this document.

Joshua Tree has much greater need of this "deactivated airport" than more Industrial Solar fields that Nextera wants to foist on Joshua Tree. The Roy Williams Joshua Tree Airport had two major setbacks in the last six years. Like many others, the 2008 recession has greatly impacted private aviation to a very great extent. In 2007, Roy Williams Joshua Tree Airport had over six thousand flights from it's runway before the recession hit. Then the owner of the JT Airport died leaving owner of the property to his ex-wife. This airport is of far greater value to the community in Joshua Tree's future.

Too much to consider: property taxes, water use, scenic values, wildlife linkage, migratory bird kill and needless destruction of the historic Roy Williams airport. There's way too much wrong with this proposal.

David Fick  
(760) 366-9862



## Sonick, Chrystale

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**From:** Vic <ytree@gmail.com>  
**Sent:** Tuesday, March 03, 2015 4:24 PM  
**To:** Creason, Tracy - LUS  
**Subject:** Planning Project Notice: Melin, Jess/NextERA Energy Resources, APN: 0607-231-11 (multiple parcels)

Date: Tue, Mar 3, 2015 at 12:50 PM

Subject: Planning Project Notice: Melin, Jess/NextERA Energy Resources, APN: 0607-231-11 (multiple parcels)

To: "Creason, Tracy - LUS" <[Tracy.Creason@lus.sbcounty.gov](mailto:Tracy.Creason@lus.sbcounty.gov)>

Dear Ms. Creason,

I am in receipt of the Planning Project Notice for Melin, Jess/ NextERA Energy Resources APN: 0607-231-11 dated February 17, 2015. This notice says comments must be submitted by the end of today, March 3, 2015, although I've been told that "comments are taken up to the time of the project decision". Could you please explain what is the official comment date and the impact of not having comments in before March 3, 2015.

My first concern is the stated factor that contributed to the decision in the site selection: "The project site is a deactivated airport which has already been disturbed". The airport is only part of the project and the asphalt runway, which according to the developer would be left intact so as not to be a dust issue, is a small part of the project. The sections of the airport with cement pads would require the cement to be broken and dug up, after which the dust mitigation would need to be dealt with, seriously impacting the remaining parcels which are largely undisturbed – in clear conflict with their stated factor of already disturbed.

This project will cause a populated residential rural neighborhood to be surrounded on two sides by an inappropriately sited, large scale, commercial/industrial solar generating facility. Furthermore this project adds to the already existing commercial-scale energy generation facilities causing a cumulative effect on air quality, wildlife, water resources and socio-economic consequences to the community. Residents in the area will see an immediate impact on the value of their homes.

The adjacent communities of Yucca Valley and 29 Palms have rejected further large scale industrial solar farms. Joshua Tree should not become a next choice dumping ground with huge impacts on our rural community, loss of viewsheds, dust storms (we are already impacted by the dust from the Cascade Project), cumulative effects on bird population and long term socio-economic effects.

This project requires a review and analysis in accordance with the California Environmental Quality Act.

Victoria Fuller  
P.O. Box 644  
Joshua Tree, Ca.  
92252

## Sonick, Chrystale

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**From:** Martin Leal <mlealgreenscene@aol.com>  
**Sent:** Thursday, March 05, 2015 6:31 AM  
**To:** Creason, Tracy - LUS  
**Subject:** Nextera Project

>  
> I am in receipt of your letter for the Nextera project. I am writing to tell you that I am against this development. I would like to know if there are any planned meetings to attend. I am within 1000 feet of this project and there is no consideration for any neighbors. I have not found any information on this project besides the letter that was sent out.  
> Again, please inform me of any meetings. I would like to know with advance notice not one day prior the way I received this notice.  
> Thank you  
>  
> Sent from my iPad

## **Sonick, Chrystale**

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**From:** Marina West <wells.out.west@gmail.com>  
**Sent:** Tuesday, March 03, 2015 12:50 PM  
**To:** Creason, Tracy - LUS  
**Subject:** Planning Project Notice: Melin, Jess/NextERA Energy Resources, APN: 0607-231-11 (multiple parcels)

Dear Ms. Creason,

I am in receipt of the Planning Project Notice for Melin, Jess/NextERA Energy Resources APN: 0607-231-11 dated February 17, 2015. This notice was sent via email from Ms. Feliciano on February 20, 2015. This notice is different that other notices I have reviewed in that it states that "comments are taken up to the time of the project decision". The other notice I have seen requires comment by the end of today.

However, this notice is incomplete as the second page map is incorrect. I would argue that the requires resubmittal of the notice to all affected and interested parties that have received this notice and therefore a "reset" of the comment deadline for the Planning Notice.

That being said, there is nothing more to go on other than the vague description and the incorrect information provided in the Notice so I am going on record as being in opposition to this project for a variety of reasons not limited to the fact that approval of this project will cause a populated residential rural neighborhood to be surrounded on two sides by such an inappropriately sited, large scale, commercial/industrial solar generating facility and it is not "in line" with the published draft SPARC Framework. Furthermore, a project of this size added to the existing acreage of commercial/industrial scale energy generation facilities causes a cumulative effect on, at a minimum, air quality, avian species, water resources and socio-economic impacts to communities.

Following a more through review of the project application and associated analysis in accordance with the California Environmental Quality Act, I may have more substantive comments for the record.

**Please keep me informed of every action/document/etc. associated with this project.**

Sincerely,  
Marina D. West, PG  
P.O. Box 3110  
Landers, CA

March 3, 2015

ATTN: Tracy Creason, LUS

RE: Project #P201400482/CUP, 5500 Sunfair Road, Joshua Tree

I live within 2 miles of this project and have reviewed its letter of intent, maps and CUP application.

It is less than 1 mile from the Cascade solar project, also off Sunfair Road, and it is the beginnings of cumulative impacts from these invasive projects in the area, something the SPARC consultants said would be avoided in a general plan update renewables element.

We are in a declared severe drought, as announced by our governor, yet the applicant will be using *at a minimum* 30 acre feet of Joshua Tree's precious drinking water for construction and 1 acre foot four times a year to wash off panels. We are told to use toilets that don't flush, take showers that don't get you wet, plant rocks and report our neighbors for hosing down their hot porches, yet the applicant is blithely proposing to take our water in return for fat subsidies to NextEra.

The county should enact a moratorium on permitting any of these projects until the general plan update has had its required public reviews and hearings and is adopted into law. Permitting any more of these potentially unlawful projects is irresponsible until new guidelines are legally adopted. As it stands, there are no safeguards for a community to protect against cumulative impacts. After NextEra, there will be more, and Joshua Tree will be an ugly sacrifice zone instead of an art/culture/nature destination and a beautiful place to live.

Rebecca Unger

63379 Jadeite Street, Joshua Tree

P.O. Box 1258, Joshua Tree

760/974-9042

unger9969@roadrunner.com



ATTENTION PROPERTY OWNERS

The development proposal listed below has been filed with County Planning. Please comment in the space below. You may attach additional pages as necessary.

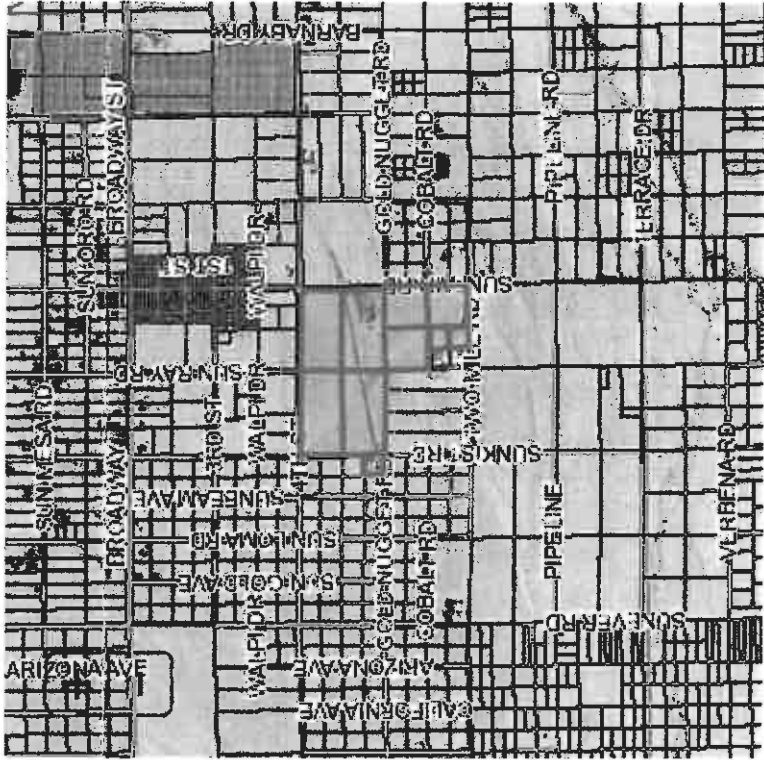
Your comments must be received by Planning no later than March 03, 2015 to be sure that they are included in the final project action. However, comments will be taken up to the time of the project decision. Please refer to this project by the Applicant's name and the Assessor Parcel Number indicated below. If you have no comment, a reply is not necessary. If you have any questions regarding this proposal, please contact Planner, TRACY CREASON at (760) 995-8143, by email at Tracy.Creason@lus.sbcounty.gov, or mail your comments to the address above. If you wish, you may also FAX your comments to (760) 995-8167.

ASSESSOR PARCEL NUMBER:	0607-231-11	(See map below for more information)
PROJECT NUMBER:	P201400482/CUP	* Multiple Parcel Associations *
APPLICANT:	MELIN, JESS/ NEXTERA ENERGY RESOURCES	
LAND USE DISTRICT (ZONING):	JT/JN	
IN THE COMMUNITY OF:	JOSHUA TREE/3RD/ SUPERVISORIAL DISTRICT	
LOCATED AT:	5500 SUNFAIR RD., JOSHUA TREE 92252	
PROPOSAL:	Conditional Use Permit to establish a 20 megawatt photovoltaic solar energy generating facility on 10 parcels totaling approximately 115 acres at the former Hi Desert (Roy Williams) Airport	

If you want to be notified of the project decision, please print your name clearly and legibly on this form and mail it to the address above along with a self-addressed, stamped envelope. All decisions are subject to an appeal period of ten (10) calendar days after an action is taken.  
Comments (If you need additional space, please attach additional pages):



VICINITY MAP



Paul Ahamendabun  
231 E. Acacia St.  
Ontario, Ca 91761

2-28-15

Paul Ahamendabun

SIGNATURE

DATE

AGENCY

IF THIS DECISION IS CHALLENGED IN COURT, SUCH CHALLENGE MAY BE LIMITED TO ONLY THOSE ISSUES RAISED IN WRITING AND DELIVERED TO LAND USE SERVICES BEFORE THE PROJECT DECISION IS MADE.

IF A PUBLIC HEARING IS HELD ON THE PROPOSAL, YOU OR SOMEONE ELSE MUST HAVE RAISED THOSE ISSUES AT THE PUBLIC HEARING OR IN WRITTEN CORRESPONDENCE DELIVERED TO THE HEARING BODY AT, OR PRIOR TO, THE HEARING. DUE TO TIME CONSTRAINTS AND THE NUMBER OF PERSONS WISHING TO GIVE ORAL TESTIMONY, TIME RESTRICTIONS MAY BE PLACED ON ORAL TESTIMONY AT ANY PUBLIC HEARING ABOUT THIS PROPOSAL. YOU MAY WISH TO MAKE YOUR COMMENTS IN WRITING TO ASSURE THAT YOU ARE ABLE TO EXPRESS YOURSELF ADEQUATELY.



ATTENTION PROPERTY OWNERS

The development proposal listed below has been filed with County Planning. Please comment in the space below. You may attach additional pages as necessary.

Your comments must be received by Planning no later than March 03, 2015 to be sure that they are included in the final project action. However, comments will be taken up to the time of the project decision. Please refer to this project by the Applicant's name and the Assessor Parcel Number indicated below. If you have no comment, a reply is not necessary. If you have any questions regarding this proposal, please contact Planner, TRACY CREASON at (760) 995-8143, by email at Tracy.Creason@lus.sbcounty.gov, or mail your comments to the address above. If you wish, you may also FAX your comments to (760) 995-8167.

ASSESSOR PARCEL NUMBER:	0607-231-11	(See map below for more information)
PROJECT NUMBER:	P201400482/CUP	* Multiple Parcel Associations *
APPLICANT:	MELIN, JESS/NEXTERA ENERGY RESOURCES	
LAND USE DISTRICT (ZONING):	JT/IN	
IN THE COMMUNITY OF:	JOSHUA TREE/3RD/ SUPERVISORIAL DISTRICT	
LOCATED AT:	5500 SUNFAIR RD., JOSHUA TREE 92252	
PROPOSAL:	Conditional Use Permit to establish a 20 megawatt photovoltaic solar energy generating facility on 10 parcels totaling approximately 115 acres at the former Hi Desert (Roy Williams) Airport	

If you want to be notified of the project decision, please print your name clearly and legibly on this form and mail it to the address above along with a self-addressed, stamped envelope. All decisions are subject to an appeal period of ten (10) calendar days after an action is taken.  
Comments (If you need additional space, please attach additional pages):

We object to the rezoning.  
It would lower the  
value of our 120 acre  
property, directly adjacent  
to the former airport.

NANCY FRIEDMANN  
706 Hillside Dr  
Long Beach, Ca 90815

X Nancy Friedmann 2-25-15

SIGNATURE

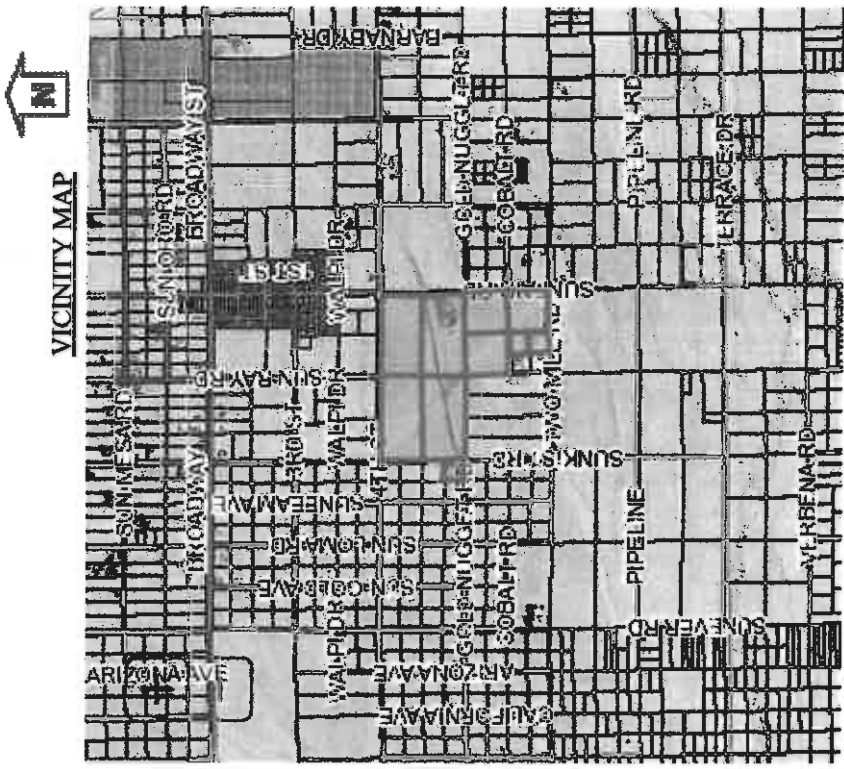
DATE

OWNER ADJACENT LAND  
AGENCY 0607-231-04-0-0000  
- 05-

IF THIS DECISION IS CHALLENGED IN COURT, SUCH CHALLENGE MAY BE LIMITED TO ONLY THOSE ISSUES RAISED IN WRITING AND DELIVERED TO LAND USE SERVICES BEFORE THE PROJECT DECISION IS MADE.

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Claude T.H. Friedmann, M.D., Inc.  
706 Hillside Drive  
Long Beach, CA 90815



JOSHUA TREE GATEWAY COMMUNITIES VACATION RENTAL ASSOCIATION  
PO Box HC-1067, JOSHUA TREE CALIFORNIA, 92252

March 15, 2016

John Oquendo  
Senior Planner County of San Bernardino Land Use Services Department, Planning Division  
15900 Smoke Tree Street, Suite 131  
Hesperia, CA 92345  
[John.oquendo@lus.sbcounty.gov](mailto:John.oquendo@lus.sbcounty.gov) sent via email

RE: Nextera proposed solar project, aka Joshua Tree Solar Farm

Dear Mr. Oquendo,

We the undersigned members of the Joshua Tree Gateway Communities Vacation Rentals Association (JTGCVRA) are writing to express our opposition to the proposed project known as Joshua Tree Solar Farm. Our reasons follow.

JOSHUA TREE PARK ECONOMIC OVERVIEW

This year, tourism to Joshua Tree National Park is expected to draw more than 2 million visitors, up 25% from 2014. A fiscal analysis conducted by the U.S. Geological Survey and National Park Service economists concluded that in 2014, visitors to the park spent \$73M in communities near the park, and supported approximately 1,030 jobs in the local area for “a cumulative benefit to the local economy of \$97M” <http://home.nps.gov/jotr/learn/news/jotr-creates-economicbenefits.htm>. Using indicators such as recent issues with lines at local restaurants, traffic back-ups into the park entrance, and the new paradigm requiring that lodging and campsites be reserved far in advance, we can anticipate that tourism revenues in our area will continue their dramatic rise.

JOSHUA TREE GATEWAY COMMUNITIES VACATION RENTAL ASSOCIATION

JTGCVRA is a group of individual Vacation Rental (VR) homeowners and property managers, representing over one hundred vacation rental units. Our objectives include enhancing park attractions by providing lodging opportunities that are unique to our region, improving the aesthetic qualities of properties in the Morongo Basin, and guiding public policy to insure quality experiences for our guests while maintaining a thriving VR industry. We support environmentally sound practices as a means of promoting a vibrant local economy.

ECONOMICS OF VACATION RENTALS IN THE AREA OF JOSHUA TREE

To date, there are over three hundred advertised VRs in the greater Joshua Tree area operating as small or family-owned businesses, and there are at least half as many more rooms in overflow homes, unadvertised homes, and part-time VRs. VRs are an emerging phenomenon with few statistics for our area, so we determined the economics of the local industry by polling two-dozen established VR properties with rates ranging from \$85 per night to \$350 per night to derive a 2015 average gross income of \$30,000 per VR property. Based on the three hundred-plus number of advertised rentals listed on just one of many websites (Airbnb), we arrived at a conservative estimate of \$9M VR gross revenues for 2015 in our area.

PRESERVE OUR ECONOMIC DRIVER

Those who have not spent time in the Morongo Basin might perceive it from the outside as a wasteland, questioning what might draw millions of visitors to a desert. The answer is simple and poetic. As one member of our community aptly stated, “They come for the Big Empty”, our sweeping scenic views as seen from atop otherworldly boulders, our air quality and dark night skies, an escape from visual pollution of urban and industrial development, and to experience the

flora and fauna that lives within and travels through our porous, open desert landscape. The uniqueness of Joshua Tree is intensified by the fact that limitless expanses can be so easily appreciated from within the comfort of homes which are in proximity to amenities. It is extremely critical that we maintain our unobstructed scenic vistas, and this is borne out by our tourism numbers. As VR homeowners, individual investors, and residents of the community, we know that our natural landscape shapes the health of our expanding local economy.

#### CONFLICT WITH THE PROPOSED SOLAR PROJECT

An important part of our mission is to preserve the desert by being environmentally aware, and many of our members support solar energy through their own investments in off-grid and grid-tied homes. But in the case of the proposed Nextera project, we cannot condone a “green energy” project that carries with it the environmental consequences of water hemorrhage, dust pollution, disturbance of habitat corridors, proven hazards to avian life, the use of industrial strength herbicides, and the disruption of scenic views from our National Park and our revenue properties. A project such as Nextera’s Joshua Tree Solar Farm would effectively compromise the very environment that it aspires to protect; thereby rendering its negative impacts greater than its overall benefits. Even without our state mandated water reductions, we strive for conscientious water usage by encouraging guests to be observant of living in the desert during this time of drought. The amount of water that would be required by this project would render our collective efforts meaningless. Furthermore, Nextera is seeking to procure groundwater rights as a means of moving forward with this poorly sited proposal. We maintain that the parcel ownership does not entitle its owner or its assigns to extraordinary use of the groundwater, such as 400 gallon per minute production pumping, and that industrial scale depletion was never an intended use for these well rights. Lastly, production wells would push aquifers even further into our current overdraft due to drought, effectively reducing the long-term groundwater supply of our entire community. Aquifer depletion will also effect the wildlife populations that are important part of the nature package that we offer to tourists. As a resource that belongs to all, decisions regarding our natural water systems are a collective concern. It is not the prerogative of a single property owner to usurp the best interests of the community.

#### WILDLIFE

In addition to being known tortoise habitat, homeowners report regular fox sightings at 5725 Sunfair Road, directly across the street from the proposed project.

#### SCENIC DEGRADATION

60-70% of the project’s footprint is undisturbed land, with the existing airport disturbance occupying 30-40% of the site. The rural feel of this valley will be changed to industrial/commercial, particularly given the visual impact when coupled with the nearby Cascade solar development. In regards to the proposed Joshua Tree Solar Farm at the Roy Williams Airport, we would like to specifically note the following as pertains to vacation rental homes:

- There are 122 known vacation rentals with views of the RW Airport area
- Approximately sixty of these known vacation rental properties fall within five miles of the proposed project.
- The project is highly visible from world-class hiking trails within the North Park Boundary Wilderness Area of Joshua Tree National Park. These are some of the most pristine and lightly traveled in the park, and include Burro Loop.
- We maintain that VR owners have made a huge contribution to property values in the Morongo Basin by paying historically high prices for homes. Furthermore, through our rehabilitation of often-derelict properties, and the collection of 7% transient occupancy taxes on short-term rental receipts, county tax revenues directly increased as a result of our activities. Conversely, Nextera will be exempt from tax liability for virtually all of its improvements.

In conclusion, we invite concerned county agencies on a tour of the world-class boulders and hiking trails in the North Boundary Wilderness Area of Joshua Tree National Park which overlook the proposed solar project, to be placed almost exactly two miles from park boundaries. While in the area, we encourage a hosted visit to some of the nearby VR properties to soak in the beauty of the views. This will provide the most straightforward argument for disputing Nextera's claims that the project will not interfere with the scenic attributes of the area. Such an outing will illustrate the shortcomings and biases of the photographs found in the Joshua Tree Solar Farm proposal.

Thank you for your time and attention in this matter affecting our local economy and environment.

Please feel free to reach out to us with questions.

Respectfully,

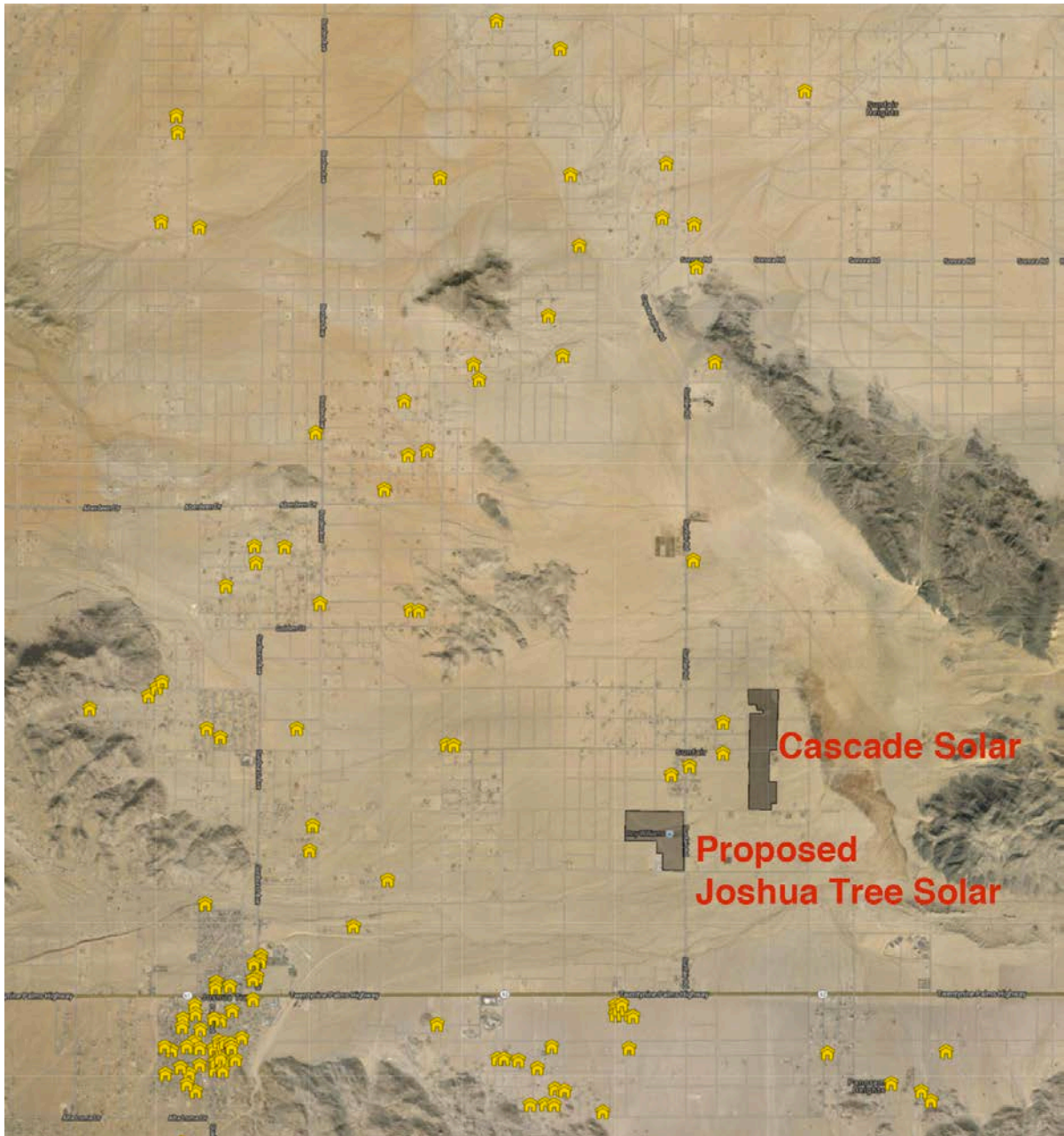
Thomas Fjalstam (415)717-5595  
totalunity@gmail.com

Miriam Seger (213)705-8003  
[miriamseger@mac.com](mailto:miriamseger@mac.com)

Gayle Austin  
Tom Austin  
Jay Babcock  
Claire Calvino  
Mark Cranston  
Jessica Franklin  
Mark Johnston  
Mindy Kaufman  
Christine Lukasik  
Michelle Meyers  
Patty Micciche  
Gabriella Nagy  
Larry Amal Norman  
Drew Reese  
John Schuster  
Stephanie Smith  
Lisa Starr  
Eva Soltes  
Shelley Strong  
Vera Topinka  
Douglas Buckley  
J.B. Wells  
Bonnie Kopp

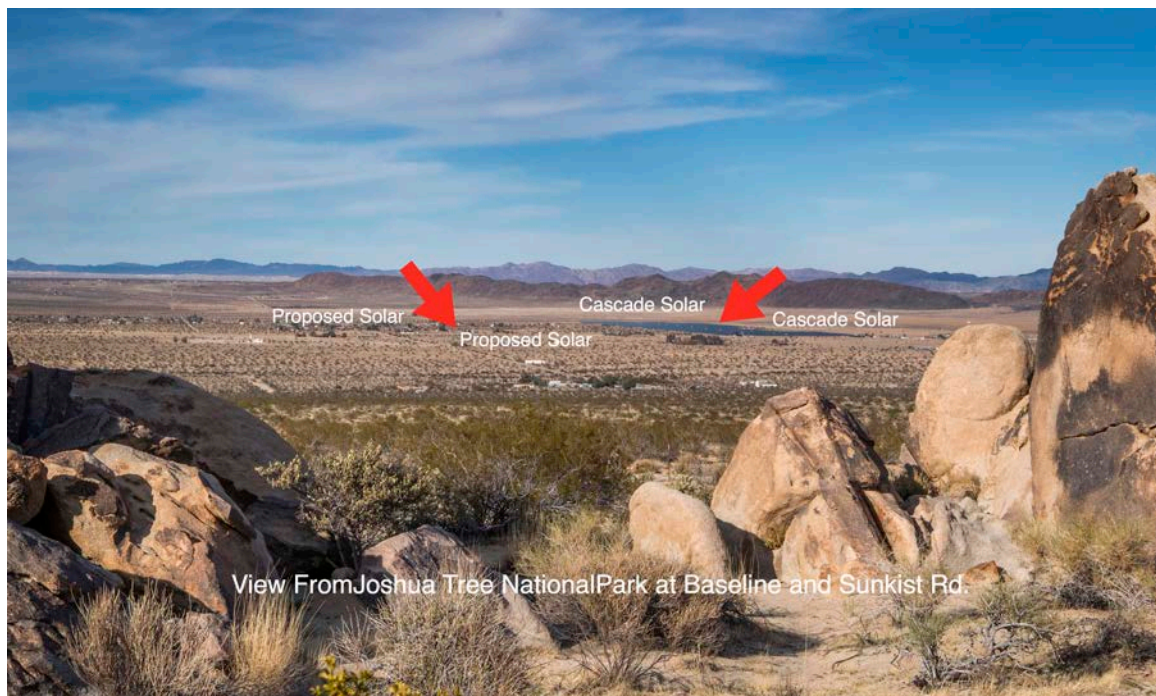
cc:  
Supervisor James C. Ramos, Chairman  
Tom Hudson, Director Land Use Services  
Mark Lundquist, MAC Field Representative, Joshua Tre

**Exhibit A: 122 Vacation Rental homes with views of Joshua Tree Solar site**



**Exhibit B: Scenic views from Joshua Tree National Park**

Inside Park boundary, on trail accessing Burro Loop



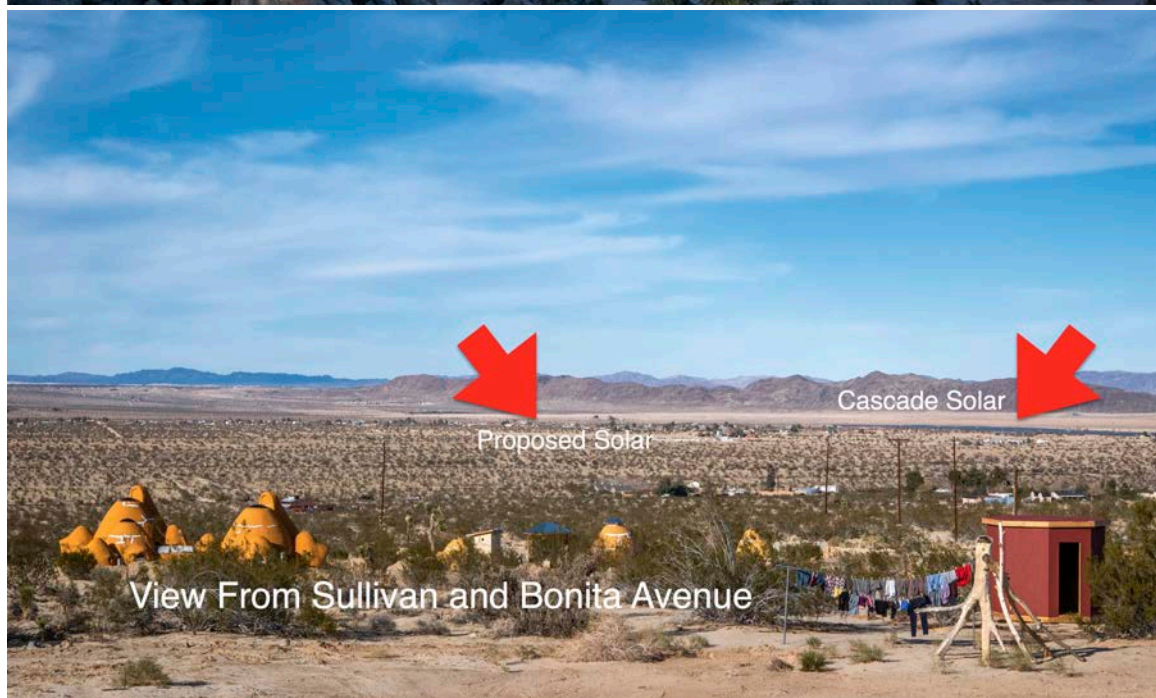
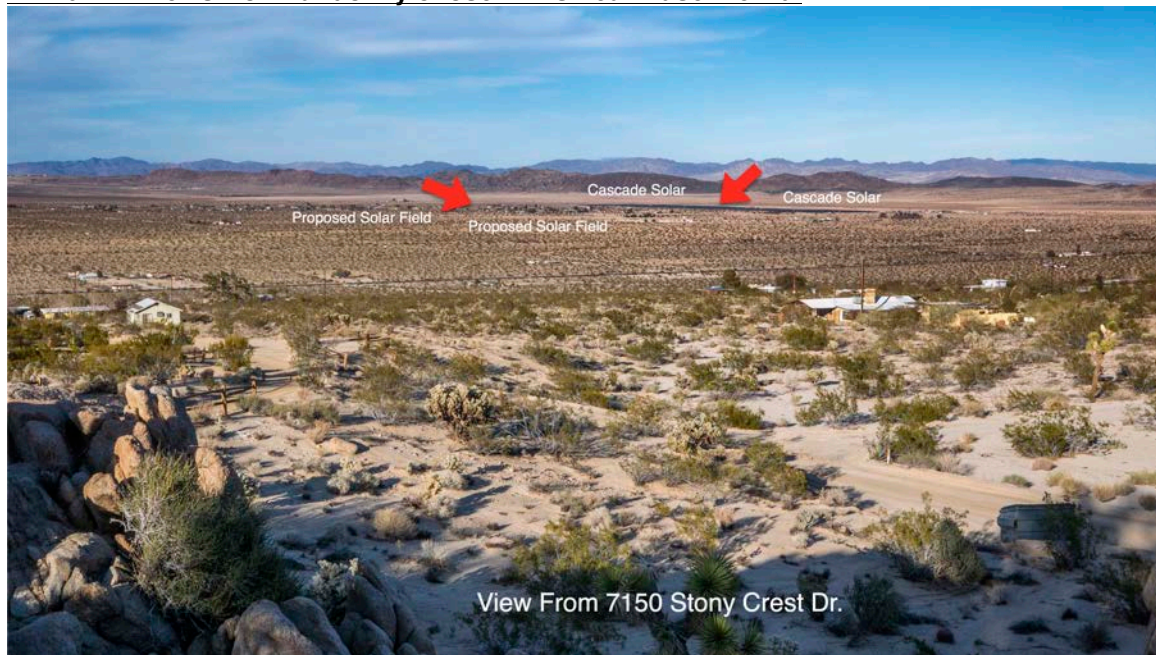
Panorama from trailhead to Burro Loop, an extensive NPS trail network



**Exhibit C: Example of view from residences north of Joshua Tree Solar Farm**

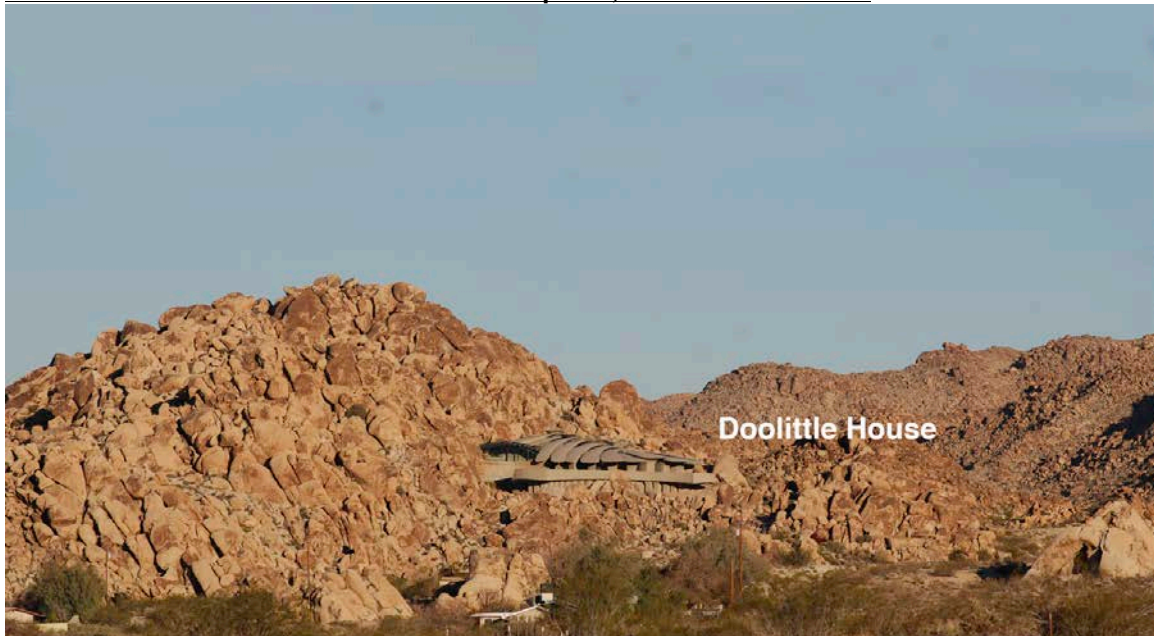


**Exhibit D: Views from randomly chosen VRs near Baseline Rd.**





**Exhibit E: Views from architectural masterpiece, the Doolittle House**



**Simi Dabah Sculpture Garden, directly across from proposed Solar Farm**





ATTENTION PROPERTY OWNERS

The development proposal listed below has been filed with County Planning. Please comment in the space below. You may attach additional pages as necessary.

Your comments must be received by Planning no later than **March 03, 2015** to be sure that they are included in the final project action. However, comments will be taken up to the time of the project decision. Please refer to this project by the Applicant's name and the Assessor Parcel Number indicated below. If you have no comment, a reply is not necessary. If you have any questions regarding this proposal, please contact **Planner, TRACY CREASON** at (760) 995-8143, by email at [Tracy.Creason@lus.sbcounty.gov](mailto:Tracy.Creason@lus.sbcounty.gov), or mail your comments to the address above. If you wish, you may also FAX your comments to (760) 995-8167.

ASSESSOR PARCEL NUMBER:	0607-231-11	(See map below for more information)
PROJECT NUMBER:	P201400482/CUP	* Multiple Parcel Associations *
APPLICANT:	MELIN, JESS/ NEXTERA ENERGY RESOURCES	
LAND USE DISTRICT (ZONING):	JT/IN	
IN THE COMMUNITY OF:	JOSHUA TREE/3RD/ SUPERVISORIAL DISTRICT	
LOCATED AT:	5500 SUNFAIR RD., JOSHUA TREE 92252	
PROPOSAL:	Conditional Use Permit to establish a 20 megawatt photovoltaic solar energy generating facility on 10 parcels totaling approximately 115 acres at the former Hi Desert (Roy Williams) Airport	

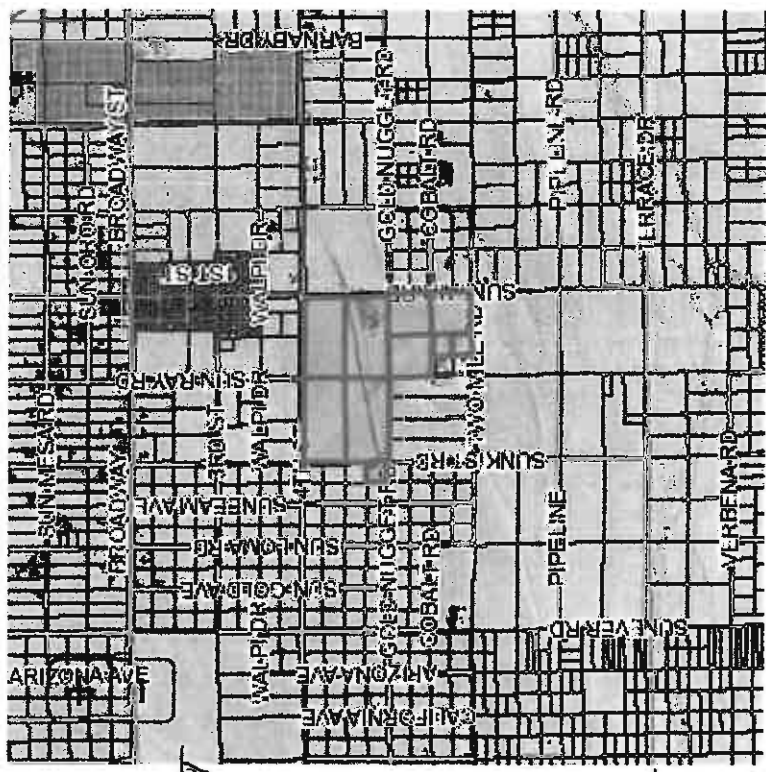
If you want to be notified of the project decision, please print your name clearly and legibly on this form and mail it to the address above along with a self-addressed, stamped envelope. All decisions are subject to an appeal period of ten (10) calendar days after an action is taken.  
Comments (if you need additional space, please attach additional pages):

AS PROPERTY OWNERS IN VERY CLOSE PROXIMITY, WE OPPOSE THIS PROJECT DUE TO THE NEGATIVE IMPACT ON THE ENVIRONMENT, WHICH IS VERY DELICATE, AND THE SIGNIFICANT REDUCTION IN PROPERTY VALUES IN THE VICINITY OF THE PROJECT.

SCOTT & BARBARA KING  
64847 TONTO DRIVE  
JOSHUA TREE CA 92252  
PROJECT: P201400482/CUP  
MELIN, JESS/ NEXTERA ENERGY RESOURCES  
PARCEL NO. 0607-231-11



VICINITY MAP



SIGNATURE

DATE

AGENCY

HOMEOWNERS

2/25/15

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19788 HORSESHOE DR  
TOPANGA CA 90290

**Morongo Basin Municipal Advisory Council  
Joshua Tree Community Center  
6171 Sunburst Avenue, Joshua Tree California**

**Regular Open Session Meeting  
6:30pm, Monday, March 14, 2016**

**Resolution No. MB-MAC014**

**A RESOLUTION OF THE MORONGO BASIN MUNICIPAL  
ADVISORY COUNCIL REGARDING THE PROPOSED  
COMMERCIAL SOLAR ENERGY GENERATION FACILITY FOR  
THE JOSHUA TREE AIRPORT**

**Whereas**, the Morongo Basin Municipal Advisory Council ("MAC"), is mindful of its role to listen to the views of the residents of the Morongo Basin on matters of importance to them and as otherwise permitted by law, and

**Whereas**, pursuant to Section 84.29.040 (f) of the ordinance of San Bernardino County relating to the establishment of commercial solar energy generation facilities (the "Solar Ordinance"), the MAC is to be notified of any pending application thereunder with respect to the Morongo Basin, and

**Whereas**, the MAC has heard views of interested parties concerning a proposed industrial solar facility at the site of the decommissioned Roy Williams airport in Joshua Tree (the "JT Airport Solar Project"), including presentations of the sponsor, as well as residents and businesses of the Joshua Tree and surrounding areas and other interested parties, and

**Whereas**, the members of the MAC are aware that a review of the JT Airport Solar Project is, or will shortly be, before the San Bernardino County Planning Commission which has the authority to determine whether such project meets appropriate legal standards, including the provisions of the Solar Ordinance, for new commercial solar energy generating facilities in the unincorporated areas of the County, and

**Whereas**, residents of Joshua Tree and the Morongo Basin have provided their views to the MAC regarding the JT Airport Solar Project, and

**Whereas**, based on the presentations to the MAC, the MAC represents that the prevailing sentiment of the Joshua Tree and Morongo Basin community is that the JT Airport Solar Project will clearly create unreasonable visual blight for visitors and residents, would be detrimental to the aesthetics and economy of the area, including, without limitation, the over 2 million annual visitors to the Joshua Tree National Park, the thousand of patrons attending Joshua Tree Music Festivals, and neighboring permanent outdoor art installations, and, in the view of many residents, the findings in the Initial Study of the project by the County Land Use Services are not consistent with the Solar Ordinance;

**NOW THEREFORE, BE IT**

**RESOLVED**, that the Morongo Basin Municipal Advisory Council recommends that the San Bernardino County Planning Commission take into consideration the views of Joshua Tree area and Morongo Basin residents and businesses to the effect that the application to construct a commercial solar energy generation facility at the site of the defunct Joshua Tree Airport be denied.

Approved and Adopted by the Morongo Basin Municipal Advisory Council at its regular meeting held on the **14<sup>th</sup> day of March, 2016** at which a quorum was present

By the following vote :

For : 9

Against : 0

Abstentions :



Mark Lundquist, Chair

# ATTENTION PROPERTY OWNERS

Page 1 of 2

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ASSESSOR PARCEL NUMBER: 0607-231-11

(See map below for more information)

PROJECT NUMBER: P201400482/CUP

\* Multiple Parcel Associations \*

APPLICANT: MELIN, JESS/ NEXTERA ENERGY RESOURCES

LAND USE DISTRICT (ZONING): JT/IN

IN THE COMMUNITY OF:

JOSHUA TREE/3RD/ SUPERVISORIAL DISTRICT

LOCATED AT:

5500 SUNFAIR RD., JOSHUA TREE 92252

PROPOSAL:

Conditional Use Permit to establish a 20 megawatt photovoltaic solar energy generating facility on 10 parcels totaling approximately 115 acres at the former Hi Desert (Roy Williams) Airport

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*Please notify of decision  
concerning this project.*

*Thank you*

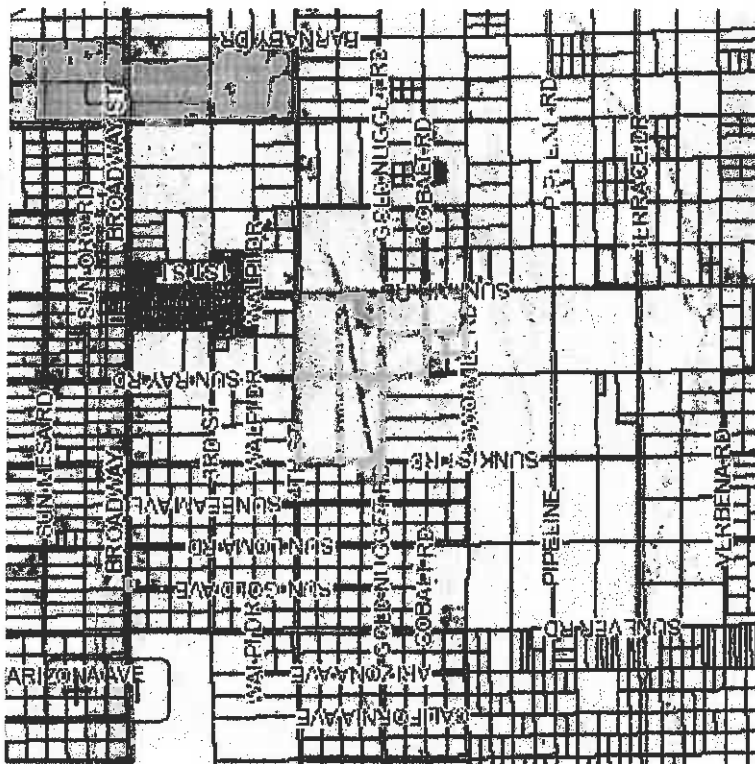
*Philip Smith*

*626-256-9307*

Mr. Philip Smith  
2851 Royal Oaks Dr  
Duarte, CA 91010



VICINITY MAP



**April Thiede**

From: "April Thiede" <atvisalia@earthlink.net>  
 Date: Tuesday, February 24, 2015 8:51 AM  
 To: <Tracy.Creason@lus.sbcounty.gov>  
 Subject: Distance and Relationship to: APN # 0607-352-04-0-000

Good morning, Tracy,

Thank you for the information regarding the Conditional Use Permit to establish a 20 megawatt photovoltaic solar generating facility on Assessor Parcel Number 0607-231-11, encompassing 10 parcels totaling approximately 115 acres at the former Hi Desert (Roy Williams) Airport.

We own a 5-acre parcel in the area (Assessor Parcel Number: 0607-352-04-0-000).

Would you please send us a parcel map which includes both the proposed Conditional Use Permit site and our own site --(showing some type of legend for distance)-- as we would like to see where we are situated in relationship to the actual project. Also, please keep us informed as to any possible Environmental Impact Reports/ramifications which this project might present as it moves forward.

Thank you very much for your time and response to our request.

April and Jim Thiede, ttee  
 THE THIEDE 2011 REVOCABLE TRUST  
 3015 South Linda Vista Street  
 Visalia, CA 93277-7222  
 atvisalia@earthlink.net

*We attempted to send this via-email. it was  
 returned as "unrouteable address".  
 Please send response via "mail mail" in the  
 enclosed postage-paid envelope*

*Thanks  
 J.T.H.*



Page 1 of 2

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**(See map below for more information)**

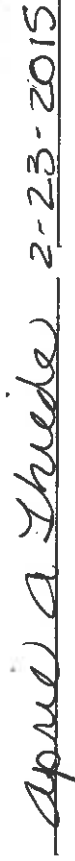
## \* Multiple Parcel Associations \*

**LAND USE DISTRICT  
(ZONING):**

**IN THE COMMUNITY OF:** **JOSHUA TREE/3RD/ SUPERVISORIAL DISTRICT**

**LOCATED AT:**  
**5500 SUNFAIR RD., JOSHUA TREE 92252**

**PROPOSAL:** Conditional Use Permit to establish a 20 megawatt photovoltaic solar energy generating facility on 10 parcels totaling approximately 115 acres at the former Hi Desert (Roy Williams) Airport



DATE \_\_\_\_\_

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**April A. Thiede**  
3015 S. Linda Vista Visalia, CA 93277

Fax

Date: April 2016

Total Pages: 5

FROM: Allison Marquez

Company: [Redacted]  
Name: [Redacted]  
Title: [Redacted]  
Phone: [Redacted]  
Email: [Redacted]

TO: Land Use/ Planning Department

Company: San Bernardino County  
Attention: Paul Smith, Commissioner  
Phone: [Redacted]  
Fax: 909-387-249

By: [Redacted] Please Comment ☐ Please Review ☒ For Your Information ☐

Comments:

Re: Terra Energy Project, Land Use Project No. P201400482

For: 482 signatures in protest of this Solar Project.

Nine percent of signatures are close proximity of said

Solar Project. Reasons are stated on the Protest Petition pages.

Correspondence: Marquez

# LANDOWNER PROTEST PETITION

I, (We), the undersigned owner(s) in accordance with the provisions of the Cortese-Knox-Wehring Local Government Reorganization Act of 1992, commencing with Government Code Section 56000, do hereby protest:

Protest: The Energy Resources Project, Land Use Project No. 000400482, to provisions in the Joshua Tree/SA20 Community Plan, adopted March 2007, which to discourage commercial energy generating facilities, life preservation, quality of life, and property values in Each of the following San Bernardino. Signatures are as follows.

1. I am protesting this protest petition.
2. I am protesting within the affected territory.
3. I am protesting the date of my signing and the Assessor's Parcel Number(s) such that the location of the protest is clearly ascertainable.

The landowner, who is protesting, provide the residence address and the date of signing in his/her own handwriting. The parcel number of the land for which protest is provided must be included. If signing on behalf of a business or other enterprise, documentation showing ability to sign as legal representative for that enterprise.

SIGN NAME PRINT NAME	RESIDENCE ADDRESS	DATE	PARCEL NUMBER
	14464366 Bore CA. RS 92252	2/18/16	06070112
SIGN NAME PRINT NAME	RESIDENCE ADDRESS	DATE	PARCEL NUMBER
	58727 DREX 92284	2/18/16	05990112
SIGN NAME PRINT NAME	RESIDENCE ADDRESS	DATE	PARCEL NUMBER
	20 VENUS 2377 Joshua	2/18/16	06330115
SIGN NAME PRINT NAME	RESIDENCE ADDRESS	DATE	PARCEL NUMBER
	0 Breat Cam 27 Joshua	2/18/16	06380112
SIGN NAME PRINT NAME	RESIDENCE ADDRESS	DATE	PARCEL NUMBER
	LATHAM TR. 92252	2/18/16	05880115
SIGN NAME PRINT NAME	RESIDENCE ADDRESS	DATE	PARCEL NUMBER
	Outpost Rd 92252	2/18/16	06020114
SIGN NAME PRINT NAME	RESIDENCE ADDRESS	DATE	PARCEL NUMBER
	Outpost Rd 92252	2/18/16	06020114
SIGN NAME PRINT NAME	RESIDENCE ADDRESS	DATE	PARCEL NUMBER
	Footwall Drive 92252	2/18/16	06070112
SIGN NAME PRINT NAME	RESIDENCE ADDRESS	DATE	PARCEL NUMBER
	Cotulla drive TREES 92252	2/18/16	06070112

I, the undersigned, certify that the signatures of Protest are true owners of said Properties

Attest:

PO:

Justine M. A. 92252

## DECLARATION PAGE FOR LANDOWNER PROTEST PETITION

SIGN NAME	PRINT NAME	RESIDENCE ADDRESS	DATE	PANEL NUMBER
SIGN NAME	PRINT NAME	2001 Sunfair Rd Joshua Tree, CA 92252	2/9/16	0606357
SIGN NAME	PRINT NAME	3001 SHADOWS BLVD JOSHUA TREE, CA 92252	2/17/16	0589184
SIGN NAME	PRINT NAME	JADEITE ST. JOSHUA TREE, CA 92252	2-9-16	0605071
SIGN NAME	PRINT NAME	HSESS SULLIVAN RD. JOSHUA TREE, CA 92252	2-9-16	0607062
SIGN NAME	PRINT NAME		2-9-16	0605100
SIGN NAME	PRINT NAME	Box 2253 WA tree	2/10/16	0607240
SIGN NAME	PRINT NAME	Box 1330 LEE, CA 92252	2/10/16	0605113
SIGN NAME	PRINT NAME	Box 1330 LEE, CA 92252	2/10/16	0605113
SIGN NAME	PRINT NAME	Rancho J.	2/13/16	0606012
SIGN NAME	PRINT NAME	8 First St. W Joshua Tree, CA	2/13/16	0607221
SIGN NAME	PRINT NAME	Quail Springs Joshua Tree, CA	2/13/16	0589121
SIGN NAME	PRINT NAME	First W-3+	2/13/16	0607240
SIGN NAME	PRINT NAME	6 Trac CA	2/13/16	0607240
SIGN NAME	PRINT NAME	6 Cobalt RD Joshua Tree	2/13/16	0607240
SIGN NAME	PRINT NAME	3 Cobalt St Joshua Tree CA	2/13/16	0607240
SIGN NAME	PRINT NAME	SUNFAIR TREE, CA	2/13/16	0607240
SIGN NAME	PRINT NAME	SUNFAIR W TREE CA	2-13-16	0607240

## **EXHIBIT F**

### **Valley Fever Memo**



# Interoffice Memo

**DATE:** November 12, 2014

**PHONE:** 909-387-6218

**FROM:** MAXWELL OHIKHUARE  
Health Officer  
Public Health Department

**TO:** TERRI RAHAL  
Planning Director  
Land Use Services Department

<b>SUBJECT</b>	<b>COCCIDIOIDOMYCOSIS (VALLEY FEVER) IN SAN BERNARDINO COUNTY</b>
----------------	---

This information is in response to your recent inquiry regarding Valley Fever. Valley Fever is a fungal infection of the lungs that results from the inhalation of *Coccidioides* spores found in soil. The majority of people (60%) have no symptoms when infected. A smaller number (40%) experience moderate flu-like symptoms, and an even smaller group (5%) develops “disseminated Valley Fever”, which is a serious illness.

Valley Fever can infect anyone, but is more common in:

- Adults aged 60 or older,
- Those with weakened immune systems,
- Those with organ transplants,
- Pregnant women, and
- Those with Diabetes.

San Bernardino County consistently has a lower incidence rate than both the National and State levels. In 2010, the number of cases in San Bernardino County was 2.8/100,000 people, while the State was at 12.1/100,000. Nationally, the number of cases was at 4.2/100,000. In 2013, San Bernardino County’s incidence rate was 3.0/100,000; 25% of these cases are found within the incarcerated population.

To be considered highly endemic, a county must have more than 20 cases/100,000 people. While many counties in California have the fungus present, the only counties having a high endemic rate are Fresno, Kern, Kings, Madera, Merced, San Luis Obispo and Tulare.

Some animals, such as dogs, can also contract Valley Fever. There have been no reports to Public Health of animal illnesses within San Bernardino County.

The California Department of Public Health (CDPH) provides several recommendations to prevent valley fever [exposure](#). Employers seeking more information can also find work related [guidance](#) through CDPH, as well as [requirements](#) for them to reduce employee exposure via the California Occupational Safety and Health Administration’s (Cal/OSHA’s) Department of Industrial Relations. Although the public health risk in San Bernardino County is low, we recommend those who work in dusty conditions adhere to the guidance from both CDPH and Cal/OSHA.