



LAND USE SERVICES DEPARTMENT  
PLANNING DIVISION  
**PLANNING COMMISSION STAFF REPORT**



**HEARING DATE: May 9, 2013**

Project Description

**AGENDA ITEM # 2**

Vicinity Map

(See Exhibit A)

<b>APN:</b>	0449-641-27 & 0449-641-04
<b>Applicant:</b>	Agincourt Solar, LLC
<b>Community:</b>	Lucerne Valley
<b>Location:</b>	West of Camp Rock Road, northeast of State Route (SR) 18, and South of Rosewood Street
<b>Project No:</b>	P201200011/CUP
<b>Staff:</b>	Christopher Conner
<b>Rep:</b>	Elliot MacDougall
<b>Proposal:</b>	Conditional Use Permit to establish a 10-Megawatt solar photovoltaic electricity generation facility on approximately 80 acres.



46 Hearing Notices Sent On: April 24, 2013

Report Prepared By: Chris Conner

**SITE INFORMATION**

**Parcel Size:** Approximately 80 acres (site size)

**Terrain:** Relatively flat vacant desert terrain site.

**Vegetation:** Creosote bush scrub.

**SURROUNDING LAND DESCRIPTION:**

AREA	EXISTING LAND USE	OFFICIAL LAND USE DISTRICT
Site	Vacant	LV/AG and LV/RL-5
North	Vacant	LV/AG and LV/RL-5
South	Vacant	LV/AG and LV/RL-5
East	Vacant	LV/AG
West	Vacant	LV/RL-5

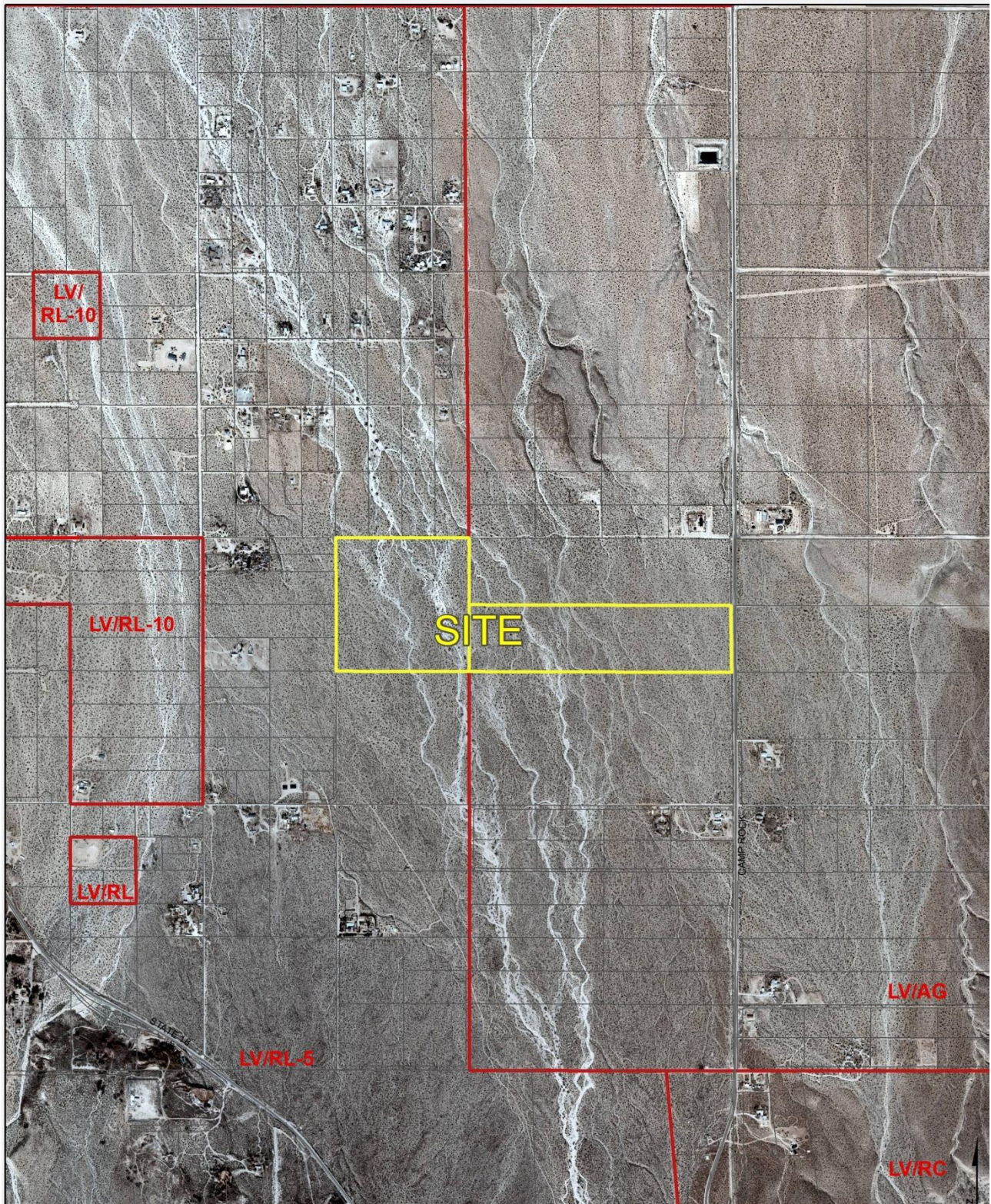
	<b><u>AGENCY</u></b>	<b><u>COMMENT</u></b>
City Sphere of Influence:	N/A	None
Water Service:	N/A	Hauled water to be used for washing as necessary
Septic Service	N/A	Not required

In accordance with Section 86.08.010 of the San Bernardino County Development Code, this action may be appealed to the Board of Supervisors.

**THIS PAGE INTENTIONALLY LEFT BLANK**



## OFFICIAL LAND USE DISTRICT MAP



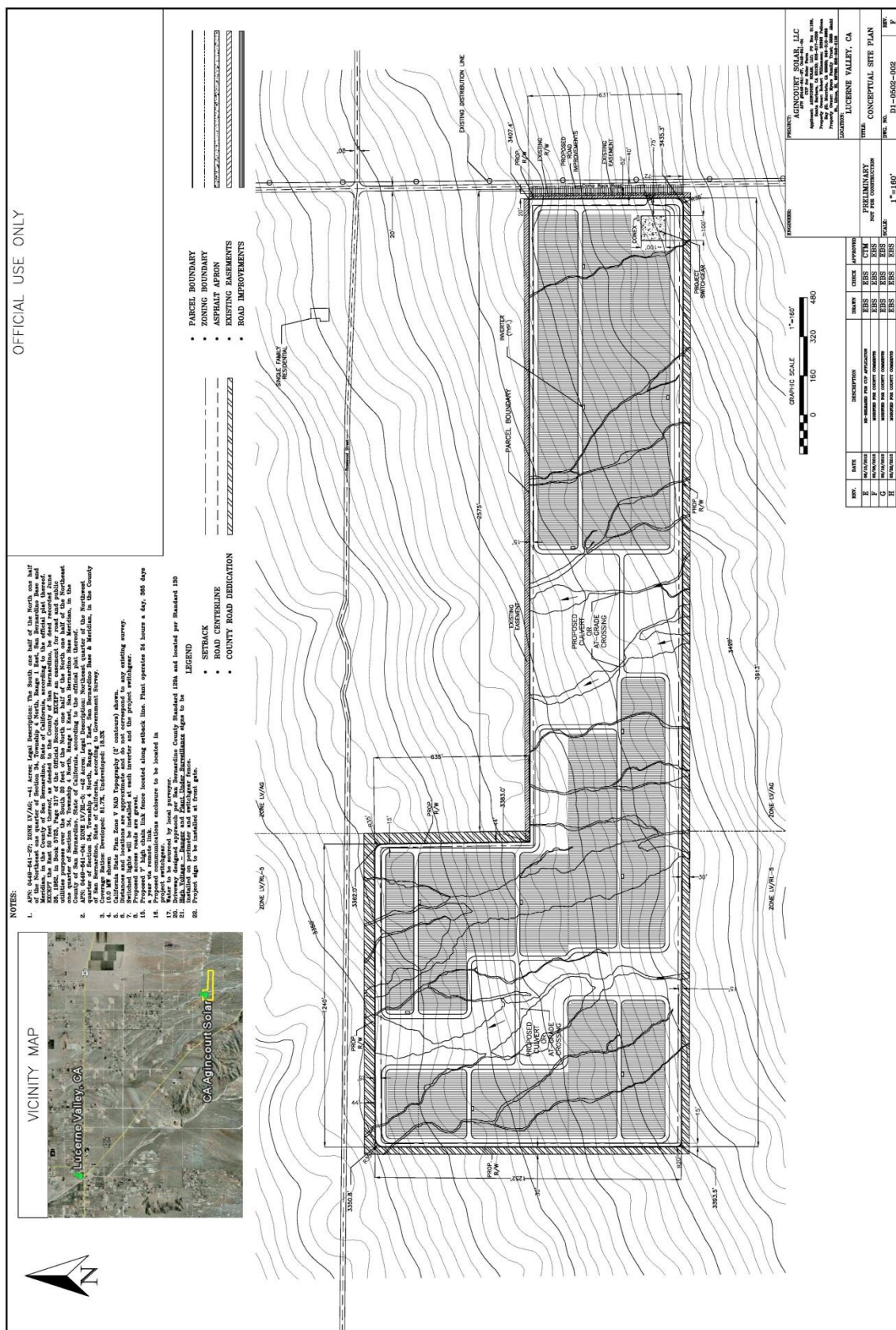


## VICINITY MAP





## PLOT PLAN





## **BACKGROUND:**

Project: The proposed Conditional Use Permit (CUP) is to establish a 10 megawatt photovoltaic (PV) solar electric power generating facility (Project) within an approximately 80-acre site in the Lucerne Valley. Construction of the Project is anticipated to last up to eight months. Upon completion, the Project will be unmanned.

Location and Access: The proposed Project site is situated in the Desert Region of the County, in the southern portion of the Lucerne Valley Community Plan. The primary facility access point is from Camp Rock Road, which runs along the eastern Project boundary of the site. Camp Rock Road intersects State Route 18 (SR-18) approximately 1.7 miles south of the proposed Project site.

Environmental Setting: The site is located on a broad gently sloping bajada of alluvial material originating from the San Bernardino Mountains to the south. Elevation of the Project site ranges from approximately 3,340 feet above sea level (asl) at its northwest corner up to 3,346 asl at its southeast corner. The topography is generally flat, with a slope of about 3.6 percent towards the north-northwest. The primary vegetation onsite is creosote bush-white burr sage scrub.

Solar Array Operation: Upon completion, the Project will be unmanned. The Project will utilize non-reflective PV modules mounted on fixed tilt or single-axis sun tracking systems mounted in rows running north-south. The modules are wired together and connected to inverters, which convert direct current into electrical alternating current. The electricity is then stepped up to 33 kV and collected via underground or above ground lines in conduits that terminate at the point of interconnection to the local electricity grid via an existing Southern California Edison (SCE) power line, which runs next to the Project site along Camp Rock Road. The electricity produced by the Project will be sold to SCE under a long-term Power Purchase Agreement that was executed in late 2012 and requires the solar facility to achieve commercial operation by October 2014.

The panels and racking system would be supported by embedded piers. Panels are expected to extend to a height of approximately eight feet above grade with a maximum height of 12 feet under the proposed conditions of approval. Electrical equipment, including inverters and transformers, will be located on concrete pads. A six foot high chain link security fence topped with one foot of barbed wire will be installed at the property setback.

Lighting will be designed to provide the minimum illumination needed to achieve safety and security objectives. Lighting will be directed downward and shielded to focus illumination on the desired areas to avoid light spillage on adjacent properties. Project lighting will be located at each inverter station and switchyard. Lighting will be no brighter than required to meet safety and security requirements. All Project lighting will be switched and without timers.



## **ANALYSIS:**

**Consistency with General Plan Policies:** The proposed Project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. The current General Plan land use designation for the proposed Project area is Lucerne Valley/Agriculture (LV/AG) and Lucerne Valley/Rural Living 5-acre minimum parcel size (LV/RL-5), which allow development of electrical power generation facilities with a CUP. The proposed Project meets the standards outlined in San Bernardino County Development Code (Development Code) Chapter 84.29 - "Renewable Energy Generation Facilities" and will be required to comply with all CUP conditions of approval.

**General Plan Policy:** The County General Plan establishes goals for renewable energy for the County. Conservation Element Policy CO 4.12 states that 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 explore and promote newer opportunities for the use of alternative energy sources. This Project supports the objectives of these goals and policies.

**Renewable Energy Projects:** 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. The proposed Project will assist in the State's efforts to meet the RPS standard and increased demands for electricity.

**Greenhouse Gas Emissions:** 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 energy purchase contracts with facilities that do not meet the GHG emissions standard. In December, 2011 the County adopted a GHG reduction plan that established a review criteria for GHG emissions. The proposed Project will assist in efforts to meet the California GHG emissions legislation, and is consistent with the County GHG reduction plan.

**Aesthetics/Visual:** The current visual character of the Project site is typical of rural living areas in the desert consisting of relatively flat vacant lands surrounded by sparse residential development and the common creosote bush-white burr sage scrub vegetation community. The proposed Project will result in the removal of the majority of the current vegetation on the site (outside the required setbacks and outside the on-site conservation areas to be preserved via permanent conservation easements); place photovoltaic panels among the remaining vegetation and other appurtenant structures; construct access roads; and erect a chain link fence around the perimeter of the site. These features will minimally



alter the existing visual character from the current vacant rural view. The Project site will be visible for several minutes to motorists traveling along SR-18, a County-designated Scenic Road, and along Camp Rock Road. The Project's IS/MND and Visual Impact Assessment indicate the Project would not result in a substantial adverse effect from this or any other scenic resource. None of the Project equipment will substantially obstruct any viewsheds in the area.

The proposed Project has a low profile and will have little potential for glare as materials are designed to absorb sunlight and marginal lighting will be used at night, therefore, it will not substantially degrade the existing visual character or quality of the site and its surroundings.

Biology: The site is within known range of Burrowing Owl, Desert Tortoise, and Desert Kit Fox. Biological surveys were conducted for the Project site and confirmed absence of Burrowing Owl, Desert Tortoise, and Desert Kit Fox. The Project, with Mitigation Measures BIO-1 through BIO-13, will not have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Rare Plants: No rare, sensitive or special-status plants were observed during biological surveys of the Project site; however, Parish's daisy (*Erigeron parishii*), a federally-listed threatened species, could potentially be present because spring flowering plant surveys were conducted to coincide with the majority of endemic plants, which are just prior to the blooming period of this plant. As a result, Mitigation Measure BIO-4 requires that spring flowering plant surveys be conducted for this plant within its blooming period and, if found, planting or reseeded of Parish's daisy shall be conducted in onsite permanent conservation areas.

Several species of native cacti and yucca, including numerous Joshua trees, exist within the Project site. These plants are protected by the California Desert Native Plants Act and the Development Code. Because the proposed Project would result in removal of these plants, the applicant must obtain authorization from the County to remove these species. Preparation and approval of a Cacti Salvage Plan, as required by Mitigation Measure BIO-5, and a Joshua Tree Translocation Plan, as required by Mitigation Measure BIO-6, will allow for removal and reduce impacts below a level of significance.

The Proposed Project does not include and would not affect creosote rings exemplified by specimens found at the Soggy Lake Creosote Rings ACEC.

Desert Tortoise: Protocol surveys were conducted in April 2012 in accordance with the USFWS (2010) survey protocol for this species (URS 2012). The focused Mojave desert tortoise surveys did not identify any recent evidence of this species onsite but the site is located in suitable habitat. In order to reduce impacts to individuals that may have migrated onto the Project site since the 2012 surveys, Mitigation Measure BIO-7 requires subsequent USFWS desert tortoise protocol surveys be conducted in 2013 to confirm no signs of current activity are noted prior to installing an exclusionary desert tortoise fence. In addition, potential impacts would be reduced to a less than significant level through



Mitigation Measures requiring the implementation of a Worker Environmental Awareness Program (BIO-2), presence of a biological monitor during construction (BIO-3), installation of tortoise exclusion fencing around disturbance zones (BIO-7), and pre-construction surveys for this species (BIO-8). If any live tortoises or active sign are noted on site during any biological survey or construction activity, the Applicant is required to comply with all notification and permitting requirements, including securing State and Federal Incidental Take Permits.

Burrowing Owl: The region contains both resident and migratory burrowing owls and it is currently unclear whether this species' use of the site is year-round or seasonal. Within the Project site, approximately 65 acres of existing natural habitat would be disturbed during construction. The current site layout would preserve prime burrowing owl habitat along major drainages via a permanent conservation easement. A Focused Burrowing Owl Survey Report date June, 2012 for the Project was prepared by URS. The report identifies impacts to the Burrowing Owl that may be significant without mitigation. These potential impacts would be reduced to a less than significant level through Mitigation Measures requiring the permanent conservation of on-site lands (BIO-1), implementation of a Worker Environmental Awareness Program (BIO-2), presence of a biological monitor during construction (BIO-3), pre-construction surveys and passive relocation (BIO-9), and implementation of a CDFW-approved Burrowing Owl Management Plan (BIO-10), including the construction of artificial burrows for any displaced active burrows.

Hydrology: The IS/MND hydrological impact assessment is based on the *Agincourt Solar Site Hydrologic Analysis*, a technical study that noted that Conditions of Approval would be imposed to control erosion and other drainage issues subject to approval by the Planning Commission. Consistent with this analysis, the County Department of Public Works has identified design standards that are contained in the Conditions of Approval to ensure that the Project does not worsen current drainage problems downstream, including flooding and erosion. The County also requested and received additional hydrological analysis demonstrating that these standards are feasible. The resultant report entitled *Agincourt Solar Site Preliminary Hydrologic Analysis* (URS Corporation, March 25, 2013) identifies two design options that demonstrate that final design can achieve the performance standards. The report has been reviewed and accepted by the County Department of Public Works and is posted on the Land Use Services website.

The County therefore has determined that the Project can be designed, and shall be designed, to meet the following performance standards as Conditions of Approval:

1. The Project must be designed to accommodate a 100-year Storm Event
2. The Project shall be designed so that peak 100-year flow rates and velocities with the Project shall not exceed existing 100-year flow rates and velocities within existing drainage courses/washes at the downstream Project/property boundary.
3. The Project shall not increase 100-year water surface elevations (flow depths) upstream of the Project/property boundary.

The additional Conditions of Approval are sufficient to avoid significant hydrological effects upstream and downstream of the proposed Project.

Noise: With the exception of a few scattered residences, the proposed Project is adjacent to undeveloped and vacant land. Construction of the proposed Project may potentially create some elevated short-term construction noise and vibration impacts to existing residents in the area; however these activities would be limited to day time hours and will comply with the noise and vibration standards of the Development Code. Construction noise and vibration is exempt from 7:00 A.M. to 7:00 P.M. Monday through Saturday. (Development Code Chapter 83.01.080 and 83.01.090.)

Operation of the proposed unmanned solar facility would not generate audible levels of noise or perceptible levels of vibration in the surrounding area. Onsite noises will be limited to the fractional horse power drive motors that rotate the photovoltaic panels during the day on the single-axis tracking system and periodic maintenance activities (including panel washing, drive motor repair, tracker repair, electrical connection repair, and panel replacement).

Traffic: The proposed Project is an unmanned facility that would be visited periodically for maintenance, panel washing, and security. The low volume of operational traffic would not create significant traffic impacts to the surrounding roadway circulation system.

During construction, approximately 80 to 100 construction workers are expected to travel to the site during some months. Typically on-site work hours are expected to be between 7 AM to 3:30 PM and may not exceed 7:00 AM to 7:00 PM Monday through Saturday. This could temporarily generate from 160 to 200 trips per day during some months. This is a conservative estimate because carpooling is expected to be common and would reduce the number of worker-related trips. Truck trips will generally be spread out throughout the construction day.

Caltrans District 8 has reviewed the proposed Project traffic impacts to SR-18 and stated that it has no comments.

Water Usage: Water will be required during construction for earthwork operations, primarily related to dust control for road construction, grading, and other site work and will be trucked onsite. In addition, a minimal amount of water will be required for construction worker needs (e.g., drinking water, sanitation facilities). Bottled water and portable sanitation units will be used during construction.



## **ENVIRONMENTAL REVIEW:**

An Initial Study (IS) was prepared for the Project pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the California Environmental Quality Act (CEQA) Guidelines. A Notice of Intent to Adopt a Mitigated Negative Declaration was prepared for the Project and was submitted to the State CEQA Clearinghouse on December 26, 2012. A 30-day CEQA public comment period ended on January 25, 2013.

Summary of Comments: The Mojave Desert Air Quality Management District (MDAQMD) commented that its staff had reviewed the IS and concurs with “Less than significant” and “No impact” findings for air quality issues. The MDAQMD also finds that mitigation measures AQ-1 through AQ-3 represent feasible mitigation. With regard to comments from the Native American Heritage Commission (NAHC), the Applicant requested and the NAHC subsequently conducted a Sacred Files record search with negative results and, coupled with a California Historical Resources Information System records search and literature review by consulting firm URS Corporation, indicate that the Project is not expected to impact significant cultural resources, which is consistent with the IS/MND. Comments were also received from Adams Broadwell Joseph & Cardozo, a legal firm representing an unincorporated association of labor unions and individuals described as the San Bernardino County Citizens for Responsible Solar and the California Unions for Reliable Energy (CURE) and separate comments were also received from several local residents. The most substantial of these comments included concerns about drainage, including the potential for downstream erosion and flooding, and potential impacts to biological resources, including creosote rings.

Responses to Comments: Staff has reviewed the comments and feels that concerns raised in the comment letters have been adequately addressed in the IS and supporting documentation, and two documents posted on the Land Use Services website including (1) a refined hydrological analysis that includes performance standards that must be achieved during final design and (2) analysis of the potential for the proposed Project to contain creosote rings. In addition, the website includes a new mitigation measure AQ-4 to further reduce less than significant air quality impacts, and this mitigation measure will further buttress the conclusions of the the MDAQMD.

As to the comments of the NAHC, and as a precautionary measure, the IS/MND states that a condition shall be added to the Project which requires the developer to contact the County Museum for determination of appropriate measures to be taken if any cultural resources are encountered during project construction. This requirement has been added to the Conditions of Approval (Exhibit C).

In response to the comments of members of the public and the attorneys for CURE, the County required the Applicant to provide (1) a refined hydrological analysis that includes performance standards that must be met during final design to ensure the Project does not contribute to local drainage problems, (2) analysis of the potential for the project to affect

creosote rings, and (3) an additional Condition of Approval to address dust control measures that would be taken during project operation (measure AQ-4).

In conclusion, the Initial Study concludes that the proposed use with mitigation measures and other Conditions of Approval will not have a significant effect on the environment and a Mitigated Negative Declaration is recommended for adoption.

**SUMMARY:**

The proposed Project will assist in meeting the renewable resource targets for retail sellers of electricity in California and it is consistent with the State's GHG emissions goals, policies and standards. In addition, the proposed Project is consistent with County goals and policies regarding renewable energy. Therefore, Planning Staff recommends approval of the Project.

**RECOMENDATION:** That the Planning Commission:

- 1) **ADOPT** the Mitigated Negative Declaration and find that the Initial Study has been completed in compliance with CEQA, that it has been reviewed and considered prior to approving the Project and that the Initial Study/Mitigated Negative Declaration reflects the independent judgment of San Bernardino County;
- 2) **APPROVE** a Conditional Use Permit to establish a 10-MW PV solar energy generation facility on an approximately 80-acre site subject to the attached conditions of approval;
- 3) **ADOPT** the Findings for approval of the Conditional Use Permit; and
- 4) **FILE** a Notice of Determination.

**ATTACHMENTS:**

**Exhibit A: Findings**  
**Exhibit B: Conditions of Approval**  
**Exhibit C: Initial Study**  
**Exhibit D: Correspondence**



## **EXHIBIT A**

### **FINDINGS**

**THIS PAGE INTENTIONALLY LEFT BLANK**



**FINDINGS: Conditional Use Permit to establish a 10-megawatt photovoltaic solar electric power generating facility on 80 acres**

1. The site for the proposed use is adequate in terms of shape and size to accommodate the proposed use and all setbacks and other required features pertaining to the application. The 80-acre site is sufficiently large to accommodate the 25-foot wide perimeter road inside the 6-foot high perimeter fence, which is set back a minimum of 15-feet from the property lines, and to allow additional access to the rows of solar arrays that constitute the project. The project has been designed to minimize impacts to the existing drainage features without affecting downstream properties. The site is able to accommodate the proposed solar panels and all ancillary facilities associated with the project with proper setbacks and access.
2. 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 site abuts Camp Rock Road which serves as the main point of access to the site. Additionally, the conditions of project approval require match-up paving on Camp Rock Road, adjacent to the site. These requirements provide legal and physical access to the site. In addition, the 25-foot wide perimeter road will allow internal access for emergency vehicles. The fences and gates, one for primary access and the other for emergency access, are a minimum of 15 feet inside the property lines so that incoming vehicles will be able to park at the gate, outside of the right-of-way.
3. The proposed use will not have a substantial adverse effect on abutting properties or the allowed use of the abutting properties, which means that the use as designed and conditioned will not generate excessive noise, traffic, vibration, lighting, glare, or other disturbance that would affect adjacent properties. The design of the solar arrays is required to operate within the standards of the County Development Code relating to noise, lighting, and the general performance standards including those for glare and vibration. A temporary increase in traffic will occur during construction however impacts will not be substantial. The project will generate minimal traffic once constructed and the use will not substantially interfere with the present or future ability to use solar energy systems, as this project is a solar energy project.
4. 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, as this projects specifically supports the following General Plan Goals/Policies:
  - *Conservation Element Policy CO 4.12*, which states that the County shall promote siting or use of renewable energy sources; and
  - *Conservation Element Goal CO 8*, which aims to minimize energy consumption and promote safe energy extraction, uses and systems to benefit local regional and global environmental goals. Specifically, Policy CO 8.3, states that the

County will 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.

5. There is supporting infrastructure, existing or available, consistent with the intensity of the development to accommodate the proposed solar power facility without significantly lowering service levels. Camp Rock Road provides for the transportation needs of this project. Southern California Edison currently has sufficient transmission capability in close proximity to the site to provide a convenient upload to the regional power grid. An existing 33kV line exists along the eastern property line following the alignment of Camp Rock Road.
6. The lawful conditions stated in the approval are deemed reasonable and necessary to protect the overall public health, safety and general welfare, because adequate onsite setbacks, security fencing, and access for emergency equipment have been required.
7. The design of the site has considered the potential for the use of solar energy systems and passive or natural heating and cooling opportunities, as the project is a photovoltaic solar energy generating facility.
8. There is no substantial evidence that the project will have a significant effect on the environment, as determined and justified in the Initial Study for the project, which has been completed in compliance with the California Environmental Quality Act. The Mitigated Negative Declaration reflects the County's independent judgment.



## **EXHIBIT B**

### **CONDITIONS OF APPROVAL**

**THIS PAGE INTENTIONALLY LEFT BLANK**

---

## CONDITIONS OF APPROVAL

---

### GENERAL REQUIREMENTS

Conditions of Operation and Procedure

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

#### LAND USE SERVICES – Planning Division (909) 387-8311

1. Project Approval Description. 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 10-megawatt (MW) solar power generation facility on 80 acres. The arrays of PV panels will be mounted on fixed tilt or single-axis tracking systems and will have an approximate maximum height of 12 feet.

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: 0449-641-04, 0449-641-27 and Project Number: P201200011.

2. Project Location. The project site is in an unincorporated area of the County of San Bernardino (County) on the west side of Camp Rock Road and the south side of Rosewood. The project site is in the Lucerne Valley Community Plan in the Third Supervisorial District.
3. Zoning Standards. The project site is located in the Desert Region within the Lucerne Valley Community Plan/Rural Living - 5 acre minimum parcel size(LV/RL-5) and the Lucerne Valley Community Plan/Agriculture (LV/AG) Land Use Zoning Districts. RL Development Standards are listed in SBCC section 82.03.060 and AG Development Standards are listed in SBCC section 82.03.050. The following standards apply to the project:
  - Solar energy generating equipment and their mounting structures and devices shall be set back from the property lines either pursuant to the standards in the Land Use Zoning District, or 130 percent of maximum height of the mounted structure, whichever is greater.
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. 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, elevations, signs, parking allocation, lighting, allowable number of occupants, (clients and/or employees); 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)
  6. 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 property owner or developer to comply with any or all of the conditions at any time may result in a public hearing and possible revocation of the approved land use, provided adequate notice, time, and opportunity is provided to the property owner, developer, or other interested party to correct the non-complying situation.
  7. Developer Defined. The term “developer” as used in these conditions of approval for this project and for any development of this project site, includes all of the following: the applicant, the property owner, and any lessee, tenant or sub-tenant, operator and/or any other agent or other interested party of the subject project and/or project site and/or any heir or any other successor in interest in the project site or project land use by sale or by lease of all or of a portion of the project site or project land uses and/or any other right given to conduct any land use in any or all of the project structures or any area on the project site.
  8. Indemnification. In compliance with SBCC §81.01.070, the developer shall agree to defend, indemnify, and hold harmless the County or its “indemnities” (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.

9. Development Impact Fees. Additional fees may be required prior to issuance of development permits. Fees shall be paid as specified in adopted fee ordinances.
10. Project Account. The Job Costing System (JCS) account number is P201200011. This is an actual cost project with a deposit account to which hourly charges are assessed by various county agency staff (e.g. Land Use Services, Public Works, and County Counsel). Upon notice, the developer shall deposit additional funds to maintain or return the account to a positive balance. The developer is responsible for all expenses charged to this account. Processing of the project shall cease, if it is determined that the account has a negative balance and that an additional deposit has not been made in a timely manner. A minimum balance of \$1,000.00 shall be in the project account at the time of project approval and the initiation of the Condition Compliance Review. Sufficient funds shall remain in the account to cover all estimated charges that may be made during each compliance review. All fees required for processing shall be paid in full prior to final inspection, occupancy, and/or operation of each approved use in each approved structure or land use activity area. There shall be sufficient funds (\$500.00 minimum) remaining in the account to properly fund file closure and any other required post-occupancy compliance review and inspection requirements (e.g. landscape performance).
11. Expiration/CUP. 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.

12. Extension of Time/CUP. 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)
13. 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.
14. 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: U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service
- 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 – Planning / Building and Safety / Code Enforcement, County Fire, Environmental Health Services, and Public Works
- d) LOCAL: N/A

15. 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 in accordance with the provisions described in Condition #114 (“Operational Dust Control Plan”).
- 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 subsequently 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.

16. 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.
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.
19. Cultural Resources. If archaeological, paleontological and/or historical resources are uncovered during ground disturbing activities, all work in that area shall cease immediately until written clearance by County Planning is provided indicating that satisfactory mitigation has been implemented. A qualified expert (e.g. archaeologist or paleontologist), as determined by County Planning in consultation with the County Museum shall be hired to record the find and recommend any further mitigation. The "Developer" shall implement any such additional mitigation to the satisfaction of County Planning and the County Museum. If human remains are uncovered during ground disturbing activities, the San Bernardino County Coroner shall be contacted within 24 hours of the find. If the remains or cultural artifacts are determined to be of Native American origin, the local Native American representative shall also be notified.
20. AQ/Construction and 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)] and the California Air Resources Board's In-Use-Off-Road Diesel Vehicle Regulations, including but not limited to:
- a) Equipment/vehicles shall not be left idling for period 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 (State law)
  - 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) In addition, all on-road diesel trucks shall not idle more than five minutes per truck trip or per day on the project site (State law).

---

**h) All transportation refrigeration units (TRU's) shall be provided electric connections.**

---

21. Noise. The following noise attenuation measures shall be implemented:
- Exterior construction activities shall be limited between 7 a.m. and 7 p.m. There shall be no exterior construction activities on Sundays or National Holidays.
  - Muffling of construction equipment shall be per manufacturer's specifications.
  - All stationary construction and operations equipment shall be placed in a manner so that emitted noise is directed away from sensitive receptors nearest the project site.

LAND USE SERVICES – Code Enforcement (909) 387-8311

22. 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.
23. 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).

LAND USE SERVICES – Building and Safety (909) 387-8311

24. Walls. Submit plans and obtain separate building permits for any required walls, retaining walls, or trash enclosures.

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

25. Water. If the developer makes any changes to the proposed Project operation that would require the site to obtain water and/or sanitary facilities other than as described in the CUP application and subsequent CEQA analysis, the project will have to be revised and conditioned by the DEHS.

SAN BERNARDINO COUNTY FIRE – (760) 995-8190

26. Jurisdiction. The above referenced project is under the jurisdiction of the San Bernardino County Fire Protection District, 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.
27. 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.

---

---

**PUBLIC WORKS – Land Development – Drainage (909) 387-8145**

28. Infrequent Flood Hazards. The site may be subject to infrequent flood hazards by reasons of overflow, erosion and debris deposition in the event of a major storm.
29. FEMA Flood Zone. The project is located within Flood Zone D according to FEMA Panel Number 6600 H dated 08/28/2008. Flood hazards are undetermined in this area, but possible.
30. Tributary Drainage. Adequate provisions should be made to manage the tributary off-site/on-site drainage flows around and through the site in a manner that will not adversely affect adjacent or downstream properties.
31. Natural Drainage. The natural drainage courses traversing the site shall not be occupied or obstructed without an approved Streambed Alteration Agreement from California Department of Fish and Wildlife.
32. Additional Drainage Requirements. In addition to drainage requirements stated herein, other on-site and/or off-site improvements may be required that 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.
33. Continuous BMP Maintenance. The property owner/developer is required to provide periodic and continuous maintenance of all Best Management Practices (BMP) devices/facilities listed in the County approved Water Quality Management Plan (WQMP) for the project. This includes but is not limited to, filter material replacement and sediment removal, as required to assure peak performance of all BMPs. Furthermore, such maintenance activity will require compliance with all Local, State or Federal laws and regulations, including those pertaining to confined space and waste disposal methods in effect at the time such maintenance occurs.
34. BMP Enforcement. In the event the property owner/developer (including any successors or assigns) fails to accomplish the necessary BMP maintenance within five days of being given written notice by County Public Works, then the County shall cause any required maintenance to be done. The entire cost and expense of the required maintenance shall be charged to the property owner and/or developer, including administrative costs, attorney's fees, and interest thereon at the rate authorized by the County Code from the date of the original notice to the date the expense is paid in full.

---

---

**PUBLIC WORKS – Land Development – Roads (909) 387-8145**

35. Road Standards. All required street improvements shall comply with the latest San Bernardino County Road Planning and Design Standards and the San Bernardino County Standard Plans.

---

**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 (909) 387-8311

36. Stormwater. Prior to issuance of a grading permit, a San Bernardino County Stormwater Management Plan is required.
37. Runoff. Applicant must hold all runoff to pre-development levels per Section 82.13.080 of the San Bernardino County Development Code.
38. 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.
39. Grading Plans. If grading exceeds fifty (50) cubic yards, approved plans are required to be submitted to and approved by Building Safety.
40. Stormwater Pollution Prevention Plan (SWPPP). A Stormwater Pollution Prevention Plan shall be submitted to Building and Safety for review and approval prior to land disturbance or issuance of any permit.
41. NPDES Permit. A National Pollutant Discharge Elimination System (NPDES) permit – Notice of Intent (NOI) is required on all grading of one acre or more prior to issuance of a grading/construction permit. Contact the Regional Water Quality Control Board (RWQCB), Lahontan Region, for specifics.
42. RWQCB Permit. Prior to permit issuance, 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 acre of land total.
43. Soils Reports. When earthwork quantities exceed 5,000 cubic yards, a new/updated geotechnical (soil) report shall be submitted to the Building and Safety Division for review and approval.
44. Geology Reports. When earthwork quantities exceed 5,000 cubic yards, a new/updated geotechnical (soil) report shall be submitted to the Building and Safety Division for review and approval.



---

---

**LAND USE SERVICES – Planning (909) 387-8311**

---

---

45. Landscape Buffers. Wherever practicable, the developer shall leave in place existing native landscaping buffers between the solar panel field and the adjacent properties. The developer shall provide verification of compliance to County Planning, which must include the certificate of completion from the certified arborist. The verification may include photographs of the landscape buffers.
46. Lot Merger. *A Lot Merger application to merge APNs 0449-172-75 and 0449-631-02 into one parcel shall be filed and accepted by the Planning Division. The lot merger shall be approved and recorded prior to issuance of building permits.*
47. AQ/Dust Control Plan - Construction. 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.
48. Worker Environmental Awareness Program. Prior to any construction activities on the project site, the Applicant will implement a Worker Environmental Awareness Program (WEAP) to educate on-site workers about sensitive environmental issues associated with the Project. The program will be administered to all on-site personnel, including the Applicant's personnel, contractors, and all subcontractors, on the first day of work prior to the employee's commencing work on the site. The WEAP will place special emphasis on the protected species that have potential to occur within the Marathon site, including the Mojave Desert tortoise, burrowing owl, nesting birds, and desert kit fox, among other plant and wildlife species.
- The program will include the following elements:
- A presentation, developed by or in consultation with a qualified biologist, discussing the sensitive biological resources with potential to occur on-site, and explaining the reasons for protecting these resources and penalties for non-compliance;
  - Brochures or booklets, containing written descriptions and photographs of protected species as well as a list of site rules pertaining to biological resources, to be provided to all WEAP participants;
  - Contact information for the project biological monitor, and instructions to contact the monitor with any questions regarding the WEAP presentation or booklets;
  - An acknowledgement form, to be signed by each worker indicating that they received WEAP training and will abide by the site rules protecting biological resources; and,
  - Conspicuous stickers, identifying the project and signifying WEAP completion, to be distributed immediately following WEAP training and required on personnel hard hats.

---

The project Applicant will be responsible for ensuring that all on-site personnel, throughout the duration of project construction, receive WEAP training. A training log, to be signed by all on-site personnel immediately following WEAP training, will be maintained on the project site during construction to document compliance with this measure.

49. **Biological Monitor.** Prior to issuance of a grading permit, a qualified biologist shall be retained by the Applicant as the biological monitor subject to the approval of the County of San Bernardino. The biological monitor shall be present at all times during vegetation clearing or ground disturbance, and shall ensure that impacts to biological resources are avoided or minimized to the fullest extent possible. When construction activities have progressed to the point where biological resources are no longer present, as determined by the biological monitor, biological monitoring in the area may be reduced or discontinued with approval from the County of San Bernardino. The biological monitor shall have the authority to stop specific grading or construction activities if violations of mitigation measures or any local, state, or federal laws are suspected.
50. **Parish's Daisy Surveys and Compensation.** Prior to vegetation clearing or ground disturbance within the Marathon site, the Applicant will retain a qualified biologist to conduct a survey for Parish's daisy (*Erigeron parishii*) within the disturbance footprint. The survey shall be timed to coincide with the blooming period of this species, and shall occur between May 1 and August 31 or as determined by a qualified biologist based on observations in the region.

If Parish's daisy is observed within the disturbance footprint, the aerial extent of the occurrence will be mapped and quantified, by outlining a convex polygon around the occurrences and considering the density of Parish's daisy individuals within the polygon. An equivalent acreage will be seeded with this species within the on-site preservation areas described in Mitigation Measure BIO-1 during the fall season.

During the blooming period following seeding, the Applicant shall retain a qualified biologist to inspect the seeded area and verify that the seeds have germinated and that Parish's daisy plants are alive. If no Parish's daisy plants are observed, or if the biologist determines the plants to be in abnormally low density or poor health, a supplemental seeding application shall be performed during the next appropriate season, as determined by the biologist.

51. **Joshua Tree Translocation Plan.** Prior to issuance of a grading permit for the project, the Applicant shall submit a Joshua Tree Translocation Plan prepared by a qualified plant ecologist to the County of San Bernardino for review and approval. The plan shall ensure compliance with the San

---

**Bernardino County Development Code and the Conservation Element of the San Bernardino County General Plan, and shall specify the best nursery practices pursuant to which Joshua trees proposed for removal shall be transplanted or stockpiled for future transplanting wherever possible. Best nursery practices include avoidance of excessive damage to root material. The plan shall specify the locations of all Joshua trees within the project site, shall identify all trees that can be transplanted, and shall identify any trees that would require removal or transplantation. All trees on the on-site areas to be set aside shall be preserved. On-site preservation will be achieved via dedication of a Conservation Easement to the CDFG or a qualified third party, as required by Mitigation Measure BIO-1.**

52. **Burrowing Owl Management Plan.** Prior to issuance of a grading permit, a habitat management plan for the burrowing owl shall be developed. The plan shall include provisions for protecting foraging habitat and replacing any active burrows from which owls may be passively evicted as allowed by Mitigation Measure BIO-9, and shall also include management or enhancement practices intended to maintain burrowing owl habitat suitability within the on-site mitigation lands preserved through Mitigation Measure BIO-1. At a minimum, the plan shall include the following elements:
- If occupied burrows are to be removed, the plan shall contain schematic diagrams of artificial burrow designs and a map of potential artificial burrow locations that would compensate for the burrows removed.
  - All active on-site burrows excavated as described in Mitigation Measure BIO-9 shall be replaced with suitable natural or artificial burrows within the on-site preservation areas, at a target ratio of 1:1.
  - Provisions for vegetation management in the on-site mitigation lands (see Mitigation Measure BIO-1), specifying the maximum allowable vegetative cover adjacent to established artificial burrows and the methodology to be used in maintaining the appropriate cover.
  - Measures prohibiting the use of rodenticides.
  - The plan shall ensure that adequate suitable burrowing owl foraging habitat is provided in proximity to natural or artificial burrows within the on-site mitigation lands. Foraging habitat shall not be located in areas shaded by the proposed solar arrays, and shall not be subject to vegetation mowing or other fuel management practices. Foraging areas shall be located adjacent to suitable natural or artificial burrow locations.

The Burrowing Owl Management Plan shall be submitted to the County of San Bernardino and CDFW for review and approval prior to issuance of a grading permit for the Project.

53. **Pre-Construction Nesting Bird Surveys and Avoidance.** Within 30 days prior to vegetation clearing or ground disturbance associated with construction or grading that would occur during the nesting/breeding season (February

---

through August, unless determined otherwise by a qualified biologist based on observations in the region), the Applicant shall retain a qualified biologist to determine if active nests of species protected by the Migratory Bird Treaty Act or the California Fish and Game Code, as well as California Department of Fish and Wildlife-designated Species of Special Concern, are present within or adjacent to the disturbance zone or within 100 feet (300 feet for raptors) of the disturbance zone. The surveys shall be conducted no more than seven days prior to initiation of disturbance work. If ground disturbance activities are delayed, then additional pre-disturbance surveys shall be conducted such that no more than seven days will have elapsed between the survey and ground disturbance activities.

If active nests are found, clearing and construction within 300 feet of the nest (or a lesser distance if approved by the USFWS) shall be postponed or halted, until the nest is vacated and juveniles have fledged, as determined by the biologist. Avoidance buffers shall be established in the field with highly visible construction fencing or flagging, and construction personnel shall be instructed on the sensitivity of nest areas. A qualified biologist shall serve as a construction monitor during those periods when construction activities will occur near active nests to ensure that no inadvertent impacts on these nests occur.

The results of pre-construction nesting bird surveys, including graphics showing the locations of any nests detected, and documentation of any avoidance measures taken, shall be submitted to the County of San Bernardino and CDFG within 14 days of completion of the pre-construction surveys or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.

54. **Pre-Construction Desert Kit Fox Surveys and Passive Relocation.** To avoid unauthorized take of the desert kit fox, the project Applicant shall retain a qualified biologist to conduct preconstruction surveys for this species within 14 days prior to ground disturbance. The survey shall be conducted by walking parallel transects spaced no more than 20 meters apart, and shall be focused on detecting any desert kit fox individuals or dens within the disturbance footprint. If dens are detected, each den shall be classified as inactive, potentially active, or definitely active based on field observations. If necessary, motion-sensitive cameras or a tracking medium shall be used to determine whether a den is active.

Inactive dens in areas that would be impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by desert kit fox. Active and potentially active dens in areas that would be impacted by construction activities shall be monitored by a qualified biologist for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance. If no tracks are



---

observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand to prevent reuse. If tracks are observed, the den shall be classified as active. Outside the desert kit fox pupping season (January 15 through July 31, unless determined otherwise by a qualified biologist based on observations in the region), the den may be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for the next three to five nights to discourage the kit fox from continuing to use the den. After verification that the den is unoccupied, it shall then be excavated and backfilled by hand to prevent reuse, while ensuring that no kit fox are trapped in the den. No excavation of active desert kit fox dens shall be permitted during the pupping season.

The Applicant shall submit a report to the County of San Bernardino and CDFG within 30 days of completion of preconstruction desert kit fox surveys describing the survey methods, results, and details of any dens backfilled or foxes observed.

55. **Pre-Construction Burrowing Owl Surveys and Passive Relocation.** Within 14 days prior to ground disturbance, the Applicant shall retain a qualified biologist to conduct burrowing owl surveys within the area to be disturbed. The survey shall be performed by walking parallel transects spaced no more than 20 meters apart, and shall be focused on detecting burrows that are occupied, or are suitable for occupation, by the burrowing owl. The results of the surveys, including graphics showing the locations of any active burrows detected and any avoidance measures required, shall be submitted to the County of San Bernardino and CDFG within 14 days following completion of the surveys. Applicant shall notify the County regarding the disposition of any onsite Burrowing Owls prior to grading. If active burrows are detected, the following take avoidance measures shall be implemented:
- If burrowing owls are observed using burrows on-site during the non-breeding season (September through January, unless determined otherwise by a qualified biologist based on field observations in the region), occupied burrows shall be left undisturbed, and no construction activity shall take place within 300 feet of the burrow where feasible (see below).
  - If disturbance of owls and owl burrows on-site is infeasible, owls shall be excluded from all active burrows through the use of exclusion devices placed in occupied burrows in accordance with California Burrowing Owl Consortium (1993) protocols. Specifically, exclusion devices, utilizing one-way doors, shall be installed in the entrance of all active burrows. The devices shall be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows shall then be excavated by hand and refilled to prevent reoccupation. Exclusion shall continue until the owls have been successfully excluded from the disturbance area, as determined by a qualified biologist.

- 
- **Any active burrowing owl burrows detected on-site during the breeding season (February through August, unless determined otherwise by a qualified biologist based on field observations in the region), shall not be disturbed. Construction activities shall not be conducted within 300 feet of an active on-site burrow at this season.**

56. **Pre-Construction Mojave Desert Tortoise Surveys and Avoidance.** Within 14 days prior to construction-related ground clearing and/or grading, the Applicant shall retain a qualified biologist to conduct surveys for signs of occupancy by the Mojave desert tortoise. Surveys shall cover the entire area proposed for disturbance, shall be conducted by walking parallel transects spaced no more than 10 meters apart, and shall focus on detecting any live tortoises or their sign, including carcasses, burrows, palates, tracks, and scat. Should any sign indicating the presence of Mojave desert tortoise be detected, the Applicant shall not proceed with ground clearing and/or grading activities in the area of the find, and shall instead contact the USFWS and CDFG to develop an avoidance strategy and/or seek authorization for incidental take of Mojave desert tortoise.

The results of the pre-construction surveys, including graphics showing the locations of any tortoise sign detected, and documentation of any avoidance measures taken, shall be submitted to the USFWS, CDFG, and the County of San Bernardino within 14 days of completion of the pre-construction surveys or construction monitoring to document compliance with applicable federal and state laws pertaining to the protection of Mojave desert tortoise.

57. **Mojave Desert Tortoise Exclusion Fencing.** During the months of April, May, September, or October prior to initiation of construction activities, the Applicant will retain a qualified biologist to conduct Mojave desert tortoise surveys in accordance with the most recent USFWS survey protocol for this species. If Mojave desert tortoises or their recent sign are detected, the Applicant shall not initiate construction, and shall instead contact the USFWS and CDFG to develop an avoidance strategy and/or seek authorization for incidental take of Mojave desert tortoise.

If survey results are negative, the Applicant shall erect a tortoise exclusion fence surrounding all portions of the Marathon site that are proposed for solar development or other ground disturbance. The exclusion fence shall be installed in accordance with the specifications set forth in Chapter 8 of the USFWS' *Desert Tortoise Field Manual* (USFWS 2009), and installation of the fence shall be overseen by a biologist familiar with the installation of tortoise exclusion fencing. Following installation of the tortoise exclusion fence, the Applicant shall retain a qualified biologist to conduct a second, full-coverage pedestrian survey of all areas encompassed by the exclusion fence. If Mojave desert tortoises or their recent sign are detected, the Applicant shall immediately remove portions of the exclusion fence to

---

prevent entrapment of tortoises, and shall contact the USFWS and CDFG to develop an avoidance strategy and/or seek authorization for incidental take of Mojave desert tortoise. If no tortoises or their sign are detected during the second survey, construction activities may commence.

During site construction, the tortoise exclusion fences will be inspected on a monthly basis for any signs of damage or wear that could potentially compromise the integrity of the exclusion perimeter. If damage or excessive wear is observed, the exclusion fence will be repaired immediately. Results of the monthly fence inspections will be maintained on-site during construction to document compliance with this provision.

58. **Cactus Salvage Plan.** Prior to issuance of a grading permit, the Applicant shall submit a Cactus Salvage Plan to the County of San Bernardino and the CDFW for approval. The Cactus Salvage Plan shall contain the following elements:

- A spatial inventory of all native cacti within the project site, including species and locations;
- A quantitative assessment of the numbers of each cactus species to be removed by the project; and,
- Proposed measures to retain as many cacti as is practical on the project site, and a spatial and quantitative description indicating the species and locations of cacti to be preserved.

59. **Streambed Alteration Agreement.** Prior to undertaking any activity that would divert, fill, obstruct, or substantially alter any of the on-site streambeds described in the Biological Resources Assessment Report for the project (URS June 2012), the project Applicant will enter into a Streambed Alteration Agreement with the CDFW authorizing the proposed activity as required by Section 1602 of the California Fish and Game Code. The project Applicant will ensure that all project personnel comply with all stated terms and conditions of the Agreement, including any seasonal or weather-related restrictions on work activities within the streambeds, construction site housekeeping practices, or other limitations the CDFW may impose.

Project-related impacts to CDFW-jurisdictional desert washes would be mitigated at a minimum ratio of 1:1, including through preservation within the on-site preservation areas identified in Mitigation Measure BIO-1. The preserved area encompasses the largest and best-developed wash system on the Project site, ensuring that the quality of drainages preserved exceeds that of the drainages to be impacted. Because the acreage of jurisdictional washes to be permanently preserved and managed exceeds the acreage that would be affected by the project, and because the washes to be preserved are of greater biological value due to their larger size and habitat

---

**complexity, it is likely that additional compensatory mitigation will not be required by the Streambed Alteration Agreement.**

---

PUBLIC WORKS – Surveyor (909) 387-8149

60. ROS. A Record of Survey per Section 8762 of the Business and Professions Code is required. The Site Plan indicates bearings and distances around the subject property, which are not of record and appear to be based upon a field survey. The Record of Survey will facilitate the construction staking for the proposed chain link fence.
61. 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).

PUBLIC WORKS – Land Development – Drainage (909) 387-8145

62. Drainage Facility Design. A Registered Civil Engineer shall investigate and design adequate drainage facilities to intercept and conduct the off-site and on-site drainage flows around and through the site in a manner that will not adversely affect adjacent or downstream properties. The Preliminary Hydrology Study received 3/26/2012 is acceptable. The applicant shall submit a Drainage Study addressing corrections on the Preliminary study for review and obtain approval. The Land Development Division will collect a \$520 deposit for drainage review upon submittal. The final design shall meet the following performance standards:
- The Project shall be designed to accommodate a 100-year storm event.
  - The Project post-development peak 100-year flow rates and velocities shall not exceed pre-development 100-year flow rates and velocities within the existing drainage courses/washes at the downstream project/property boundary.
  - The Project shall not increase 100-year water surface elevations (flow depths) upstream of the project/property boundary.
63. Drainage Easements. Applicant shall provide adequate San Bernardino County Drainage Easements (width and location to be determined in consultation with the Department of Public Works during its review and approval of the final Drainage Facility Design) over the natural drainage courses that will be permanently preserved.

- 
64. FEMA Flood Zone. The project is located within Flood Zone D according to FEMA Panel Number 6600 H dated 08/28/2008. Flood hazards are undetermined in this area, but possible. The requirements may change based on the recommendations of a drainage study accepted by the Land Development Division and the most current Flood Map prior to issuance of grading permit.
  65. Topo Map. A topographic map shall be provided to facilitate the design and review of necessary drainage facilities.
  66. LDD/Grading Plans. Applicant shall submit grading plans to the Land Development Division, Drainage Section for review and approval. The Land Development Division will collect a \$520 deposit for grading review upon submittal.
  67. Natural Drainage. The natural drainage courses traversing the site shall not be occupied or obstructed without consultation with California Department of Fish and Wildlife.
  68. SAA. California Department of Fish and Wildlife must be notified if the drainage course of any streambed on this property is to be altered or encroached. A streambed alteration agreement shall be provided to Department of Public Works prior to grading permit.
  69. WQMP. A completed Water Quality Management Plan (WQMP) shall be submitted for review and approval obtained. The Land Development Division will collect a \$2500 deposit for WQMP review upon submittal. Copies of the WQMP guidance and template can be found at:  
[http://www.sbcounty.gov/dpw/land/environmental\\_mgmt.asp](http://www.sbcounty.gov/dpw/land/environmental_mgmt.asp)
  70. WQMP Inspection Fee. The developer shall deposit an inspection fee for WQMP in the amount of \$3,600 to Land Development Division if a category project is established.

PUBLIC WORKS / Land Development Division – Roads (909) 387-8145

71. Maintenance Agreement. The developer shall enter into a maintenance agreement with the Department of Public Works, Transportation Operations Division to insure all County maintained roads utilized by construction traffic shall remain in acceptable condition during construction.

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

72. C&D Plan – Part 1. The developer shall prepare, submit, and obtain approval from Solid Waste Management Division (SWMD) of a “Construction Waste Management Recycling Plan (C&D Plan), Part I”. The C&D Plan 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 C&D Plan 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.

SAN BERNARDINO COUNTY FIRE – (760) 995-8190

73. Access Requirements. The applicant shall submit emergency/evacuation road access plans to the Fire Department for review and approval. [F09]
74. Access. The development shall have a minimum of ONE (1) points of vehicular access. These are for fire/emergency equipment access and for evacuation routes. Standard 902.2.1

Single Story Road Access Width: All buildings shall have access provided by approved roads, alleys and private drives with a minimum twenty six (26) foot unobstructed width and vertically to fourteen (14) feet six (6) inches in height. Other recognized standards may be more restrictive by requiring wider access provisions.

Multi-Story Road Access Width: Buildings three (3) stories in height or more shall have a minimum access of thirty (30) feet unobstructed width and vertically to fourteen (14) feet six (6) inches in height. [F41]

---

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

---

**PUBLIC WORKS – Land Development – Roads (909) 387-8145**

75. Road Dedication/Improvement. The developer shall submit for review and obtain approval from the County Public Works of the following dedications, plans and permits for the listed required improvements, designed by a Registered Civil Engineer (RCE), licensed in the State of California. These shall be submitted to the Department of Public Works (DPW), located at 825 E. Third Street, San Bernardino CA 92415-0835. Phone: (909) 387-8145.
- Camp Rock Road (Major Highway – 104')
    - Road Dedication. A 2 foot grant of easement is required to provide a half-width right-of-way of 52 feet.
    - Street Improvements. Design A.C. dike with match up paving 40 feet from centerline.
    - Driveway Approach. Design driveway approach per San Bernardino County Standard 129A, and located per Standard 130.
  - APN 0449-641-27
    - Road Dedication. A 30 foot grant of easement is required to provide a half-width right-of-way of 30 along the south property line.
    - Curb Return Dedication. A 35 foot radius return grant of easement is required at the intersection of Camp Rock Road & South Property Line.
  - APN 0449-641-04
    - Road Dedication. A 44 foot grant of easement is required to provide a half-width right-of-way of 44 along the north and east property lines. East property line dedication shall extend from the north property line of 0449-641-04 to the north property line of 0449-641-27.
    - Road Dedication. A 30 foot grant of easement is required to provide a half-width right-of-way of 30 along the west and south property lines.
    - Curb Return Dedication. A 20 foot radius return grant of easement is required at the intersection of West & South Property Lines.
    - Curb Return Dedication. A 35 foot radius return grant of easement is required at the intersections of the North Property Line with the East and West Property Lines.
76. Road Design. Road sections within and/or bordering the project site shall be designed and constructed 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 Master Plan of Highways.
77. Street Improvement Plans. The developer shall submit for review and obtain approval of street improvement plans prior to construction.

- 
78. Utilities. 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.
  79. Encroachment Permits. Prior to installation of road and drainage improvements, a permit is required from County Public Works, Transportation Operations Division, Permit Section, (909) 387-8039, as well as other agencies prior to work within their jurisdiction.
  80. 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.
  81. 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.
  82. 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.
  83. 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 (909) 387-8311

84. Erosion Control Devices. Prior to issuance of building permits, erosion control devices must be installed at all perimeter openings and slopes. No sediment is to leave the job site.
85. Erosion Control Devices Installed. All erosion control planting, landscaping and devices shall be installed upon completion of rough grading.
86. Site Drainage/Runoff. All runoff must be held to pre-development levels [SBCC §82.13.080].
87. Soils Reports. When earthwork quantities exceed 5,000 cubic yards, a new/updated geotechnical (soil) report shall be submitted to the Building and Safety Division for review and approval.

- 
88. Geology Reports. When earthwork quantities exceed 5,000 cubic yards, a new/updated geotechnical (soil) report shall be submitted to the Building and Safety Division for review and approval.
  89. Building Plans. Any building, sign, or structure to be constructed or located on site will require professionally prepared plans approved by the Building and Safety Division. Submit plans and obtain permits for foundation and hold-down design for all equipment and shelters or storage structures.
  90. Fence/Wall Plans. Submit plans and obtain permits for all fences greater than six feet in height and for any walls required by the Planning Division.
  91. Building Plans. No less than three (3) complete sets of Building Plans shall be submitted to the Fire Department for review and approval. [F42]
  92. Access - 150+ feet. Roadways exceeding one hundred fifty (150) feet in length shall be approved by the Fire Department. These shall be extended to within one hundred fifty (150) feet of and shall give reasonable access to all portions of the exterior walls of the first story of any building. Standard 902.2.1 [F45]
  93. 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. Standard 901.4.4 [F72]

#### LAND USE SERVICES – Planning (909) 387-8311

94. 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 Plan shall satisfy the following requirements:
  - a) Closure Plan. Following the operational life of the project, the project owner shall perform site closure activities to meet federal, state, and local requirements for the rehabilitation and re-vegetation of the project Site after decommissioning. The applicant shall prepare a Closure, Re-vegetation, and Rehabilitation Plan and submit to the Planning Division for review and approval prior to building permit issuance. Under this plan, all aboveground structures and facilities shall be removed to a depth of three feet below grade, and removed off-site for recycling or disposal. Concrete, piping, and other materials existing below three feet in depth may be left in place. Areas that had been graded shall be restored to original contours unless it can be shown that there is a community benefit for the grading to remain as altered. Succulent plant species native to the area shall be salvaged prior to construction, transplanted into windrows, and maintained for later transplanting following decommissioning. Shrubs and other plant species

---

shall be re-vegetated by the collection of seeds and re-seeding following decommissioning.

- b) Closure Compliance. Following the operational life of the project, the developer shall perform site closure activities in accordance with the approved closure plan to meet federal, state, and local requirements for the rehabilitation and re-vegetation of the project site after decommissioning. Project decommissioning shall be performed in accordance with all other plans, permits, and mitigation measures that would assure the project conforms to applicable requirements and would avoid significant adverse impacts. These plans shall include the following as applicable:
- Water Quality Management Plan
  - Erosion and Sediment Control Plan
  - Drainage Report
  - Notice of Intent and Stormwater Pollution Prevention Plan
  - Air Quality Permits
  - Biological Resources Report
  - Incidental Take Permit, Section 2081 of the Fish and Game Code
  - Cultural Records Report
- c) Abandoned Site. If the solar field is not operational for twelve consecutive months, it shall be deemed abandoned. The solar field shall be removed within 60 days from the date a written notice of the declaration of abandonment by the County is sent to the developer. Within this 60-day period, the developer may provide the Land Use Services Director with a written request to modify this condition at a public hearing before the Planning Commission requesting an extension of time for an additional twelve months. In no case shall the Planning Commission authorize an extension of time beyond two years from the date the solar field was deemed abandoned without requiring financial assurances to guarantee the removal of the solar field, and that portion of the support structure lying above the natural grade level, in the form of a corporate surety bond, irrevocable letter of credit, or an irrevocable certificate of deposit wherein the County is named as the sole beneficiary. In no case shall a solar field, which has been deemed abandoned, be permitted to remain in place for more than 48 months from the date the solar field was first deemed abandoned.
- d) Environmental Site Assessment. 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

95. Commercial Addressing. Commercial and industrial developments of 100,000 sq. ft. or less shall have the street address installed on the building with numbers that are a minimum six (6) inches in height and with a three quarter (3/4) inch stroke. The street address shall be visible from the street. During the hours of darkness, the numbers shall be electrically illuminated (internal or external). Where the building is two hundred (200) feet or more from the roadway, additional non-illuminated contrasting six (6) inch numbers shall be displayed at the property access entrances. Standard 901.4.4 [F82]
96. Key Box. An approved Fire Department key box is required. The key box shall be provided with a tamper switch and shall be monitored by a Fire Department approved central monitoring service. In commercial, industrial and multi-family complexes, all swing gates shall have an approved fire department Knox Lock. Standard 902.4 [F85]
97. Fire Extinguishers. Hand portable fire extinguishers are required. The location, type, and cabinet design shall be approved by the Fire Department. [F88]
98. 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. [F94]
99. Street Sign. Prior to final inspection and occupancy of the first structure, the permanent street sign shall be installed. Standard 901.4.4 [F72]

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

100. Emergency/Contingency Plan. Prior to occupancy, the operator shall submit a Business Emergency/Contingency Plan for emergency release or threatened release of hazardous materials and wastes or a letter of exemption. For information, contact the Office of the Fire Marshall, Hazardous Materials Division at (909) 386-8401.
101. 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**

102. C&D Plan – Part 2. The developer shall complete SWMD's C&D Plan 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 C&D Plan – 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.

This summary shall provide documentation of diversion of materials including but not limited to receipts or letters documenting material types and weights from diversion facilities or certification reuse of materials on site.

**PUBLIC WORKS – Land Development – Drainage (909) 387-8145**

103. Drainage and WQMP Improvements. All required drainage and WQMP improvements shall be completed by the applicant, then inspected and approved by County Public Works.
104. WQMP Final File. An electronic file of the final and approved WQMP shall be submitted to Land Development Division, Drainage Section.

**PUBLIC WORKS – Land Development – Roads (909) 387-8145**

105. Road Improvements. The applicant shall complete all required on-site and off-site improvements. County Public Works shall inspect and approve.
106. 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.
107. Maintenance Compliance. The developer shall comply with the maintenance agreement during construction if applicable and/or assure that all County maintained roads affected by the project during construction shall be restored to pre-construction condition. Please contact the County Department of Public Works, Transportation Operations Division at (909) 387-7995 for inspection prior to occupancy.

**LAND USE SERVICES – Building and Safety (909) 387-8311**

108. Final Occupancy. Prior to occupancy, all Planning Division requirements and sign-offs shall be completed.

---

---

**LAND USE SERVICES – Planning (909) 387-8311**

109. 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.
110. 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 ensure that the solar facility complies with the Performance Measure described below during its operational life.

The Applicant shall implement Dust Control Strategies, as appropriate, sufficient to ensure that areas within the project sites that have been disturbed via construction of the solar facility ("Post-Construction Conditions") or are disturbed as a result of ongoing operation and maintenance activities 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. Preserved conservation areas are not subject to this measure. 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.

111. Install On-site Improvements. All required on-site improvements shall be installed.
112. Fees Paid. Prior to final inspection by Building and Safety Division and/or issuance of a Certificate of Conditional Use by the Planning Division, the applicant shall pay in full all fees required under actual cost job number P201200011.

**END OF CONDITIONS**

## **EXHIBIT C**

### **INITIAL STUDY**

**THIS PAGE INTENTIONALLY LEFT BLANK**

SAN BERNARDINO COUNTY

INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA Guidelines.

**PROJECT LABEL:**

<b>APN:</b>	0449-641-27 and -04
<b>APPLICANT:</b>	AGINCOURT SOLAR, LLC
<b>COMMUNITY:</b>	LUCERNE VALLEY/ THIRD SUPERVISORIAL DISTRICT
<b>LOCATION:</b>	WEST OF CAMP ROCK ROAD NORTHEAST OF STATE ROUTE (SR 18) AND SOUTH OF ROSEWOOD STREET AND NEVADA STREET
<b>PROJECT NO:</b>	P201200011/CUP
<b>STAFF:</b>	NELSON MILLER
<b>REP('S):</b>	ELLIOT MACDOUGALL
<b>PROPOSAL:</b>	A CONDITIONAL USE PERMIT TO BUILD AND OPERATE A 10 MEGAWATT UTILITY SCALE PHOTOVOLTAIC FACILITY ON APPROXIMATELY 65 ACRES OF THE 79.9-ACRE SITE.

**USGS Quad:** Cougar Buttes  
**T, R, Section:** T4N R1E Sec.34 NE/4 of NW/4, & S/2 of N/2 of NE/4

**Thomas Bros.:** page 4572Grid: A-1

**Planning Area:** Lucerne Valley Community Plan  
**Land Use:** LV/RL-5 and LV/AG  
**Zoning:**  
**Overlays:** AR4 (Airport Safety Review Area 4)  
FS2 (Fire Safety Area 2)  
Bio Res (Biological Resources)

**PROJECT CONTACT INFORMATION:**

**Lead agency:** County of San Bernardino  
Land Use Services Department  
385 N. Arrowhead Avenue  
San Bernardino, CA 92415-0182

**Contact person:** Nelson Miller, Contract Planner  
**Phone No:** (760) 995-8153 Fax No: (760-995-8170  
**E-mail:** Nelson.miller@lus.sbcounty.gov

**Project Sponsor:** WDG Capital Partners, LP, Elliott MacDougall  
PO Box 31159  
Santa Barbara CA 93103

## **PROJECT DESCRIPTION:**

The Agincourt Solar Project "Solar Project" is being developed by Agincourt Solar, LLC. (Applicant) to provide solar photovoltaic (PV) power to serve the electrical load requirements of California. The Project will generate approximately 10 megawatts (MW) alternating current (AC) photovoltaic (PV) modules on approximately 65 acres of the 79.9-acre site. The proposed Project will connect with an existing Southern California Edison (SCE) 33-kilovolt (kV) transmission line in an existing corridor that runs along Camp Rock Road. No new offsite transmission line is proposed. The electricity produced by the Solar Project will be marketed to power buyers through a long-term power purchase agreement.

The Project is designed to have a useful life of 20 to 30 years, although the life span could be extended by upgrades and refurbishments. In the event that the Solar Project is decommissioned, the facility would be removed and the site prepared for subsequent land use.

## **Project Location and Legal Description**

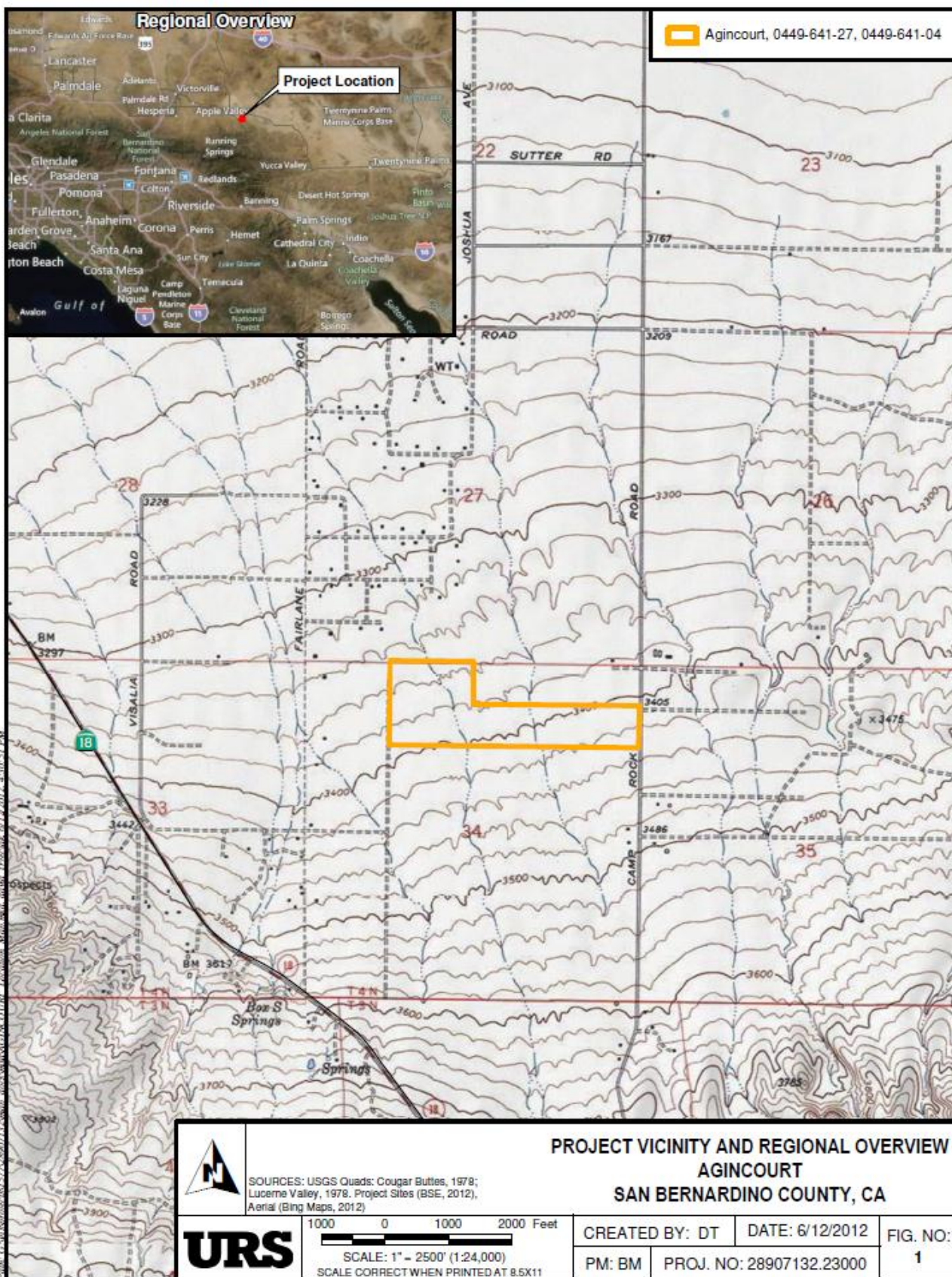
The proposed Project site is situated in the western Mojave Desert, in the southern Lucerne Valley region of San Bernardino County. The site is about 5.5 miles southeast of the Lucerne Valley community. The primary access point to the Project site is from Camp Rock Road, which runs along the eastern boundary of the site. Camp Rock Road intersects State Route 18 (SR 18) approximately 1.7 miles south of the proposed Project site, see Figure 1, Location Map.

The project site includes the following Assessor Parcel Numbers (APNs):

- 0449-641-04 (40.3 acres, NE/4 of NW/4, Section 34, Township 4N, Range 1E)
- 0449-641-27 (39.7 acres, S/2 of N/2 of NE/4, Section 34, Township 4N, Range 1E, excepting County 50-foot road easement)



Figure 1 Location Map



## **Project Layout and Construction**

The proposed 79-acre solar power generation facility would be comprised of the following major components: non-reflective PV solar module arrays mounted on fixed-tilt or single-axis trackers and a racking system supported by embedded piers. The site would also include approximately 10 inverters on small concrete pads, a switching station in an enclosure measuring approximately 200 by 200 feet, an unmanned communications enclosure measuring approximately 20 by 30 feet, a Conex box for equipment storage, and buried collector lines. Concrete pads would be sized and installed to accommodate associated equipment (inverters and switchgear). The top-of-concrete elevation would be approximately 6 inches above-grade-level locally to maintain flow away from the foundation.

The site plan and typical elevation are provided in Figures 2 and 3. The layout of the solar panels would be aligned in rows in the north-south direction throughout the site. Each solar panel would be attached to embedded piers using a support structure. The rows of solar panels would be separated by access ways. Internal site circulation would include a 25-foot-wide perimeter gravel road. Maintenance roads with access to the solar panels would be improved (minimally graded, dirt or gravel). An AC/DC collection system would be installed along internal access roads to collect power from the rows of modules and deliver it to the project substation. This collection system would likely be installed in a subsurface trench, though due to shallow bedrock in some areas part or all of the collection system may be housed in an above-grade raceway suspended on stakes. Collection trenches would likely be mechanically excavated, though in some cases targeted shallow trench blasting may be required as a construction technique due to near-surface bedrock. If explosives are to be used, the applicant will be required to obtain all necessary permits and approvals through the San Bernardino County Fire Department's Hazardous Materials Division (HMD). Upon completion of the proposed Project, vegetation or dust palliatives or other best management practices would be used if needed to control wind and water erosion during operations.

The design of the proposed project site will avoid three major washes that cross the site, and Joshua trees within such washes. All other areas will have vegetation removed and be graded as needed to install project components. Minor washes will be filled in and associated flows re-directed to the larger washes through perimeter swales. Grading cuts and fills are expected to balance on site.

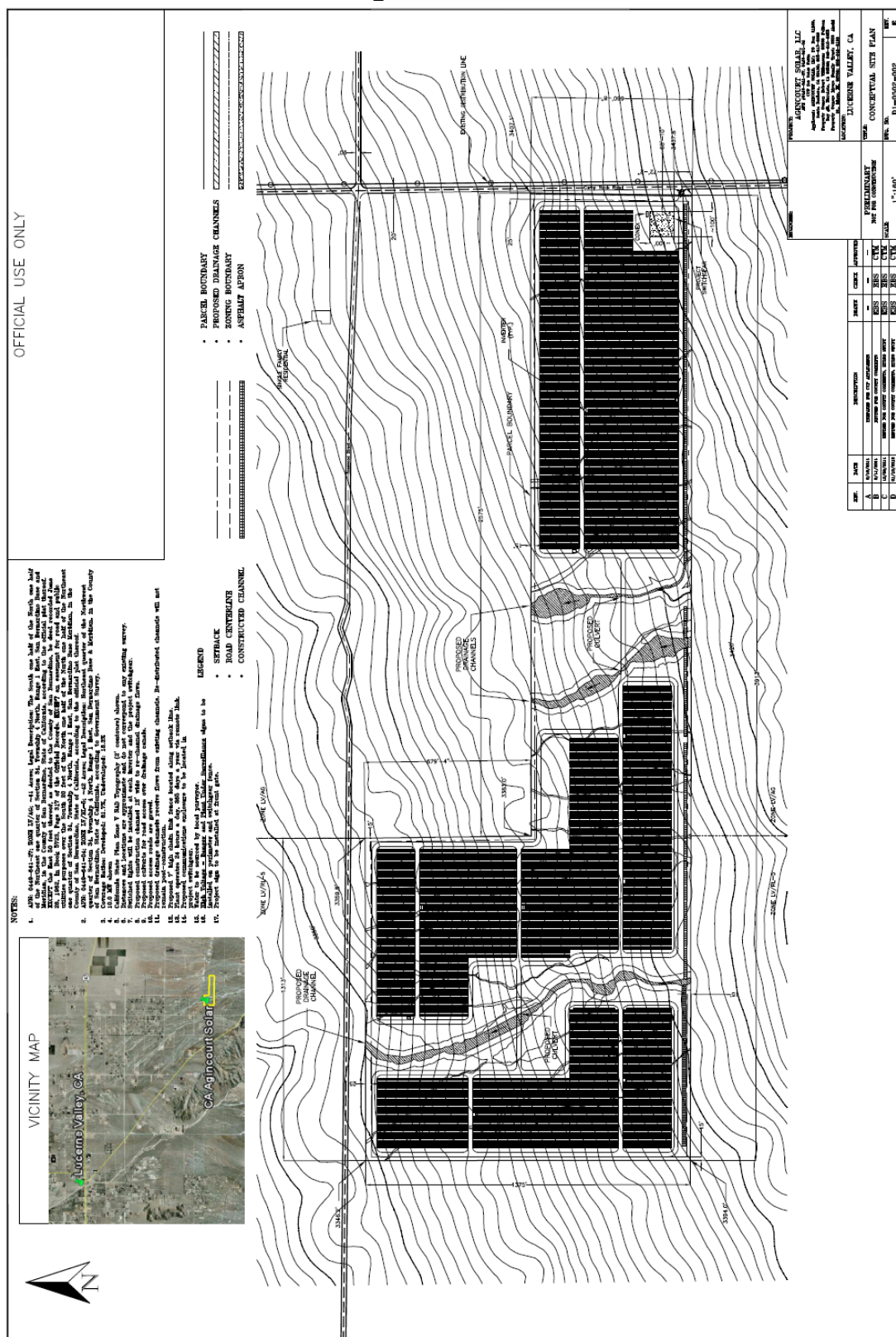
No off-site improvements are anticipated with the exception of the development of site access points. Typical site access will be 25 feet wide, accommodating 75-foot turning radii in both directions. The proposed site access will include a 75-foot-long drive apron and a roadway section paved with asphalt.

A six foot high chain link security fence topped with one foot of barbed wire will be installed at the property setback. Signs will be installed to achieve the appropriate safety and security as expected in a solar power plant. Proposed signage includes high voltage danger signs, site under surveillance, caution electric shock, etc. Any signs as required by the National Electrical Code will be installed.

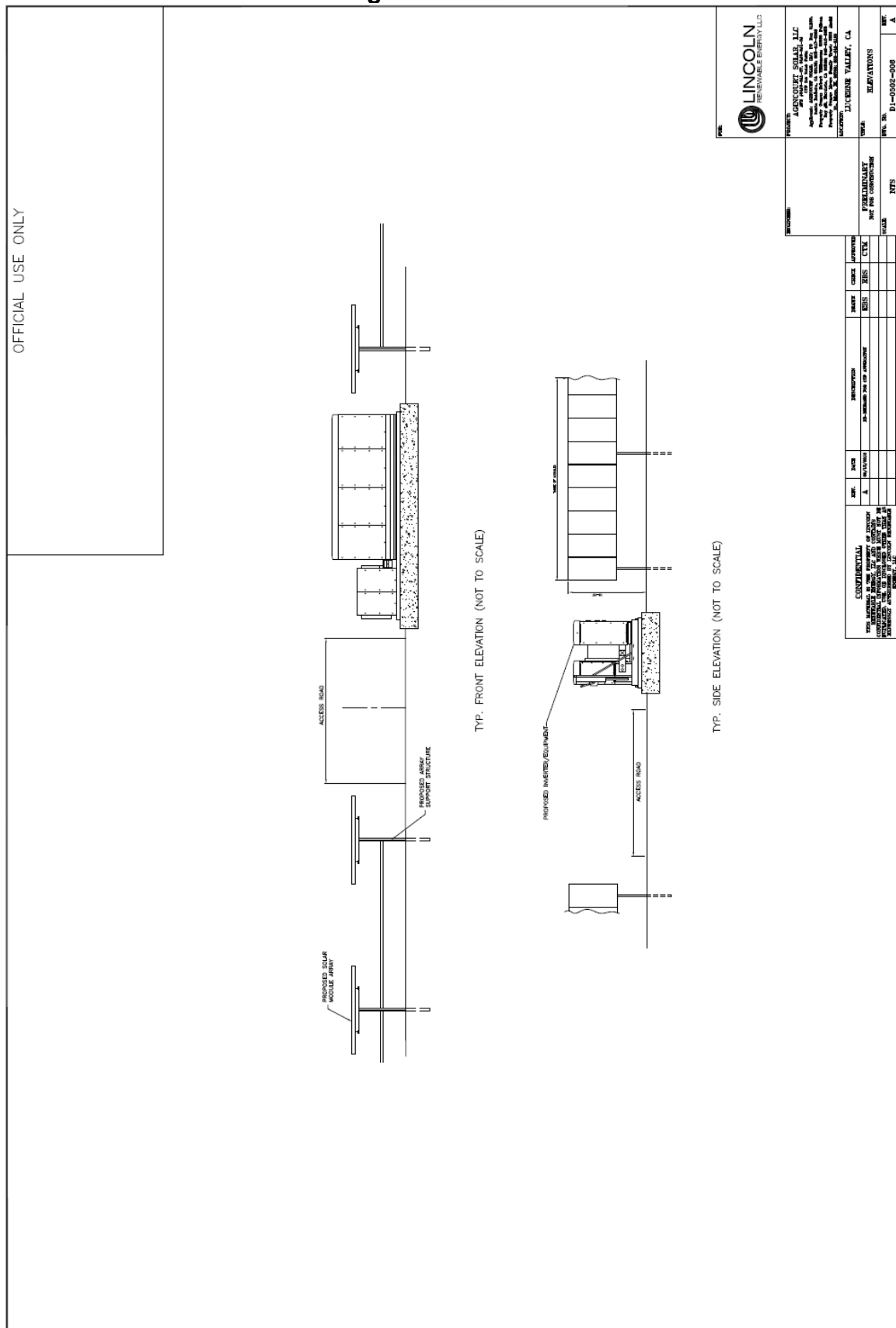
The Project's lighting system will provide operation and maintenance personnel with illumination for both normal and emergency conditions. Lighting will be designed to provide the minimum illumination needed to achieve safety and security objectives. Lighting will be directed downward and shielded to focus illumination on the desired areas only to avoid light spillage on adjacent properties. Project lighting will be located at each inverter station and switchyard. Lighting will be no brighter than



### Figure 2 Site Plan



### Figure 3 Elevations



required to meet safety and security requirements, and the lamp fixtures and lumens will be selected accordingly. All project lighting will be switched and without timers.

### **Support Pedestal Drainage and Erosion Design**

The solar panels would drain freely to the ground. They would be almost parallel to the ground with a slight sloping orientation. In general, rain would run off the lower edge of the PV panel. The edge of the panel would be approximately 24 inches above the ground, and the runoff would be approximately 25 gallons in a 10-year storm (5-minute – 10-year rain event per 200 square feet of panels). This volume of water is expected to run off the panels over a 5-minute period. Based on the volume of water falling from each panel, the height of the fall, and the soil conditions, it is not expected that erosion beyond a micro level will occur. Water will fall from the PV panels and pond at a drip point before infiltrating or gradually migrating into the existing drainage patterns. If, over time, minor erosion was noted at the drip points, small gravel pads could be added to help dissipate the energy of the falling water. If minor erosion were noted near the foundations, minor grading could restore support for the individual foundations, and keep surface flows from undermining the foundations in future storm events.

### **Increase in Imperviousness Due to Construction**

Increase in impervious area of the site due to the construction of the project embedded piers, is estimated to be minimal, approximately 11 percent assuming the AC collection system is installed in subsurface trenches. If 100 percent of the collection is installed in above-grade raceways, the impervious area would increase by approximately 2 percent, to a maximum impervious cover of approximately 13 percent.

### **Site Drainage**

A flood map search (FEMA 2011) for Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panel ID numbers 06071C6575H and 06071C6600H confirms the proposed Project site area has not been mapped by FEMA for flood zone hazards, and is therefore classified as an “Undetermined Risk Area.” The County of San Bernardino also has no flood zone hazard mapping for this area.

Typical of arid regions, the area experiences short-duration, high-intensity rainfall storm events producing potentially high rates of runoff when the initial infiltration rates are exceeded. During these periods the small, incised washes become conduits for water flow.

The soil in the watershed is predominantly Soil Group D. This soil type is characterized as having high runoff potential due to very slow infiltration rates when thoroughly wetted. Construction could affect some of the ephemeral drainages onsite but it is expected that drainage conditions present at the site, which have been formed by past storm events, would continue to convey storm flows following project construction.

Based on visual observations during a site visit and the type of facility proposed, it is expected that the proposed solar panel construction would not significantly change offsite runoff characteristics during a major storm event. Because the imperviousness of the site would not be greatly changed as a result of the construction, the impact of increased rainfall runoff due to construction would be

negligible. As noted above, the site design indicates that project construction would result in a minor (i.e., maximum of 13 percent) increase in impervious surfaces at the site.

The site topography can be characterized as uniform in surface profile, with a slight slope in a northwesterly direction. Based on field observations, the site is characterized by naturally developed riverine channels that direct rainfall runoff through the site. Some of the existing drainage flow paths would be filled during the development of the site based on the final layout of the solar panels and the project's Conceptual Drainage Plan would redirect their existing flows to other existing drainages onsite. With incorporation of the Conceptual Drainage Plan, the proposed Project is not expected to significantly affect offsite flow patterns.

### **Project Construction, Grading and Schedule**

Construction of the proposed Project is estimated to require approximately 80-100 workers at its peak. Construction is estimated to start in 2013 and would take approximately nine months to complete. A total of approximately 40 acre-feet of water would be used during construction for dust suppression and ancillary construction activities. Dust suppression during construction may also involve application of palliatives.

The development of the Project would require site grading, with limited impact to existing offsite drainage patterns and overall topography of the site. Minor cuts may be required at the locations of inverters and other equipment to provide level foundations. The fill from these cuts will be placed around the pre-cast foundation in order to divert small, localized flows away from the foundation and prevent undermining of the same.

Where grading is required, cut-and-fills are expected be balanced onsite, resulting in little or no import or export of earthen material. A total of approximately 150,000 cubic yards of cut-and-fill may be balanced onsite. Final drainage design will be completed following a detailed topographic site survey overlaid with proposed site development grading.

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

Best management practices (BMPs) for erosion control would be used to avoid and minimize impacts on the environment during construction, operations and maintenance. For example, gravel pads or other track-out reduction measures at project construction site access points may be used to minimize dirt and mud deposits on public roads, as required to meet stormwater quality regulations and vegetation or dust palliatives may be used if needed to control wind and water erosion during operations. A Water Quality Management Plan that includes a Stormwater Pollution Prevention Plan and an Erosion and Sediment Control Plan would be prepared and implemented to avoid and minimize impacts on water quality during construction and operations. A Joshua Tree Translocation Plan would be prepared as required by the County's Development Code.



---

## **Project Operations**

The facility will be unmanned. Several part-time employees would visit the site periodically (e.g., monthly or bi-monthly) and several times a year the employees or a contractor would visit the site to wash the PV panels. Panel washing would require approximately 2 acre-feet of water per year and, based on an assumed use of medium-sized water tankers, would require approximately 130 truckloads (260 truck trips) for delivery of this water. Water would be purchased from a local purveyor. Candidate water purveyors include: Mojave Water Agency, Club View Partners, Hi-Grade Materials Company, Jubilee Mutual Water Company, Lucerne Valley Partners, M.B. Landscaping & Nursery, Inc., Mitsubishi Cement Company, or Wilshire Road Partners.

## **ENVIRONMENTAL/EXISTING SITE CONDITIONS:**

### **Environmental Setting and Surrounding Uses**

The Mojave Desert is a subsection of the Basin and Range Physiographic Province, which is characterized by long, north-south-trending mountain ranges separated by broad valleys. The site is located on a broad gently sloping bajada of alluvial material originating from the San Bernardino Mountains to the south. Elevation of the project site ranges from approximately 3,340 feet above sea level (asl) at its northwest corner up to 3,446 asl at its southeast corner. The topography is generally flat, with a slope of about four percent towards the north-northwest. Numerous small braided channels cross the site. The primary vegetation onsite is creosote bush-white burr sage scrub.

The Project site is bordered to the north by vacant land and Rosewood Street. Land to the north of Rosewood Street is subdivided into five acre lots, but only a few of these have been developed with residences. To the west, the land is also subdivided with lot sizes ranging from 2.5 to 10 acres. Most of these lots are vacant, and about one dozen homes are located within one-half mile of the northern and western project boundaries. Immediately south of the project site are two large vacant lots. In general terms, land to the south and east is in larger lots with a lower density of development. About one dozen homes are located within one mile of the project to the south and east.

### **Existing Land Uses**

The project site is currently vacant, see Figure 4 Site Photos Below. The western portion of the site (parcel 04) is zoned LV/RL-5 (Rural Living – 5 acre parcel minimum). The RL land use zoning district provides sites for rural residential uses, incidental agricultural uses, and similar and compatible uses. The easterly portion of the site is zoned LV/AG (Agriculture), which has a minimum 10-acre lot size and is intended for commercial agricultural operations, agriculture support services, rural residential uses and similar and compatible uses. Under County Code Chapters 82.03 and 82.04 (Land Use Tables), electrical power generation is categorized as a transportation, communications and infrastructure use, and is allowed in the AG and RL-5 zones upon approval of a Conditional Use Permit (CUP).

**Figure 4 Site Photos**

Facing southwest toward the project site from Camp Rock Road.



Facing northwest toward the project site along Camp Rock Road.



Facing south from along Rosewood Street the project site's northern boundary.



Facing north from southern project boundary.



AREA	EXISTING LAND USE	OFFICIAL LAND USE DISTRICT
SITE	Vacant	Lucerne Valley Community Plan LV/RL-5 and LV/AG
North	Vacant	Lucerne Valley Community Plan LV/RL-5 and LV/AG
South	Vacant	Lucerne Valley Community Plan LV/RL-5 and LV/AG
East	Vacant	Lucerne Valley Community Plan LV/AG
West	Vacant	Lucerne Valley Community Plan LV/RL-5

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

Federal: Federal Aviation Administration (FAA)

State of California: Department of Fish and Game

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

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

---

## **EVALUATION FORMAT**

This initial study is prepared in compliance with the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21000, et seq. and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an Initial Study is guided by Section 15063 of the State CEQA Guidelines. This format of the study is presented as follows. The project is evaluated based upon its effect on seventeen (17) major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study Checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

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

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

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

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

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

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

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

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



Signature: prepared by Nelson Miller, Contract Planner

12/18/12

December 18, 2012

Signature: Supervising Planner  
Planning Division

December 18, 2012

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
<b>I. AESTHETICS</b> - Would the project				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

- a) **Less than Significant Impact.** No designated scenic vistas are located within visible distance of the Project.

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

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

The project site is zoned Rural Living (RL-5) and LV/AG and relatively flat. The proposed Project site has views of low-lying foothills in the background (see Figure 4). The solar equipment on site would consist of PV modules mounted on fixed-tilt foundations or tracker units and associated electrical equipment will maintain a low profile. The project will also include access roads and a six-foot chain link perimeter fence topped by a one-foot section of barbed wire. None of the proposed equipment would have a substantial adverse effect on any scenic vista. The project site will be visible for several minutes from motorists traveling along SR-18, a County-designated Scenic Road, and along Camp Rock Road. The proposed Project's visual impact assessment (URS June 2012) selected two Key Observation Points (KOPs) for analysis in consultation with the County. A comparison of existing conditions (Figures 5 and 6) with simulations from the KOPs (Figures 7 and 8)

---

indicate the proposed Project would not have a substantial adverse effect on scenic vistas. Any cumulative impacts would be less than significant. The following discussion of Item b), below, provides additional details.

- b) **Less than Significant Impact.** The Project would not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway. SR-18 is eligible for listing as a state scenic highway; however it has not been officially listed. Therefore the Project would have no impact to scenic resources along a state scenic highway.

At the local level, SR-18 is designated as a “Scenic Road” within the San Bernardino County General Plan and a visual impact assessment report including photo simulations was prepared for the proposed Project (URS 2012). In consultation with the County, two Key Observation Points (KOPs) were selected for analysis. KOP 1 is located at the intersection of Camp Rock Road and SR-18. This KOP is representative of views to the north toward the central portion of the Lucerne Valley, and is primarily experienced by motorists traveling on SR-18 (Figure 5). KOP 2 is located on the north facing slope of Blackhawk Mountain, approximately 3.1 miles south of the Project. KOP 2 faces northwest toward the open expanse of the Lucerne Valley. This KOP is located on a USFS access road and offers unobstructed and panoramic views of the Lucerne Valley and Fry Mountains (Figure 6). From this elevated perspective, residential and commercial development in the Lucerne Valley area appears small in scale relative to the panoramic landscape. This KOP includes views of the foothills of Blackhawk Mountain, located in the immediate foreground. Results of the visual impact analysis are summarized below.

As motorists travel south on SR-18 toward Big Bear Lake, the Project is likely to be visible toward the south and east for approximately 3 miles. As such, the Project has the potential to be visible for approximately three minutes when traveling south on SR-18. However, from this portion of SR-18, motorists will be at a lower elevation compared to the Project. As motorists continue to travel south toward the Project, they will also be moving west and away from the Project boundary. The combination of elevation change in relation to movement away from the Project is likely to decrease the visibility and overall duration of view for southbound travelers. Motorists traveling southbound on SR-18 from its intersection with SR-247 will also have direct views of the Mitsubishi Mining Operation. The extensive and vast nature of the visible scar on the mountains caused by this mine could attract viewer attention compared to the brevity of views they will have toward the Project.

Motorists traveling north on SR-18 from Big Bear to Lucerne Valley will be at an elevated position relative to the Project site. Based on the field reconnaissance and viewshed analysis (URS, 2012), the Project site is not visible from the mountainous portion of SR-18. While views of the Lucerne Valley are visible from this stretch of road, the Project site itself (and much of the southern portion of the greater Lucerne Valley) was largely screened by topographical obstructions in the foreground of most views. As noted on the viewshed analysis, the Project does not become visible until motorists traveling on SR-18 reach the base of the mountain and enter the Lucerne Valley. As such, motorists traveling north will

have views of the Project for approximately two miles of the entire SR-18 corridor. This equates to a possible viewing opportunity of approximately two minutes, which is a moderate to high duration of view.

The visual contrast of the Project was rated weak from KOP-1 based on a consideration of expected views along the length of SR-18 for north and south bound motorists. The Project does not dominate the motorist viewshed nor is it likely to attract particular attention. Additionally, because motorists' overall view toward the Project would be temporary and viewed at an oblique angle when traveling north or south on SR-18, the Project would not result in adverse scenic changes to the existing visual landscape viewed from SR-18. See Figures 7 and 8 for simulations of the proposed Project and another small solar project that may be constructed nearby. Cumulative impacts would be less than considerable.

- c) **Less than Significant Impact.** The Project will not substantially degrade the existing character or quality of the site and its surroundings (see Figures 7 and 8). The visual analysis (URS June 2012) suggests the Project will have a moderate to weak change in terms of color and texture when viewed from an elevated position. However, the Contrast Rating analysis prepared from KOP 1, which represents views of the Project for the majority of viewers, suggests the Project will have very weak contrast with the existing visual environment. The simulations prepared for both KOP 1 and KOP 2 demonstrate the Project largely blends with the mosaic mixture of developed and undeveloped parcels that characterize the existing landscape (see Figures 7 and 8, respectively). Moreover, the size and scale of the Project is small relative to the expansive landscape that surrounds it. Consequently, the Project would not dominate the views experienced from the nearby San Bernardino Mountains (i.e., KOP 2, Figure 8). Recreationists in this area would have limited opportunities to view the Project as views of Lucerne Valley are obstructed by topography from most locations on the trail. Based on this analysis, the Project would have less than significant impacts on the existing visual character and quality of the site and its surroundings.

In addition to the proposed Project, Figures 7 and 8 also simulate potential visual impacts from another small solar project that may be located approximately 0.4-mile to the north. These figures demonstrate that the proposed Project in combination with the other solar project would not have cumulatively considerable visual impacts.

- d) **Less than Significant Impact.** The Project is not expected to create a substantial new source of light or glare. The facility will be unmanned and therefore nighttime lighting will be used to the extent needed to maintain safety and security objectives. Lighting fixtures will be hooded and directed downward to avoid spillage on adjacent properties. Additionally, the Project will comply with San Bernardino County Ordinance No. 84.29.040 which regulates glare, outdoor lighting, and night sky protection. All lighting associated with the proposed Project will be subject to County approval and compliance with San Bernardino County requirements. As such, the Project will have less than significant impacts in terms of lighting.



The Project is unlikely to create a substantial source of sustained glare, though it may cause glare at various times of the day and under certain lighting conditions and from distinct viewing positions. Because the Project is low in height, and largely blends with the existing vegetation and structural components of this landscape, the majority of viewers are not expected to experience increased glare as a result of the Project. Motorists traveling down SR-18 from Big Bear to the Lucerne Valley will not have direct views of the Project from this roadway. As such, the Project will have no impact on these viewers. Some sensitive viewers utilizing local trails on Blackhawk Mountain would have elevated and clear views of the Project from certain trail locations. These viewers may experience glare from the Project at certain times of the day under particular ambient lighting conditions, however, due to the small scale of the Project within the larger landscape, combined with the fact that the Project will comply with San Bernardino County Ordinance Standards 84.29.040, which states that solar energy facilities shall be designed to preclude daytime glare on any abutting residential land use zoning district, residential parcel, or public right-of-way, the proposed Project will have less than significant impacts in terms of light and glare. No cumulatively considerable impacts are expected.

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

**Figure 5 KOP 1 Existing Conditions**



**Figure 6 KOP 2 Existing Conditions**



**Figure 7 KOP 1 Proposed Project and Cumulative Conditions**





**Figure 8 KOP 2 Proposed Project and Cumulative Conditions**



Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
<b>II. AGRICULTURE AND FORESTRY RESOURCES</b> - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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"/>

---

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

- a) **No Impact.** The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use. According to the California Department of Conservation County of San Bernardino Important Farmland 2010 map, the Agincourt site is located within land mapped as Grazing Land and Other Land.
- b) **No Impact.** The proposed Project does not conflict with any agricultural zoning or Williamson Act land conservation contract. The site is vacant and is not used for agricultural uses. The current General Plan land use designation for the proposed Project area is Lucerne Valley/Rural Living five acre minimum (LV/RL-5) Assessor's Parcel Number (APN) -9 and Lucerne Valley/Agriculture (LV/AG) (APN -27), which allows development of electrical power generation facilities with a Conditional Use Permit (CUP). The proposed Project area is not under a Williamson Act contract.
- c) **No Impact.** The proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)). The proposed Project area is currently vacant land, which has never been designated as forest land or timberland. No rezoning of the project site would be required as the proposed Project is compatible with the current zoning designation, with a Conditional Use Permit (CUP).
- d) **No Impact.** The proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. The proposed Project area is currently vacant land and has never been designated as forest land or timberland.
- e) **No Impact.** The proposed Project will not involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to a non-agricultural use because the proposed site is not classified as Farmland, is not used for agricultural purposes, and no off-site improvements are proposed.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
<b>III. AIR QUALITY</b> - Where available, the significance criteria established by the applicable air quality management or air pollution control district might be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>

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

- a) **Less than Significant Impact.** The proposed Project will not conflict with or obstruct implementation of the applicable air quality plan. The project site is located within the Mojave Desert Air Basin (MDAB) and is within the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). The Air Quality Management Plan (AQMP) provides a program for obtaining attainment status for key monitored air pollution standards, based on existing and future air pollution emissions resulting from employment and residential growth projections. The AQMP is developed using input from various agencies' General Plans and other projections for population and employment growth. While the proposed Project is not identified specifically in the County of San Bernardino General Plan, it will not generate new homes or employment opportunities that will change the County's projections. Given that the proposed Project will not alter the population or employment projections considered during the development of the AQMP, and considering the minor emissions attributable to the proposed Project during operation (refer to discussion in item III(b) below), impacts associated with AQMP consistency will be less than significant. In order to limit the production of fugitive dust during implementation of the proposed Project, construction activities will be conducted in accordance with MDAQMD Rules 403 - Fugitive Dust and



---

403.2 - Fugitive Dust Control for the Mojave Desert Planning Area. This includes using water trucks to minimize the production of visible dust emissions to 20 percent opacity in areas where grading, blasting or vegetation removal occurs, within the staging areas, and on any unpaved roads utilized during project construction.

Over its lifetime, the proposed Project will not violate the regulations set forth by the MDAQMD Rule Book or CEQA. Currently the proposed Project will not utilize equipment that requires permits from the MDAQMD. Electricity generation via the use of photovoltaic systems does not generate chemical emissions that will negatively contribute to air quality. The proposed Project is designed to limit the amount of blasting and grading required for construction, which will limit fugitive dust generated during the life of the project.

- b) **Less than Significant Impact.** The proposed Project is not expected to violate any air quality standard or contribute substantially to an existing or projected air quality violation. Potential air quality impacts include construction exhaust emissions generated from construction equipment, vegetation clearing and earth movement activities (if necessary), construction workers' commute, blasting and construction material hauling for the entire construction period. These activities will involve the use of diesel- and gasoline-powered equipment that will generate emissions of criteria pollutants such as Carbon Monoxide (CO), Nitrogen Oxides (NOX), Reactive Organic Gases (ROG) or Volatile Organic Compounds (VOC), Sulfur Oxides (SOX), Particulate Matter less than 10 microns (PM<sub>10</sub>), and Particulate Matter less than 2.5 microns (PM<sub>2.5</sub>). The project construction activities also represent sources of vehicle re-entrained fugitive dust (which includes PM<sub>10</sub>), a potential concern because the proposed Project is in a non-attainment area for ozone and PM<sub>10</sub>.

Construction-related increases in emissions of fugitive dust, exhaust from construction equipment, and employee commute vehicles will be temporary and localized during construction. Estimated quantities of unmitigated construction-related criteria pollutants from the Agincourt Solar Project in the MDAQMD are presented in Table 1. These data indicate that all construction-related emissions are below MDAQMD thresholds for California Environmental Quality Act (CEQA) review. Table 1 includes both the onsite activity of off-road equipment and the on-road mobile sources making deliveries to the site during the construction phase. A portion of these deliveries will occur in the South Coast Air Basin) and under the jurisdiction of the SCAQMD. Estimated emissions in the SCAQMD are presented in Table 2 and demonstrate that mobile sources associated with the construction activities in the South Coast Air Basin are not significant.

Some blasting of shallow bedrock may be required to bury AC/DC lines to collect power from the rows of modules and deliver it to the project substation. The horizontal area that would be affected by trenching would total approximately 1.38 acres. Even if all trenches required blasting over 6 months the increase in particulate matter would be less than 0.2 tons of PM<sub>10</sub>. This amount is less than 6 percent of the total calculated PM<sub>10</sub> emissions (URS November 2012, URS December 2012, MDAQMD Emissions Inventory Guidance 2000). The proposed Project will also include dust abatement measures that will limit the generation of pollutants, including particulate matter 10 microns or less in diameter (PM<sub>10</sub>), consistent with

Rule 403.2 Fugitive Dust Control for the Mojave Desert Planning Area. This includes using water trucks to apply water and/or palliatives to minimize the production of visible dust emissions to 20 percent opacity in areas where grading, blasting or vegetation removal occurs, within the staging areas, and on any unpaved roads used during project construction. These measures will further reduce less than significant fugitive dust emissions. In the context of the project design and construction features, proposed Project construction-related air quality impacts will be negligible.

Electricity generation via the use of PV systems does not generate chemical emissions that will negatively affect air quality. Over its lifetime, the proposed Project will not violate the regulations set forth by the MDAQMD Rule Book, CEQA and Federal Conformity Guidelines. Emissions from this unmanned facility during operations will be from periodic security checks of the site, periodic site maintenance, and trucks associated with routine panel washing that would be conducted approximately 2-4 times per year. Periodic equipment maintenance will require truck visits, deliveries, and could require minor use of solvents, paints, coatings, etc.

Table 3 presents the estimated operational emissions for all mobile sources. It has been conservatively assumed that all operational emissions are generated in the MDAQMD, given there are no long distance deliveries required during the operational phase. These emissions are all below the annual thresholds of the MDAQMD.

**TABLE 1**  
**CONSTRUCTION PERIOD CRITERIA POLLUTANT EMISSIONS**  
**ALL SOURCES WITHIN MDAQMD**  
**FOR AGINCOURT SOLAR 10 MW PV PROJECT**

Criteria Pollutant	Unmitigated Construction (tons/yr)	MDAQMD Annual Threshold (tons)
Carbon Monoxide (CO)	9.24	100
Oxides of Nitrogen (NO <sub>x</sub> )	17.59	25
Volatile Organic Compounds (VOC)	2.25	25
Oxides of Sulfur (SO <sub>x</sub> )	0.02	25
Particulate Matter (PM <sub>10</sub> ) <sup>1</sup>	5.488	15
Particulate Matter (PM <sub>2.5</sub> ) <sup>1</sup>	2.25	15

Note: <sup>1</sup> Exhaust and Fugitive Dust.

**TABLE 2**  
**MOBILE SOURCE EMISSIONS FROM CONSTRUCTION ACTIVITIES**  
**IN SCAQMD PORTION OF SAN BENARDINO COUNTY**  
**FOR AGINCOURT SOLAR 10 MW PV PROJECT**

Criteria Pollutant	Unmitigated Mobile Sources (tons/yr)	Unmitigated Mobile Sources (lb/day)	SCAQMD Mass Daily Thresholds Construction (lbs/day)
Carbon Monoxide (CO)	0.28	2.73	550
Oxides of Nitrogen (NO <sub>x</sub> )	0.84	8.30	100
Volatile Organic Compounds (VOC)	0.06	0.54	75
Oxides of Sulfur (SO <sub>x</sub> )	0.00	0.00	150
Particulate Matter (PM <sub>10</sub> ) <sup>1</sup>	1.03	10.05	150

Particulate Matter (PM <sub>2.5</sub> ) <sup>1</sup>	0.05	0.49	55
--	------	------	----

Note: <sup>1</sup> Exhaust and Fugitive Dust.

**TABLE 3  
 OPERATIONAL EMISSIONS  
 FOR AGINCOURT SOLAR 10 MW PV PROJECT**

Criteria Pollutant	Operational Emissions (tons/yr)	MDAQMD Threshold (tons/yr)
Carbon Monoxide (CO)	0.11	100
Oxides of Nitrogen (NO <sub>x</sub> )	0.06	25
Volatile Organic Compounds (VOC)	0.01	25
Oxides of Sulfur (SO <sub>x</sub> )	0.00	25
Particulate Matter (PM <sub>10</sub> ) <sup>1</sup>	2.24	15
Particulate Matter (PM <sub>2.5</sub> ) <sup>1</sup>	0.23	15

Note: <sup>1</sup> Exhaust and Fugitive Dust.

- c) **Less than Significant Impact.** The proposed Project will not 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). The project will contribute criteria pollutants in the area during the short-term project construction period (see Table 1, above). None of the activities associated with the proposed Project will create a substantial permanent increase in the emissions of criteria pollutants that will be cumulatively considerable. Periodic panel washing, occasional patrolling and routine maintenance and repairs of the unmanned solar facility will have no cumulatively considerable impact on the emissions of criteria pollutants. There are no sources of potential long-term air impacts associated with the implementation of the proposed Project (see Table 2, above). Therefore, impacts will be less than significant. Moreover, the proposed solar electricity Project would reduce criteria pollutant emissions compared to emissions associated with generation of comparable amounts of electricity from fossil fuels.
- d) **Less than Significant Impact.** The proposed Project will not expose sensitive receptors to substantial pollutant concentrations. The MDAQMD defines sensitive receptors as residences, schools, daycare centers, playgrounds and medical facilities (MDAQMD 2009). Residences in the project area may be exposed to short-term construction air quality impacts associated with construction exhaust emissions generated from construction equipment, vegetation clearing, construction workers' commute, and construction material hauling during the construction period. There will be no air quality impacts from project operation: electricity generation via the use of photovoltaic systems does not generate chemical emissions that will negatively contribute to air quality. The County's general conditions and standards as well as project-specific design and construction features incorporated into the proposed

Project such as dust suppression techniques per MDAQMD's Rule 403 will reduce any potential impacts from the project.

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

**Although impacts to Air Quality are considered to be less-than-significant the following mitigation measures are required as conditions of project approval.**

**MM# Mitigation Measures**

**AQ-1 AQ/Construction and 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 period 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 (State law)
- 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) In addition, all on-road diesel trucks shall not idle more than five minutes per truck trip or per day on the project site (State law).
- h) All transportation refrigeration units (TRU's) shall be provided electric connections. [Mitigation Measure **AQ-1** - General Requirements/Planning]

**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.

**AQ-3 AQ – Installation.** The developer shall submit for review and obtain approval from County Planning 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. [Mitigation Measure **AQ-3** – Final Inspection/Planning]

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
<b>IV. BIOLOGICAL RESOURCES - Would the project:</b>				
a) Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc...) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

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

- a) **Less than Significant with Mitigation Incorporated.** As described more fully in Section 4.0 of the Project's General Biological Resources Assessment Report (URS 2012), the site is a fairly representative sample of the western Mojave Desert from a biological perspective. The creosote bush-white burr sage scrub vegetation community that comprises the site's vegetative cover supports an assemblage of common desert plants and wildlife, and one

special-status species, the burrowing owl (*Athene cunicularia*) was detected during field surveys. Other special-status species, such as the Mojave desert tortoise (*Gopherus agassizii*) and desert kit fox (*Vulpes macrotis arsipus*), have potential to occur on-site considering the site's habitat characteristics and distribution of the species in the region, but were not observed on-site during biological surveys. Common wildlife species that currently utilize the Project site could be impacted by construction and operation of the proposed Project. Generally speaking, impacts could potentially include injury or mortality during construction, and long-term habitat loss due to the conversion from native habitats to a developed condition. These sorts of impacts would potentially affect all wildlife species occupying the site, including common, sensitive, and special-status species.

Existing plants within proposed disturbance zones would be eliminated during grading or site preparation activities, as these species are immobile. No sensitive or special-status plants were observed during biological surveys of the Agincourt site; however, Parish's daisy (*Erigeron parishii*), a federally-listed threatened species, could potentially be present because biological surveys were conducted outside the blooming period of this plant. Additionally, several species of native cacti and yucca, including numerous Joshua trees, were detected within the Agincourt site. Although these plants maintain no formal sensitivity designations, they are protected by the California Desert Native Plants Act and the San Bernardino County Development Code. Impacts to these species are addressed under criterion e) below.

For the wildlife that inhabit the site, ground disturbance would have the potential to cause injury and/or mortality of individuals. The extent to which species would be impacted would be dependent on several factors, including the species' mobility and the extent to which the species relies on the site for life history requirements. Species of low mobility, or those that use the site during particularly vulnerable portions of the life history, such as nesting periods, would be expected to sustain greater impacts than highly mobile species or those whose use of the site is transitory. Because the project would disturb less than 80 acres on the floor of the Lucerne Valley, a relatively homogeneous desert habitat area, regionally abundant plants and wildlife species would not be substantially affected by the Project. Impacts to specific special-status species are discussed below.

**Impacts to Parish's Daisy (*Erigeron parishii*).** Parish's daisy is a perennial herb endemic to Southern California, and is federally-listed as threatened under the Endangered Species Act. Critical habitat for this species has been designated in portions of the northern foothills of the San Bernardino Mountains, including some areas within 3 miles of the Agincourt site. Parish's daisy is generally restricted to carbonate substrate, but has been observed in other areas as well. The blooming period for this species is normally May through July. Because full-coverage botanical surveys for the Agincourt project were completed in April, 2011 (see URS 2012), and due to the presence of suitable habitat for this species on-site and documented occurrences in the vicinity, there is a possibility that this species may occur within the Agincourt site. If present, this species would be impacted during grading or site preparation activities; therefore, impacts to Parish's daisy would be potentially significant, absent mitigation. The pre-construction surveys and contingency compensation

---

requirements required by Mitigation Measure BIO-4 would reduce this impact to a less than significant level.

**Impacts to the Burrowing Owl (*Athene cunicularia*).** Burrowing owls are a California Species of Special Concern, and were detected at two locations within the Agincourt site during biological field investigations. The individuals were detected during the nesting season; however, because the region contains both resident and migratory burrowing owls, it is currently unclear whether this species' use of the site is year-round or seasonal. Within the Project site, a total of approximately 63.88 acres of existing natural habitat would be disturbed during construction. Given the homogeneous nature of the Project region, this loss of habitat is not substantial. Moreover, the current site layout would preserve habitat along major drainages. However, since burrowing owls nest and roost underground, it is possible that adult and juvenile/nestling owls may be killed or injured, or eggs may be destroyed during construction-related ground disturbances. If construction occurs when nestlings are present, adult owls might have the ability to escape, but nestlings likely would not. In addition, disturbances from construction could potentially cause burrowing owls to abandon their nest burrows, leaving nestlings unattended and exposed to injury and mortality. Injury or mortality of burrowing owls during Project construction would be significant, absent mitigation. These impacts would be reduced to a less than significant level through Mitigation Measures requiring the permanent conservation of on-site lands (BIO-1), implementation of a Worker Environmental Awareness Program (BIO-2), presence of a biological monitor during construction (BIO-3), pre-construction surveys and passive relocation (BIO-9), and implementation of a Burrowing Owl Management Plan (BIO-10).

**Impacts to the Mojave Desert Tortoise (*Gopherus agassizii*).** Protocol surveys conducted in April 2012 in accordance with the USFWS (2010) survey protocol for this species (URS 2012) detected no live tortoises, burrows, scat, etc. One partial skeleton estimated at more than 4 years of age was detected during protocol surveys. The potential for project-related impacts to Mojave desert tortoises would be limited to individuals that either occupied the site but went undetected during protocol surveys or that were not present on-site during the surveys but colonized the area subsequently. Although unlikely, these impacts would be potentially significant, absent mitigation, due to the very high level of statutory protection afforded this species. These impacts would be reduced to a less than significant level through Mitigation Measures requiring the implementation of a Worker Environmental Awareness Program (BIO-2), presence of a biological monitor during construction (BIO-3), installation of tortoise exclusion fencing around disturbance zones (BIO-7), and pre-construction surveys for this species (BIO-8).

**Impacts to the Desert Kit Fox (*Vulpes macrotis arsipus*).** The desert kit fox is a small fox native to the Mojave and Sonoran deserts of California, Oregon, Nevada, Utah, Colorado, Texas, New Mexico, and Arizona, as well as parts of Mexico. While the desert kit fox is not designated by federal, state, or local agencies as a special-status species, CDFG regulations at 14 CCR 460 prohibit the take of this species. Thus, to be compliant with CDFG regulations, the project must be accomplished without hunting, shooting, catching, capturing, or killing desert kit foxes, or attempting these activities. Full-coverage biological



surveys within the Agincourt site did not detect any desert kit foxes or their sign on-site. However, the species is known to occur in the immediate vicinity of the site, including on the site of the nearby Marathon solar project. Considering these factors, and because of the high mobility of this species, there is a high likelihood that desert kit foxes may periodically occupy or move through the Agincourt site. Because the desert kit fox is not a sensitive or special-status species, project impacts to this species would be less than significant. However, the survey and passive relocation requirements specified in Mitigation Measure BIO-12 would further reduce the potential for the project to impact this species, and would ensure compliance with CDFG regulations.

- b) **Less than Significant with Mitigation Incorporated.** Vegetation on-site is dominated by shrubs with a herbaceous understory that most closely corresponds with Sawyer et al.'s (2009) creosote bush-white burr sage scrub (*Larrea tridentata*-*Ambrosia dumosa* shrubland alliance). The Project site provides habitat for a variety of plant and wildlife species that are found throughout the region. To facilitate development of the Agincourt site, existing vegetation within the development envelope would need to be removed. Taller-growing species, such as Joshua trees, inhibit installation of solar panels due to their height and would be removed deliberately during site preparation. Lower-growing species, such as grasses, forbs, and shrubs, would not be removed specifically but would be uprooted or buried during the minor grading or other site preparation activities proposed. Because development of the site would involve soil movement and compaction, and because the proposed solar panels would create shade over much of the site, it is unlikely that new growth of vegetation would occur within the solar arrays following completion of the project. Thus, vegetation losses in the development footprint are presumed to be permanent. In total, implementation of the proposed Project would result in the permanent loss of approximately 64 acres of creosote bush-white burr sage scrub vegetation. The remaining vegetation would not be disturbed during project construction, and would remain in place. Because creosote bush/white burr sage scrub is abundant and widely distributed in the Project region and is not designated as a sensitive natural community, impacts would be less than significant.

As described and illustrated in Section 4.3 of the Project's General Biological Resources Assessment Report (URS 2012), jurisdictional delineations indicate the Project site contains portions of 12 unnamed ephemeral washes that total approximately 9.15 acres in size. These small drainages do not represent federally protected wetlands under the Clean Water Act but they are regulated by the California Fish and Game Code, which specifies that a Streambed Alteration Agreement must be obtained from the CDFG prior to undertaking an activity that would divert, obstruct, or substantially alter the streambed. Implementation of the proposed Project would adversely affect approximately 5.89 acres of these ephemeral drainages through filling and other means. Flows from affected drainages would be re-directed through perimeter swales to three larger drainages that would be protected onsite. These three drainages would remain in an open and earthen state, although one would be narrowed and straightened.

Because the proposed activities would result in permanent losses of jurisdictional waters,

these impacts would be significant, absent mitigation. However, the preservation of on-site lands required by Mitigation Measure BIO-1, as well as compliance with all terms and conditions of a CDFG-issued Streambed Alteration Agreement (BIO-13) would reduce these impacts to a less than significant level.

- c) **No Impact.** As described and illustrated in Section 4.3 of the Project's General Biological Resources Assessment Report (URS 2012), jurisdictional delineations indicate the Project site contains portions of 12 unnamed ephemeral washes. Because they are not hydrologically connected to any navigable waters, the streams on-site are not subject to the permitting authority of the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act.
- d) **Less than Significant Impact.** As described in Section 4.5 of the proposed Project's General Biological Resources Assessment Report (URS 2012), the Agincourt Project site is not within an identified wildlife movement corridor, and the site's location on the floor of the Lucerne Valley makes the site suboptimal as a regional travel route. Use of the site for wildlife movement is mainly limited to short-distance, routine travel. Because of the site's limited size, and because the adjacent lands are equally permeable to travelling wildlife, development of the Project site would not result in obstruction or elimination of important wildlife movement routes.
- e) **Less than Significant with Mitigation Incorporated.** The proposed Agincourt Solar Project has been designed with consideration for the policies and ordinances of San Bernardino County, and the proposed Project is consistent with these policies and ordinances. However, in some instances, these ordinances may impose additional requirements on the Project. Section 88.01.050 of the San Bernardino County Development Code requires that where removal of Joshua trees is proposed, all trees to be removed shall be transplanted or stockpiled for future transplanting wherever possible. Development of the proposed Project would require the removal of approximately 645 Joshua trees.

As an additional protective measure, Section 88.01.050(f)(3)(C) of the San Bernardino County Development Code requires that the removal of "specimen" size Joshua trees cannot be allowed unless there is no reasonable alternative means to develop the land. Development of the proposed Agincourt Solar Project would require the removal of approximately 288 "specimen-size" Joshua trees from the site. The spatial configuration of these trees is such that developing the site while leaving the trees in place is not feasible. Specimen trees are present on-site at a density of approximately 4.5 trees per acre, and are approximately evenly distributed across the site. Because avoidance of these trees would render the site undevelopable, the proposed development meets the test set forth by the Development Code.

Absent any sort of strategy for salvaging or preserving Joshua trees during site development, the Project would potentially conflict with Sections 88.01.050 and 88.01.060 of the San Bernardino County Development Code. This conflict would represent a potentially significant impact, absent mitigation. However, development of a Joshua Tree

Translocation Plan, per mitigation measure BIO-6, would ensure consistency with the Development Code and reduce this potential impact (resulting from conflict with local policies or ordinances protecting biological resources) to a less than significant level.

The California Desert Native Plants Act is intended to prohibit the unlawful harvest of certain native desert plant species, and provides a permit process by which the harvest of these species can be authorized. Section 88.01.060(d) of the San Bernardino County Development Code requires compliance with all provisions of the California Desert Native Plants Act prior to the County's issuance of a development permit or approval of a land use application. Protected species identified on-site include five cacti (silver cholla, pencil cholla, cottontop cactus, Englemann's hedgehog cactus, and beavertail cactus), and one member of the agave family (Mojave yucca). Harvest of these species can be authorized by the County through issuance of a permit.

Development of the proposed Project would require the removal of approximately 80 percent of the on-site individuals protected by the California Desert Native Plants Act. Thus, the project would require the removal of approximately 108 silver cholla individuals, 21 pencil cholla individuals, 57 cottontop cactus individuals, 66 Englemann's hedgehog cactus individuals, 273 beavertail cactus individuals, and 349 Mojave yucca individuals, in addition to the Joshua trees noted above.

Because the proposed activities would result in removal of plants protected by the California Desert Native Plants Act and San Bernardino County Development Code, the applicant must obtain authorization from the County to remove these species. Obtaining a CUP for the project would comply with the County Development Code and the California Desert Native Plants Act. Preparation and implementation of a Cacti Salvage Plan, as required by Mitigation Measure BIO-5, would further reduce this impact

- f) **No Impact.** The Agincourt site is not enrolled in any formal Habitat Conservation Plan or Natural Community Conservation Plan. However, several conservation plans have been adopted in the region, and the Project's consistency with these plans is described below.

In 1996, the USFWS granted an Incidental Take Permit to the Cushenbury Sand and Gravel Quarry, a facility located approximately two miles south of the Agincourt site along Camp Rock Road, and the Quarry's permit application included a Habitat Conservation Plan (HCP). The Mojave desert tortoise was the only species covered by the HCP and Incidental Take Permit. Because the provisions of the Cushenbury Sand and Gravel Quarry HCP are applicable only to the quarry site, activities on the Agincourt site are not subject to these provisions. The project would not conflict with the Cushenbury Sand and Gravel Quarry HCP.

In 2006, the Bureau of Land Management (BLM) adopted the West Mojave Plan, a habitat conservation plan and federal land use plan amendment that presents a comprehensive strategy to conserve and protect sensitive biological resources within approximately 6.2 million acres in the western Mojave Desert while also providing a streamlined program for

complying with state and federal endangered species laws. Two state agencies and 15 local jurisdictions, including the County of San Bernardino, worked closely with the BLM during preparation of the West Mojave Plan. The two species of primary importance covered in the West Mojave Plan are the Mojave desert tortoise and Mohave ground squirrel. Because these species have not been detected within the Agincourt site, the Project would not pose significant conflicts with this plan. It should be noted that the BLM's approval of the West Mojave Plan has been the subject of recent litigation, and that the legal process may necessitate some deviation from the version approved in 2006. Thus, some uncertainty exists regarding the exact terms of this plan. The project will have no significant impact relative to conservation plans.

**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.**

**MM# Mitigation Measures**

**BIO-1 Avoidance and Long-Term Preservation of On-Site Lands.** Within eighteen months after the start of construction, the Applicant shall place a permanent Conservation Easement on a minimum of 15 acres within the Agincourt site. Vegetation mapping efforts within the Agincourt site have identified the on-site mitigation lands as creosote bush/white bursage scrub, a common Mojave Desert plant community. This vegetation provides suitable habitat for several species of desert plants and wildlife, including Joshua trees and native cacti, Mojave desert tortoise, burrowing owl, desert kit fox, and native birds, and the on-site mitigation lands also encompass the two largest and highest-quality desert washes within the site. A permanent Conservation Easement on the on-site mitigation land shall be offered to the CDFG or to a non-governmental conservation organization, and shall be recorded to the satisfaction of the County of San Bernardino and the CDFG. The Applicant shall establish an endowment satisfactory to CDFG for the management and preservation of the on-site mitigation lands. The proposed site management practices, and endowment shall be approved by the County of San Bernardino, after consultation with CDFG.

**BIO-2 Worker Environmental Awareness Program.** Prior to any construction activities on the project site, the Applicant will implement a Worker Environmental Awareness Program (WEAP) to educate on-site workers about sensitive environmental issues associated with the Project. The program will be administered to all on-site personnel, including the Applicant's personnel, contractors, and all subcontractors, on the first day of work prior to the employee's commencing work on the site. The WEAP will place special emphasis on the protected species that have potential to occur within the Agincourt site, including the Mojave desert tortoise, burrowing owl, nesting birds, and desert kit fox, among other plant and wildlife species.

The program will include the following elements:

- A presentation, developed by or in consultation with a qualified biologist, discussing the sensitive biological resources with potential to occur on-site, and explaining the reasons for protecting these resources and penalties for non-compliance;
- Brochures or booklets, containing written descriptions and photographs of protected species as well as a list of site rules pertaining to biological resources, to be provided to all WEAP participants;
- Contact information for the project biological monitor, and instructions to contact the monitor with any questions regarding the WEAP presentation or booklets;
- An acknowledgement form, to be signed by each worker indicating that they received WEAP training and will abide by the site rules protecting biological resources; and,
- Conspicuous stickers, identifying the project and signifying WEAP completion, to be distributed immediately following WEAP training and required on personnel hard hats.

The project Applicant will be responsible for ensuring that all on-site personnel, throughout the duration of project construction, receive WEAP training. A training log, to be signed by all on-site personnel immediately following WEAP training, will be maintained on the project site during construction to document compliance with this measure.

**BIO-3 Biological Monitor.** Prior to issuance of a grading permit, a qualified biologist shall be retained by the Applicant as the biological monitor subject to the approval of the County of San Bernardino. The biological monitor shall be present at all times during vegetation clearing or ground disturbance, and shall ensure that impacts to biological resources are avoided or minimized to the fullest extent possible. When construction activities have progressed to the point where biological resources are no longer present, as determined by the biological monitor, biological monitoring in the area may be reduced or discontinued with approval from the County of San Bernardino. The biological monitor shall have the authority to stop specific grading or construction activities if violations of mitigation measures or any local, state, or federal laws are suspected.

**BIO-4 Parish's Daisy Surveys and Compensation.** Prior to vegetation clearing or ground disturbance within the Agincourt site, the Applicant will retain a qualified biologist to conduct a survey for Parish's daisy (*Erigeron parishii*) within the disturbance footprint. The survey shall be timed to coincide with the blooming period of this species, and shall occur between May 1 and August 31 or as determined by a qualified biologist based on observations in the region.

If Parish's daisy is observed within the disturbance footprint, the aerial extent of the occurrence will be mapped and quantified, by outlining a convex polygon around the occurrences and considering the density of Parish's daisy individuals within the polygon. An equivalent acreage will be seeded with this species within the on-site preservation areas described in Mitigation Measure BIO-1 during the fall season.

During the blooming period following seeding, the Applicant shall retain a qualified biologist to inspect the seeded area and verify that the seeds have germinated and that Parish's daisy plants are alive. If no Parish's daisy plants are observed, or if the biologist determines the plants to be in abnormally low density or poor health, a supplemental seeding application shall be performed during the next appropriate season, as determined by the biologist.

**BIO-5 Cactus Salvage Plan.** Prior to issuance of a grading permit, the Applicant shall submit a Cactus Salvage Plan to the County of San Bernardino and the CDFG for approval. The Cactus Salvage Plan shall contain the following elements:

- A spatial inventory of all native cacti within the project site, including species and locations;
- A quantitative assessment of the numbers of each cactus species to be removed by the project; and,
- Proposed measures to retain as many cacti as is practical on the project site, and a spatial and quantitative description indicating the species and locations of cacti to be preserved.

**BIO-6 Joshua Tree Translocation Plan.** Prior to issuance of a grading permit for the project, the Applicant shall submit a Joshua Tree Translocation Plan to the County of San Bernardino. The plan shall ensure compliance with the San Bernardino County Development Code, and shall specify methods by which Joshua trees proposed for removal shall be transplanted or stockpiled for future transplanting wherever possible. The plan shall specify the locations of all Joshua trees within the project site, and shall identify any trees that would require removal or transplantation. All trees on the on-site areas to be set aside shall be preserved. On-site preservation will be achieved via dedication of a Conservation Easement to the CDFG or a qualified third party, as required by Mitigation Measure BIO-1.

**BIO-7 Mojave Desert Tortoise Exclusion Fencing.** During the months of April, May, September, or October prior to initiation of construction activities, the Applicant will retain a qualified biologist to conduct Mojave desert tortoise surveys in accordance with the most recent USFWS survey protocol for this species. If Mojave desert tortoises or their recent sign are detected (the partial tortoise skeleton detected during protocol surveys in 2012 was many years old, and does not indicate current Mojave desert tortoise presence on the site), the Applicant shall not initiate construction, and shall instead contact the USFWS and CDFG to develop an avoidance strategy and/or seek authorization for incidental take of Mojave desert tortoise.

If survey results are negative, the Applicant shall erect a tortoise exclusion fence surrounding all portions of the Agincourt site that are proposed for solar development or other ground disturbance. The exclusion fence shall be installed in accordance with the specifications set forth in Chapter 8 of the USFWS' *Desert Tortoise Field Manual* (USFWS 2009), and installation of the fence shall be overseen by a biologist familiar with the

installation of tortoise exclusion fencing. Following installation of the tortoise exclusion fence, the Applicant shall retain a qualified biologist to conduct a second, full-coverage pedestrian survey of all areas encompassed by the exclusion fence. If Mojave desert tortoises or their recent sign are detected, the Applicant shall immediately remove portions of the exclusion fence to prevent entrapment of tortoises, and shall contact the USFWS and CDFG to develop an avoidance strategy and/or seek authorization for incidental take of Mojave desert tortoise. If no tortoises or their sign are detected during the second survey, construction activities may commence.

The tortoise exclusion fences will be inspected on a monthly basis for any signs of damage or wear that could potentially compromise the integrity of the exclusion perimeter. If damage or excessive wear is observed, the exclusion fence will be repaired immediately. Results of the monthly fence inspections will be maintained on-site to document compliance with this provision.

**BIO-8 Pre-Construction Mojave Desert Tortoise Surveys and Avoidance.** Within 14 days prior to construction-related ground clearing and/or grading, the Applicant shall retain a qualified biologist to conduct surveys for signs of occupancy by the Mojave desert tortoise. Surveys shall cover the entire area proposed for disturbance, shall be conducted by walking parallel transects spaced no more than 10 meters apart, and shall focus on detecting any live tortoises or their sign, including carcasses, burrows, palates, tracks, and scat. Should any sign indicating the presence of Mojave desert tortoise be detected, the Applicant shall not proceed with ground clearing and/or grading activities in the area of the find, and shall instead contact the USFWS and CDFG to develop an avoidance strategy and/or seek authorization for incidental take of Mojave desert tortoise.

The results of the pre-construction surveys, including graphics showing the locations of any tortoise sign detected, and documentation of any avoidance measures taken, shall be submitted to the USFWS, CDFG, and the County of San Bernardino within 14 days of completion of the pre-construction surveys or construction monitoring to document compliance with applicable federal and state laws pertaining to the protection of Mojave desert tortoise.

**BIO-9 Pre-Construction Burrowing Owl Surveys and Passive Relocation.** Within 14 days prior to ground disturbance, the Applicant shall retain a qualified biologist to conduct burrowing owl surveys within the area to be disturbed. The survey shall be performed by walking parallel transects spaced no more than 20 meters apart, and shall be focused on detecting burrows that are occupied, or are suitable for occupation, by the burrowing owl. The results of the surveys, including graphics showing the locations of any active burrows detected and any avoidance measures required, shall be submitted to the County of San Bernardino and CDFG within 14 days following completion of the surveys. If active burrows are detected, the following take avoidance measures shall be implemented:

- If burrowing owls are observed using burrows on-site during the non-breeding season (September through January, unless determined otherwise by a qualified biologist

based on field observations in the region), occupied burrows shall be left undisturbed, and no construction activity shall take place within 300 feet of the burrow where feasible (see below).

- If avoiding disturbance of owls and owl burrows on-site is infeasible, owls shall be excluded from all active burrows through the use of exclusion devices placed in occupied burrows in accordance with California Burrowing Owl Consortium (1993) protocols. Specifically, exclusion devices, utilizing one-way doors, shall be installed in the entrance of all active burrows. The devices shall be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows shall then be excavated by hand and/or mechanically and refilled to prevent reoccupation. Exclusion shall continue until the owls have been successfully excluded from the disturbance area, as determined by a qualified biologist.
- Any active burrowing owl burrows detected on-site during the breeding season (February through August, unless determined otherwise by a qualified biologist based on field observations in the region), shall not be disturbed. Construction activities shall not be conducted within 300 feet of an active on-site burrow at this season.

**BIO-10**

**Burrowing Owl Management Plan.** Prior to issuance of a grading permit, a habitat management plan for the burrowing owl shall be developed. The plan shall include provisions for protecting foraging habitat and replacing any active burrows from which owls may be passively evicted as allowed by Mitigation Measure BIO-9, and shall also include management or enhancement practices intended to maintain burrowing owl habitat suitability within the on-site mitigation lands preserved through Mitigation Measure BIO-1. At a minimum, the plan shall include the following elements:

- If occupied burrows are to be removed, the plan shall contain schematic diagrams of artificial burrow designs and a map of potential artificial burrow locations that would compensate for the burrows removed.
- All active on-site burrows excavated as described in Mitigation Measure BIO-9 shall be replaced with suitable natural or artificial burrows within the on-site preservation areas, at a target ratio of 1:1.
- Provisions for vegetation management in the on-site mitigation lands (see Mitigation Measure BIO-1), specifying the maximum allowable vegetative cover adjacent to established artificial burrows and the methodology to be used in maintaining the appropriate cover.
- Measures prohibiting the use of rodenticides.
- The plan shall ensure that adequate suitable burrowing owl foraging habitat is provided in proximity to natural or artificial burrows within the on-site mitigation lands, in off-site mitigation areas, or both. Foraging habitat shall not be located in



areas shaded by the proposed solar arrays, and shall not be subject to vegetation mowing or other fuel management practices. Foraging areas shall be located adjacent to suitable natural or artificial burrow locations.

The Burrowing Owl Management Plan shall be submitted to the County of San Bernardino and CDFG for review and approval prior to issuance of a grading permit for the Project.

**BIO-11 Pre-Construction Nesting Bird Surveys and Avoidance.** Within 30 days prior to vegetation clearing or ground disturbance associated with construction or grading that would occur during the nesting/breeding season (February through August, unless determined otherwise by a qualified biologist based on observations in the region), the Applicant shall retain a qualified biologist to determine if active nests of species protected by the Migratory Bird Treaty Act or the California Fish and Game Code are present within or adjacent to the disturbance zone or within 100 feet (300 feet for raptors) of the disturbance zone. The surveys shall be conducted no more than seven days prior to initiation of disturbance work. If ground disturbance activities are delayed, then additional pre-disturbance surveys shall be conducted such that no more than seven days will have elapsed between the survey and ground disturbance activities.

If active nests are found, clearing and construction within 100 feet of the nest (or a lesser distance if approved by the USFWS) shall be postponed or halted, until the nest is vacated and juveniles have fledged, as determined by the biologist. Avoidance buffers shall be established in the field with highly visible construction fencing or flagging, and construction personnel shall be instructed on the sensitivity of nest areas. A qualified biologist shall serve as a construction monitor during those periods when construction activities will occur near active nests to ensure that no inadvertent impacts on these nests occur.

The results of pre-construction nesting bird surveys, including graphics showing the locations of any nests detected, and documentation of any avoidance measures taken, shall be submitted to the County of San Bernardino and CDFG within 14 days of completion of the pre-construction surveys or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.

**BIO-12 Pre-Construction Desert Kit Fox Surveys and Passive Relocation.** To avoid unauthorized take of the desert kit fox, the project Applicant shall retain a qualified biologist to conduct preconstruction surveys for this species within 14 days prior to ground disturbance. The survey shall be conducted by walking parallel transects spaced no more than 20 meters apart, and shall be focused on detecting any desert kit fox individuals or dens within the disturbance footprint. If dens are detected, each den shall be classified as inactive, potentially active, or definitely active based on field observations. If necessary, motion-sensitive cameras or a tracking medium shall be used to determine whether a den is active.

Inactive dens in areas that would be impacted by construction activities shall be excavated

by hand and/or mechanically and backfilled to prevent reuse by desert kit fox.

Active and potentially active dens in areas that would be impacted by construction activities shall be monitored by a qualified biologist for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand to prevent reuse. If tracks are observed, the den shall be classified as active. Outside the desert kit fox pupping season (January 15 through July 31, unless determined otherwise by a qualified biologist based on observations in the region), the den may be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for the next three to five nights to discourage the kit fox from continuing to use the den. After verification that the den is unoccupied, it shall then be excavated and backfilled by hand to prevent reuse, while ensuring that no kit fox are trapped in the den. No excavation of active desert kit fox dens shall be permitted during the pupping season.

The Applicant shall submit a report to the County of San Bernardino and CDFG within 30 days of completion of preconstruction desert kit fox surveys describing the survey methods, results, and details of any dens backfilled or foxes observed.

**BIO-13 Streambed Alteration Agreement.** Prior to undertaking any activity that would divert, fill, obstruct, or substantially alter any of the on-site streambeds described in the Biological Resources Assessment Report for the project (URS 2012), the project Applicant will enter into a Streambed Alteration Agreement with the CDFG authorizing the proposed activity as required by Section 1602 of the California Fish and Game Code. The project Applicant will ensure that all project personnel comply with all stated terms and conditions of the Agreement, including any seasonal or weather-related restrictions on work activities within the streambeds, construction site housekeeping practices, or other limitations the CDFG may impose.

Project-related impacts to CDFG-jurisdictional desert washes would be mitigated at a minimum ratio of 1:1, including through preservation within the on-site preservation areas identified in Mitigation Measure BIO-1. The preserved area encompasses the two largest and best-developed washes on the Agincourt site, ensuring that the quality of drainages preserved exceeds that of the drainages to be impacted. Because the acreage of jurisdictional washes to be permanently preserved and managed exceeds the acreage that would be affected by the project, and because the washes to be preserved are of greater biological value due to their larger size and habitat complexity, it is likely that additional compensatory mitigation will not be required by the Streambed Alteration Agreement.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>SUBSTANTIATION:</b> (Check if the project is located in the Cultural <input type="checkbox"/> or Paleontologic <input type="checkbox"/> Resources overlays or cite results of cultural resource review):				

- a) **No Impact.** The project will not cause a substantial adverse change in the significance of a historical resource, because no resources have been identified on the site and none are expected. No structures are present.

A California Historical Resources Information System cultural resources site records and literature search for this project has been conducted by URS (URS December 2011). The site record search indicates that the Project site has not been previously surveyed for cultural resources; four previous studies have been conducted within one mile of the site. Three of the four studies were adjacent to the proposed Project site: two small aerial surveys and a linear survey of the SCE transmission line that runs along Camp Rock Road immediately adjacent to the Project site's eastern border. The fourth investigation consisted of a survey of 11 miles of replacement water mains in the Lucerne Springs residential tract northwest of the project site. The record search revealed that no cultural resources are recorded on or adjacent to the Project site and no significant cultural resources are expected to occur.

However, as a precautionary measure, a condition shall be added to the project which requires the developer to contact the County Museum for determination of appropriate measures to be taken if any cultural resources are encountered during project construction.

- b) **No Impact.** See discussion of Item a), above.
- c) **No Impact.** This project will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature because the site contains no rock outcrops and

the site is primarily comprised of active and deep alluvial soils. No resources have been identified or are expected on the site. To further reduce the potential for impacts, a condition shall be added to the project which requires the developer to contact the County Museum for a determination of appropriate measures to be taken, if any finds are made during project construction.

- d) **Less than Significant Impact.** This project will not disturb any human remains, including those interred outside of formal cemeteries, because no such burial grounds are identified on this project site and none are expected. If any human remains are discovered, during construction of this project, the developer is required to contact the County Coroner and the County Museum for a determination of appropriate measures to be taken. A Native American representative shall also be consulted, if the remains are determined to be of Native American origin.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
<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 California Building Code (2001) creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

- a) **i) Less than Significant Impact.** The entire San Bernardino County area is particularly susceptible to strong ground shaking and other geologic hazards from numerous earthquake fault zones, including the San Andreas Fault, among others. A review of California Geological Survey - Alquist-Priolo Earthquake Fault Zones maps indicates the proposed Project is located approximately 0.8 mile northeast of the Helendale-South

---

Lockhart fault zone which locally trends along Highway 18. While the potential for onsite ground rupture cannot be totally discounted (e.g., unmapped faults could conceivably underlie the project site, the likelihood of such an occurrence is considered low due to the absence of known faults within the site.

The proposed Project will not include any habitable structures. Nonetheless, the design of any structures onsite will incorporate measures to accommodate seismic loading, pursuant to existing guidelines such as the "Greenbook" Standard Specifications for Public Works Construction (2006) and the International Code Council's (ICC) 2007 California Building Code (CBC). Specific standards that may be used for the proposed Project include but are not limited to proper fill composition and compaction, anchoring (or other means of securing application structures); and use of appropriate materials, dimensions and flexible joints where appropriate. Therefore, impacts from proximity to fault zones are considered less than significant.

**ii) Less than Significant Impact.** The subject site is within an area that is subject to strong earthquakes but no habitable structures are proposed. Due to economic considerations, it is not generally considered reasonable to design a structure that is not susceptible to earthquake damage. Therefore, significant damage to structures may be unavoidable during large earthquakes. The proposed structures should, however, be designed to resist structural collapse through incorporation of California Building Standards Code design guidelines and thereby provide reasonable protection from serious injury, catastrophic property damage and loss of life. With compliance with the California Building Standards Code, impacts are considered less than significant.

**iii) Less than Significant Impact.** The project site is expected to experience earthquake activity that is typical of the Southern California area. However, the site is characterized by deep, well-drained alluvial soils and groundwater in the region is low. The potential for liquefaction at this site is considered to be low. Furthermore, the proposed Project design and construction will incorporate requirements of the California Building Code to address potential seismic-related effects such as liquefaction, settlement, and lateral spreading. Based on incorporation of applicable standards, potential project impacts associated with seismic-related ground failure will be less than significant.

**iv) No Impact.** The proposed 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.

- b) **Less than Significant Impact.** The proposed Project's hydrological report (URS June 2012) indicates substantial soil erosion or the loss of topsoil is not expected. Site soils are well-drained and any rain or wash water on the solar panels would drain freely to the

ground. Based on the volume of water falling from each panel during storm events, the height of the fall, and site soil conditions, it is not expected that erosion beyond a microlevel will occur. Water will fall from the PV panels and pond at a drip point before infiltrating or gradually migrating into the existing drainage patterns. If, overtime, minor erosion were noted at the drip points, small gravel pads could be added to help dissipate the energy of the falling water. If minor erosion were noted near the foundations, minor grading could restore support for the individual foundations, and keep surface flows from undermining the foundations in future storm events.

Erosion control plans will be required to be submitted, approved and implemented. Measures to reduce and control erosion of soil during construction and long term operation are required by MDAQMD through its Rule 403 for control of fugitive dust, the Colorado River Basin Regional Water Quality Control Board (RWQCB) under its administration of the State's General Construction Permit, and the County of San Bernardino Public Works Department through its Storm Water Management Program. Implementation of requirements under MDAQMD Rule 403 for control of fugitive dust would reduce or eliminate the potential for soil erosion due to wind. The proposed Project would result in a minor increase in impervious surfaces and implementation of Best Management Practices (BMPs) that would be included in the applicant's Storm Water Pollution Prevention Plan (SWPPP) would reduce soil erosion due to storm water or water associated with construction.

- c) **Less than Significant Impact.** Mapped soil types—primarily well-drained alluvial soils—appear to be conducive to the development of the proposed Project. The Project design and construction methods, including use of embedded pier foundations and re-compaction of surface soils where needed, will stabilize project components; thereby, reducing potential impacts of the mapped soils to a less than significant level.

The project area is relatively flat terrain where landslides have not historically been an issue. Potential liquefaction (and related settlement and lateral spreading effects) and landslide impacts are discussed above in Sections VI.a.iii and VI.a.iv, respectively. Based on the described conditions and project design and construction methods, no significant impacts related to geologic instability are anticipated as a result of project implementation.

- d) **Less than Significant Impact.** Site soils are well-drained to excessively well-drained and are not considered expansive soils.
- e) **No Impact.** The proposed Project is an unmanned facility. No septic or other wastewater disposal systems will be utilized as part of this project.

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

<i>Issues</i>		<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
<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 any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

***SUBSTANTIATION:***

- a) **Less than Significant Impact.** The County's Greenhouse Gas Emissions Reduction Plan (GHG Plan) was adopted on December 6, 2011 and became effective on January 6, 2012. The GHG Plan establishes a GHG emissions reduction target for the year 2020 that is 15 percent below 2007 emissions. The plan is consistent with AB 32 and sets the County on a path to achieve more substantial long-term reduction in the post-2020 period. Achieving this level of emissions will ensure that the contribution to greenhouse gas emissions from activities covered by the GHG Plan will not be cumulatively considerable.

In 2007, the California State Legislature adopted Senate Bill 97 (SB 97) requiring that the CEQA Guidelines be amended to include provisions addressing the effects and mitigation of GHG emissions. New CEQA Guidelines have been adopted that require: inclusion of a GHG analyses in CEQA documents; quantification of GHG emissions; a determination of significance for GHG emissions; and, adoption of feasible mitigation to address significant impacts. The CEQA Guidelines [Cal. Code of Regulations Section 15083.5 (b)] also provide that the environmental analysis of specific projects may be tiered from a programmatic GHG plan that substantially lessens the cumulative effect of GHG emissions. If a public agency adopts such a programmatic GHG Plan, the environmental review of subsequent projects may be streamlined. A project's incremental contribution of GHG emissions will not be considered cumulatively significant if the project is consistent with the adopted GHG plan.

Implementation of the County's GHG Plan is achieved through the Development Review Process by applying appropriate reduction requirements to projects, which reduce GHG emissions. All new development is required to quantify the project's GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance. A review standard of 3,000 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) per year is used to identify and mitigate project emissions. For projects exceeding 3,000 MTCO<sub>2</sub>e per year of GHG emissions, the developer may use the GHG Plan Screening Tables as a tool to assist with calculating GHG reduction measures and the determination of a significance finding. Projects that garner 100 or more points in the Screening Tables do not require



quantification of project-specific GHG emissions. The point system was devised to ensure project compliance with the reduction measures in the GHG Plan such that the GHG emissions from new development, when considered together with those from existing development, will allow the County to meet its 2020 target and support longer-term reductions in GHG emissions beyond 2020. Consistent with the CEQA Guidelines, such projects are consistent with the Plan and therefore are determined to have a less than significant individual and cumulative impact for GHG emissions.

Greenhouse gas emissions resulting from the construction and operation of the proposed Project were quantified and reported in a technical memorandum (URS June 2012). Results from the GHG analysis performed for the solar energy project show that construction and operation emissions over 30 years will be approximately 180 MTCO<sub>2</sub>e per year. This is far below San Bernardino County's significance threshold of 3,000 MTCO<sub>2</sub>e per year. These project GHG emissions are consistent with the County of San Bernardino's September 2011 Green House Gas Reduction Plan and would present a less than significant impact for GHG emission.

Moreover, the construction of this solar facility will generate "green" electric power generation that would otherwise be produced with fossil fuels with much higher GHG emissions. The proposed Project thus would result in a net environmental benefit regarding GHG emissions.

- b) **No Impact.** The proposed Project would produce solar electricity and is consistent with the *County of San Bernardino Greenhouse Gas Emissions Reduction Plan* (GHG Plan). (See discussion above in Item a).

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
<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 proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

---

---

**SUBSTANTIATION:**

---

- a) **Less than Significant Impact.** The proposed Project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, because no use approved on the site is anticipated to be involved in such activities. If such uses are proposed on-site in the future, they will be subject to permit and inspection by the Hazardous Materials Division of the County Fire Department and in some instances additional land use review.

Construction will involve short-term use of hazardous substances such as fuels, lubricants, adhesives, solvents and asphalt wastes. The potential risk associated with the accidental discharge during use and storage of such construction-related hazardous materials is considered low because the handling of any such materials will be addressed through the implementation of Best Management Practices (BMPs) pursuant to the National Pollutant Discharge Elimination System (NPDES) General Construction Permit.

The AC/DC collection system may be installed in shallow subsurface trenches and/or on an above-grade raceway suspended on stakes. Collection trenches would likely be mechanically excavated, though in some cases targeted shallow trench blasting may be required as a construction technique due to near-surface bedrock. Therefore, Construction may involve short-term use of explosives.

If explosives are to be used, the applicant will be required to obtain all necessary permits and approvals through the San Bernardino County Fire Department's Hazardous Materials Division (HMD). This may include preparing a Business Emergency Contingency Plan and securing a Certified Unified Program Agency (CUPA) Permit for hazardous materials handling and/or hazardous waste generation, as required by the HMD. The applicant and/or its construction firm and/or relevant subcontractors responsible for blasting activities will engage the HMD to perform a pre-construction site tour, to assist with worker training as necessary, and to perform a site closure inspection once any required blasting has been completed. Explosives will be transported, handled and used in accordance with all applicable laws and regulations. Therefore impacts would be less than significant.

- b) **Less than Significant Impact.** The project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. With the exception of typical construction-related hazards such as fuels, lubricants, adhesives, solvents and asphalt wastes, the proposed Project will not generate or require the use or storage of significant quantities of hazardous substances. The photovoltaic panels used in the proposed Project are environmentally sealed collections of photovoltaic cells that require no chemicals and produce no waste materials. Batteries used for the construction and operation will be stored and disposed of according to Department of Toxic Substances Control (DTSC) the Universal Waste Rule or EPA Hazardous Waste Battery Regulations. Furthermore, standard operating procedures will prevent the use of materials from causing a significant

---

hazard to the public or environment.

- c) **No Impact.** There are no existing or proposed schools within one-quarter mile of the proposed Project site.
- 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 and will not create a significant hazard to the public or the environment.
- e) **No Impact.** The project site is not located within an airport land use plan or within two miles of an airport. The nearest public use airport is located more than nine miles to the south in Big Bear City, California. The project is located within the County's Airport (AR-4) Overlay. AR-4 includes low-altitude/high speed corridors designated for military aircraft use. Military training routes VR-1214, -1215, -1217 and -1218 occur in this area and pilots can fly as low as 100 feet above ground level (AGL) along VR-1214, -1215, -1217 and 200 feet along VR-1218. San Bernardino Development Code 82.09.060 (b) states that "Proposed structures and the normal mature height of any vegetation shall not exceed the height limitations established in Federal Aviation Regulations (FAR) Part 77, unless Form 7460-1 (Notice of Proposed Construction or Alteration) has been filed with and approved by the FAA before the issuance of a Building Permit." As per FAR Part 77.9, construction or alteration requiring FAA notification includes:
  - any construction or alteration exceeding 200 ft above ground level
  - any construction or alteration:
    - within 20,000 ft of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3,200 ft
    - within 10,000 ft of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 ft
    - within 5,000 ft of a public use heliport which exceeds a 25:1 surface
    - any highway, railroad or other traverse way whose prescribed adjusted height would exceed the above noted standards
    - when requested by the FAA
    - any construction or alteration located on a public use airport or heliport regardless of height or location.

The proposed project would not involve construction or operational equipment that would be tall enough to affect military flights. However, as noted, the FAA may request such a filing. To provide the FAA with an opportunity to comment on the project, the applicant shall contact FAA air traffic specialists for Southern California. If requested, the applicant shall file form 7460-1 prior to receiving a Building Permit.

- f) **No Impact.** The proposed 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 Rabbit Ranch Airport located more than nine miles to the northwest.

- g) **Less than Significant Impact.** The project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan because the project is located along Camp Rock Road with adequate access from two or more directions via State Route 18 to the south and State Route 247 to the north.
- h) **Less than Significant Impact.** Any development, along with the associated human activity, in previously undeveloped areas increases the potential of the occurrence of wildfires in the region. Comprehensive safety measures that comply with federal, state, and local worker safety and fire protection codes and regulations will be implemented for the proposed Project and will minimize the occurrences of fire due to project activities during construction and for the life of the project. Therefore, less than significant impacts are anticipated.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
<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 pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite?	<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 offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structure which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

---

---

**SUBSTANTIATION:**

---

- a) **Less than Significant Impact.** According to the Project's Draft Water Quality Management Plan (URS June 2012), the project will not violate any water quality standards or waste discharge requirements. Potential water quality impacts from the proposed Project could be associated with short-term (construction-related) erosion/sedimentation and hazardous material use/discharge. During operations, the expected pollutants of concern at this unmanned facility include trash and debris and potentially oil and grease from maintenance vehicles visiting the site periodically for panel washing (several times per year) and general site maintenance (as needed).

The facility will be unmanned. Solar panels will be elevated above the existing grade and supported by a metal frame and individual embedded piers. The ground shall be minimally graded. The proposed Project also includes construction of various concrete pads and gravel internal access roads but the Hydrological Analysis (URS June 2012) indicates only 13 percent of the site will be covered with impervious surfaces. The remaining 87 percent will remain as native soil or graded to improve and control surface drainage.

Furthermore, potential erosion/sedimentation and hazardous materials impacts will be avoided or reduced below a level of significance through conformance with applicable elements of the NPDES Municipal Stormwater General Construction Permit. As part of the permit requirements, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the project. The SWPPP provides detailed descriptions of water quality management measures to be used (e.g., site design and construction BMPs).

Maintenance of the unmanned facility Project will primarily involve panel washing and repairs or replacement of panels or other electrical equipment. Panel washing would be conducted as needed but is expected to occur quarterly or bi-annually. Panels would be power-washed with clean water that will contain no cleaning agents or other additives.

- b) **Less than Significant Impact.** The proposed Project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. Water sourced from a local water purveyor listed in the Project Description will be trucked in and sprayed on the panels from a water truck. Most (87 percent) of the ground surface within the proposed Project area will be permeable and operational water use will be small, estimated at approximately 2 acre-feet per year or less. Water percolation and groundwater recharge will not be significantly impacted by the proposed Project.
- c) **Less than Significant Impact.** The proposed Project will have a less than significant impact on the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that will result in substantial erosion or siltation on- or offsite. The proposed Project's Hydrologic Analysis (URS December 2011) includes a conceptual drainage plan that would maintain three major washes across the site. Minor washes would be filled and their flows redirected to the large washes via a perimeter swale. The Hydrological Analysis concluded that this plan would maintain adequate runoff through

the Project site without causing backup for flows upstream or concentrated flows downstream. The proposed Project would result in only a negligible effect to the current runoff rates, offsite drainage patterns, or quantity of runoff. Furthermore, potential erosion/sedimentation and hazardous materials impacts will be avoided or reduced below a level of significance through conformance with applicable elements of the NPDES Municipal Stormwater General Construction Permit. As part of the permit requirements, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the project.

The site topography is generally flat, with a slope of about four percent towards the north-northwest. Numerous small braided channels cross the site. Typical of arid regions, the area experiences short-duration, high-intensity rainfall storm events producing potentially high rates of runoff when the initial infiltration rates are exceeded. During these periods the small, incised washes onsite become conduits for water flow. Preservation of three larger washes on the site would continue drainage conditions, which have been formed by past storm events. Construction of gravel access roads, embedded pier foundations, and concrete pads for electrical equipment and storage would result in a minor (13 percent) increase in impervious surfaces at the site. Because the imperviousness of the site would not be greatly changed as a result of the construction, the impact of increased rainfall runoff due to construction would be negligible.

During operation, the panels shall drain freely to the ground any rainwater that hits them. Based on the volume of water falling from each panel, the height of the fall, and the soil conditions, it is not expected that erosion beyond an immediate micro level shall occur. Site soils are well-drained to excessively well-drained. Water from the PV panels infiltrate or gradually migrate into the existing drainage patterns. If, over time, minor erosion is noted at the drip points or foundations, small gravel pads can be added to help dissipate the energy of the falling water. If, over time, minor erosion is noted near the foundations, minor grading can restore support for the individual foundations and keep surface flows from undermining the foundations in future storm events.

- d) **Less than Significant Impact.** According to the Project's Hydrologic Analysis (URS June 2012), the project will not 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. [See the discussion above in Item (c)].
- e) **Less than Significant Impact.** According to the Project's Hydrologic Analysis (URS December 2011), the proposed Project would result in a negligible increase in runoff compared to existing conditions and thus will not 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. Three major washes onsite would be preserved and minor washes would be filled and their flows redirected to the larger washes via a perimeter swale. The Hydrologic Analysis indicates this conceptual drainage plan will not substantially increase the volume of stormwater flows originating from or altered by the project. The Hydrologic Analysis was developed in consultation with and will be reviewed by



---

the County Public Works Department. All necessary drainage improvements will be required by the County as conditions of project approval.

- f) **Less than Significant Impact.** The proposed Project would not otherwise substantially degrade water quality because appropriate measures relating to water quality protection, including erosion control measures, are required.
- g) **No Impact.** The project will not place unprotected 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, because the project does not propose housing and is not within identified flood hazard areas as reviewed by County Public Works.
- h) **No Impact.** The project will not place within a 100-year flood hazard area structures which would impede or redirect flood flows, because the site is not located within a 100-year flood hazard area.
- i) **No 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.
- j) **No Impact.** The project will not be impacted by inundation by seiche, tsunami, or mudflow, because the project is not adjacent to any body of water that has the potential of seiche or tsunami nor is the project site in the path of any potential mudflow.

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

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

***SUBSTANTIATION:***

- a) **No Impact.** The project would not physically divide an established community because there are no established residential communities present in the project area. The proposed Project area is located in an unincorporated part of the County that has sparse residential development in the immediate area. North of the project site, land to the north of Rosewood Street is subdivided into five acre lots, but only a few of these have been developed with residences. To the west, the land is also subdivided with lot sizes ranging from 2.5 to 10 acres. Most of these lots are vacant, and about one dozen homes are located within one-half mile of the northern and western project boundaries. Immediately south of the project site are two large vacant lots. In general terms, land to the south and east is in larger lots with a lower density of development. About one dozen homes are located within one mile of the project to the south and east. Therefore, the proposed Project would not divide an established community.
- b) **Less than Significant Impact.** The proposed Project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. The current General Plan land use designation for the proposed Project area is Lucerne Valley/Rural Living five acre minimum (LV/RL-5) Assessor's Parcel Number (APN) -9 and Lucerne Valley/Agriculture (LV/AG) (APN -27), which allows development of electrical power generation facilities with a Conditional Use Permit (CUP). The proposed Project will be required to comply with all CUP conditions of approval. ☐
- c) **No Impact.** The proposed Project does not conflict with any applicable habitat conservation plans or natural community conservation plans, because there is no habitat conservation plan or natural community conservation plan applicable to the project site.

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

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
<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"/> |

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

- a) **No Impact.** The project will not result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state, because there are no identified important mineral resources on the project site and the site is not within a Mineral Resource Zone Overlay.
- b) **No Impact.** The project will not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan, because there are no identified important mineral resources on the project site and the site is not within a Mineral Resource Zone Overlay.

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

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

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

- a) **Less than Significant Impact.** With the exception of a few scattered residences, the proposed Project is adjacent to undeveloped and vacant land. Construction of the proposed Project may potentially create some elevated short-term construction noise and vibration impacts to existing residents in the area; however these activities would be limited to day time hours and will comply with the noise and vibration standards of the San Bernardino Development Code. Construction noise and vibration is exempt from 7:00 A.M. to 7:00 P.M. Monday through Saturday. (County of San Bernardino, CA, County Development Code Chapter 83.01.080 and 83.01.090.) Some blasting of shallow bedrock may be needed. Noise from blasting of shallow bedrock will be limited in frequency and duration. The local noise ordinance does not specify a maximum dBA for construction noise sources during working times indicated above; therefore noise and vibration from any required targeted shallow trench blasting of bedrock would be considered less than significant.

Operation of the proposed unmanned solar facility would not generate audible levels of noise or perceptible levels of vibration in the surrounding area. There would be no permanent substantial change in noise or vibration levels. If the panels are mounted on trackers, on-site noises would be limited to the motors that rotate the photovoltaic panels and periodic maintenance activities (including periodic panel washing, driving motor repair, tracker repair, electrical connection repair, and panel replacement). Tracker noise typically is around 60 to 70 dBA at 50 feet, depending on the design and vendor for the equipment. Based on the preliminary project plan, the nearest existing residence would be about 800 feet from the nearest inverter stations. At this distance, the inverter noise would be reduced to about 45 dBA. According to the County's General Plan, 60 dBA is the acceptable noise level for single-family uses while 65 dBA is acceptable for commercial uses. Since this is a solar PV project, the inverters would not operate at nighttime. Vehicle trips generated by maintenance and security after construction would be nominal.

- b) **Less than Significant Impact.** The project will not create exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels, because the project will be conditioned to comply with the vibration standards of the County Development Code and no vibration exceeding these standards is anticipated to be generated by the proposed uses.
- c) **Less than Significant Impact.** The project will not generate a substantial permanent increase in ambient noise levels in the project vicinity above levels existing or allowed without the project, because the project will be conditioned to comply with the noise standards of the County Development Code and no noise exceeding these standards is anticipated to be generated by the project operations.
- d) **Less than Significant Impact.** The project will not generate a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing or allowed without the project because construction equipment shall not operate during evening hours and construction noise and vibration is exempt from noise/vibration standards from 7:00 a.m. to 7:00 p.m. Monday-Saturday, and the project will be conditioned to comply with the noise standards of the County Development Code.
- e) **No Impact.** The proposed Project area is not located an airport land use plan or within two miles of a public airport or public use airport. The nearest public use airport is located more than nine miles to the south in Big Bear City, California. The Apple Valley County Airport is approximately 21 miles northwest of the project site. The project is located within the County's Airport (AR-4) Overlay. AR-4 includes the low-altitude/high speed corridors designated for military aircraft use. Military training routes VR-1214, -1215, -1217 and -1218 occur in this area and pilots can fly as low as 100 feet above ground level (AGL) along VR-1214, -1215, -1217 and 200 feet along VR-1218. San Bernardino Development code 82.09.060 (b) states that "Proposed structures and the normal mature height of any vegetation shall not exceed the height limitations established in Federal Aviation Regulations (FAR) Part 77, unless Form 7460-1 (Notice of Proposed Construction or Alteration) has been filed with and approved by the FAA before the issuance of a Building Permit." As per FAR Part 77.9, construction or alteration requiring FAA notification includes:

- any construction or alteration exceeding 200 ft above ground level
- any construction or alteration:
  - within 20,000 ft of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3,200 ft
  - within 10,000 ft of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 ft
  - within 5,000 ft of a public use heliport which exceeds a 25:1 surface
  - any highway, railroad or other traverse way whose prescribed adjusted height would exceed the above noted standards
  - when requested by the FAA
  - any construction or alteration located on a public use airport or heliport regardless of height or location.

The proposed project would not involve construction or operational equipment that would be tall enough to affect military flights. However, as noted, the FAA may request such a filing. To provide the FAA with an opportunity to comment on the project, the applicant shall contact FAA air traffic specialists for Southern California. If requested, the applicant shall file form 7460-1 prior to receiving a Building Permit.

- f) **No Impact.** The proposed Project area is not located within the vicinity of a private airstrip. The nearest private airstrip, Rabbit Ranch Airport, is approximately nine miles northwest of the project site.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
<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"/>

***SUBSTANTIATION:***

- a) **No Impact.** The project will not induce substantial population growth in an area either directly or indirectly. The proposed Project is an unmanned solar generating facility; no homes or extension of roads or other infrastructure are proposed or required. The proposed nine-month construction schedule will require only 80-100 workers at its peak. During operations the facility will be unmanned. Several part-time employees or contractors would visit the site periodically for maintenance and several times a year employees or a contractor would visit the site to wash the PV panels.
- b) **No Impact.** The proposed Project site is vacant land. No existing housing would be affected.
- c) **No Impact.** The proposed Project would not displace any people; the Project site is vacant.

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



<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
<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"/>

#### ***SUBSTANTIATION:***

- a) **Less than Significant Impact.** The proposed Project will not 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, including fire and police protection, schools, parks or other public facilities. The project is located in Lucerne Valley County Service Area CSA-29, which provides or oversees some public services including: ambulance service, fire department, and parks and recreation.

**Fire Protection - Less than Significant Impact.** The proposed Project would not result in the need for additional fire protection services that would require construction of new facilities. The nearest fires station, East Lucerne Valley Fire Station (Station 7) and Lucerne Valley Fire Station (Station 8), are located approximately 3.1 miles north and 4.7 miles northwest of the project site, respectively (County of San Bernardino Fire Department 2012). Any development in previously undeveloped areas increases human presence and the potential for fire. The fire threat is considered moderate at the project site, while the southern foothills three miles south of the project site are considered very high. Comprehensive safety measures that comply with federal, state, and local worker safety and fire protection codes and regulation would be implemented for the proposed Project

that would minimize the potential occurrence of fire due to project activities during construction and for the life of the project. During construction, some public services including fire protection may be required but these would be short-term and would not result in increase in the level of service offered or effect these agencies' response times. Because of the low probability and short-term nature of potential fire protection needs during construction, the proposed Project would not result in associated significant impacts to fire protection.

**Police Protection – Less than Significant Impact.** The proposed Project would not result in the need for additional police protection services that would require construction of new facilities. The proposed Project area is served by the San Bernardino County Sheriff's Department. The Lucerne Valley Substation is located approximately 5 miles to the northwest of the project site. The substation has one sergeant, one detective and six deputies who are responsible for 900-plus miles of farming, ranching, commercial businesses and residential areas located within a wide range of mountainous and remote desert terrain. The overall population is approximately 5,200 residents. The Lucerne Valley Substation is supported by the Victor Valley Station located 33 miles northwest of the project site. Due to the large expanse that the substation covers, deputies are regularly assisted by California Highway Patrol, Big Bear Lake, Hesperia, Victorville and the Town of Apple Valley police, and BLM Rangers. The proposed Project would not impact service ratios, response times, or other performance objectives related to police protection. During construction, some public services including police protection may be required but these would be short-term and would not result in a need for new facilities or an increase in the level of service offered or effect these agencies' response times. The project will include a six foot high chain link security fence topped with one foot of barbed wire installed at the property setback and lighting will be designed to provide the minimum illumination needed to achieve the project's security objectives.

**Schools – No Impact.** Long-term operations of the proposed solar facility would place no demand of school services because it does not include the construction of residences. The project would not introduce temporary or permanent population into the area; therefore no impacts to schools would occur.

**Parks – No Impact.** Long-term operation of the proposed unmanned solar facility would place no demand on parks because it does not include the construction of residences or the extension of roads or other infrastructure that could induce population growth

**Other Public Facilities – No Impact.** The proposed Project would not result in the introduction and/or an increase in new residential homes or otherwise induce population growth that could require new public facilities.

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

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
<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"/>

***SUBSTANTIATION:***

- a) **No Impact.** The proposed Project will not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated because the project will be unmanned and does not include construction of any new residential units or infrastructure extensions that would induce population growth.
- b) **No Impact.** The proposed solar facility will be unmanned and does not include recreational facilities or require the construction or expansion of recreational facilities.

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

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
<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 greenways, 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 type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

***SUBSTANTIATION:***

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

Approximately 80 to 100 construction workers are expected to travel to the site during some months. Typically on-site work hours are 7 AM to 3:30 PM. Under this scenario, most workers (e.g., 95%) would arrive before the 7-9 AM peak hours and leave before the 4-6 PM peak hours. If 10-hour days are scheduled, workers would still arrive before 7 AM but all would leave at approximately 5:30 PM. This could temporarily generate from 160 to 200 trips in the PM peak hour during construction. Traffic conditions on roadway segments and intersections of SR-18 between SR-247 to the north and Marble Canyon Road to the south are anticipated to be a level of service B until 2030, per the County's Lucerne Valley Community Plan (Pp. 31, 2007). A LOS of C or better is required by the County General Plan. The unmanned solar facility would not result in operational traffic that would reduce LOS.

In addition, the proposed Project is not expected to exceed any applicable level of service, either individually or cumulatively, based on the short-term construction timetable. For estimated deliveries by during construction (see table below).

Vehicle Type	Construction Delivery Activity							
	Deliveries Per Month							
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8
Material delivery Trucks <sup>1</sup>	40	192	288	192	144	96	96	96
Water Truck (average)	814	814	814	814	814	814	814	814
<sup>1</sup> Total Per Month <sup>2</sup>	851	1,006	1,102	1,006	958	910	910	910

<sup>1</sup> Heavy Duty Diesel (80,000 lbs gross vehicle weight).

<sup>2</sup> Assumed 4,000 gallon water trucks. Water used for dust control.

- c) **No Impact.** The proposed Project will not affect air traffic patterns. Operation of the proposed Project is not dependent upon air transport related material, labor force, or service and would not result in an increase to air traffic levels. Therefore, no change in air traffic patterns, volume and safety are anticipated.
- d) **No Impact.** The project will not introduce design features, such as sharp curves or dangerous intersections within the vicinity of the project site. The project site is adjacent to an established road that is accessed at points with good site distances. There are no incompatible uses proposed by the project that will impact surrounding land uses.
- e) **No Impact.** The project will not result in inadequate emergency access. The unmanned facility can be accessed along Camp Rock Road via SR-18 to the south and SR-247 to the north. Both Camp Rock Road and SR 18 are designated as Major Highways based on the General Plan Transportation Element Victor Valley Region Map.
- f) **No Impact.** No alternative transportation plans or programs have been designated for the proposed Project area. The Lucerne Valley Community Plan includes a goal and policies

for inclusion of alternative transportation with road widening and other improvements (San Bernardino County 2007). The proposed Project will not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) and/or decrease the performance of facilities as no offsite improvements are proposed.

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

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
<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 type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded, entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

***SUBSTANTIATION:***

- a) **No Impact.** The proposed Project does not involve construction of facilities that would generate wastewater; therefore it would not exceed applicable wastewater treatment requirements. The project will use uncontaminated water to clean the solar panels. The proposed Project's water discharge does not require treatment or permitting per the Colorado River Regional Water Quality Control Board.
- b) **No Impact.** The proposed Project will not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. Approximately 40 acre-feet per year of water would be used during construction for dust suppression and ancillary construction activities. Operational panel washing would require approximately 2 acre-feet

of water per year. Water demands for the proposed Project will be purchased from a local purveyor listed in the Project Description.

- c) **Less than Significant Impact.** The proposed Project would not require the construction or expansion of storm water drainage facilities. Most (87 percent) of the project site would remain pervious and existing soils are predominantly well drained. Minor washes onsite would be filled and their stormwater flows re-directed to other existing washes onsite via perimeter swales. The project's Hydrologic Analysis (URS June 2012) indicates this conceptual drainage plan would maintain adequate runoff through the Project site without causing backup for flows upstream or concentrated flows downstream. The proposed Project would result in only a negligible effect to the existing runoff rates, offsite drainage patterns, or quantity of runoff. Furthermore, potential erosion/sedimentation and hazardous materials impacts will be avoided or reduced below a level of significance through conformance with applicable elements of the NPDES Municipal Stormwater General Construction Permit. As part of the permit requirements, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the project.
- d) **Less than Significant Impact.** Construction and operational water demands of the proposed Project will be trucked from an offsite water purveyor listed in the Project Description. A total of approximately 40 acre-feet per year of water could be required during construction for dust suppression. The project's operation water demand is estimated at 2 acre-feet per year for panel washing. The unmanned facility requires no water or sewer hookups. Water use for construction and operation of the proposed Project is negligible relative to existing supply (18th Annual Report of the Mojave Basin Area Watermaster, May 1, 2012).
- e) **No Impact.** The proposed unmanned solar facility would not require or result in the construction of new wastewater treatment facilities or the expansion of existing wastewater treatment facilities. A local portable toilet contractor would meet the wastewater needs of the approximately 80-100 workers during construction.
- f) **No Impact.** Less than significant impacts related to landfill capacity are anticipated from the proposed Project. The proposed Project is an unmanned solar electricity generating facility generating no process waste and only small amounts of solid waste requiring disposal. Solid waste generated during short-term construction activities will include minor quantities of construction debris. Solid wastes associated with the proposed Project will be disposed as appropriate in local landfill or at a recycling facility.

The proposed Project area is served by the two regional Class III landfills. The Landers Sanitary Landfill (Class III) is located approximately 31 miles southeast of the project has a remaining capacity of 765,098 Cubic Yards (CYs). The Victorville Sanitary Landfill is located approximately 25 miles northwest has a remaining capacity of 81,510,000 CYs. These landfills have sufficient permitted capacity to accommodate the project's solid waste disposal needs.



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

- g) **No Impact.** The proposed Project would comply with all federal, state, and local statutes and regulation related to solid waste. Accordingly, no significant impacts related to landfill capacity are anticipated from the proposed Project.

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

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant</i>	<i>No Impact</i>
<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 shall cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### ***SUBSTANTIATION:***

- a) **Less than Significant Impact with Mitigation Incorporated.** Implementation of the proposed Project, with mitigation, will not degrade the overall quality of the region's environment, or 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.

Refer to *Section III, Air Quality*, where short-term (construction) air quality impacts are discussed. Implementation of mitigation measures AQ-1, AQ-2 and AQ-3 would further reduce air quality impacts to a less than significant level.

Refer to *Section IV, Biological Resources*. The project has the potential to affect, either directly or through habitat modifications, species and/or sensitive natural communities 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. The proposed Project has the potential to have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game. Implementation of mitigation measures

BIO-1 through BIO-13 will reduce potential impacts to a level considered less than significant.

- b) **Less than Significant Impact.** The project does not have impacts that are individually limited but cumulatively considerable. The sites of projects in the area to which this project would add cumulative impacts are capable of absorbing such uses without generating any cumulatively significant impacts.
- c) **Less than Significant Impact.** The incorporation of design features, County policies, standards, and guidelines would ensure that there would be no substantial adverse effects on human beings, either directly or indirectly. Impacts of the proposed Project would be less than significant.

## **XIX. MITIGATION MEASURES**

(The following mitigation measures, which are also included within the Conditions of Approval and coupled with the required Condition Compliance Release Forms (CCRF) shall serve as the Mitigation Monitoring and Reporting Program for this project.)

- AQ-1 AQ/ Construction and 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 period 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 (State law)
  - 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) In addition, all on-road diesel trucks shall not idle more than five minutes per truck trip or per day on the project site (State law).
  - h) All transportation refrigeration units (TRU's) shall be provided electric connections. [Mitigation Measure AQ-1 - General Requirements/Planning]
- 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.
- AQ-3 AQ – Installation.** The developer shall submit for review and obtain approval from County Planning 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. [Mitigation Measure **AQ-3** – Final Inspection/Planning]
- BIO-1 Avoidance and Long-Term Preservation of On-Site Lands.** Within eighteen months after the start of construction, the Applicant shall place a permanent Conservation Easement on a minimum of 15 acres within the Agincourt site. Vegetation mapping efforts within the Agincourt site have identified the on-site mitigation lands as creosote bush/white bursage scrub, a common Mojave Desert plant community. This vegetation provides suitable habitat

for several species of desert plants and wildlife, including Joshua trees and native cacti, Mojave desert tortoise, burrowing owl, desert kit fox, and native birds, and the on-site mitigation lands also encompass the two largest and highest-quality desert washes within the site. A permanent Conservation Easement on the on-site mitigation land shall be offered to the CDFG or to a non-governmental conservation organization, and shall be recorded to the satisfaction of the County of San Bernardino and the CDFG. The Applicant shall establish an endowment satisfactory to CDFG for the management and preservation of the on-site mitigation lands. The proposed site management practices, and endowment shall be approved by the County of San Bernardino, after consultation with CDFG.

**BIO-2 Worker Environmental Awareness Program.** Prior to any construction activities on the project site, the Applicant will implement a Worker Environmental Awareness Program (WEAP) to educate on-site workers about sensitive environmental issues associated with the Project. The program will be administered to all on-site personnel, including the Applicant's personnel, contractors, and all subcontractors, on the first day of work prior to the employee's commencing work on the site. The WEAP will place special emphasis on the protected species that have potential to occur within the Agincourt site, including the Mojave desert tortoise, burrowing owl, nesting birds, and desert kit fox, among other plant and wildlife species.

The program will include the following elements:

- A presentation, developed by or in consultation with a qualified biologist, discussing the sensitive biological resources with potential to occur on-site, and explaining the reasons for protecting these resources and penalties for non-compliance;
- Brochures or booklets, containing written descriptions and photographs of protected species as well as a list of site rules pertaining to biological resources, to be provided to all WEAP participants;
- Contact information for the project biological monitor, and instructions to contact the monitor with any questions regarding the WEAP presentation or booklets;
- An acknowledgement form, to be signed by each worker indicating that they received WEAP training and will abide by the site rules protecting biological resources; and,
- Conspicuous stickers, identifying the project and signifying WEAP completion, to be distributed immediately following WEAP training and required on personnel hard hats.

The project Applicant will be responsible for ensuring that all on-site personnel, throughout the duration of project construction, receive WEAP training. A training log, to be signed by all on-site personnel immediately following WEAP training, will be maintained on the project site during construction to document compliance with this measure.

---

**BIO-3 Biological Monitor.** Prior to issuance of a grading permit, a qualified biologist shall be retained by the Applicant as the biological monitor subject to the approval of the County of San Bernardino. The biological monitor shall be present at all times during vegetation clearing or ground disturbance, and shall ensure that impacts to biological resources are avoided or minimized to the fullest extent possible. When construction activities have progressed to the point where biological resources are no longer present, as determined by the biological monitor, biological monitoring in the area may be reduced or discontinued with approval from the County of San Bernardino. The biological monitor shall have the authority to stop specific grading or construction activities if violations of mitigation measures or any local, state, or federal laws are suspected.

**BIO-4 Parish's Daisy Surveys and Compensation.** Prior to vegetation clearing or ground disturbance within the Agincourt site, the Applicant will retain a qualified biologist to conduct a survey for Parish's daisy (*Erigeron parishii*) within the disturbance footprint. The survey shall be timed to coincide with the blooming period of this species, and shall occur between May 1 and August 31 or as determined by a qualified biologist based on observations in the region.

If Parish's daisy is observed within the disturbance footprint, the aerial extent of the occurrence will be mapped and quantified, by outlining a convex polygon around the occurrences and considering the density of Parish's daisy individuals within the polygon. An equivalent acreage will be seeded with this species within the on-site preservation areas described in Mitigation Measure BIO-1 during the fall season.

During the blooming period following seeding, the Applicant shall retain a qualified biologist to inspect the seeded area and verify that the seeds have germinated and that Parish's daisy plants are alive. If no Parish's daisy plants are observed, or if the biologist determines the plants to be in abnormally low density or poor health, a supplemental seeding application shall be performed during the next appropriate season, as determined by the biologist.

**BIO-5 Cactus Salvage Plan.** Prior to issuance of a grading permit, the Applicant shall submit a Cactus Salvage Plan to the County of San Bernardino and the CDFG for approval. The Cactus Salvage Plan shall contain the following elements:

- A spatial inventory of all native cacti within the project site, including species and locations;
- A quantitative assessment of the numbers of each cactus species to be removed by the project; and,
- Proposed measures to retain as many cacti as is practical on the project site, and a spatial and quantitative description indicating the species and locations of cacti to be preserved.

---

**BIO-6 Joshua Tree Translocation Plan.** Prior to issuance of a grading permit for the project, the Applicant shall submit a Joshua Tree Translocation Plan to the County of San Bernardino for review and approval. The plan shall ensure compliance with the San Bernardino County Development Code, and shall specify methods by which Joshua trees proposed for removal shall be transplanted or stockpiled for future transplanting wherever possible. The plan shall specify the locations of all Joshua trees within the project site, and shall identify any trees that would require removal or transplantation. All trees on the on-site areas to be set aside shall be preserved. On-site preservation will be achieved via dedication of a Conservation Easement to the CDFG or a qualified third party, as required by Mitigation Measure BIO-1.

**BIO-7 Mojave Desert Tortoise Exclusion Fencing.** During the months of April, May, September, or October prior to initiation of construction activities, the Applicant will retain a qualified biologist to conduct Mojave desert tortoise surveys in accordance with the most recent USFWS survey protocol for this species. If Mojave desert tortoises or their recent sign are detected (the partial tortoise skeleton detected during protocol surveys in 2012 was many years old, and does not indicate current Mojave desert tortoise presence on the site), the Applicant shall not initiate construction, and shall instead contact the USFWS and CDFG to develop an avoidance strategy and/or seek authorization for incidental take of Mojave desert tortoise.

If survey results are negative, the Applicant shall erect a tortoise exclusion fence surrounding all portions of the Agincourt site that are proposed for solar development or other ground disturbance. The exclusion fence shall be installed in accordance with the specifications set forth in Chapter 8 of the USFWS' *Desert Tortoise Field Manual* (USFWS 2009), and installation of the fence shall be overseen by a biologist familiar with the installation of tortoise exclusion fencing. Following installation of the tortoise exclusion fence, the Applicant shall retain a qualified biologist to conduct a second, full-coverage pedestrian survey of all areas encompassed by the exclusion fence. If Mojave desert tortoises or their recent sign are detected, the Applicant shall immediately remove portions of the exclusion fence to prevent entrapment of tortoises, and shall contact the USFWS and CDFG to develop an avoidance strategy and/or seek authorization for incidental take of Mojave desert tortoise. If no tortoises or their sign are detected during the second survey, construction activities may commence.

During site construction, the tortoise exclusion fences will be inspected on a monthly basis for any signs of damage or wear that could potentially compromise the integrity of the exclusion perimeter. If damage or excessive wear is observed, the exclusion fence will be repaired immediately. Results of the monthly fence inspections will be maintained on-site during construction to document compliance with this provision.

**BIO-8 Pre-Construction Mojave Desert Tortoise Surveys and Avoidance.** Within 14 days prior to construction-related ground clearing and/or grading, the Applicant shall retain a qualified

biologist to conduct surveys for signs of occupancy by the Mojave desert tortoise. Surveys shall cover the entire area proposed for disturbance, shall be conducted by walking parallel transects spaced no more than 10 meters apart, and shall focus on detecting any live tortoises or their sign, including carcasses, burrows, palates, tracks, and scat. Should any sign indicating the presence of Mojave desert tortoise be detected, the Applicant shall not proceed with ground clearing and/or grading activities in the area of the find, and shall instead contact the USFWS and CDFG to develop an avoidance strategy and/or seek authorization for incidental take of Mojave desert tortoise.

The results of the pre-construction surveys, including graphics showing the locations of any tortoise sign detected, and documentation of any avoidance measures taken, shall be submitted to the USFWS, CDFG, and the County of San Bernardino within 14 days of completion of the pre-construction surveys or construction monitoring to document compliance with applicable federal and state laws pertaining to the protection of Mojave desert tortoise.

**BIO-9 Pre-Construction Burrowing Owl Surveys and Passive Relocation.** Within 14 days prior to ground disturbance, the Applicant shall retain a qualified biologist to conduct burrowing owl surveys within the area to be disturbed. The survey shall be performed by walking parallel transects spaced no more than 20 meters apart, and shall be focused on detecting burrows that are occupied, or are suitable for occupation, by the burrowing owl. The results of the surveys, including graphics showing the locations of any active burrows detected and any avoidance measures required, shall be submitted to the County of San Bernardino and CDFG within 14 days following completion of the surveys. If active burrows are detected, the following take avoidance measures shall be implemented:

- If burrowing owls are observed using burrows on-site during the non-breeding season (September through January, unless determined otherwise by a qualified biologist based on field observations in the region), occupied burrows shall be left undisturbed, and no construction activity shall take place within 300 feet of the burrow where feasible (see below).
- If disturbance of owls and owl burrows on-site is infeasible, owls shall be excluded from all active burrows through the use of exclusion devices placed in occupied burrows in accordance with California Burrowing Owl Consortium (1993) protocols. Specifically, exclusion devices, utilizing one-way doors, shall be installed in the entrance of all active burrows. The devices shall be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows shall then be excavated by hand and refilled to prevent reoccupation. Exclusion shall continue until the owls have been successfully excluded from the disturbance area, as determined by a qualified biologist.
- Any active burrowing owl burrows detected on-site during the breeding season (February through August, unless determined otherwise by a qualified biologist based on field



observations in the region), shall not be disturbed. Construction activities shall not be conducted within 300 feet of an active on-site burrow at this season.

**BIO-10 Burrowing Owl Management Plan.** Prior to issuance of a grading permit, a habitat management plan for the burrowing owl shall be developed. The plan shall include provisions for protecting foraging habitat and replacing any active burrows from which owls may be passively evicted as allowed by Mitigation Measure BIO-9, and shall also include management or enhancement practices intended to maintain burrowing owl habitat suitability within the on-site mitigation lands preserved through Mitigation Measure BIO-1. At a minimum, the plan shall include the following elements:

- If occupied burrows are to be removed, the plan shall contain schematic diagrams of artificial burrow designs and a map of potential artificial burrow locations that would compensate for the burrows removed.
- All active on-site burrows excavated as described in Mitigation Measure BIO-9 shall be replaced with suitable natural or artificial burrows within the on-site preservation areas, at a target ratio of 1:1.
- Provisions for vegetation management in the on-site mitigation lands (see Mitigation Measure BIO-1), specifying the maximum allowable vegetative cover adjacent to established artificial burrows and the methodology to be used in maintaining the appropriate cover.
- Measures prohibiting the use of rodenticides.
- The plan shall ensure that adequate suitable burrowing owl foraging habitat is provided in proximity to natural or artificial burrows within the on-site mitigation lands. Foraging habitat shall not be located in areas shaded by the proposed solar arrays, and shall not be subject to vegetation mowing or other fuel management practices. Foraging areas shall be located adjacent to suitable natural or artificial burrow locations.

The Burrowing Owl Management Plan shall be submitted to the County of San Bernardino and CDFG for review and approval prior to issuance of a grading permit for the Project.

**BIO-11 Pre-Construction Nesting Bird Surveys and Avoidance.** Within 30 days prior to vegetation clearing or ground disturbance associated with construction or grading that would occur during the nesting/breeding season (February through August, unless determined otherwise by a qualified biologist based on observations in the region), the Applicant shall retain a qualified biologist to determine if active nests of species protected by the Migratory Bird Treaty Act or the California Fish and Game Code are present within or adjacent to the disturbance zone or within 100 feet (300 feet for raptors) of the disturbance zone. The surveys shall be conducted no more than seven days prior to initiation of disturbance work. If ground disturbance activities are delayed, then additional pre-

disturbance surveys shall be conducted such that no more than seven days will have elapsed between the survey and ground disturbance activities.

If active nests are found, clearing and construction within 100 feet of the nest (or a lesser distance if approved by the USFWS) shall be postponed or halted, until the nest is vacated and juveniles have fledged, as determined by the biologist. Avoidance buffers shall be established in the field with highly visible construction fencing or flagging, and construction personnel shall be instructed on the sensitivity of nest areas. A qualified biologist shall serve as a construction monitor during those periods when construction activities will occur near active nests to ensure that no inadvertent impacts on these nests occur.

The results of pre-construction nesting bird surveys, including graphics showing the locations of any nests detected, and documentation of any avoidance measures taken, shall be submitted to the County of San Bernardino and CDFG within 14 days of completion of the pre-construction surveys or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.

**BIO-12 Pre-Construction Desert Kit Fox Surveys and Passive Relocation.** To avoid unauthorized take of the desert kit fox, the project Applicant shall retain a qualified biologist to conduct preconstruction surveys for this species within 14 days prior to ground disturbance. The survey shall be conducted by walking parallel transects spaced no more than 20 meters apart, and shall be focused on detecting any desert kit fox individuals or dens within the disturbance footprint. If dens are detected, each den shall be classified as inactive, potentially active, or definitely active based on field observations. If necessary, motion-sensitive cameras or a tracking medium shall be used to determine whether a den is active.

Inactive dens in areas that would be impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by desert kit fox.

Active and potentially active dens in areas that would be impacted by construction activities shall be monitored by a qualified biologist for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand to prevent reuse. If tracks are observed, the den shall be classified as active. Outside the desert kit fox pupping season (January 15 through July 31, unless determined otherwise by a qualified biologist based on observations in the region), the den may be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for the next three to five nights to discourage the kit fox from continuing to use the den. After verification that the den is unoccupied, it shall then be excavated and backfilled by hand to prevent reuse, while ensuring that no kit fox are trapped in the den. No

---

excavation of active desert kit fox dens shall be permitted during the pupping season.

The Applicant shall submit a report to the County of San Bernardino and CDFG within 30 days of completion of preconstruction desert kit fox surveys describing the survey methods, results, and details of any dens backfilled or foxes observed.

**BIO-13 Streambed Alteration Agreement.** Prior to undertaking any activity that would divert, fill, obstruct, or substantially alter any of the on-site streambeds described in the Biological Resources Assessment Report for the project (URS June 2012), the project Applicant will enter into a Streambed Alteration Agreement with the CDFG authorizing the proposed activity as required by Section 1602 of the California Fish and Game Code. The project Applicant will ensure that all project personnel comply with all stated terms and conditions of the Agreement, including any seasonal or weather-related restrictions on work activities within the streambeds, construction site housekeeping practices, or other limitations the CDFG may impose.

Project-related impacts to CDFG-jurisdictional desert washes would be mitigated at a minimum ratio of 1:1, including through preservation within the on-site preservation areas identified in Mitigation Measure BIO-1. The preserved area encompasses the two largest and best-developed washes on the Agincourt site, ensuring that the quality of drainages preserved exceeds that of the drainages to be impacted. Because the acreage of jurisdictional washes to be permanently preserved and managed exceeds the acreage that would be affected by the project, and because the washes to be preserved are of greater biological value due to their larger size and habitat complexity, it is likely that additional compensatory mitigation will not be required by the Streambed Alteration Agreement.

## **GENERAL REFERENCES**

Alquist-Priolo Special Studies Zone Act Map Series (PRC 27500)

California Environmental Quality Act (CEQA) Guidelines, Appendix G.

California Fish and Game Code, Migratory Bird Treaty Act and Section 3503.

California Standard Specifications, July 1992

California Natural Diversity Database, accessed at [www.dfg.ca.gov/biogeodata/cnddb/](http://www.dfg.ca.gov/biogeodata/cnddb/).

California Department of Resources Recycling and Recovery (CalRecycle) Accessed at <http://www.calrecycle.ca.gov/SWFacilities/Landfills/> on August 17, 2012.

California Department of Conservation. County of San Bernardino Important Farmland Map. 2010.

California Geological Survey. Alquist-Priolo Earthquake Fault Zones Maps. Assessed at <http://www.consrv.ca.gov/cgs/rghm/ap/Pages/index.aspx> on August 16, 2012.

Water Quality Control Plan – Colorado River Basin Region 7. Colorado River Regional Water Quality Control Board (CRRWQB) approved by the State Water Resources Control Board on February 17, 1994.

Federal Emergency Management Agency (FEMA). *Flood Insurance Rate Map and Flood Boundary*

*Mojave Desert Air Quality Management District California Environmental Quality Act (CEQA) and Federal Conformity Guidelines. 2009*

*Mojave Desert Air Quality Management District Antelope Valley Air Pollution Control District Emissions Inventory Guidance Mineral Handling and Processing Industries. 2000.*

[www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=401](http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=401)

San Bernardino Associated Government's *Congestion Management Plan - 2007 Update*. Adopted December, 2007.

San Bernardino County. *Greenhouse Gas Emissions Reduction Plan*, Adopted December 6, 2011.

San Bernardino County. *Development Code*, 2007

San Bernardino County. *General Plan*, adopted 2007.

San Bernardino County. *General Plan Environmental Impact Report*, 2007.

---

San Bernardino County. *Lucerne Valley Community Plan*. Adopted March 13, 2007.

San Bernardino County. Identified Hazardous Materials Waste Sites List, April 1998

San Bernardino County. Countywide Integrated Waste Management Plan. Prepared by the Department of Public Works. December 2007.

San Bernardino County. *San Bernardino County Stormwater Program, Model Water Quality Management Plan Guidance*.

San Bernardino County of, Road Planning and Design Standards.

San Bernardino County Sheriff's Department. Accessed on August 15, 2012 at <http://www.sbcounty.gov/sheriff/index.asp>.

San Bernardino County Fire Department. Assessed on August 14, 2012 at [http://www.sbcfire.org/fire\\_rescue/Division2/Division2\\_stations.aspx](http://www.sbcfire.org/fire_rescue/Division2/Division2_stations.aspx)

South Coast Air Quality Management District, CEQA Air Quality Handbook, November 1993.

Mojave Basin Area Watermaster, 18<sup>th</sup> Annual Report of the published on May 1, 2012. Accessed online at [www.mojavewater.org/files/18AR1011.pdf](http://www.mojavewater.org/files/18AR1011.pdf) on August 15, 2012.

### **PROJECT SPECIFIC STUDIES:**

*Criteria Pollutant Emissions from the Proposed Agincourt Solar Project, CUP Application (P201200011), San Bernardino County, California. Technical memorandum prepared by URS. November 2012.*

*Response to Comment on Emissions from blasting Activities for Construction of the Agincourt and Marathon Solar sites. Technical memorandum prepared by URS. December 2012.*

*Draft Jurisdictional Determination Report for the Agincourt Solar Site. Prepared by URS. March 2012.*

*General Biological Resources Assessment Report - Agincourt Solar Project. Prepared by URS. June 2012.*

*Focused Burrowing Owl Survey Report - Agincourt Solar Project. Prepared by URS. June 2012.*

---

*Focused Desert Tortoise Survey Report - Agincourt Solar Project. Prepared by URS. June 2012*

*Cultural Resources Record Search Results for the Agincourt Solar Project. Prepared by URS. December 2011.*

*Agincourt Solar Site Hydrologic Analysis. Prepared By URS. June 2012.*

*Draft Water Quality Management Plan. Prepared by URS. June 2012.*

*Greenhouse Gas Emissions from the Proposed Agincourt Solar Project. Prepared by URS. June 2012.*

*Phase I Environmental Site Assessment - Agincourt Solar Site. Prepared by URS. December 2011.*

*Agincourt Solar Visual Impact Assessment. Prepared by URS. June 2012.*

## **EXHIBIT D**

### **CORRESPONDENCE**

**THIS PAGE INTENTIONALLY LEFT BLANK**



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

tgulesserian@adamsbroadwell.com

2013 APR 26 PM 1:10

SACRAMENTO OFFICE

520 CAPITOL MALL, SUITE 350  
SACRAMENTO, CA 95814-4721

TEL: (916) 444-6201  
FAX: (916) 444-6209

DANIEL L. CARDOZO  
THOMAS A. ENSLOW  
PAMELA N. EPSTEIN  
TANYA A. GULESSERIAN  
MARC D. JOSEPH  
ELIZABETH KLEBANER  
RACHAEL E. KOSS  
JAMIE L. MAULDIN  
ROBYN C. PURCHIA  
ELLEN L. TRESCOTT

April 23, 2013

Via U.S. Mail

Christopher Conner  
Planner II  
County of San Bernardino  
Land Use Services Department  
Planning Division  
385 N. Arrowhead Ave., 1<sup>st</sup> Floor  
San Bernardino, CA 92415-0187

Re: Agincourt and Marathon Solar Projects

Dear Mr. Conner:

San Bernardino County Citizens for Responsible Solar ("Citizens"), LRE Agincourt, LLC and LRE Marathon, LLC ("Developers") are pleased to announce that they have reached an agreement to resolve the outstanding issues raised by Citizens before San Bernardino County in its comments on the Initial Studies and Mitigated Negative Declarations prepared by the County for the Agincourt Solar and Marathon Solar Projects. Under this Agreement, Developers will implement additional measures to avoid and minimize potentially significant impacts to: (1) special status species and other biological resources; (2) air quality and public health from emissions of pollutants during project construction activities; and (3) hydrologic effects to downstream parcels.

In consideration of these additional measures, as well as those imposed by the County in response to comments submitted by Citizens, Citizens believes that the construction and operation of the Project will benefit the State of California, San Bernardino County, and communities in the vicinity of the Projects' sites.

Under the Agreement, Developers agree to take the measures identified in Exhibit A to this letter, which Citizens and Developers request be incorporated into the County approvals for the Projects.

Thank you for your attention to this matter.

2834-024cv

April 23, 2013

Page 2

SAN BERNARDINO COUNTY CITIZENS FOR RESPONSIBLE SOLAR



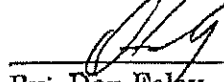
By: Tanya A. Gulesserian

Its: Legal Counsel

LRE MARATHON, LLC

By: LINCOLN RENEWABLE ENERGY, LLC

Its: Sole Member



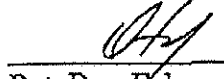
By: Dan Foley

Its: Chief Operating Officer

LRE AGINCOURT, LLC

By: LINCOLN RENEWABLE ENERGY, LLC

Its: Sole Member



By: Dan Foley

Its: Chief Operating Officer

TAG:clv

## Exhibit A

### A. Biological Resources:

1. Western Burrowing Owl Protection: To protect Western burrowing owl(s), Developers shall notify the County regarding the disposition of any on-site owls prior to grading. Developers agree to request that the County amend mitigation measure BIO-9 in the IS/MNDs accordingly.
2. Desert Tortoise Protection: To ensure protection of desert tortoise, Developers shall retain a qualified biologist to conduct Mojave desert tortoise surveys prior to initiating construction, in accordance with the most recent USFWS survey protocol for this species. If survey results are negative for active tortoise presence, Developers shall (i) erect a tortoise exclusion fence around all portions of each project site that is proposed for solar development or ground disturbance, and (ii) following fence construction, retain a qualified biologist to conduct an additional full-scale pedestrian tortoise survey of all areas encompassed by the exclusion fence. If either survey result is positive for active tortoise presence, Developers shall (i) initiate consultations with the California Department of Fish & Wildlife [CDFW] for an Incidental Take Permit [ITP] under the California Endangered Species Act, and (ii) perform all desert tortoise mitigation requirements requested by the CDFW in conjunction with the ITP. If both survey results are negative for active tortoise presence, no further action shall be required.
3. LeConte thrasher: To ensure protection of the LeConte Thrasher, Developers agree to request that the County amend mitigation measure BIO-11 in the IS/MNDs to incorporate the following provisions:
  - a) Developers shall retain a qualified biologist to determine if active nests of species protected by the Migratory Bird Treaty Act and the California Fish and Game Code, as well as California Department of Fish and Wildlife-designated Species of Special Concern, are present within or adjacent to the disturbance zone or within 100 feet (300 feet for raptors) of the disturbance zone.

b) If active nests are found, clearing and construction within 300 feet of the nest (or a lesser distance if approved by the USFWS) shall be postponed or halted, until the juveniles have fledged, as determined by the biologist.

4. Joshua Trees: To further ensure protection of Joshua trees, Developers agree to request that the County amend mitigation measure BIO-6 in the IS/MNDs to incorporate the following:

a) The Joshua Tree Transplantation Plan shall be prepared by a qualified plant ecologist, shall ensure compliance with the San Bernardino County Development Code and the Conservation Element of the San Bernardino County General Plan, and shall specify the best nursery practices, pursuant to which the Joshua trees proposed for removal shall be transplanted or stockpiled for future transplanting, wherever possible. Best nursery practices include avoidance of excessive damage to root material. The plan shall specify the locations of all Joshua trees within the project site and identify all trees that can be transplanted.

B. Air Quality:

1. To reduce nitrogen oxide (NO<sub>x</sub>) emissions during construction, Developers shall comply with the California Air Resources Board's In-Use-Off-Road Diesel Vehicle Regulations that are applicable at the time of construction. Developers shall request that the County include this item as a new Condition of Approval in each project's Conditional Use Permit.

2. In addition to the measures in the IS/MNDs, Developers shall incorporate additional fugitive dust performance measures, which are more stringent than those required under existing regulations, into the conditional use permit for each Project. The measures shall include securing an Operational Dust Control Plan approved by the Mojave Desert Air Quality Management District. The Operational Dust Control Plan shall ensure that fugitive dust at the property boundaries does not exceed baseline thresholds, as determined by the air district, and shall specify appropriate measurement and control methods to

April 23, 2013

Page 5

ensure subsequent compliance. Developers shall request that the County include this item as a new Condition of Approval in each project's Conditional Use Permit.

C. Hydrology:

1. Developers shall ensure that each Project will be designed not to generate any increase in flow or velocities to down-gradient parcels, as modeled under a 100-year-precipitation-event scenario. Developers shall request that the County include this item as a new Condition of Approval in each project's Conditional Use Permit.

# 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

eklebaner@adamsbroadwell.com

## SACRAMENTO OFFICE

520 CAPITOL MALL, SUITE 350  
SACRAMENTO, CA 95814-4721

TEL: (916) 444-6201  
FAX: (916) 444-6209

DANIEL L. CARDOZO  
THOMAS A. ENSLOW  
PAMELA N. EPSTEIN  
TANYA A. GULESSERIAN  
MARC D. JOSEPH  
ELIZABETH KLEBANER  
RACHAEL E. KOSS  
JAMIE L. MAULDIN  
ROBYN C. PURCHIA  
ELLEN L. TRESCOTT

February 1, 2013

### By: Email and U.S. Mail

Nelson Miller, Contract Planner  
County of San Bernardino  
Land Use Services Department  
Planning Division  
15900 Smoke Tree Street, First Floor  
Hesperia, CA 92345  
Nelson.Miller@lus.sbcounty.gov

### Re: Comments on the Initial Studies and Mitigated Negative Declarations ("IS/MNDs") Prepared for the Agincourt and Marathon Solar Projects

Dear Mr. Nelson:

We are writing on behalf of San Bernardino County Citizens for Responsible Solar ("Citizens") to provide comments on the IS/MNDs prepared by San Bernardino County for the Agincourt Solar Project and the Marathon Solar Project (collectively, "Projects"). Because the Projects are proposed by the same developer, would be located at a distance of less than one mile from each other, would utilize identical technology, are concurrently undergoing environmental review by the County in accordance with the California Environmental Quality Act ("CEQA")<sup>1</sup> and, therefore, are related and raise similar issues, we have elected to combine our comments on each IS/MND into one comment letter. For your convenience, we provide the County with two copies of our comments in order that they may be filed in each Project file.

Based upon our review of the IS/MNDs and supporting documentation, we conclude that the IS/MNDs fail to comply with CEQA's requirements. Each IS/MND fails to provide a complete and accurate Project description and to set forth an accurate and documented description of the environmental setting for biological

<sup>1</sup> Pub. Resources Code §§ 21000 et seq.  
2834-008cv

February 1, 2013

Page 2

resources. In addition, both IS/MNDs fail to disclose past uses on and in the vicinity of the Project sites, which are part of the environmental setting and highly relevant to the County's analysis of each Project's potentially significant environmental impacts. These uses include practice bombing exercises conducted by the military and agricultural production activities on and abutting the Project sites. These deficiencies in the IS/MNDs are fatal errors'. As a result, the IS/MND prepared for each Project fails to identify the Project's potentially significant environmental impacts and propose measures that can reduce those impacts to a less than significant level.

As described in these comments, there is more than a fair argument that each Project will result in potentially significant direct and indirect impacts on air quality, biological resources, hydrology, and worker health through exposure to hazards and toxic chemicals that may exist on each Project site. The County may not approve a Conditional Use Permit ("CUP") for either Project until it prepares an Environmental Impact Report ("EIR") that adequately analyzes the Projects' potentially significant direct, indirect and cumulative impacts, and incorporates all feasible mitigation measures to minimize these impacts.

The Projects' impacts must be considered in one EIR. The County violated CEQA by improperly segmenting environmental review of the Projects into two IS/MNDs. The Projects are clearly related, proximate and will result in cumulative impacts on biological, hydrological, and air quality resources, among other impacts.

We prepared these comments with the assistance of air quality, toxics and hydrology experts Matthew Hagemann P.G., C.Hg and Uma Bhandaram, biologist James Cornett B.A. M.S., and technical expert David Marcus. Their technical comments and qualifications are attached hereto and submitted to the County on the IS/MNDs in addition to the comments in this letter. We request that the County address and respond to the comments of Mr. Hagemann and Ms. Bhandaram, Mr. Cornett, and Mr. Marcus separately.

## **I. STATEMENT OF INTEREST**

Citizens is an unincorporated association of individuals and labor unions that are concerned about public and worker health and safety risks and environmental and public service impacts from industrial development. Citizens supports environmentally sound land use and development in the County. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more

2834-008cv

February 1, 2013  
Page 3

expensive for business and industry to expand in the region, and by making it less desirable for businesses to locate and people to live there. This reduces future employment opportunities. Indeed, continued degradation can, and has, caused construction moratoria, eliminated protected species and their habitat, consumed limited water resources, and placed added stress on the public service and environmental carrying capacity of the State. Citizens is equally concerned about projects with adverse environmental impacts and which place demands on public service infrastructure without providing countervailing employment and economic benefits to local workers and communities.

Citizens includes Mark Rice, Duane Morris, Joshua Ast, and California Unions for Reliable Energy ("CURE") and its members and their families (collectively, "Members"). Citizens and Members have a strong interest in enforcing environmental laws such as CEQA. Members recognize the potential benefits of solar as a renewable energy source. However, Members are also cognizant of the health and safety and environmental risks associated with the industrial processes and development impacts associated with the Projects.

Members reside, recreate, and work in the Projects' vicinity and may themselves work on the Projects. Members breathe the air whose quality will be degraded by Project construction and enjoy the natural landscapes and biological resources that will be adversely impacted by Project development. Finally, Members who may work on the Project would be first in line to be exposed to any contaminated soils that have not been adequately tested, identified, and remediated, and would also be directly exposed to any other unmitigated safety hazards that may exist onsite. Accordingly, the Projects' environmental impacts will directly affect Citizens' and Members' interests.

## II. THE AGINCOURT AND MARATHON SOLAR PROJECTS

The Projects are proposed by the same Project sponsor, WDG Capital Partners ("Applicant"). The Projects are proposed to be sited in the western Mohave Desert, in the southern Lucerne Valley region of San Bernardino County, along a one-mile stretch of Camp Rock Road lying south of State Route 245 and north of State Route 18. Fewer than 2,000 feet separate the Projects.<sup>2</sup>

<sup>2</sup> The Agincourt Project is located 1.8 miles north of the State Route 18 and the Marathon Project is located 2.2 miles north of State Route 18. The IS/MNDs do not state whether the distance is measured from the southern boundary of each Project site. Assuming, that the southern boundary of



February 1, 2013

Page 4

Both Projects will utilize photovoltaic ("PV") technology to generate electricity. The PV solar module arrays at each Project site would be mounted on fixed-tilted or single-axis trackers and a racking system supported by embedded piers. The panels at each site would be raised approximately 25 inches above the ground and tilted nearly parallel to the ground. The PV arrays would be aligned in rows in the north-south direction and separated by access ways. The generation facilities proposed as part of the Projects have a combined direct footprint of approximately 200 acres.

The internal site circulation at each Project site would include a 25-foot-wide perimeter gravel road and maintenance roads with access to the solar panels. The primary facility access point for each Project is from Camp Rock Road. Both Projects are proposed to interconnect to a 33 kV distribution line, which runs along Camp Rock Road and connects to the electrical grid at SCE's Cottonwood Substation. The Cottonwood Substation is located approximately two miles south of the Agincourt Solar Project, at the junction of Camp Rock Road and State Route 18. Both Projects are designed to have a useful life of 20 to 30 years, although according to the IS/MNDs, their life span could be extended by upgrades and refurbishments.

#### **A. The Agincourt Solar Project**

The Agincourt Solar Project is expected to generate 10 MW (net) and is proposed to be sited on a 79.9-acre site abutting Camp Rock Road, approximately 1.8 miles north of State Route 18. The PV modules proposed as part of the Project are estimated to have a direct footprint of 65 acres. The Project includes the construction of approximately 10 inverters on concrete pads, a switching station, an unmanned communications enclosure, an equipment storage enclosure, and underground collector lines, and site access roads.

#### **B. The Marathon Solar Project**

The Marathon Solar Project is expected to generate 20 MW (net) and is proposed to be sited on a 152-acre site abutting Camp Rock Road, approximately 2.2 miles north of State Route 18. The PV modules proposed as part of the Project are

---

each Project site is located at a distance of .4 miles (2.2-1.8 miles = 0.4 miles), the southern boundary of each site is at a distance of 2,112 feet. Accordingly, the northern boundary of the Agincourt site is less than 2,112 feet from the southern boundary of the Marathon site.

2834-008cv

February 1, 2013  
Page 5

estimated to have a direct footprint of 130 acres. The Project includes the construction of approximately 20 inverters on concrete pads, a switching station, an unmanned communications enclosure, an equipment storage enclosure, and underground collector lines, and site access roads.

1-11

### III. THE PROJECT DESCRIPTION IN EACH IS/MND IS INADEQUATE

The IS/MNDs do not meet CEQA's requirements because they fail 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>3</sup> Without a complete project description, the environmental analysis will be impermissibly narrow, thus minimizing the project's impacts and undercutting public review.<sup>4</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 document]."<sup>5</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>6</sup>

1-12

The IS/MNDs are inadequate because they fail to identify all components of each Project. In particular, each IS/MND excludes from the project description the infrastructure that will be necessary to interconnect each Project to the 33 kV Camp Rock Road distribution line and the transmission upgrades that are necessary to bring the Projects online. As a result, the disturbance acreage identified in each IS/MND is understated. The omission skews the impact analysis for each Project because the IS/MNDs fail to address the biological resources that may be impacted or the additional air pollutant emissions that will be generated during construction of these linear facilities.

1-13

#### A. The Project Description In Each IS/MND Improperly Excludes The Projects' Interconnecting Transmission

The Project description in each IS/MND is incomplete because it fails to identify the gen ties that will interconnect each Project to SCE's 33 kv line. The

1-14

<sup>3</sup> See, e.g., *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376.

<sup>4</sup> See *id.*

<sup>5</sup> *County of Inyo v. County of Los Angeles* (1977) 71 Cal.App.3d 185, 193.

<sup>6</sup> *Id.* at 192-193.

2834-008cv

February 1, 2013  
Page 6

pole sites, laydown areas, and pull-sites that will be required to install these facilities will cause ground disturbance, dust generation and noise. As described by James Cornett in his comments, these activities, as well as the operation of the transmission line after construction, have the potential to significantly impact biological resources.<sup>7</sup> The gen tie line is part of each Project's environmental footprint and must be analyzed as such in an EIR.

1-14

#### **B. The Project Description In Each IS/MND Improperly Excludes the Projects' Downstream Transmission Upgrades**

The IS/MNDs fail to identify and analyze the downstream transmission upgrades necessary to support each Project. As described by David Marcus, the Projects require upgrades to the Camp Rock Road line.<sup>8</sup> The upgrades are part of each Project description because the Projects cannot deliver their generation to the grid absent the upgrades and the upgrades would not be necessary but for the Projects.<sup>9</sup> The upgrades will result in new physical impacts to the environment, including but not limited to, potential impacts to biological resources and temporary criteria pollutant emissions during construction.<sup>10</sup> The transmission upgrades are part of each Project's environmental footprint and must be analyzed as such in an EIR.

1-15

#### **IV. BOTH IS/MNDS FAIL TO ADEQUATELY DOCUMENT OR DESCRIBE THE ENVIRONMENTAL SETTING**

An Initial Study must include a description of the project's environmental setting.<sup>11</sup> The description of the environmental setting constitutes the baseline physical conditions by which a lead agency may assess the significance of a project's impacts.<sup>12</sup> As a general matter, the IS/MND must also "disclose the data or evidence upon which person(s) conducting the study relied. Mere conclusions simply provide no vehicle for judicial review."<sup>13</sup> The IS/MNDs are inadequate because their description of the environmental setting with respect to biological

1-16

<sup>7</sup> James Cornett Comments (Attachment 1).

<sup>8</sup> David Marcus Comments (Attachment 2).

<sup>9</sup> See *id.*

<sup>10</sup> *Ibid.*

<sup>11</sup> Cal. Code Regs., §15063 subd. (d)(2) (hereafter "CEQA Guidelines").

<sup>12</sup> CEQA Guidelines, §15125, subd. (a).

<sup>13</sup> *Citizens Association for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 171.

2834-008cv

February 1, 2013  
Page 7

resources, existing land uses and hazards is either, incomplete, unsupported, or inaccurate.

**A. The Description of the Environmental Setting for Biological Resources in Each IS/MND is Incomplete**

Although the existing setting includes natural communities within the vicinity of the Projects, the IS/MNDs improperly limit their description of the existing setting to the immediate Project footprints. The County is required to evaluate the direct, indirect, and cumulative effects of each Project.<sup>14</sup> Indirect effects are changes in the physical environment that occur later in time or farther removed in distance than direct effects.<sup>15</sup> Here, the Project impact area includes lands beyond the immediate Project footprint. As explained by James Cornett in his comments, the natural communities that surround both Projects will be severely impacted by construction and operation activities at each site.<sup>16</sup> Such activities may include noise, dust generation from construction vehicles, and the downslope movement of toxic chemicals, such as fuel and oil.<sup>17</sup> However, the IS/MNDs fail to provide a legally adequate description of existing natural communities, including biological resources, in areas potentially impacted by the Projects. The survey data for each Project site is limited to the immediate Project footprints.

It is a standard practice to conduct surveys at least 100 meters beyond a project site's boundaries, since important biological resources may lie immediately off site.<sup>18</sup> Protocol surveys for special status species, such as the burrowing owl and the desert tortoise, require that surveys be conducted from 150 to 200 meters beyond the site's boundary.<sup>19</sup> Absent survey data for the entirety of the Project impact area, including areas where indirect effects are likely, the County cannot conclude that the Projects' impacts to biological resources have been mitigated to a less than significant level. The Applicant should be required to provide biological baseline data for the entire impact area for each Project site.

<sup>14</sup> See CEQA Guidelines, §15126.2(a).

<sup>15</sup> CEQA Guidelines, §15358(a)(2).

<sup>16</sup> James Cornett Comments at p. 2 (Attachment 1).

<sup>17</sup> *Ibid.*

<sup>18</sup> *Ibid.*

<sup>19</sup> *Ibid.*

2834-008cv



February 1, 2013

Page 8

## **B. The Descriptions of the Environmental Setting for Special Status Species in the IS/MNDs are Unsupported**

“An initial study may rely upon expert opinion supported by facts, technical studies or other substantial evidence to document its findings.”<sup>20</sup> The CEQA Guidelines define “substantial evidence” as “enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion.”<sup>21</sup> “Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.” “[U]nsupported opinion or narrative [and] evidence which is clearly inaccurate or erroneous . . . is not substantial evidence.”<sup>22</sup>

The County cites to the Biological Resource Reports, Burrowing Owl Surveys, and Desert Tortoise Surveys prepared by the Applicant for each Project site as support for its conclusions regarding the environmental setting for special status species at each site. Relying on this documentation, the Agincourt IS/MND states that no special status species plants or wildlife, except one burrowing owl, were observed during biological surveys.<sup>23</sup> The IS/MND further concludes that impacts to the Desert tortoise are unlikely.<sup>24</sup> The County provides a nearly identical analysis in the Marathon IS/MND.<sup>25, 26</sup>

The County’s description of the environmental setting for special status species at each Project site is inadequate, because it is unsupported. As explained by James Cornett, the Applicant’s studies are so flawed that they do not rise to the level of substantial evidence under CEQA. We provide a brief summary of those errors here.

As an initial matter, it appears that the Applicant’s surveys are false and that protocol tortoise surveys have not been conducted. A comparison of the field surveys conducted for the Agincourt and Marathon sites reveals that the surveys

<sup>20</sup> CEQA Guidelines, §15063 subd. (a)(3).

<sup>21</sup> CEQA Guidelines, §15384.

<sup>22</sup> Pub. Resources Code, § 21082.2 subd. (c).

<sup>23</sup> Agincourt IS/MND, at p. 31.

<sup>24</sup> *Id.* at p. 32.

<sup>25</sup> See Marathon IS/MND, at pp. 30-34.

<sup>26</sup> With the exception that a burrowing owl pair and single loggerhead shrike were detected on the Marathon site during site reconnaissance.

2834-008cv

February 1, 2013  
Page 9

are alleged to have been conducted by the same people and at the same time, at the two Project sites.<sup>27</sup> Conflicting field times were given on six different occasions.<sup>28</sup>

A comparison of the Applicant's biological studies also shows that the same people are alleged to have been conducting different surveys on different sites at the same time. For example, surveyors allegedly conducting Desert tortoise surveys on the Marathon site were, at the same time, conducting native plant surveys on the Agincourt site, and vice versa.<sup>29</sup> The data provided in the Applicant's studies is clearly erroneous and does not constitute substantial evidence. It is apparent that if surveys were conducted at all, they were not conducted to protocol, and that insufficient time was dedicated to survey efforts to yield reliable results.<sup>30</sup>

It also appears that, contrary to at the Applicant's supporting documentation, plant surveys were not conducted for least one of the two Project sites. As explained by James Cornett, the plant tables for each Project site are identical.<sup>31</sup> It is nearly impossible for two sites to have identical flora.<sup>32</sup> Combined with the impossibility that the surveys were conducted by the same people at the same time on different sites, it can reasonably be assumed that one site was not surveyed for plants. As a result, the County lacks substantial evidence to concludes that the Projects will not adversely affect special status plants.

Finally, as described by James Cornett in his comments, the Applicant's biological studies cannot be relied upon as expert analyses. The studies exclude information regarding the academic training and relevant experience of the individuals conducting the fieldwork and are riddled with technical errors.<sup>33</sup> For example, the species assessments included in the studies fail to identify extremely common resident species, including protected species and species that are candidates for listing.<sup>34</sup> In addition, the supporting documentation suggests that no snakes, almost no rodents, and no bats occur at either Project site.<sup>35</sup> Yet, these animal groups are among the most abundant groups of desert animals. The

<sup>27</sup> James Cornett Comments, at p. 4 (Attachment 1).

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

<sup>29</sup> *Id.* at pp. 4-5.

<sup>30</sup> See *id.* at p. 5.

<sup>31</sup> *Id.* at p. 5.

<sup>32</sup> See *id.*

<sup>33</sup> *Id.* at p. 3.

<sup>34</sup> *Id.* at p. 6.

<sup>35</sup> *Ibid.*

2834-008cv

February 1, 2013  
Page 10

significant errors and omissions in the Applicant's supporting documentation place the conclusions in the IS/MNDs at issue, strongly suggest that Project sites' value for special status species may be understated and easily raise a fair argument that the Project may result in potentially significant impacts on biological resources.<sup>36</sup>

1-27

**C. The Conclusions in the IS/MNDs Regarding the Project Sites' Potential to Serve as Wildlife Movement Corridors are Unsupported**

The Agincourt IS/MND concludes that the Agincourt site is not within an identified wildlife movement corridor and the site's location on the floor of the Lucerne Valley makes the site suboptimal as a regional travel route.<sup>37</sup> The County reached the identical conclusions in the Marathon IS/MND.<sup>38</sup> However, the conclusions in the IS/MNDs rely on a theoretical model not performed for the Projects.<sup>39</sup> Also, no attempt is made in the IS/MNDs, or the underlying documentation, to substantiate the model's applicability to the Project sites in question.

1-28

No attempt was made by the Applicant's consultants to gather evidence that may expose the existence of wildlife corridors at the Project sites. Such investigation should have, at a minimum, included wash sweeping to reveal recent animal tracks.<sup>40</sup> Ephemeral washes can serve as valuable wildlife movement corridors in the desert, since they are often the only source of water long after a rain event. As a result, the IS/MNDs lack any evidence supporting their claim that the existing conditions do not include wildlife movement corridors.

1-29

Absent data regarding existing conditions at the Project sites, the County lacks substantial evidence to determine the Projects' impacts on wildlife corridors. Furthermore, because the Project sites have washes, which are often used as wildlife corridors, a fair argument can be made that the Projects may result in a significant impact to wildlife corridors.

1-30

1-31

<sup>36</sup> See *id.* at p. 3.

<sup>37</sup> Agincourt IS/MND, at p. 34.

<sup>38</sup> See Marathon IS/MND, at p. 34.

<sup>39</sup> See James Cornett Comments at p. 7(Attachment 1).

<sup>40</sup> *Ibid.*

2834-008cv

February 1, 2013

Page 11

#### **D. The IS/MNDs Fail to Address the Environmental Setting With Respect to Creosote Rings**

The creosote bush enjoys special protection under the County General Plan and Development Code. The San Bernardino County Code prohibits the removal of creosote rings that are 10 feet or greater in diameter.<sup>41</sup> The San Bernardino County General Plan's Conservation Element policies for the County's Desert Region requires "retention of existing native vegetation for new development projects . . . particularly creosote rings."<sup>42</sup> Although creosote bushes produce large numbers of fuzzy seeds at each flowering, few of them are able to germinate. It takes decades for creosote bushes to return to areas that have been cleared of native shrubs.<sup>43</sup> In a few areas of the Mojave Desert, clonal creosote rings have been found that are several yards in diameter. Near Lucerne Valley, "King Clone" has an average diameter of 45 feet.<sup>44</sup> Using radiocarbon dating and known growth rates of creosote, scientists have estimated the age of "King Clone" as 11,700 years.<sup>45</sup> King Clone is located less than ten miles east of the Project sites.

The County summarily concluded in the Agincourt IS/MND that because the Project would disturb "less than 80 acres on the floor of the Lucerne Valley," regionally abundant plants would not be substantially affected by the Project.<sup>46</sup> Similarly, the County summarily concluded in the Marathon IS/MND that regionally abundant plants would not be substantially affected by the Marathon Project, because the Marathon Project would disturb "less than 160 acres on the floor of the Lucerne Valley."<sup>47</sup> The conclusions are invalid because they are unsupported. Although the creosote bush is protected by County ordinance and the General Plan and the Projects are located in proximity to "one of the most spectacular examples of the phenomenon,"<sup>48</sup> the IS/MNDs fail to address the presence of creosote rings on the Project sites. A review of the Applicant's documentation confirms that the Applicant made no attempt investigate the presence of creosote rings on the Project sites.

<sup>41</sup> San Bernardino County Code, § 88.01.060 subd. (c)(3).

<sup>42</sup> San Bernardino County General Plan, Conservation Element, Desert Region Goals and Policies of the Conservation Element, Policy D/CO 1.3.

<sup>43</sup> <http://www.nps.gov/jotr/naturescience/creosote.htm>

<sup>44</sup> *Ibid.*

<sup>45</sup> *Ibid.*

<sup>46</sup> Agincourt IS/MND, at p. 31.

<sup>47</sup> Marathon IS/MND, at p. 31.

<sup>48</sup> James Cornett Comments, at p. 6 (Attachment 1).  
2834-008cv



February 1, 2013  
Page 12

**E. The Agincourt IS/MND Fails to Describe the Environmental Setting With Respect to the Presence of Residual Pesticides at the Project Site**

An Initial Study must include a description of the project's environmental setting.<sup>49</sup> According to the Phase I ESA prepared for the Agincourt Project, the Project site was previously used for agriculture and residual pesticides may be present in the Project site soils.<sup>50</sup> As explained in the comments of Matt Hagemann and Uma Bhandaram, residual pesticides may pose a serious health risk to workers and site personnel who may be exposed to these substances through dermal contact with the soil and through dust inhalation.<sup>51</sup>

The County's failure to disclose past agricultural activities at the Project site and the potential for pesticides to be present in Project soils renders the IS/MND inadequate under CEQA. "A prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decision making and informed public participation."<sup>52</sup> The County's failure to identify these potential on-site hazards precludes decision makers and the public from considering the Agincourt Project in its environmental context.

**F. The Marathon IS/MND Fails to Disclose the Land Uses In the Vicinity of the Project Site**

An Initial Study must include a description of the project's environmental setting.<sup>53</sup> The Marathon IS/MND fails to identify the Victorville Precision Bombing Range No. 8 ("Victorville PBR"), which is located approximately 1,000 feet northwest of the Project site.<sup>54</sup> The Victorville PBR was acquired by the Department of Defense in 1945 and used for bombing practice.<sup>55</sup> Munitions, including 100-lb practice bombs, spotting charges, and high explosive bombs, were

<sup>49</sup> CEQA Guidelines, § 15063 subd. (d)(2).

<sup>50</sup> See Hagemann Comments, at p. 6 (Attachment 3).

<sup>51</sup> *Id.*, at p. 7.

<sup>52</sup> *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 712; see also *City of Fremont v. San Francisco Bay Area Rapid Transit Dist.* (1995) 34 Cal.App.4th 1780, 1790.

<sup>53</sup> CEQA Guidelines, § 15063 subd. (d)(2).

<sup>54</sup> See Matt Hagemann Comments, at p. 1 (Attachment 3).

<sup>55</sup> *Id.* at p. 2.

2834-008cv

1-35

1-36

February 1, 2013

Page 13

used at the site from 1942 to 1944.<sup>56</sup> A 1995 Archive Search Report found a 4,000 pound AN-M56 case and a 100 pound AN-M30 general purpose bomb at the site. As explained in the comments of Matt Hagemann and Uma Bhandaram, although the Victorville PBR is located outside of the Marathon Project site footprint, munitions debris may be found within the Project boundary.<sup>57</sup> In the case of the Victorville PBR No. 3, munitions debris was found outside of the 3,000-foot range.<sup>58</sup>

The Marathon IS/MND's failure to disclose the Victorville PBR as part of the environmental setting renders the IS/MND inadequate under CEQA. "A prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decision making and informed public participation."<sup>59</sup> The County's failure to identify the Victorville PBR in the IS/MND precludes decision makers and the public from considering the Project in its environmental context.

**G. The Marathon IS/MND Fails to Identify the Presence of Aboveground Storage Tanks, Electric Transformers, Fuel Containers, and Other Debris at the Project Site**

An Initial Study must include a description of the project's environmental setting.<sup>60</sup> According to the Phase I ESA prepared for the Marathon Project, the Project site contains an aboveground storage tank, electrical transformers, fuel containers, and residential and storage structures among other debris.<sup>61</sup> As described in the comments of Matt Hagemann and Uma Bhandaram, potential risks from the conditions identified in the Marathon Phase I ESA include exposure to chemicals, which are harmful to human health.<sup>62</sup>

The County's failure to disclose the debris and associated toxics found on the Marathon Project site renders the IS/MND inadequate under CEQA. "A prejudicial abuse of discretion occurs if the failure to include relevant information precludes

<sup>56</sup> *Ibid.*

<sup>57</sup> *Ibid.*

<sup>58</sup> *Ibid.*

<sup>59</sup> *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 712; see also *City of Fremont v. San Francisco Bay Area Rapid Transit Dist.* (1995) 34 Cal.App.4th 1780, 1790.

<sup>60</sup> CEQA Guidelines, § 15063 subd. (d)(2).

<sup>61</sup> Marathon Phase I ESA, at p. 4-1.

<sup>62</sup> Hagemann Comments, at p. 4 (Attachment 3).

2834-008cv

February 1, 2013  
Page 14

informed decision making and informed public participation.”<sup>63</sup> The County’s failure to identify these potential on-site hazards precludes decision makers and the public from considering the Marathon Project in its environmental context.

## V. AN ENVIRONMENTAL IMPACT REPORT IS REQUIRED TO SATISFY CEQA’S PURPOSES AND GOALS

CEQA has two basic purposes, neither of which the IS/MNDs satisfy. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project.<sup>64</sup> CEQA requires that lead agencies analyze any project with potentially significant environmental impacts in an environmental impact report (“EIR”).<sup>65</sup> The purpose of the EIR is to “inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR protects not only the environment, but also informed self-government.”<sup>66</sup> The EIR has been described as “an environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.”<sup>67</sup>

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures.<sup>68</sup> The EIR serves to provide public agencies and the public in general, with information about the effect that a proposed project is likely to have on the environment, and to “identify ways that environmental damage can be avoided or significantly reduced.”<sup>69</sup> If a project has a significant effect on the environment, the agency may approve the project only upon a finding that it has “eliminated or substantially lessened all significant effects on the environment where feasible,” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns” specified in CEQA section 21081.<sup>70</sup> The IS/MNDs fail to satisfy the basic

<sup>63</sup> *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 712; see also *City of Fremont v. San Francisco Bay Area Rapid Transit Dist.* (1995) 34 Cal.App.4th 1780, 1790.

<sup>64</sup> CEQA Guidelines, § 15002, subd. (a)(1).

<sup>65</sup> See Pub. Resources Code, § 21000; CEQA Guidelines, § 15002.

<sup>66</sup> *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 564 (citations omitted).

<sup>67</sup> *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

<sup>68</sup> CEQA Guidelines, § 15002, subd. (a)(2)-(3); *Berkeley Keep Jets Over the Bay Com. v. Bd. of Port Comrs.* (2001) 91 Cal.App.4th 1344, 1354.

<sup>69</sup> CEQA Guidelines, § 15002, subd. (a)(2).

<sup>70</sup> *Ibid.*; CEQA Guidelines § 15092, subd. (b)(2)(A)-(B).

2834-008cv

February 1, 2013  
Page 15

purposes of CEQA by failing to inform the public and decision makers of the Projects' potentially significant impacts and to propose mitigation measures that can reduce those impacts to a less-than-significant level. The County is required to evaluate the Projects in an EIR.

CEQA's purpose and goals must be met through the preparation of an EIR, except in certain limited circumstances.<sup>71</sup> CEQA contains a strong presumption in favor of requiring a lead agency to prepare an EIR. This presumption is reflected in the "fair argument" standard. Under that standard, a lead agency must prepare an EIR whenever substantial evidence in the whole record before the agency supports a fair argument that a project may have a significant effect on the environment.<sup>72</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>73</sup> An agency's decision not to require an EIR can be upheld only when there is no credible evidence to the contrary.<sup>74</sup>

A mitigated negative declaration may be prepared instead of an EIR only when, after preparing an Initial Study, a lead agency determines that a project may have a significant effect on the environment, but:

- (1) Revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where *clearly no significant effect* on the environment would occur; and

<sup>71</sup> See Pub. Resources Code, § 21100.

<sup>72</sup> Pub. Resources Code § 21082.2; CEQA Guidelines, § 15064(f), (h); *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1993) ("Laurel Heights II") 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>73</sup> *Citizens Action to Serve All Students v. Thornley* (1990) 222 Cal.App.3d 748, 754.

<sup>74</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"].

2834-008cv



February 1, 2013  
Page 16

- (2) There is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.<sup>75</sup>

1-42

Substantial evidence can be provided by technical experts or members of the public.<sup>76</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>77</sup> The CEQA Guidelines provides that “if there is disagreement among expert opinion supported by facts over the significance of an effect on the environment, the Lead Agency shall treat the effect as significant and shall prepare an EIR.”<sup>78</sup>

1-43

As detailed in the following sections, there is a fair argument, supported by substantial evidence that the Projects may result in significant impacts to air quality, biological resources, water resources, and worker safety through exposure to on-site hazards including, but not limited to, unexploded ordnance, residual pesticides and petroleum hydrocarbons. Therefore, the County is required to prepare an EIR to evaluate the Projects’ impacts and propose all mitigation measures that are necessary to reduce those impacts to a less than significant level.

1-44

1-45

#### **A. Substantial Evidence Supports a Fair Argument That the Marathon Project May Result In Significant, Unmitigated Impacts to Air Quality**

An MND is appropriate only where a project’s significant impacts have been avoided or mitigated to a point where “clearly no significant effect on the environment would occur” and there is no substantial evidence in light of the whole

1-46

<sup>75</sup> Pub. Resources Code, § 21064.5.

<sup>76</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>77</sup> CEQA Guidelines, § 15062 subd. (f).

<sup>78</sup> CEQA Guidelines, § 15062 subd. (g).

2834-008cv

February 1, 2013  
Page 17

record that the Project may have a significant effect on the environment.<sup>79</sup> The County cannot make either of these findings with respect to the Marathon Project's air quality impacts because the Project will result in significant, unmitigated emissions of oxides of nitrogen ("NO<sub>x</sub>"), an ozone precursor and regulated air pollutant.

Ozone is also a criteria pollutant, regulated under the state and federal Clean Air Acts.<sup>80</sup> Ozone is a potential carcinogen and is linked to several adverse health effects:

Exposure to ozone can reduce the respiratory system's ability to remove inhaled particles, increase pulse rate, decrease blood pressure and reduce the body's ability to fight infection. After six hours of exposure a healthy person can have significant reduction of lung function.<sup>81</sup>

Short-term exposure to ozone may also lead to temporary irritation of the skin, eyes, upper respiratory system, and mucous membranes.<sup>82</sup>

In 2012, the U.S. Environmental Protection Agency ("EPA") classified the Western Mohave Desert in severe -15 nonattainment of the federal eight-hour ozone standard.<sup>83</sup> The Western Mohave Desert is also classified in non-attainment of state ozone standards by the California Air Resources Board.<sup>84</sup> The Marathon Project is proposed to be sited in the vicinity of the highest recorded concentrations of ozone within the Western Mohave Desert Ozone Nonattainment Area.<sup>85</sup>

<sup>79</sup> Pub. Resources Code, § 21064.5.

<sup>80</sup> Mojave Desert Air Quality Management District Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Non-Attainment Area), June 9, 2008, at p. 7 (hereafter "2008 Ozone Attainment Plan") (**Attachment 5**).

<sup>81</sup> *Ibid.*

<sup>82</sup> *See ibid.*

<sup>83</sup> District CEQA Guidelines, at p. 3, Table 1; *see also* 77 Fed. Reg. 2,6950 (May 8, 2012); *see also* 40 C.F.R. §81.305 and 2008 Ozone Attainment Plan at p. E-3, Fig. 1.

<sup>84</sup> District CEQA Guidelines, at p. 3, table 1 (**Attachment 4**).

<sup>85</sup> The highest historical ozone concentrations within the District were recorded within the southeast portion of the Western Mojave Desert planning area, near the border with the South Coast Air Basin 2008 Ozone Attainment Plan, at p. 8 (hereafter "2008 Ozone Attainment Plan") (**Attachment 5**).

The District does not record ozone emissions in Lucerne Valley, however ozone emission are monitored within approximately 35 miles of the Marathon Project site in Hesperia and Victorville. *See* District CEQA Guidelines, at p. 5.

2834-008cv

February 1, 2013  
Page 18

Ozone can form through a complex system of reactions of hydrocarbons and NOx in the presence of sunlight.<sup>86</sup> In order to control ozone emissions, the Mojave Desert Air Quality Management District (“District”) also regulates the emission of ozone precursors, including NOx.<sup>87</sup> The vast majority of NOx emissions source from cars, heavy duty trucks, and large off-road vehicles, such as those typically used during construction.<sup>88</sup>

1-47

In the Marathon IS/MND, the County relies on the air quality significance thresholds recommended in former Appendix G of the State CEQA Guidelines.<sup>89</sup> To determine whether these qualitative significance thresholds may be exceeded, it is common practice for lead agencies to compare project emissions to quantitative significance thresholds developed by local air districts as a screening tool for CEQA review. Thresholds of significance for construction emissions are typically expressed on a short-term basis, i.e., daily or hourly basis to adequately capture impacts due to the high variability of emissions during different construction stages. Here, the County relied on the significance thresholds that were adopted by the District to determine the significance of Project construction emissions.<sup>90</sup>

1-48

Contrary to IS/MND, the Project’s construction emissions are significant.<sup>91</sup> Under the District’s adopted significance thresholds, any project that emits NOx at a rate of 137 lbs/day will result in a significant air quality impact.<sup>92</sup> As demonstrated by Matt Hagemann and Uma Bhandaram, the Marathon Project will exceed District significance threshold for NOx, with emissions at a rate of 148 lbs/day.<sup>93</sup> As such, the Marathon Project’s short-term NOx emissions are significant. The Marathon IS/MND fails to identify the Project’s significant emissions of NOx or propose feasible mitigation measures to reduce the Project’s significant emissions of ozone precursors to a less than significant level.

Substantial evidence supports a fair argument that the Marathon Project may result in significant, unmitigated impacts to air quality. The County is

1-49

<sup>86</sup> 2008 Ozone Attainment Plan, p. 7.

<sup>87</sup> See *id.* at p. 20.

<sup>88</sup> See *id.* at pp. 20-21.

<sup>89</sup> See Marathon IS/MND, at p. 24.

<sup>90</sup> *Id.* at p. 26.

<sup>91</sup> See Marathon IS/MND, at pp. 25, 27.

<sup>92</sup> District CEQA Guidelines, at pp. 9-10, Table 6.

<sup>93</sup> Matt Hagemann Comments, at p. 11 (**Attachment 3**).  
2834-008cv

February 1, 2013  
Page 19

required to address the Project's NOx emissions, together with mitigation measures that will reduce emissions to a less than significant level, in an EIR. As described in the comments of Matt Hagemann and Uma Bhandaram, feasible mitigation measures include, but are not limited to, the use of alternative fuels with a lower nitrogen content and implementation of a NOx emission reduction plan for the Project's construction fleet.<sup>94</sup>

1-49

**B. Substantial Evidence Supports a Fair Argument That the Marathon Project May Result In Significant, Unmitigated Cumulative Emissions of NOx**

As shown by Matt Hagemann and Uma Bhandaram, the Marathon Project is NOx emissions during construction will be cumulatively considerable. The Marathon Project and the Agincourt Project are proposed to be sited less than 2,000 feet apart with potentially simultaneous construction schedules. The Projects' combined NOx emissions exceed the District's daily and annual significance thresholds for NOx.<sup>95</sup> Because the Marathon Project's contribution to total NOx emissions during construction is significant, the Project's emissions are also cumulatively considerable. The Marathon IS/MND fails to identify the Project's significant emissions of NOx and to propose measures that can reduce emissions to a less than significant level. Substantial evidence supports a fair argument that the Marathon Project may result in cumulatively considerable, unmitigated impacts to air quality. The County is required to address the Project's NOx emissions, together with mitigation measures that will reduce emissions to a less than significant level, in an EIR.

1-50

1-51

**C. Substantial Evidence Supports a Fair Argument That the Projects May Result in Significant Impacts to the LeConte's Thrasher**

The Le Conte's thrasher inhabits some of the hottest and driest habitats in the arid southwest, including the deserts of southeastern California where they occur year-round. Preferred habitats include sparse desert scrub, alkali desert scrub, and desert succulent scrub habitats with open desert washes. This species requires areas with an accumulated leaf litter under most plants as cover for its preferred arthropod prey; they also feed on seeds, insects, small lizards, and other

1-52

<sup>94</sup> *Id.* at p. 12.

<sup>95</sup> *Id.* at pp. 12-13.

2834-008cv



February 1, 2013

Page 20

small vertebrates. The Le Conte's thrasher population densities are among the lowest of passerine (perching) birds, estimated at less than five birds per square kilometer in optimal habitats.<sup>96</sup> This low population density decreases the probability of their detection during field surveys.<sup>97</sup> The population is declining due in part to the conversion of habitat to agriculture and urbanization.<sup>98</sup> LeConte's thrasher is one of the focal bird species identified by The Desert Bird Conservation Plan that is vulnerable to habitat loss and fragmentation.<sup>99</sup>

1-52

As described in the comments of James Cornett, the Project sites provide suitable habitat and the Project's will pose potentially significant impacts to this species.<sup>100</sup> The Applicant's biological consultants failed to adequately address the LeConte's thrasher, erroneously concluding that the thrasher is absent because "saltbush scrub habitat is not present on-site."<sup>101</sup> However, as explained by James Cornett, this information relates only to the San Joaquin Valley population of LeConte's thrasher, not populations living in the Mohave Desert. Populations of this species in the Mohave Desert are typically found in "the creosote bush association," plant associations of "mostly cholla and creosote bush" and normally "under creosote bushes."<sup>102</sup> The latter vegetation communities occur on both Project sites.

1-53

James Cornett concludes that, based on the known habitat characteristics of the Project sites, it should be assumed that the LeConte's thrasher is present on the Project sites and will be impacted by Project development. Substantial evidence supports a fair argument that the Projects may result in significant, unmitigated impacts to air quality. The County is required to address the Projects' impacts on the LeConte's thrasher, together with mitigation measures that will reduce emissions to a less than significant level, in an EIR.

1-54

1-55

<sup>96</sup> Imperial Valley SA/DEIS, p. C.2-27 (Attachment 6).

<sup>97</sup> *Ibid.*

<sup>98</sup> *Ibid.*

<sup>99</sup> *Ibid.*

<sup>100</sup> James Cornett Comments (Attachment 1).

<sup>101</sup> *Id.*

<sup>102</sup> *Id.*

2834-008cv

February 1, 2013  
Page 21

**D. Substantial Evidence Supports a Fair Argument That the Projects Will Result in Potentially Significant, Unmitigated Impacts to the Desert Tortoise**

The desert tortoise occurs in the Mohave and Sonoran deserts of southeastern California and southern Nevada, and south through Arizona and Mexico. The desert tortoise was listed by the State of California as threatened in 1989 and federally listed as threatened in 1990. Desert tortoises occur in creosote bush scrub, saltbrush scrub, and Joshua tree woodland.<sup>103</sup> In California, desert tortoises are most often found on level ground, especially adjacent to washes.

In their respective IS/MND, each Project site is described as characterized by creosote bush-white burr sage scrub.<sup>104</sup> The Marathon Project site contains 5.31 acres of unnamed ephemeral washes.<sup>105</sup> The Agincourt Project contains twelve ephemeral washes, totaling approximately 9.15 acres in size.<sup>106</sup> It is undisputed that the acreage comprising both Project sites is suitable habitat for the federally- and state-listed threatened desert tortoise.<sup>107</sup> In addition, evidence of a tortoise carcass found on the Agincourt Project sites suggests that the species has been or still is resident on the site.<sup>108</sup> Indeed, prior surveys conducted within the vicinity of the Project sites have revealed burrows and other tortoise, suggesting the presence of live desert tortoises.<sup>109</sup>

The County proposes to mitigate impacts to the tortoise at both Project sites through the implementation of mitigation measures BIO-2, BIO-3 and BIO-7. These measures require the Applicant to implement a worker environmental awareness program, retain a qualified biologist to monitor construction activities, and utilize tortoise exclusion fencing if no live tortoises are found during preconstruction surveys. However, as explained by James Cornett in his comments,

<sup>103</sup> Lilburn Corporation, Habitat Conservation Plan for the Federally Threatened Desert Tortoise Cushenbury Sand and Gravel Quarry, San Bernardino, California, July 1995, at p. 3 (hereafter "Cushenbury HCP") (**Attachment 7**).

<sup>104</sup> Marathon IS/MND, at p. 30; Agincourt IS/MND, at pp. 30-31.

<sup>105</sup> Marathon IS/MND, at p. 34.

<sup>106</sup> Agincourt IS/MND, at p. 33.

<sup>107</sup> See James Cornett Comments at p. 7 (**Attachment 1**); Marathon Biological Resources Assessment Report, at p. 4-28; Agincourt Biological Resources Assessment Report, at p. 4-32.

<sup>108</sup> See Cushenbury HCP, at p. 3 (**Attachment 7**) and Agincourt Desert Tortoise Survey, at p. ES-1.

<sup>109</sup> *Id.* at p 5.

2834-008cv

February 1, 2013  
Page 22

the above measures will not reduce impacts to the tortoise to a less than significant level because they fail to compensate for loss of habitat and are otherwise inadequate.<sup>110</sup> Habitat compensation is a standard mitigation measure for impacts to lands that are suitable for the tortoise. On past energy projects considered by the Energy Commission and the U.S. Bureau of Land Management, state and federal resource agencies have required a compensation ratio of as much as 3:1 to meet the California Endangered Species Act's full mitigation standard for good quality habitat.<sup>111</sup> Here too, habitat compensation is required to reduce the Projects' impacts to a less than significant level.<sup>112</sup>

1-58

Substantial evidence supports a fair argument that the Project may result in significant, unmitigated impacts to the tortoise through loss of suitable habitat. To offset the loss of tortoise habitat, the Applicant should be required to purchase mitigation habitat at a ratio of at least one to one.<sup>113</sup> The County is required to prepare an EIR to address the Projects' impacts on the desert tortoise and its habitat and require the Applicant to secure compensation lands as appropriate.

1-59  
1-60  
1-61

**E. Substantial Evidence Supports a Fair Argument That the Projects Will Result in Potentially Significant, Unmitigated Impacts to the Burrowing Owl**

Burrowing owls are a California Species of Special Concern. One nesting pair of owls was detected within the Marathon site<sup>114</sup> and two individual owls were detected at the Agincourt site.<sup>115</sup> The County proposes to mitigate impacts to burrowing owls through mitigation measures BIO-2 (Worker Environmental Awareness Program), BIO-3 (biological monitor during construction), BIO-9 (pre-construction surveys), BIO-9 (passive relocations), and BIO-10 (implementation of a Burrowing Owl Management Plan). The mitigation proposed in the MND fails to mitigate the Projects impacts to burrowing owls to a less than significant level.

1-62

Substantial evidence supports a fair argument that the Projects will result in significant, unmitigated impacts to the owl. The preconstruction surveys required

1-63

<sup>110</sup> See James Cornett Comments, p. 9.

<sup>111</sup> See, e. g., California Energy Commission, Staff Environmental Assessment for the Calico Project, (2010) p. C.2-3 (Attachment 8).

<sup>112</sup> James Cornett Comments, at p. 7 (Attachment 1).

<sup>113</sup> *Id.*

<sup>114</sup> Marathon IS/MND, at p. 32.

<sup>115</sup> Agincourt IS/MND, at p. 32.

2834-008cv

February 1, 2013  
Page 23

by mitigation measure BIO-9 fail to avoid impacts to the owl because the measure allows grading to begin prior to the disposition of owls on-site.<sup>116</sup> Additionally, as explained by James Cornett, the measure allows owls to be relocated regardless of breeding status in contravention of the Migratory Bird Act.<sup>117</sup> Mitigation measure BIO-10 does not ensure that impacts to owls will be reduced to a less than significant level because it fails to require the acquisition of suitable habitat for off-site mitigation.<sup>118</sup> The County is required to prepare an EIR to evaluate the Projects' impacts to burrowing owls and proposes all feasible avoidance and mitigation measures that reduce Project impacts to a less than significant level.

#### **F. Substantial Evidence Supports a Fair Argument That the Projects Will Result in Potentially Significant Impacts to Creosote Bush Rings**

Conflicts with any local policies or ordinances protecting biological resources are a potentially significant impact under CEQA.<sup>119</sup> Substantial evidence supports a fair argument that the Projects are in conflict with local policies and ordinances regarding the protection of ancient creosote rings. The San Bernardino County Code prohibits the removal of creosote rings that are 10 feet or greater in diameter.<sup>120</sup> The San Bernardino County General Plan's Conservation Element policies for the Desert Region requires "retention of existing native vegetation for new development projects . . . particularly creosote rings."<sup>121</sup>

As described by James Cornett in his comments, creosote rings are known to occur in the Projects' vicinity and there is a possibility that protected creosote rings exist on site.<sup>122</sup> Indeed, the Projects are proposed to be located in the vicinity of one of the oldest known specimens of this species; the 11,400-year old King Clone.<sup>123</sup> If present, these biologically significant features could be lost during grading operations.<sup>124</sup> The loss of creosote rings would conflict with local ordinances and

<sup>116</sup> See James Cornett Comments, at p. 10 (**Attachment 1**).

<sup>117</sup> *Ibid.*

<sup>118</sup> *Ibid.*

<sup>119</sup> CEQA Guidelines, Appendix G; see also Marathon IS/MND, at p. 30; Agincourt IS/MND, at p. 30.

<sup>120</sup> San Bernardino County Code, § 88.01.060 subd. (c)(3).

<sup>121</sup> San Bernardino County General Plan, Conservation Element, Desert Region Goals and Policies of the Conservation Element, Policy D/CO 1.3.

<sup>122</sup> James Cornett Comments at pp. 8 (**Attachment 1**).

<sup>123</sup> See Citizens Comments, *supra* at § IV.D. We provide an aerial image of King Clone at

**Attachment 9.**

<sup>124</sup> *Ibid.*

2834-008cv



February 1, 2013  
Page 24

policies protecting biological resources and result in a potentially significant impact under CEQA. The County should require the Applicant to survey the Project sites for creosote rings and the results of the Applicant's surveys, along with all proposed feasible mitigation measures, should be disclosed in an EIR.

1-66

**G. Substantial Evidence Supports a Fair Argument That the Projects Will Result in Potentially Significant, Unmitigated Impacts to Desert Native Plants**

Conflicts with any local policies or ordinances protecting biological resources are a potentially significant impact under CEQA.<sup>125</sup> Contrary to IS/MNDs, the Projects are in conflict with local policies and ordinances regarding the protection Joshua trees. The San Bernardino County Code identifies Joshua trees as a regulated tree and plant<sup>126</sup> and requires transplanting or stockpiling Joshua trees that will be significantly damaged by development wherever possible.<sup>127</sup> Desert Region Policy 1.3 of the Conservation Element of the San Bernardino County General Plan "require[s] retention of existing . . . Joshua trees" through transplantation standards that follow best nursery practices, among other methods.<sup>128</sup>

The Projects is in conflict with the local ordinances and the County General Plan because proposed mitigation measure BIO-6 will result in the death of the majority of the Joshua trees on the Project sites. Substantial evidence supports a fair argument that the Projects will result in potentially significant impacts to biological resources. As described by James Cornett in his comments, most Joshua trees that are transplanted die.<sup>129</sup> Mass Joshua tree mortality following transplantation has been recorded at various sites.<sup>130</sup> For example, 75% of transplanted Joshua trees at a Caltrans project in Yucca Valley were determined to be dead or dying upon inspection.<sup>131</sup>

1-67

The low success rate of Joshua tree transplantation efforts is attributed to too much root material being damaged or destroyed during transplantation, as well as

<sup>125</sup> CEQA Guidelines, Appendix G; *see also* Marathon IS/MND, at p. 30; Agincourt IS/MND, at p. 30.

<sup>126</sup> San Bernardino County Code §§ 88.01.060 subd. (a) and 88.01.060 subd. (c)(4).

<sup>127</sup> San Bernardino County Code § 88.01.050 subd. (f)(3)(A).

<sup>128</sup> San Bernardino County General Plan, Conservation Element, pp. V-44-45.

<sup>129</sup> James Cornett Comments, at p. 6 (**Attachment 1**).

<sup>130</sup> *Ibid.*

<sup>131</sup> *Ibid.*

2834-008cv

February 1, 2013

Page 25

to translocation to sites where soils are too well drained.<sup>132</sup> Mitigation measure BIO-6 fails to reduce impacts to Joshua trees because the measure fails to ensure that best nursery practices are followed during transplantation, or to specify criteria for appropriate transplantation sites. Absent these safeguards, the County cannot conclude that the Projects are consistent with local policies and ordinances protecting biological resources and that the Projects' potentially significant impacts to biological resources have been mitigated to a less than significant level.

An EIR is required to address the Projects' impacts on desert native plants, including Joshua trees, as well as the mitigation measures that may reduce to impacts to a less than significant level. In addition to identifying the methods by which Joshua trees are to be transplanted and the appropriate transplantation sites, the mitigation measures proposed in the EIR should require a preconstruction inspection to determine the presence of regulated trees and plants on the Project sites, certification from a Desert Native Plant expert that the proposed tree removal replacement or revegetation activities are appropriate and the posting of a performance bond to ensure the Applicant's completion of the mitigation obligations. These additional measures are consistent with the San Bernardino County Native Tree or Plant Removal Permit Ordinance.<sup>133</sup> The EIR should also consider more effective Joshua tree mitigation techniques, such as germinating replacement trees from seed and then planting them at appropriate locations in the vicinity of the Project sites.<sup>134</sup> This method is reported to have a much higher Joshua tree survival rate than transplantation.<sup>135</sup>

#### **H. Substantial Evidence Supports a Fair Argument That the Projects Will Result in Potentially Significant, Unmitigated Impacts to Water Quality**

Both Projects involve construction activities that will impact the ephemeral channels on each Project site, as well as the quality of those waters. The intensive construction activities proposed for each Project site will remove and otherwise impact waters of the State through fill, dust generation, and other activities. These activities include the placement of numerous support structures within ephemeral channels, trenching and road construction.<sup>136</sup> According to the Marathon IS/MND,

<sup>132</sup> *Ibid.*

<sup>133</sup> See San Bernardino County Code §§ 88.01.050 subds. (c)-(b), (e)(1)-(3).

<sup>134</sup> See James Cornett Comments, at p. 9 (**Attachment 1**).

<sup>135</sup> See *ibid.*

<sup>136</sup> Matt Hagemann Comments, at pp. 9-10 (**Attachment 3**).  
2834-008cv

February 1, 2013

Page 26

channels located on the Marathon site will be filled and their flows redirected.<sup>137</sup> According to the Agincourt IS/MND, several washes on the Agincourt Project site will be filled and their flows redirected to larger drainages located on the Project site, and these drainages will be “narrowed and straightened.”<sup>138</sup>

1-70

Substantial evidence supports a fair argument that the aforementioned activities at each Project site will result in potentially significant impacts through unregulated discharges of waste. As described in the comments of Matt Hagemann and Uma Bhandaram, surface waters at each site would be impacted through filling of ephemeral washes, dust generation, and discharge of contaminants, all of which are considered discharges of waste under state law.<sup>139</sup> As further described in the comments of Matt Hagemann and Uma Bhandaram, residual pesticides and petrochemicals may also become entrained in stormwater runoff and flow offsite.<sup>140</sup> Erosion and runoff of site contaminants will be greatest during construction when soil is disturbed by grading, which is estimated to involve a total of 450,000 cubic yards between the two Projects.<sup>141</sup> The IS/MNDs fail to identify these potentially significant impacts and to specify mitigation measures that will reduce these impacts to a less than significant level.

1-71

The County relies on a Draft Water Quality Management Plan, prepared by the Applicant’s consultant, for the conclusion that neither Project will violate water quality standards or waste discharge requirements.<sup>142</sup> The conclusion is unsupported. The Plan does not address the potential soil contaminants that may become entrained in stormwater runoff and flow offsite, including but not limited to residual pesticides, as described in the comments of Matt Hagemann and Uma Bhandaram.<sup>143</sup> Although each IS/MND assumes that waste discharge will be mitigated to a less than significant level through the Applicant’s conformance with applicable permit requirements under the federal Clean Water Act, the IS/MNDs fail to address fill and other waste discharges that are regulated under state law.<sup>144</sup>

1-72

1-73

<sup>137</sup> Marathon IS/MND, at p. 34.

<sup>138</sup> Agincourt IS/MND, at p. 33.

<sup>139</sup> Water Code §13050 subd. (d); *see also Lake Madrone Water Dist. V. State Water Resources Control Board* (1989) 209 Cal.App. 3d 163, 169.

<sup>140</sup> *See* Matt Hagemann Comments (**Attachment 3**).

<sup>141</sup> *Ibid.*

<sup>142</sup> *See* Agincourt IS/MND, at p. 55; Marathon IS/MND, at p. 56.

<sup>143</sup> *See* Citizens Comments, *infra*, §§ V.I-V.K.

<sup>144</sup> *See* Agincourt IS/MND, at p. 55; Marathon IS/MND, at p. 56.

2834-008cv

February 1, 2013  
Page 27

The California Water Code requires any person discharging waste that could affect the waters of the state to file an application for waste discharge with the relevant regional water board.<sup>145</sup> Individual discharges of waste are regulated by waste discharge requirements, issued by the regional boards based upon mandatory reports filed by dischargers.<sup>146</sup> Reports of waste discharge must specify information regarding the character, location, and volume of the discharge.<sup>147</sup> The waste discharge requirements issued by the regional boards ensure implementation of relevant water quality control plans and the prevention of nuisance conditions.<sup>148</sup>

The Agincourt and Marathon IS/MNDs acknowledge that “approval[s]” from the Colorado River Regional Water Quality Control Board (“Board”) are required, but fail to identify the required permits.<sup>149</sup> Contrary to the IS/MNDs, the Applicant’s Jurisdictional Determination Reports for each Project claim that the Board approval will not be necessary if appropriate stream avoidance measures are implemented.<sup>150</sup> The IS/MNDs are unclear as to whether the County is relying on the Jurisdictional Determination Reports or not and whether the Project will obtain the required permits or not. What is clear is that neither IS/MND adequately analyzes the Projects’ development of a power plant in ephemeral washes and other State waters. It is also clear that neither IS/MND proposes mitigation measures addressing discharge of waste into surface water at each Project site. The IS/MNDs simply lack any assurance that at water of the State will not be significantly impacted.

Substantial evidence supports a fair argument that the Projects will result in potentially significant, unmitigated impacts to water quality through unregulated discharge of waste. The County is required to prepare an EIR to address these impacts. The EIR should address potential impacts from hazards and contaminants existent at each Project site, including those associated with past agricultural activities and military training exercises. Finally, the EIR should specify the mitigation measures that will be implemented to ensure that the Projects will not result in potentially significant impacts to water resources through unregulated discharge of waste during construction and operation activities.

<sup>145</sup> See Water Code §§ 13260 et seq.

<sup>146</sup> See Water Code § 13260 subd. (a).

<sup>147</sup> Water Code § 13260 subd. (a); 23 Cal. Code Reg. § 2205.

<sup>148</sup> Water Code § 13263 subd. (a).

<sup>149</sup> See Agincourt IS/MND, at p. 11; Marathon IS/MND, at p. 11.

<sup>150</sup> Agincourt Jurisdictional Determination, at p. 5-1; Marathon Jurisdictional Determination, at p. 5-1.



February 1, 2013  
Page 28

# **I. Substantial Evidence Supports a Fair Argument That the Marathon Project Will Result in Potentially Significant Impacts Due To Worker Exposure to Munitions Debris**

Substantial evidence supports a fair argument that the Marathon Project will result in potentially significant, unmitigated impacts to worker health. The Marathon Project site is located approximately 1,000 feet from the Victorville PBR, which was used by the military for bombing practice exercises.<sup>151</sup> As described in the comments of Matt Hagemann and Uma Bhandaram, munitions debris is likely to be found within the Project site boundaries.<sup>152</sup> Prior site investigation conducted by the U.S. Army Corps of Engineers at the Victorville PBR concluded that 31 separate instances of munitions debris were found on the Victorville PBR site and high explosives are suspected to have been used.<sup>153</sup> Although to date no remedial investigation has been conducted at the Victorville PBR and the vicinity, such studies were recommended by both state and federal regulators.<sup>154</sup>

1-75

The Marathon IS/MND fails to identify the Victorville PBR or the potential for workers to be exposed to munitions in the Project site soils. The Phase I ESA prepared for the Marathon Project also fails to identify the regulatory history of the Victorville PBR and the potential for past activities to have impacted the Project site.<sup>155</sup> Substantial evidence supports a fair argument that munitions may be found on the Project site<sup>156</sup> and that munitions pose a significant health and safety hazard to workers and onsite personnel.

1-76

The bombs that were found on the Victorville PBR site utilize chemicals such as trinitrotoluene ("TNT") and nitroglycerine.<sup>157</sup> TNT is classified by the EPA as a possible human carcinogen.<sup>158</sup> Primary routes of exposure to TNT are through inhalation and dermal sorption of TNT particulates.<sup>159</sup> Hagemann and Bhandaram conclude that at the Project site, the likely route of exposure would be through

1-77

<sup>151</sup> Citizens Comments, *supra*, § IV.F; *see also* Hagemann Comments at p. 2 (**Attachment 3**).

<sup>152</sup> Hagemann Comments, at p. 2 (**Attachment 3**).

<sup>153</sup> *Ibid.*

<sup>154</sup> *Id.* at pp. 1-2.

<sup>155</sup> *See id.* at p. 3.

<sup>156</sup> *See* Citizens Comments, *supra*, § IV.F.

<sup>157</sup> Matt Hagemann Comments at p. 3 (**Attachment 3**).

<sup>158</sup> *Ibid.*

<sup>159</sup> *Id.* at p. 3.

2834-008cv

February 1, 2013  
Page 29

contact with contaminated soils.<sup>160</sup> Workers that may be exposed to these toxins can suffer serious adverse health effects, including anemia and abnormal liver function.<sup>161</sup>

In addition, the munitions debris and unexploded ordnance that may exist on the Marathon Project site may also pose a significant health and safety risk to workers on personnel.<sup>162</sup> The California Department of Toxic Substances Control has found that practice bombs can cause burns and fatal injuries if picked up or otherwise disturbed.<sup>163</sup> Project construction requires earthmoving activities such as trenching, grading, and excavating. If munitions debris is present on the Project site, it is highly likely that these hazards will be disturbed during construction.

The County is required to prepare an EIR that addresses the Project's potentially significant impacts to workers through exposure to munitions debris in the Project site soils. The County should further require the Applicant to conduct a geophysical and visual survey of the Project site to assess the potential for munitions debris to exist on site and to conduct all necessary remediation before construction activities are commenced. The results of the survey and any sampling should be disclosed in an EIR.

**J. Substantial Evidence Supports a Fair Argument That the Marathon Project Will Result in Potentially Significant Impacts Due to Worker Exposure to Residual Toxic Chemicals**

The Phase I ESA prepared for the Marathon Project identifies the presence of debris at the Project site, including but not limited to, aboveground storage tanks, electric transformers, fuel containers and an abandoned car.<sup>164</sup> Substantial evidence supports a fair argument that residual chemicals on the Marathon Project site will pose a potentially significant, unmitigated hazard for workers. As detailed in the comments of Matt Hagemann and Uma Bhandaram, potential risks from these conditions include worker exposure to total petroleum hydrocarbons ("TPH") in the Project soils.<sup>165</sup> TPH may affect the central nervous system and can cause

<sup>160</sup> *Id.* at p. 2.

<sup>161</sup> *Ibid.*

<sup>162</sup> *Id.* at p. 3.

<sup>163</sup> *Ibid.*

<sup>164</sup> *See id.*, at pp. 3-4.

<sup>165</sup> *Id.* at p. 4.

2834-008cv

February 1, 2013

Page 30

headaches and dizziness.<sup>166</sup> One TPH compound can cause peripheral neuropathy, which manifests in numbness in the feet and legs, while other TPH compounds can adversely affect the blood, the immune system, lungs, skin and eyes.<sup>167</sup>

1-80

Based on identified debris at the Project site, Hagemann and Bhandaram also conclude that workers may also be exposed to polychlorinated biphenyls ("PCBs") and pentachlorophenyl.<sup>168</sup> Both chemicals are classified by the EPA as probable human carcinogens.<sup>169</sup> Exposure to PCBs and pentachlorophenyl result in serious, adverse health impacts. It is documented that worker exposure to PCBs has led to skin and eye irritation.<sup>170</sup> PCBs also adversely affect the immune, reproductive, nervous, and endocrine systems.<sup>171</sup> Pentachlorophenyl can affect the cardiovascular system.<sup>172</sup> As explained by Hagemann and Bhandaram, construction workers may be exposed to these chemicals through inhalation and dermal contact.<sup>173</sup> The IS/MND fails to identify the aforementioned hazards or to propose mitigation measures that may protect workers from exposure to hazardous chemicals.

1-81

The County is required to address the presence of residual chemicals at the Marathon Project site in an EIR. The County should further require the Applicant to conduct a Phase II ESA to assess the presence of contaminated soils at the Project site, determine whether the concentrations of hazardous substances exceed health-protective regulatory screening levels, and propose mitigation and avoidance measures to protect workers. The County should also require the Applicant to remove contaminated soils prior to commencing construction.

1-82

1-83

1-84

<sup>166</sup> *Ibid.*

<sup>167</sup> *Ibid.*

<sup>168</sup> *Id.* at p. 5.

<sup>169</sup> *See id.* at p. 5.

<sup>170</sup> *Ibid.*

<sup>171</sup> *Ibid.*

<sup>172</sup> *Ibid.*

<sup>173</sup> *Ibid.*

February 1, 2013  
Page 31

**K. Substantial Evidence Supports a Fair Argument That Residual Pesticides at the Agincourt Project Site Will Result in Potentially Significant Impacts to Worker Health**

The Phase I ESA prepared by the Applicant's consultant for the Agincourt Project discloses that the site was historically used for agriculture.<sup>174</sup> The Phase I ESA further states that "chemical retention in subsurface soils could be of concern" and "based on the historical agricultural use of the property, there is the potential for residual pesticide concentrations in the surface and subsurface soils."<sup>175</sup> Although the Phase I ESA does not identify the types of crops that were grown on the Project site, it is possible that the Project site was used for alfalfa cultivation. Alfalfa has been historically grown in Lucerne Valley.<sup>176</sup> In fact, the region carries the crop's name – the word "lucerne" means "alfalfa" in French.<sup>177</sup>

Substantial evidence supports a fair argument that residual pesticides at the Agincourt Project site will result in potentially significant impacts to workers. As described in the comments of Matt Hagemann and Uma Bhandaram, organochlorine pesticides, such as DDT, have been used in alfalfa cultivation.<sup>178</sup> The EPA has determined DDT to be a probable human carcinogen, and the chemical is known to affect the central nervous system.<sup>179</sup> Although DDT was banned in the 1970s, it can persist in the soil for hundreds of years.<sup>180</sup> Construction workers may be exposed to DDT and other residual pesticide at the Agincourt Project site through dermal contact with the soil and dust inhalation.<sup>181</sup> Hagemann and Bhandaram conclude that residual pesticides at the Agincourt Project site pose a potentially significant hazard to workers and personnel.<sup>182</sup>

The County is required to address the presence of residual pesticides at the Agincourt Project site in an EIR. The County should further require the Applicant to conduct a Phase II ESA to assess the presence of contaminated soils at the

<sup>174</sup> See Phase I ESA, at pp. 2-3.

<sup>175</sup> *Ibid.*

<sup>176</sup> Matt Hagemann Comments, at p. 6 (Attachment 3).

<sup>177</sup> <http://www.thefreedictionary.com/Lucerne>.

<sup>178</sup> Matt Hagemann Comments, at pp. 6-7 (Attachment 3).

<sup>179</sup> *Ibid.*

<sup>180</sup> *Ibid.*

<sup>181</sup> *Ibid.*

<sup>182</sup> See *ibid.*



February 1, 2013

Page 32

Project site, determine whether the concentrations of hazardous substances exceed health-protective regulatory screening levels, and propose mitigation and avoidance measures to protect workers. The County should also require the Applicant to implement all appropriate mitigation measures to reduce the potential for worker exposure to these substances.

1-88

## VI. THE COUNTY IMPERMISSIBLY PIECEMEAL ENVIRONMENTAL REVIEW OF THE AGINCOURT AND MARATHON PROJECTS

CEQA prohibits lead agencies from piecemealing a larger project by reviewing portions of the larger project in separate and ostensibly unrelated environmental review documents.<sup>183</sup> CEQA mandates “that environmental considerations do not become submerged by chopping a large project into many little ones – each with a minimal potential impact on the environment – which cumulatively may have disastrous consequences.”<sup>184</sup> Before approving a project, a lead agency must, therefore, assess the environmental impacts of the whole of the project. This is precisely the error that the County committed in this case.

For example, in the case *Arviv Enterprises v. South Valley Area Planning Commission*, the court rejected an attempt by a housing developer to divide a 21-home development into several smaller pieces – first 5 homes, then 2 homes, then 14 homes, each with successive mitigated negative declarations. The court held that the applicant had improperly described the project and that a single EIR was required to analyze and mitigate the effects of the entire 21-home development. The court found that the significance of an accurate project description is “manifest” where environmental impacts “may be disguised or minimized by filing numerous, serial applications.”<sup>185</sup> Similarly here, the County must prepare an EIR to analyze the impacts of the Marathon and Agincourt Projects as a whole, rather than analyzing each individual facility in separately prepared IS/MNDs.

1-89

<sup>183</sup> CEQA Guidelines, § 15378, subd. (a); *Burbank-Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 592.

<sup>184</sup> *Bozung v. Local Agency Formation Commission* (1975) 13 Cal.3d 263, 283-84; *City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438, 1452; *Citizens Ass’n for Sensible Devel. of Bishop Area v. Inyo* (1985) 172 Cal.App.3d 151, 165-166.

<sup>185</sup> *Arviv Enterprises v. South Valley Area Planning Commission* (2002) 101 Cal.App.4th 1333, 1346; see also *Natural Resources Defense Council v. City of Los Angeles* (2002) 103 Cal.App.4th 268, 284. 2834-008cv

February 1, 2013  
Page 33

## VII. CONCLUSION

The IS/MNDs are inadequate because they fail to include complete and accurate Project descriptions, set forth the existing environmental setting and identify and mitigate the Projects' potentially significant impacts on air quality, biological resources and public health. Here, the County also lacks substantial evidence to assess the Projects' impacts because the Applicant failed to provide key data on baseline conditions with respect to biological resources at the Project sites, and the information that was provided with respect to hazards extant at each Project site is incomplete and inaccurate. Due to these significant deficiencies in the IS/MNDs and their supporting documentation, the County cannot conclude that the Projects' potentially significant impacts have been mitigated to a less than significant level.

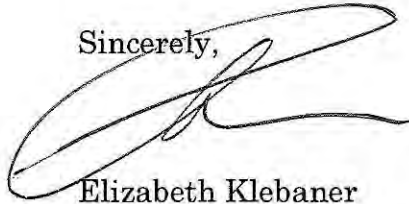
The CEQA Guidelines require that an EIR be prepared if there is substantial evidence supporting a fair argument that any aspect of a project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial.<sup>186</sup> As discussed in detail above, there is substantial evidence that the Projects, collectively and individually would result in significant adverse impacts that were not identified in the IS/MNDs. These include: unmitigated, potentially significant impacts to air quality during construction; unmitigated, potentially significant impacts to special status birds and wildlife, such as the LeConte's thrasher and the desert tortoise; unmitigated, potentially significant impacts to desert native plants that are protected under County ordinances and the San Bernardino General Plan; unmitigated, potentially significant impacts to surface water quality through unregulated waste discharges; and unmitigated, potentially significant impacts to workers from exposure to hazards and toxins at each Project site.

<sup>186</sup> CEQA Guidelines § 15063 subd. (b)(1).  
2834-008cv

February 1, 2013  
Page 34

We urge the County to fulfill its responsibilities under CEQA by withdrawing the IS/MNDs and preparing one EIR, as required, to address the issues raised in this comment letter. By complying with State law, the County and the public can ensure that the Projects' significant environmental impacts are mitigated to a less than significant level.

Sincerely,



Elizabeth Klebaner

EK:clv  
Attachments (1-9)

1-94

# ATTACHMENT 1





James W. Cornett — Ecological Consultants

January 24, 2013

Elizabeth Klebaner  
Adams Broadwell Joseph & Cardozo  
601 Gateway Boulevard, Suite 1000  
South San Francisco, California 94080-7037

Subject: Agincourt 10 MW and Marathon 20 MW Photovoltaic Solar Facilities  
Initial Studies, Biological Resource Reports, Biological Report Addendum,  
Burrowing Owl Surveys and Desert Tortoise Surveys

Dear Ms. Klebaner:

I have reviewed the Initial Studies (IS), Biological Resource Reports (BRR), Biological Report Addendum (BRA), burrowing owl surveys (BOS) and desert tortoise surveys (DTS), and Jurisdictional Delineations completed for the proposed Agincourt 10 MW (A10) and Marathon 20 MW (M20) photovoltaic solar facilities (collectively, "Projects"). Both Projects are located on private property under the planning jurisdiction of the County of San Bernardino. I have also conducted my own research to evaluate the Projects and their potentially significant effects on biological resources. My qualifications to perform this review include forty years of experience as a professional California desert ecologist, hundreds of special-status plant and animal surveys, and twenty years of formal research on Joshua tree population dynamics under permits from the National Park Service. I have both prepared and reviewed nearly one thousand biological resource sections of environmental documents. My professional resume is attached hereto.

1.1-1

My comments on the above studies, surveys and reports follow.

**I. The biological studies fail to provide credible information regarding the sensitive species that occur on and adjacent to the Project sites.**

1.1-2

**A. The biological studies fail to cover the entirety of the Projects' impact area.**

The California Department of Fish & Game Staff Report on Burrowing Owl Mitigation<sup>1</sup> and the Pre-project Field Survey Protocol for Potential Desert Tortoise Habitat required by the U.S. Fish

1.1-3

<sup>1</sup> Staff Report on Burrowing Owl Mitigation, Department of Fish and Game, 2012, Appendix C.

& Wildlife Service, require intensive focused field surveys for each species. These protocols require walking transects spaced at ten-meter intervals and off-site surveys on lands adjacent to a project site.<sup>2</sup> The BR, BOS and DTS prepared for the Project sites fail to cover lands adjacent to the Project sites. As a result, the studies fail to include a complete description of the environmental setting and the special status species that will be impacted by the Projects.

1.1-3

The pervasive natural communities that surround both Projects can be expected to be severely impacted by Project construction, operation and maintenance activities.<sup>3</sup> These activities include noise resulting from construction and operation of the facilities, generation of dust from construction vehicles and the downslope movement of toxic chemicals such as fuel and oil during occasional precipitation events. Therefore, the “action area” is not confined to the immediate Project footprints. The Applicant should be required to disclose the biological resources on lands adjacent to the Project sites and analyze whether they would be impacted by the Projects.

1.1-4

1.1-5

It is standard practice to conduct surveys at least 100 meters beyond site boundaries since important biological resources may lie immediately off site. Small animals can easily move off and back onto a site in a manner of minutes, certainly in days.<sup>4</sup> The Applicant should be required to follow standard practice and conduct wildlife surveys 100 meters beyond the immediate Project site boundaries and disclose that information for public and agency review and comment. In order to ascertain Project impacts on burrowing owls and desert tortoise, the Applicant should be required to survey lands lying within at least 200 meters of the Project site boundaries. Protocol surveys for the burrowing owl are recommended at 150 meters beyond site boundaries<sup>5</sup> and desert tortoise surveys are required at 200 meters beyond site boundaries.<sup>6</sup> Both of these sensitive species were detected on the Project sites.<sup>7</sup> The Applicant should be required to conduct surveys for each of the above species in accordance with the recommended survey protocols, and disclose the survey results for public and agency review and comment. At the very least, a discussion should have been provided in the BRR as to why standard practices were abandoned, recommendations were ignored and requirements not satisfied.

1.1-6

1.1-7

1.1-8

1.1-9

<sup>2</sup> Preparing For Any Action That May Occur Within The Range Of The Mojave Desert Tortoise (*Gopherus agassizii*). U.S. Fish & Wildlife Service, 2010.

<sup>3</sup> Yahner, R. H. 1988. Changes in wildlife communities near edges. *Conservation Biology* 2(4):333-339.

<sup>4</sup> Berry, K. H. 1986. Desert tortoise (*Gopherus agassizii*), relocation: Implications of social behavior and movements. *Herpetologica* 42:113-125.

<sup>5</sup> Staff Report on Burrowing Owl Mitigation, Department of Fish and Game, 2012, Appendix C.

<sup>6</sup> Preparing For Any Action That May Occur Within The Range Of The Mojave Desert Tortoise (*Gopherus agassizii*). U.S. Fish & Wildlife Service, 2010.

<sup>7</sup> BRS Agincourt site, page 3-3; BRS Marathon site, page 3-3; BOS Agincourt site, pages 3-1 to 2-2; BOS Marathon Site, page 3-1 to 3-2; DTS Agincourt site, page 3-2; DTS Marathon site, page 3-2.

Finally, the project description indicates that no offsite surveys on associated access roads or transmission corridors were conducted. Such areas are part of the project footprint and must be surveyed for biological resources. Above-ground transmission lines are a hazard to birds.<sup>8</sup>

1.1-10

#### B. Competency of Field Investigators

It is impossible to determine the validity of any of the reports as no information was provided on the academic training or relevant experience of the individuals conducting the fieldwork and writing the reports. The report authors are not listed as field work participants and, therefore, did not participate in any of the fieldwork and could have no first-hand knowledge of the site. There was also no indication in the BRR or IS that fieldworkers reviewed the reports for accuracy. No information was provided as to the academic training of the fieldworkers or whether or not they had degrees in biology or other appropriate discipline. No specific information was provided as to the existence or extent of the relevant experience of the fieldworkers. Evidence of two sensitive species, the burrowing owl and desert tortoise, was described in the reports but no specific information was provided as to whether or not any of the field workers had ever conducted surveys for the two species prior to their employment on this project. Finally, there was no indication that any of the participants in the project had ever been involved in biological studies in the Mojave Desert.

1.1-11

1.1-12

One technical issue strongly suggested that the team of field workers were unfamiliar with the environment in which they worked. Table 5 on page 4-14 of the BRR (Agincourt site) and Table 4 of the BRR (Marathon site) indicate the teddy-bear Cholla, *Cylindropuntia bigelovii*, was found on both Project sites. This is a distinctive-appearing species of cacti, quite unlike any other in California. It does not, however, occur in the western and central Mojave Desert where the Project sites are located.<sup>9</sup> An image of a related cactus species, the golden cholla (*Cylindropuntia echinocarpa*) is shown in the BRR completed for the Agincourt Site on page A-1. This species was not included in the plant species tables in either BRR. It was this species that was probably mistaken for the teddy-bear cholla. To a biologist familiar with the California deserts, this is an egregious error and clearly indicates unfamiliarity with the flora of the region and undermines the credibility of the findings of the sensitive plant surveys.

1.1-13

Desert environments have unique qualities that require specialized methodologies.<sup>10</sup> In my experience, specific information as to the qualifications of those developing a biological resources report is always included in the document. Without such information the reliability of the

1.1-14

<sup>8</sup> Manville, A.M. 2005. Bird Strikes and Electrocutions at Power Lines, Communication Towers, and Wind Turbines: State of the Art and State of the Science, Next Steps Toward Mitigation. USDA Forest Service Gen. Tech. Report. PSW-GTR-191.

<sup>9</sup> Baldwin, B.G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti and D. H. Wilken, editors. 2012. *The Jepson Manual: vascular plants of California, second edition*. University of California Press, Berkeley, California.

<sup>10</sup> Fenstermaker, L. F., E. V. McDonald and R. H. Webb. 2009. Regional threats to the Mojave Desert in *The Mojave Desert: Ecosystem Processes and Sustainability*. University of Nevada Press, Reno, Nevada.

report contents cannot be ascertained, particularly when there are glaring errors and omissions as there are in the BBRs prepared for the Projects.

### C. Conflicting Field Times

The BRR, BOS and DTS prepared for each Project are in serious conflict with regard to the timing of fieldwork that was allegedly conducted by the fieldworkers. The BRR for the Agincourt site indicates that field workers Cristina Slaughter and Ronald Cummings were conducting a reconnaissance-level survey on the site on February 16, 2010, from 10 a.m. in the morning until 5:00 p.m. in the afternoon.<sup>11</sup> The BRR for the Marathon Site, located approximately one-quarter mile from the Agincourt site, indicates the same field workers were conducting a reconnaissance-level survey on the same date and during the same time period on the Marathon Site as well.<sup>12</sup> The same two people could not have been in two different places at the same time. In either scenario, the fieldwork times provided in the BRR are false.

Errors of duplication in reports can occur when similar field methods are used and similar projects are involved. However, contradictory field times were given not once, but on six different occasions. When the “full coverage biological survey” was being conducted on the Agincourt Site by David Kisner and Kelly Kephart on May 5, 2011, they were also allegedly on the Marathon Site during the identical time period: from 8:00 a.m. until 7:00 p.m.<sup>13</sup> When the delineation of jurisdictional waters and streambeds were conducted on the Agincourt Site by Julie Love and Greg Hoisington on September 13, 2011, they were also allegedly on the Marathon Site at exactly the same times on exactly the same day.<sup>14</sup> When Julie Love, William Fletcher, Chris Munson and Natalie Evans were stated to be on the Agincourt Site inventorying Joshua trees, they were also said to be on the Marathon Site, doing exactly the same thing, again at the exact same time period on precisely the same day.<sup>15</sup> The conflicting information provided in the BRR precludes my ability to assess whether sufficient time and staffing was dedicated to survey efforts to ensure reliable results.

The reports also indicate that, sometimes, the same people were doing different things on different sites but at the same times. Based upon the data provided in the DTS report, Christopher Julian, Julie Love and William Fletcher were conducting desert tortoise surveys between the hours of 11:30 a.m. and 5:10 p.m. on the Marathon Site on April 11, 2012.<sup>16</sup> Amazingly, they were also carrying out a native plant inventory on the Agincourt Site on the very same day and at precisely the same hours.<sup>17</sup> This same contradiction occurred once more on

<sup>11</sup> BRR for the Agincourt Site, page 3-2.

<sup>12</sup> Ibid.

<sup>13</sup> BRR Agincourt Site, page 3-2; BRR Marathon Site, page 3-2.

<sup>14</sup> Ibid.

<sup>15</sup> Ibid.

<sup>16</sup> DTS Marathon Site, page 3-2.

<sup>17</sup> BRR Agincourt Site, page 3-2.



April 12 with the same people performing different activities on different sites but during the exact same time periods.<sup>18</sup> This apparent falsification of field times severely undercuts the assertion in the reports for both Projects that “protocol surveys for Mojave desert tortoise (*Gopherus agassizii*) survey, and burrowing owl (*Athene cunicularia*)” were undertaken.<sup>19</sup> Either protocol surveys were not conducted on one or the other site, or only half as much time was spent on each site than is stated in the DTS and BRR.

1.1-15

If I assume that the fieldworkers actually split their time in half between the two Project sites on the two days, then the three field workers would have spent not 16 hours conducting tortoise surveys on the Marathon Site but only 8 hours. Three field workers walking one-mile-per-hour transects for eight hours equal a total of 24 hours of survey time. That is not enough time to cover 152 acres of shrub- and ravine-covered desert. Proper coverage of 152 acres requires that approximately 42.5 hours of transect walking be conducted on the site.<sup>20</sup> Thus, in my professional opinion, insufficient time was spent conducting tortoise surveys to obtain reliable results and federal protocol was not followed.

1.1-16

#### D. Questionable Plant Lists

The likely falsification of field data appears not to be confined to field survey time schedules. A comparison of the two plant tables described above show no difference between the Agincourt and Marathon sites. They are exactly the same. In my forty years of conducting botanical surveys for the environmental review process, I find that it is nearly impossible for two separate sites to have identical floras. The most likely explanation for identical plant lists is that one site was not properly surveyed. A second possibility is that the findings of the botanical surveys were combined into one table. In either case, the plant tables do not constitute an accurate survey of existing biological resources and, in particular, sensitive plant species.

1.1-17

#### E. Inaccurate Habitat Analysis for LeConte’s Thrasher

The BRRs fail to adequately address the LeConte’s thrasher, a State Species of Special Concern. This species likely occurs on or near the Project sites because the habitat is highly suitable.

The BRRs suggest the thrasher is absent because “saltbush scrub habitat is not present on-site,”<sup>21</sup> information the report author most likely obtained from the California Department of Fish &

1.1-18

<sup>18</sup> DTS Marathon Site, page 3-2; BRR Agincourt Site, page 3-2.

<sup>19</sup> BRR, page 3-2.

<sup>20</sup> The Project site is approximately 2,640 feet by 2,640 feet. Divide 2,640 feet by transects spaced 31 feet apart which equals approximately 85 half-mile transects to cover the site. Walking at one-mile-per-hour would take 42.5 hours.

<sup>21</sup> BRR Agincourt Site, page 4-33; BRR Marathon Site, page 4-31.

Wildlife.<sup>22</sup> However, this information relates only to the San Joaquin Valley population of LeConte's thrasher, not populations living in the Mojave Desert. Populations of this species in the Mojave Desert are typically found in "the creosote bush association,"<sup>23</sup> plant associations of "mostly cholla and creosote bush"<sup>24</sup> and normally "under creosote bushes."<sup>25</sup> The latter vegetation communities occur on both Project sites. Based on the limited baseline information provided in the BRRs, it should be assumed that the LeConte's thrasher is present on the Project sites and will be impacted by Project development. ,

1.1-18

#### F. Incomplete Species Assessment

The vertebrate species list is woefully inadequate because it is incomplete. The vertebrate species shown in Table 6 (Agincourt site) and Table 5 (Marathon site) suggest that no snakes, almost no rodents and no bats occur on either Project sites. In fact, these animal groups are among the most abundant groups of desert animals.<sup>26</sup>

1.1-19

Certain extremely common resident species were not observed. For example, the lack of observations of such species as the western whiptail<sup>27</sup> (Agincourt site), black-throated sparrow<sup>28</sup> (both Project sites) and antelope ground squirrel<sup>29</sup> (both Project sites) seriously undermines the credentials and credibility of the field workers. In addition, the lists should have included species that would normally be expected on the project sites but were not observed including the desert iguana, prairie falcon (a state fully protected species) and little pocket mouse (some populations are candidates for listing).

1.1-20

1.1-21

#### G. Ancient Creosote Rings Ignored

Due to their great antiquity, the county of San Bernardino prohibits the removal or destruction of creosote bush rings (*Larrea tridentata*) with a diameter of ten feet or greater.<sup>30</sup> One creosote ring, located less than ten miles to the east, is considered the oldest living thing on earth.<sup>31</sup> In

1.1-22

<sup>22</sup> 2008. California Bird Special Species of Concern List. Prepared April 10, 2008. Accessed online at <http://www.dfg.ca.gov/wildlife/nongame/ssc/birds.html>.

<sup>23</sup> Miller, A. H. and R. C. Stebbins. 1964. *The Lives of Desert Animals in Joshua Tree National Monument* (page 175). University of California Press, Berkeley, California.

<sup>24</sup> Udvardy, M. D. F. 1985. *Deserts* (page 603). Alfred A. Knopf, New York, New York.

<sup>25</sup> Bent, A. C. 1964. *Live Histories of North American Nuthatches, Wrens, Thrashers and Their Allies* (page 413). Dove Publications, New York, New York. Page 413.

<sup>26</sup> Cornett, J. W. 2012. *Wildlife of the Southwest Deserts*. Nature Trails Press, Palm Springs, California.

<sup>27</sup> Jones, L. C. and R. E. Lovich (editors). 2008. *Lizards of the American Southwest* (page 396). Rio Nuevo Publishers, Tucson, Arizona.

<sup>28</sup> Jaeger, E. C. 1961. *Desert Wildlife* (page 151). Stanford University Press, Stanford, California.

<sup>29</sup> Jameson, E. W. and H. J. Peeters. 2004. *Mammals of California* (page 260). University of California Press, Berkeley, California.

<sup>30</sup> San Bernardino County, California, Code of Ordinances, Chapter 88.01: Plant Protection and Management, subsection C-3.

<sup>31</sup> Vasek, F. C. 1980. Creosote bush: long-lived clones in the Mojave Desert. *American Journal of Botany*. 67(2): 246-255.

spite of the County's protection and the proximity of the most spectacular example of the phenomenon, there is no mention of creosote rings in the report and no search for the rings was undertaken.

1.1-22

## II. No Field Investigations of Wildlife Corridors

No attempt was made to gather evidence that might expose the existence of wildlife corridors. Sweeping of wash beds, tracking or remote photography might have revealed wildlife corridors but none of these detection methods were undertaken. At the very least, wash sweeping to reveal recent animal tracks should have been performed.

1.1-23

Instead, the BBRs use vague generalities in an attempt to explain away the presence of corridors (see page 46 of the Agincourt BRR). Specifically, both BBRs cite a study by Penrod and others to explain how the sites are not wildlife corridors.<sup>32</sup> The Penrod study, however, is a theoretical modeling study not supported by field research. It is not a substitute for on-ground field investigations during the course of site-specific biological analyses, analyses that should have been done on and adjacent to the project sites.

1.1-24

## III. The Project Will Result in Potentially Significant Impacts to the Desert Tortoise

Both Project sites are considered suitable habitat for the federally threatened desert tortoise.<sup>33</sup> As an officially listed threatened species by both state and federal governments, any impact to the desert tortoise is considered significant under CEQA. Therefore, to offset the loss of tortoise habitat, the Applicant should be required to purchase mitigation habitat elsewhere at a ratio of at least one to one.<sup>34</sup>

1.1-25

The cumulative impact to the desert tortoise may also be significant.<sup>35</sup> Other solar developments are proposed in the immediate region and most are in tortoise habitat.<sup>36, 37, 38</sup> In addition, numerous other alternative energy projects, covering thousands of acres, have been proposed for

1.1-26

<sup>32</sup> Penrod, K., P. Cabanero, P. Beier, C. Luke, W. Spencer, and E. Rubin. 2005. South Coast Missing Linkages Project: A Linkage Design for the San Bernardino-Granite Connection. South Coast Wildlands, Idyllwild, Ca. [www.scwildlands.org](http://www.scwildlands.org).

<sup>33</sup> BBR (Agincourt), page 4-25; BBR (Marathon), page 4-28.

<sup>34</sup> U.S. Fish & Wildlife Service memorandum from Field Supervisor to (Venture Office) to District Manager, California Desert District, Bureau of Land Management, dated October 1, 2010, regarding Biological Opinion of Brightsource Energy's Ivanpah Solar Electric Generating System Project, San Bernardino County, California [CACA-48668, 49502, 49503, 49504] (8-8-10-F-24).

<sup>35</sup> Lovich, J. E. and J. R. Ennen. Energy Development in the Desert Southwest. *BioScience* Vol. 61, No. 12 (December 2011), pp. 982-992.

<sup>36</sup> <http://www.sbcounty.gov/Uploads/lus/Environmental/Aikyum/BiologicalSurvey.pdf>

<sup>37</sup> [http://www.sbcounty.gov/Uploads/lus/Desert/initial\\_study\\_mnd.pdf](http://www.sbcounty.gov/Uploads/lus/Desert/initial_study_mnd.pdf)

<sup>38</sup> <http://www.sbcounty.gov/Uploads/lus/Desert/noticeOfDecision.pdf>

the California portion of the Mojave Desert.<sup>39</sup> Cumulative impacts to desert tortoises and their habitat must be addressed as stipulated under CEQA.

#### **IV. Potentially Significant Impacts to LeConte's Thrasher [refer to Section I.F above]**

Based on my field experience in the Mojave Desert, the Photographs of the project sites in the BRRs, the preferred habitat descriptions cited earlier in this letter and the obvious inexperience of the field investigators, I conclude the LeConte's thrasher, a State Species of Special Concern, occurs both on and adjacent to the project sites. Therefore, I further conclude that there will be a significant impact to this species as a result of the construction and operation of the Agincourt and Marathon facilities.

#### **V. Potentially Significant Impacts to Special Status Vertebrate Species [refer to Section I.G, above]**

The abbreviated lists of vertebrate animals in both BRRs suggest that some significant species may have been overlooked including the prairie falcon, subspecies of the little pocket mouse and special-status bat species. If this is the case, then there could be significant impacts to such species as a result of the project.

#### **VI. Potentially Significant Impacts to Creosote Bush Rings [refer to Section I.H above]**

Since the immediate region of the project site is known to harbor large and very old creosote rings, there is a possibility that such rings occur on one or both project sites. If present, these highly significant features could be lost during grading operations.

#### **VII. The Project Will Result in Potentially Significant Impacts to the LeConte's Thrasher, Joshua Tree Woodland and Desert Tortoise Habitat Due to the Invasion of Exotic Weed Species.**

Site grading will invite exotic weed species onto the Project site and immediate vicinity.<sup>40</sup> I could find no comprehensive weed control plan and no complete list of herbicides, in any of the reports, which might be used as control agents. This documentation must be provided to ensure such hazards will be adequately mitigated with respect to LeConte's thrasher, Joshua Tree Woodland and desert tortoise habitat.

<sup>39</sup> CEC at [http://www.energy.ca.gov/maps/documents/Solar\\_Power\\_Plant\\_Licensing\\_Projects.pdf](http://www.energy.ca.gov/maps/documents/Solar_Power_Plant_Licensing_Projects.pdf)

<sup>40</sup> Bossard, C. C., J. M. Randall and M. C. Hosbovsky. 2000. *Invasive Plants of California's Wildlands*. University of California Press, Berkeley, California.



### **VIII. Proposed Mitigation Will Not Reduce Impacts to a Less Than Significant Level and Are Otherwise Inadequate**

The ISs prepared for both Projects describe thirteen mitigation actions to reduce possible impacts to biological resources to a level of insignificance. . The proposed mitigation is premature because the Applicant has failed to provide reliable data regarding the existing environmental settings. Nonetheless, I offer comments on the efficacy of several of the proposed mitigation measures and reserve the right to supplement my comments once adequate surveys have been disclosed for public review and comment. .

1.1-33

#### BIO-4 Parish's Daisy Surveys and Compensation.

Contrary to the BRRs, five sensitive plant species, not one, were considered to have a moderate potential to occur within the Project sites boundaries.<sup>41</sup> Accordingly, proposed mitigation measure BIO-4, should be revised to require surveys, seed collection, and broadcast and follow up surveys for each of the five species. Additionally, no mention is made as to what will occur if the existing coverage of Parish's daisy is greater than fifteen acres and the amount of acreage to be left undisturbed on the Project site. Provisions should be made to acquire additional, offsite acreage if the extent of current existence is greater than fifteen acres.

1.1-34

1.1-35

#### BIO-6 Joshua Tree Translocation Plan

In my experience most Joshua trees which are transplanted die. There are multiple reasons for transplantation mortality including excessive damage of root material and placement trees where soils are too well drained. For example, in a Caltrans project along Highway 62 in Yucca Valley, California, approximately 75% of the transplanted trees I examined were dead or dying. Mass mortality has also been documented at other sites.<sup>42</sup> In my opinion, a better course of action is to collect local seed, germinate the seeds in a nursery setting and then plant them as close as possible to the original site, Jean Graham, the Native Plant Nursery Manager at Joshua Tree National Park, reports "the survival rate for out planted nursery-grown Joshua trees is between 85 and 90%."<sup>43</sup>

1.1-36

As a result of the above information, and based upon the intent of the County of San Bernardino's "Plant Protection and Management" code, the specific conditions and methods to

<sup>41</sup> BBR (Agincourt) pages 4-26 to 4-30; BBR (Marathon) pages 4-23 to 4-26.

<sup>42</sup> Carrell, M. <http://www.youtube.com/watch?v=jn7UEE5fP4c>

<sup>43</sup> Graham, Jean. Personal e-mail communication on January 23, 2014.

be used to transplant and store Joshua trees must be delineated to insure tree survival. Specific practices exist and must be followed.<sup>44</sup>

1.1-36

#### BIO-7 Mojave Desert Tortoise Exclusion Fencing

A pre-construction survey will be required by the county of San Bernardino. The proposed mitigation should be revised to state the area in which the survey will be conducted and that the survey will include a buffer area of a least two hundred meters around the project site. The proposed mitigation should also require a monthly monitoring and maintenance of the tortoise exclusion fence. In my experience, a daily check of the exclusion fence is required to ensure efficacy of such mitigation. Workers on foot and vehicles will traverse the site every day during construction and fence damage typically occurs on a daily basis. Absent the above revisions to the proposed mitigation measure, I cannot conclude that the proposed mitigation will reduce impacts to a less than significant level.

1.1-37

1.1-38

#### BIO-8 Pre-Construction Mojave Desert Tortoise Surveys and Avoidance

Proposed mitigation measure BIO-8 fails to require surveys beyond the immediate Project boundaries. Federal protocols for desert tortoise pre-construction surveys indicate that such surveys must also be conducted at least 200 meters beyond site boundaries.<sup>45</sup> Mitigation measure BIO-8 should be revised in conformance with federal protocols. Absent the above revisions to the proposed mitigation measure, I cannot conclude that the proposed mitigation will reduce impacts to a less than significant level.

1.1-39

#### IO-9 Pre-Construction Burrowing Owl Surveys and Passive Relocation

As worded, proposed mitigation measure BIO-9 would allow grading to begin prior to the disposition of owls on-site. Surveys need only be done 14 days (or less) prior to grading but the Applicant needs to notify the County 14 days after the surveys. Thus, the Applicant could notify the County after grading began. Surveys should be done between 30 and 15 days prior to grading (not 14 or fewer days) and the Applicant must notify the County immediately if owls are found. It must be made clear that grading may not proceed until a disposition plan for resident owls is in place.

1.1-40

1.1-41

This mitigation requirement also states “If avoiding disturbance of owls and owl burrows on-site is infeasible” the owls can be relocated, apparently regardless of breeding status. Any kind of relocation of breeding owls is not provided for under State guidelines and would be a violation of

1.1-42

<sup>44</sup> Hoines, J., Joshua Tree National Park Vegetation Specialist. Personal communication on January 22, 2013.

<sup>45</sup> Preparing For Any Action That May Occur Within The Range Of The Mojave Desert Tortoise (*Gopherus agassizii*). U.S. Fish & Wildlife Service, 2010.

the Migratory Bird Act.<sup>46</sup> The last paragraph in this section should be placed above all other sections to eliminate any confusion regarding the disposition of breeding owls.

1.1-42

#### BIO-10 Burrowing Owl Management Plan

Proposed mitigation measure BIO-10 mentions that off-site mitigation is acceptable but provides no guidelines as to how this might be accomplished. A site-specific mitigation plan should be prepared and approved by the California Department of Fish & Wildlife prior to project approval.<sup>47</sup> Although the CDFW does not provide a compensation ratio for replacement habitat,<sup>48</sup> based on my experience I recommend that it be not less than a 1 to 1 ratio for all acreage within the project sites.

1.1-43

1.1-44

#### BIO-12 Pre-Construction Desert Kit Fox Surveys and Passive Relocation

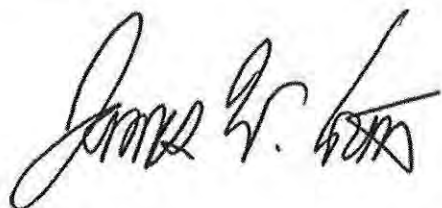
Breeding kit foxes should not be relocated when the female is close to parturition or pups are in the den. The kit fox is much less common than the burrowing owl and should be afforded the same level of protection. This condition should be stipulated in the mitigation element.

1.1-45

This concludes my comments regarding the findings and recommendations in the IS and BRR for the Agincourt and Marathon sites.

1.1-46

Sincerely,



James W. Cornett  
JWC Ecological Consultants  
P.O. Box 846  
Palm Springs, California 92263  
Telephone 760-320-8135  
Fax 760-320-2664

P.O. Box 846 Palm Springs California 92263

<sup>46</sup> Staff Report on Burrowing Owl Mitigation, Department of Fish and Game, 2012.

<sup>47</sup> Staff Report on Burrowing Owl Mitigation, Department of Fish and Game, 2012.

<sup>48</sup> Ibid.

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

### **Personal Data**

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

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

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

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

### **Education**

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

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

### **Positions Held**

**January, 1974 - Present**

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

January, 1996 – June, 2004

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

January, 1980 – December, 1995

Curator of Natural Sciences, Palm Springs Desert Museum

September, 1976 - December, 1979

Assistant Curator of Natural Science, Palm Springs Desert Museum

September, 1975 - June, 1976

Natural Science Instructor, Palm Springs Desert Museum

January, 1973 - Present

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

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

January, 1981 - Present

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

October, 1975 - June, 1983

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

January, 1973 - June, 1974

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

### **Professional Affiliations**

American Society of Mammalogists

Bureau of Land Management Colorado Desert Advisory Committee

California Botanical Society

California Native Plant Society

Ecological Society of America

Herpetologists League

International Palm Society

Joshua Tree National Park Association, Board Member

Southern California Academy of Sciences

Southern California Botanists

Southwestern Naturalists' Society

Western Field Ornithologists

# ATTACHMENT 2



Elizabeth Klebaner  
Adams, Broadwell, Joseph and Cardozo  
Via e-mail

January 25, 2013

**RE: Marathon and Agincourt Solar Projects; Initial Studies and Mitigated Negative Declarations**

Dear Ms. Klebaner,

At your request, I have reviewed the Initial Studies and other documents regarding the proposed Marathon and Agincourt Solar Projects (collectively, “Projects”) in the Lucerne Valley area of Southern California. Based on my analysis and experience I have concluded that a necessary part of the development of the Projects may be the reconductoring of portions of the 33 kilovolt (kV) distribution line owned by Southern California Edison Company (SCE).

The Projects, as described in their respective Initial Studies, would each abut Camp Rock Road, and would each interconnect to the 33 kV SCE distribution line which runs along Camp Rock Road. The Agincourt Project is proposed to be 10 megawatts (MW) in size, while the Marathon Project is proposed to be 20 MW, for a combined total of 30 MW.<sup>1</sup>

The Camp Rock 33 kV distribution line connects to the rest of the SCE grid at SCE’s Cottonwood Substation, which is located at the junction of Camp Rock Road and State Route 18, south of the proposed Agincourt and Marathon locations.<sup>2</sup> It is a necessary part of the Agincourt and Marathon Projects. The Projects cannot deliver their generation to SCE without the Camp Rock 33 kV distribution line unless a new transmission line is constructed.

I have reviewed the most current SCE interconnection queue, which lists projects proposing to interconnect to SCE and their proposed interconnection locations.<sup>3</sup> That queue listing shows four projects, totaling 75 MW, with proposed interconnections to the Camp Rock 33 kV circuit.<sup>4</sup> However all four projects are also listed as canceled.<sup>5</sup> Thus, there do not appear to be any other projects currently in SCE’s interconnection queue for the Camp Rock 33 kV line. The Marathon and Agincourt projects may be the only ones currently planning to connect to it, or there may be one other project, 3 Mw in size, which would also connect to it.<sup>6</sup> The Agincourt and Marathon Initial Studies and supporting

<sup>1</sup> Agincourt IS, p. 2; Marathon IS, p. 2.

<sup>2</sup> BLM, Final Environmental Impact Statement (FEIS) for the Lucerne Valley Solar Project, August 2010, p. 2-13 and Figure 2-1 on p. 2-3. Available online at [http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/cdd/energy.Par.94982.File.dat/Lucerne\\_Valley-FEIS%20Volume%20I-Chapter2.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/cdd/energy.Par.94982.File.dat/Lucerne_Valley-FEIS%20Volume%20I-Chapter2.pdf).

<sup>3</sup> SCE’s WDAT & Rule 21 Current Interconnection Queue, 12/11/12, downloadable from <http://www.sce.com/AboutSCE/Regulatory/openaccess/default.htm#publicwdat>.

<sup>4</sup> Ibid., projects WDT282 (35 MWw), WDT395 (20 MW), WDT418 (10 MW), and 418DS (10 MW).

<sup>5</sup> Ibid.

<sup>6</sup> The SCE queue (Ibid.) does list project WDT406 as a 3 Mw project connecting to the Timco 12 kV distribution circuit. San Bernardino County also has a 3 Mw project pending before it, at East End Road about 3 miles from the Marathon and Agincourt project sites (<http://www.sbcounty.gov/Uploads/lus/Environmental/SolarpackIS.pdf>, p. 3, Figure 2). If the project on East End Road is the same as WDT406, then it would be located just one mile north of the Camp Rock 33

documentation do not identify any additional projects that are proposing to connect to the Camp Rock line.

The carrying capacity of the Camp Rock 33 kV line was analyzed by the Bureau of Land Management (“BLM”) in 2010.<sup>7</sup> The BLM concluded that the Camp Rock 33 kV circuit was definitely capable of handling 20 MW of solar generation, but quite possibly not too much more. The BLM estimated that the total capacity of the Camp Rock 33 kV line was probably about 25 or 26 MW.<sup>8</sup> That is less than the proposed generation that would connect to the line of either 30 MW (from the Projects) or 33 MW (from the Projects plus WDT406). Thus, it is likely that interconnecting both Projects would require upgrading of the Camp Rock 33 kV circuit. The Agincourt and Marathon Initial Studies do not address the question of whether there are other projects currently proposing to interconnect to the same Camp Rock line that would require it to handle cumulative power flows in excess of 30 MW.

In order to upgrade the Camp Rock 33 kV circuit to carry more than its estimated current capacity of 25-26 MW, the line would have to be reconducted between the Agincourt Project and the Cottonwood Substation.<sup>9</sup> Reconducting means that the existing wires (“conductors”) would have to be removed, and replaced with heavier wires capable of carrying more power. This would require construction crews and equipment to work along approximately 1¾ miles of line, which is the distance along Camp Rock Road from the southeast corner of the Agincourt Project to the intersection of Camp Rock Road and State Route 18.<sup>10</sup>

Depending on the height and strength of the existing poles and crossbars, it might also be necessary to replace some or all of them as well. This would require bringing new poles in and old poles out. In the Lucerne Valley Solar FEIS, the BLM assumed that separate environmental review would be conducted to evaluate the impacts of additional proposed transmission facilities, and whether new power poles or disturbance to the existing SCE ROW would occur.<sup>11</sup> The Initial Studies and supporting documentation prepared for the Projects do not address the transmission upgrades that would be necessary to bring the Projects on line.

---

kV line (see

[http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/cdd/energy.Par.94982.File.dat/Lucerne\\_Valley-FEIS%20Volume%20I-Chapter2.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/cdd/energy.Par.94982.File.dat/Lucerne_Valley-FEIS%20Volume%20I-Chapter2.pdf), p. 2-3, Figure 2-1), and it is likely that the Timco 12 kV line would feed into the Camp Rock 33 kV line. In that case the total generation proposed to deliver output via the Camp Rock line would be 33 Mw rather than 30 Mw.

<sup>7</sup> BLM, Final Environmental Impact Statement (FEIS) for the Lucerne Valley Solar Project, August 2010.

The relevant sections are available online at

[http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/cdd/energy.Par.94982.File.dat/Lucerne\\_Valley-FEIS%20Volume%20I-Chapter2.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/cdd/energy.Par.94982.File.dat/Lucerne_Valley-FEIS%20Volume%20I-Chapter2.pdf).

<sup>8</sup> Ibid., pp. 2-24 and 2-25.

<sup>9</sup> North of the Agincourt Project, the new capacity connected to the line from the Marathon Project and (potentially) WDT406 would be no more than 23 MW, which would not trigger a need to reconductor.

<sup>10</sup> Cottonwood Substation is located on the south side of State Route 18 at its intersection with Camp Rock Road. See

[http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/cdd/energy.Par.94982.File.dat/Lucerne\\_Valley-FEIS%20Volume%20I-Chapter2.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/cdd/energy.Par.94982.File.dat/Lucerne_Valley-FEIS%20Volume%20I-Chapter2.pdf), p. 2-3, Figure 2-1. The location of the Agincourt Project is shown in the Agincourt Initial Study, p. 3, Figure 1.

<sup>11</sup> Ibid., p. 2-13.



In conclusion, my analysis shows that: (1) the existing Camp Rock 33 KV line is <sup>1.2</sup> necessary for the Projects to deliver their generation to SCE; (2) there are 30-33 MW of projects currently proposing to interconnect to the Camp Rock 33 kV circuit, of which 30 MW are from the Agincourt and Marathon Projects; (3) the best current estimate of the carrying capacity of that line is only 25-26 MW; and (4) the Camp Rock line would likely have to be reconductored to deliver the combined output of the Agincourt and Marathon Projects. Reconductoring would require, at a minimum, removing the existing conductors and restringing new, larger, conductors. It could also require reinforcing or replacing the existing poles.

Sincerely,



David Marcus

## RESUME

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

June 2011

### Employment

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

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

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

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

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

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

#### CEC, October 1977 - December 1979

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

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

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

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

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

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

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

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

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

**Education**

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

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

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

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

**Professional Publications**

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

# ATTACHMENT 3



Technical Consultation, Data Analysis and  
Litigation Support for the Environment

2503 Eastbluff Dr., Suite 206  
Newport Beach, California 92660

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

January 30, 2013

Elizabeth Klebaner  
Adams Broadwell Joseph & Cardozo  
601 Gateway Boulevard, Suite 1000  
South San Francisco, CA 94080-7037

**Subject: Comments on the Initial Study and Mitigated Negative Declaration for the  
Marathon and Agincourt Solar Projects, San Bernardino County, California**

---

Dear Ms. Klebaner:

We have reviewed the November 2012 Initial Study, Mitigated Negative Declarations (IS/MNDs) and supporting documentation for two solar (photovoltaic) projects proposed to be built approximately 5.5 miles southeast of the Lucerne Valley Community in San Bernardino County, California:

- Marathon Solar Project (Marathon Project): 20 megawatts on 152 acres; and
- Agincourt Solar Project (Agincourt Project): 10 megawatts on 80 acres (collectively, "Projects").

The Projects will be located within one mile of each other along Camp Rock Road.

We have reviewed the IS/MNDs and supporting documentation for issues associated with hazards and hazardous materials, hydrology and water quality, and air quality. The IS/MNDs do not adequately disclose site conditions at the Marathon and Agincourt Project sites that may result in significant and adverse impacts to construction workers, nearby residents, and the surrounding environment. A Draft Environmental Impact Report (DEIR) should be prepared to disclose, evaluate, and mitigate the Projects' potentially significant environmental impacts.

#### **HAZARDS AND HAZARDOUS MATERIALS**

##### Formerly Used Defense Site (FUDS) Near the Marathon Project Site

The Victorville Precision Bombing Range No. 8 (Victorville PBR) is located approximately 1,000 feet to the northwest of the Marathon Project site.<sup>1</sup> A Site Inspection (SI) report, to evaluate the potential for military debris to exist on the site, was conducted by the Army Corps of Engineers in 2008.<sup>2</sup> The

---

<sup>1</sup> See Attachment A.

<sup>2</sup> See Attachment B.



Victorville PBR was acquired by the Department of Defense in 1945 and used for bombing practice and included a range target. Munitions, including 100-lb practice bombs, spotting charges, and high explosive bombs, were used at the site from 1942 to 1944.<sup>3</sup> The report concluded that 31 separate instances of munitions debris were found on the site.<sup>4</sup>

High explosives such as MK1, MK4, and AN-M30 general bombs and AN-M56 light case bombs are suspected to have been used on site.<sup>5</sup> A 1995 Archive Search Report, referenced in the SI, found two high explosives on the site, to include:

- A 4,000-pound AN-M56 light case bomb; and
- A 100-pound AN-M30 MK1 general purpose bomb.<sup>6</sup>

These bombs utilize chemicals such as trinitrotoluene (TNT)<sup>7</sup> and nitroglycerine. TNT is classified by the U.S. EPA as a possible human carcinogen. Primary routes of exposure are through inhalation and dermal sorption of TNT particulates and the likely route of exposure is through contact with contaminated soils. Exposure can result in abnormal liver function and anemia.<sup>8</sup>

Based on these findings, the SI concludes that the presence of munitions of explosive concern (MEC) to be present on the site as “confirmed or suspected” (p. 6-4). Because of the potential for MEC and high explosives to be found on the site, the SI recommended that a Remedial Investigation/Feasibility Study (RI/FS) should be conducted.<sup>9</sup> The Department of Toxic Substances Control (DTSC) agreed with this recommendation and requested that a RI/FS to be performed in a letter dated April 11, 2008.<sup>10</sup>

Although the Project site is outside of Victorville PBR No. 8, munitions debris may still be found within the Project boundary. Previous investigations of formerly used defense sites (FUDS) have shown that munitions debris have been found outside of the FUDS boundary. For example, at Victorville PBR No. 3, munitions debris was found outside of the 3,000-foot range, to include a M38A2 practice bomb, spotting charge debris, and M1 rifle clips. Along with munitions debris, nitroglycerine was also beyond the range boundary.<sup>11</sup>

The December 2011 Phase I Environmental Site Assessment (ESA), prepared for the Marathon Project, identifies the Victorville PBR No. 8 but only to state that:

<sup>3</sup> *Ibid.*, p. ES-1.

<sup>4</sup> *Ibid.*, p. 6-4.

<sup>5</sup> *Ibid.*, p. 6-4.

<sup>6</sup> *Ibid.*, p. 2-7.

<sup>7</sup> See UXO Info, Bomb, Light Case, 4,000-pound, AN-M56 & AN-M56A1.

<http://64.78.11.86/uxofiles/mulvaney/techdatasheets/Bomb,LightCase,4000lbs,AN-M56,andAN-M56A1.pdf>; and UXO Info, Bomb General Purpose (GP), 100-pound, AN-M30.

[http://64.78.11.86/uxofiles/mulvaney/techdatasheets/100POUND\\_AN\\_M30.pdf](http://64.78.11.86/uxofiles/mulvaney/techdatasheets/100POUND_AN_M30.pdf), Accessed January 25, 2013.

<sup>8</sup> U.S. EPA, Technical Fact Sheet 2, 4, 6-Trinitrotoluene (TNT).

[http://www.epa.gov/fedfac/pdf/technical\\_fact\\_sheet\\_tnt.pdf](http://www.epa.gov/fedfac/pdf/technical_fact_sheet_tnt.pdf), Accessed January 25, 2013.

<sup>9</sup> *Ibid.*, p. ES-2.

<sup>10</sup> See Attachment C.

<sup>11</sup> See Attachment D.

Victorville PBR No. 8 in Lucerne valley was identified on the FUDS database. No violations were reported. Based on the regulatory status of the facility, it is not anticipated to impact the property.<sup>12</sup>

The Phase I ESA does not provide any evidence to support this claim. Munitions debris at a neighboring practice bombing range, Victorville PBR No. 3, was found at 3,000 feet beyond the range boundary. Given that the Project site is located 1,000 feet from the Victorville PBR No. 8, there is the potential that munitions debris may be found on the Project site as well. Therefore, contrary to the Phase I ESA's conclusion, the Victorville PBR No. 8 should be considered a recognized environmental condition (REC).<sup>13</sup> Project construction requires earthmoving activities such as trenching, grading, and excavating. If munitions debris is present on the Project site, Project construction may potentially disturb the debris and present a significant risk to workers and site personnel.

The IS/MND does not reference the Phase I ESA's identification of a FUDS site located 1,000 feet northwest of the Project boundary. Failure to disclose Victorville PBR No. 8 in the IS/MND is an oversight that may jeopardize the safety and health of construction workers and other site personnel. DTSC states that even practice bombs can contain "small explosive charges that could burn or cause fatal injuries if picked up or otherwise disturbed."<sup>14</sup> The munitions debris, MEC, or unexploded ordnance (UXO) that may exist on the Project site poses a health and safety risk to construction workers and site personnel.

A geophysical and visual survey of the Project site, to assess the potential for munitions debris and MEC, by trained personnel should be conducted prior to construction.<sup>15</sup> Sampling, if warranted, should be done to test for any associated chemicals that may exist in site soils. Results of the survey and any sampling should be disclosed in a DEIR to ensure adequate disclosure of the environmental setting at the Project site. If munitions debris, MEC, or UXO are found on the Project site, construction should be delayed until all debris has been cleared.

#### Phase I ESA Findings at the Marathon Project Site

A December 2011 Phase I ESA prepared for the Marathon Project site identified the presence of debris on the site, including:

- Aboveground storage tank (AST);
- Electric transformers;
- Fuel containers;

<sup>12</sup> Phase I Environmental Site Assessment for the Marathon Project Site, San Bernardino County, California. p. 4-1.

<sup>13</sup> A REC is defined by the ASTM as the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. See <http://www.astm.org/Standards/E1527.htm>

<sup>14</sup> Department of Toxic Substances Control, Potentially Explosive Ordnance in the City of Rancho Santa Margarita and O'Neill Park. [http://www.dtsc.ca.gov/OMF/Projects/upload/RanchoSantaMargarita\\_FLY\\_Ordnance.pdf](http://www.dtsc.ca.gov/OMF/Projects/upload/RanchoSantaMargarita_FLY_Ordnance.pdf). Accessed January 23, 2013.

<sup>15</sup> The Applicant can request for construction support from the U.S. Army Corps of Engineers.



- Residential structures;
- Storage structures;
- Animal pens and discolored soil near pens;
- An abandoned car; and
- Trash piles (to include: a couch, a mattress, concrete and brick debris, wood, and wire spools).

Rifle shells have been observed on the Project site and can be seen in photos included in the Phase I ESA, and are also referenced in a site interview conducted with the property owners.<sup>16</sup> However, no discussion of the rifle shells is provided in the Phase I ESA.

The Phase I ESA does not identify any of the above findings as RECs. This is in contrast with other Phase I ESA's, prepared for investigations in San Bernardino County, which have found similar conditions to be RECs. For example:

- A Phase I ESA for the Inland Energy Power Plan in Victorville, California identified an abandoned vehicle and structure to present on the site and the potential for hazardous materials from these findings to be a REC.<sup>17</sup> The Phase I ESA recommends that hazardous materials be properly disposed of in accordance with regulations.<sup>18</sup>

Potential risks from the conditions identified in the Phase I ESA include the presence of the following chemicals in the Project soils and the associated health and safety risks:

1. AST/Fuel Containers/Abandoned car:

The Phase I ESA does not specify the contents of the AST or fuel containers. Chemicals – such as cleaning chemicals, gasoline, oils and grease – may have been stored and may have leaked into site soils. Oils from the abandoned car may have also leaked onto Project soils. Total petroleum hydrocarbons (TPH) are chemical compounds that originate in crude oil and can range from TPH-oil, TPH-diesel, and TPH-gasoline. TPH may affect the central nervous system and can cause headaches and dizziness at high levels in the air. One TPH compound can cause a nerve disorder called "peripheral neuropathy," consisting of numbness in the feet and legs while others can cause effects on the blood, immune system, lungs, skin, and eyes.<sup>19</sup>

2. Electrical transformers:

Electrical transformers have used polychlorinated biphenyls (PCBs) as coolants and lubricants as early as 1929. Although their use has been discontinued since 1977, transformers prior to that date may contain PCBs. The U.S. EPA has classified PCBs as probable human carcinogens. Worker

<sup>16</sup> Phase I Environmental Site Assessment, Marathon Project Site, San Bernardino County, California, Photograph 13, p. A-7.

<sup>17</sup> See Attachment E, p. 8-1.

<sup>18</sup> *Ibid.*, p. 8-2.

<sup>19</sup> Agency for Toxic Substances and Disease Registry, TOXFAQs for Total Petroleum Hydrocarbons (TPH) <http://www.atsdr.cdc.gov/toxfaq/tf.asp?id=423&tid=75> Accessed January 21, 2013.



exposure to PCBs has been known to result in skin and eye irritation.<sup>20</sup> PCBs also cause adverse health effects on the immune, reproductive, nervous, and endocrine systems.<sup>21</sup>

### 3. Trash piles:

Wood debris may consist of treated wood which may have been treated with pentachlorophenol, a wood preservative used for utility poles, shingles, fences, and building components.<sup>22</sup> Exposure to pentachlorophenol can occur via inhalation<sup>23</sup> and result in effects to the cardiovascular system and is classified as a probable human carcinogen by the U.S. EPA.<sup>24</sup>

Project construction requires earthmoving activities such as grading and trenching as well as excavation of 300,000 cubic yards of cut-and-fill (IS/MND, p. 9). During these activities, construction workers may be exposed to contaminated site soils, through dermal contact and inhalation. Based upon the findings of the Phase I ESA for the Marathon Project site, soil sampling, under a Phase II investigation, should be completed to assess the presence of contaminated soils on the Project site. Results should be compared to health-protective regulatory screening levels<sup>25</sup> and included in a DEIR. Contamination above regulatory screening levels should be evaluated in a human health risk assessment, to also be included in the DEIR. Debris should be cleared and any contaminated soil should be removed prior to beginning construction to protect worker health.

#### Phase I ESA Findings at the Agincourt Project Site

##### **Agricultural/Pesticide Findings**

The December 2011 Phase I ESA prepared for the Agincourt Project states that the Project site has a history of agricultural use and that residual pesticides may be present in site soils (Agincourt Phase I ESA, p. 2-3). The Phase I ESA does not identify this past agricultural use as a REC.

For example, other site investigations conducted in San Bernardino County have identified agricultural uses as a REC:

- An investigation for a site in the City of San Bernardino identified potential sources of contamination on the site from DDT.<sup>26</sup> A Phase I ESA prepared for the site notes that the site was used for agricultural purposes prior to 1990 and classifies the historical agricultural use

<sup>20</sup> U.S. EPA, PCB Questions and Answers. <http://www.epa.gov/region9/pcbs/faq.html>, Accessed January 21, 2013.

<sup>21</sup> See Attachment O.

<sup>22</sup> U.S. EPA, Preliminary Risk Assessment Pentachlorophenol ("Penta"), HCB, and Dioxin: Question and Answer. <http://www.epa.gov/opp00001/factsheets/chemicals/pentachlorophenol.htm>, Accessed January 22, 2013.

<sup>23</sup> Agency for Toxic Substances and Disease Registry, Pentachlorophenol: Potential for Human Exposure. <http://www.atsdr.cdc.gov/toxprofiles/tp51-c6.pdf>, Accessed January 22, 2013.

<sup>24</sup> U.S. EPA, Pentachlorophenol. <http://www.epa.gov/ttn/atw/hlthef/pentachl.html>, Accessed January 22, 2013.

<sup>25</sup> California Human Health Screening Levels (CHHSLs), <http://www.calepa.ca.gov/brownfields/documents/2005/CHHSLsGuide.pdf>; and Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, [http://www.swrcb.ca.gov/sanfranciscobay/water\\_issues/available\\_documents/ESL\\_May\\_2008.pdf](http://www.swrcb.ca.gov/sanfranciscobay/water_issues/available_documents/ESL_May_2008.pdf)

<sup>26</sup> [http://www.envirostor.dtsc.ca.gov/public/profile\\_report.asp?global\\_id=36010036](http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=36010036), Accessed January 22, 2013.



as a REC.<sup>27</sup> The Phase I ESA recommends that additional investigations, under oversight of the DTSC, should be conducted to evaluate the environmental impacts from agricultural use of the site.<sup>28</sup>

- An investigation at the Arbors Wood Elementary School site in Rancho Cucamonga identified organochlorine pesticides (chlordane, DDT, DDE, and DDD) as potential sources of contamination. The site was fallow at the time of investigation and was observed to have been historically used as a vineyard.<sup>29</sup> A Phase I ESA of the site noted that the site had been used as a vineyard and for agricultural purposes since 1938 and identified the past historical agricultural use of the site as a REC.<sup>30</sup> The Phase I ESA recommended that a Phase II soil sampling investigation be conducted to further evaluate these conditions.<sup>31</sup>
- An investigation was conducted for a proposed school site in Apple Valley.<sup>32</sup> The site had been used for agricultural purposes since prior to 1971, primarily for alfalfa. The Phase I ESA completed for the site identifies historical agricultural use of the site as a REC and recommended that soil samples be collected and analyzed to test for the presence of pesticides.<sup>33</sup> DTSC agreed with the Phase I ESA conclusion and recommended that soil sampling be conducted under their oversight.<sup>34</sup>

The IS/MND does not include any discussion of past agricultural uses at the Project site and fails to disclose that pesticides may present health hazards to construction workers. The Phase I ESA also does not describe the types of crops grown on the Project site, but states that “chemical retention in subsurface soils could be of concern” and “based on the historical agricultural use of the property, there is the potential for residual pesticide concentrations in the surface and subsurface soils.”<sup>35</sup>

Alfalfa has been historically grown in Lucerne Valley.<sup>36</sup> Organochlorine pesticides, such as DDT, have been used in association with alfalfa cultivation.<sup>37</sup> Although DDT was banned in the 1970s, it can persist in the soil for hundreds of years.<sup>38</sup> The U.S. EPA has determined DDT and DDE, a breakdown product, to be probable human carcinogens.<sup>39</sup> DDT is also known to affect the nervous system.<sup>40</sup>

<sup>27</sup> See Attachment F, p. 21

<sup>28</sup> *Ibid.*, p. 22

<sup>29</sup> [http://www.envirostor.dtsc.ca.gov/public/profile\\_report.asp?global\\_id=36010052](http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=36010052). Accessed January 22, 2013.

<sup>30</sup> See Attachment G, p. 21

<sup>31</sup> *Ibid.*, p. 22

<sup>32</sup> [http://www.envirostor.dtsc.ca.gov/public/profile\\_report.asp?global\\_id=36010032](http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=36010032). Accessed January 23, 2013.

<sup>33</sup> See Attachment H, p. E-ii

<sup>34</sup> [http://www.envirostor.dtsc.ca.gov/regulators/deliverable\\_documents/7571577310/Sitting%20Bull%20School%20Final%20DTSC%20Letter%20for%20Phase%201\\_020400.pdf](http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/7571577310/Sitting%20Bull%20School%20Final%20DTSC%20Letter%20for%20Phase%201_020400.pdf) Accessed January 23, 2013.

<sup>35</sup> Phase I Environmental Site Assessment for the Agincourt Project Site, San Bernardino County, California, p. 2-3

<sup>36</sup> <http://www.lucernevalley.net/history/owen1.htm>. Accessed January 23, 2013.

<sup>37</sup> See Attachment I

<sup>38</sup> See Attachment J.

<sup>39</sup> See U.S. EPA, DDT, <http://www.epa.gov/pbt/pubs/ddt.htm>; and U.S. EPA, DDE, <http://www.epa.gov/ttnatw01/hlthef/dde.html> Accessed January 23, 2013.

<sup>40</sup> ToxFAQs, DDT, DDE, DDD, <http://www.atsdr.cdc.gov/toxfaqsf/tf.asp?id=80&tid=20>. Accessed January 23, 2013.

Any past agricultural uses of the Project site should be disclosed, including all pesticides used in association with agricultural operations, in a DEIR. Construction workers and site personnel may be exposed to these pesticides, via dermal contact with the soil and dust inhalation, and experience adverse health impacts. A Phase II ESA should be conducted to include soil sampling to test for all pesticides that may have been used on the Project site in association with past agricultural uses. Sampling results should be compared to human health screening levels (cited in the previous section) to determine potential risks to public health. If results exceed screening levels, appropriate mitigation should be implemented to reduce the potential for dermal contact with contaminated soil and dust inhalation to protect worker health.

1.3-5

## HYDROLOGY AND WATER QUALITY

### Impacts to Waters of the State

Development of both Project sites will result in adverse impacts to ephemeral drainages which constitute waters of the state. A DEIR needs to be prepared to identify construction activities within the ephemeral drainages that will require permitting from the Regional Water Quality Control Board (RWQCB) under provisions of the California Water Code. A DEIR is also necessary to identify mitigation and monitoring that will be necessary to reduce adverse effects on the drainages.

1.3-6

#### **Identified Impacts to Waters of the State at the Marathon Project Site**

The IS/MND identifies the Project site to include two ephemeral washes that total approximately 5.31 acres in size (IS/MND, p. 34). These washes are identified as waters of the state and subject to RWQCB permitting in the Jurisdictional Determination Report.<sup>41</sup>

The IS/MND states that implementation of the Project would “adversely affect” 2.52 acres of the washes (IS/MND, p. 34). The IS/MND goes on to state that “Minor channels of these washes would be filled with native material and their flows re-directed into the primary channels via perimeter swales” and that “Culverts would be installed on both drainages to allow flows to pass beneath the proposed perimeter access road” (IS/MND, p. 34). No additional detail is provided on the adverse effects described in the IS/MND or the filling of the channels and the redirection of the flows.

1.3-7

We have created a map to overlay of the Project site plan and the map of jurisdictional waters provided in the Jurisdictional Determination Report to show that solar panels are proposed to be placed directly over waters of the state.<sup>42</sup>

<sup>41</sup> Draft Jurisdictional Determination Report, Marathon Solar Site, December 2011, Revised March 2012, p. 4-5.

<sup>42</sup> See Figure 1.



### Identified Impacts to Waters of the State at the Agincourt Project Site

The IS/MND identifies 12 washes, totaling 9.15 acres of ephemeral drainages that cross the Project site (IS/MND, p. 33). The ephemeral drainages are classified as waters of the state, subject to permitting by the RWQCB.<sup>43</sup>

The IS/MND states 5.89 acres of the drainages will be adversely affected by “filling and other means” (IS/MND, p. 33). The Project will avoid three major washes that cross the site, but that minor washes “will be filled and associated flows re-directed to the larger washes through perimeter swales” (IS/MND, p. 4). Flow from these drainages would be directed to three larger drainages, one of which would be “narrowed and straightened” (IS/MND, p. 33).

We have created a map to show that placement of solar panels at the site would occur directly over jurisdictional waters.<sup>44</sup>

### Impacts to Water Quality Not Addressed in the Project IS/MNDs

#### Placement of Panel Support and Construction of Roadways

Project construction will entail the placement of numerous support structures within the ephemeral channels. Approximately 150,000 individual panels will be required for both Projects.<sup>45</sup> By referencing elevation plans for both projects (Figure 3 in the IS/MNDs), which show one pier per five PV panels, we have estimated that at least 30,000 piers will be necessary for panel support. Of these 30,000 piers, some will necessarily be placed in the ephemeral channels, even with plans to avoid impacts to the major channels are made as described in the IS/MNDs.

Construction of the Project involves building access roads (Marathon IS/MND, p. 14) and trenching along the roads for installation of maintenance cables (Marathon IS/MND, p. 8). The site plan for the Marathon Project (Marathon IS/MND, Figure 2) shows these roads will cut across ephemeral drainages. Similarly, access roads construction for the Agincourt site will also cross through ephemeral drainages (Agincourt IS/MND, Figure 2).

Installation of panel supports and construction of access roads will adversely impact ephemeral drainages and result in potentially significant impacts to waters of the state.

#### Erosion from Concentrated Drainage

Impacts to surface hydrology would include accelerated erosion caused by drainage from water dripping of the edge of the panels. The IS/MNDs state that rainfall, which would run off the

<sup>43</sup> Draft Jurisdictional Determination Report, Agincourt Solar Site, March 2012, p. 4-11.

<sup>44</sup> See Figure 2.

<sup>45</sup> The Press-Enterprise, Real Estate: Lincoln tapped for SoCal Edison pact. <http://blog.pe.com/real-estate/2012/11/05/real-estate-lincoln-tapped-for-socal-edison-solar-power-sales-pact/> Accessed January 23, 2013.

edges of the solar panels, would not cause erosion “beyond a micro level” (Marathon and Agincourt IS/MND, p. 7). The IS/MNDs estimate that 25 gallons of runoff, from each individual panel, would result from 10-year, 5-minute rain event. The IS/MND states that, because of the height of the panels and the soil conditions on the site, rainfall runoff is not expected to cause erosion.

The IS/MND fails to consider that larger storms (longer return frequency) will generate much more runoff from the PV panels. For example, a 50-year, 5-minute storm would generate 0.37 inches of rainfall<sup>46</sup> which in turn would generate 46 gallons of runoff along the driplines of each panel.<sup>47</sup> This is almost double the amount of runoff considered in the IS/MNDs. The water cascading from the panels during storms of this intensity would have a much greater capacity to erode underlying soils, including the soils found within channels ephemeral drainages. Channel erosion from large storm events can lead to a degradation of ephemeral washes and result in a potentially significant impact to waters of the state.

No mitigation measure is proposed to address erosion that could occur from larger storm events. If erosion were to occur, the IS/MNDs state only that (1) small gravel pads could be constructed to dissipate the energy of the falling water; and (2) minor grading could be necessary to restore support for the individual foundations. Construction of these features would be subject to permitting under Section 13260 of the RWQCB.

#### Impacts from Stormwater Runoff

The Agincourt IS/MND makes no reference to pesticides that may be present in site soils from historical agricultural use. If pesticides are present in Project soils, they may become entrained in stormwater runoff and flow offsite. Similarly, any chemicals that are found at the Marathon Project site in association with the former bombing range ordnance may also be entrained in runoff that leaves the Project site. Erosion and runoff of site contaminants will be greatest during construction when soil is disturbed by grading which is estimated to involve approximately 300,000 cubic yards of cut-and-fill at the Marathon site (IS/MND, p. 8) and approximately 150,000 cubic yards of cut-and-fill at the Agincourt site (IS/MND, p. 8).

Stormwater Pollution Prevention Plans (SWPPPs) are planned to be prepared following completion of the projects. According to Marathon and Agincourt IS/MNDs, the SWPPPs will provide detailed descriptions of site design and construction BMPs (IS/MND, p. 56). However, there is no requirement in the IS/MNDs that the SWPPPs need to consider potential soil contaminants. No provisions are included in either IS/MND for managing water quality from stormwater that may carry contaminants from former land uses at the site, including agriculture and potential bombing range-related contaminants. A SWPPP should be prepared for inclusion in a DEIR to address the potential for pesticide residuals and chemicals associated with military

<sup>46</sup> See Attachment L.

<sup>47</sup>  $(1) * (0.37 \text{ in}/5 \text{ min}) * (200 \text{ sq. feet}) * (1 \text{ ft}/12 \text{ in}) * (7.48 \text{ gallons}/\text{cubic feet}) = 46 \text{ gallons}/5 \text{ min}$  (Note: A runoff coefficient of 1 is used because solar panels are considered to be 100% impervious).



activity to become entrained in runoff. Best management practices (BMPs) should be identified in the DEIR to prevent erosion of soils that contain residual chemicals, to include BMPs such as using erosion control blankets, silt fences, or straw mulch – as recommended by the California Department of Transportation.<sup>48</sup>

A DEIR should be prepared to include a full discussion on impacts to waters of the state that are regulated by the RWQCB under Section 13260(a). The DEIR should disclose, through preparation of a report of waste discharge, how impacts from construction activities, concentrated erosion, and stormwater runoff to ephemeral drainages would be mitigated and monitored and where impacts might need to be offset. The reports of waste discharge should be submitted to the Colorado River Basin RWQCB for review and approval and the Board's recommendations should be addressed in the DEIR.

## AIR QUALITY

### Nitrogen Oxides (NOx) Emissions from the Marathon Project Site

NOx emissions for the Marathon Project are estimated to 20.78 tons/year. As this falls below the MDAQMD threshold of 25 tons/year, emissions are considered to be not significant (Marathon IS/MND, p. 26). However, as Project construction is only scheduled to last nine months, calculating emissions over the period of a year mischaracterizes the Project's emissions.

Emitting 20.78 tons/year is the equivalent to emitting 148 lbs/day for 9 months.<sup>49</sup> The MDAQMD daily threshold for NOx emissions is 137 lbs/day<sup>50</sup> meaning daily NOx emissions from Project construction exceed the MDAQMD threshold. Therefore, the Project's construction NOx emissions should be considered significant.

A DEIR should be prepared to disclose that construction of the Marathon Project site will result in significant daily NOx emissions. Mitigation measures, to reduce emissions below threshold, should be identified:

- Implement Best Available Control Technology (BACT) for the emissions unit. For compressor engines, this can result in NOx emission rate of 1 g/bhp-hr, which is lower than the 1.5 g/bhp-hr rate used in the modeling;
- Utilize electric powered compressor engines in place of fuel combustion sources. Using electric-powered compressor motors in place of the typical natural gas-fired compressor engines could eliminate primary NOx emissions from compressor stations;
- Use alternative fuels, which have lower fuel nitrogen content. Natural gas-fired compressor engines typically have lower NOx emissions than diesel-fired engines;

<sup>48</sup> California Department of Transportation, Construction Site Best Management Practice (BMP) Field Manual and Troubleshooting Guide. [http://www.dot.ca.gov/hq/construc/stormwater/BMP\\_Field\\_Master\\_FullSize\\_Final-Jan03.pdf](http://www.dot.ca.gov/hq/construc/stormwater/BMP_Field_Master_FullSize_Final-Jan03.pdf) Accessed January 23, 2013.

<sup>49</sup> (20.78 tons/year)\*(1 year/9 months)\*(1 month/30 days)\*(2000 lbs/ton) = 148 lbs/day

<sup>50</sup> See Attachment M, p. 10.

- Increase dispersion of NOx emissions to reduce near field impacts by spreading emissions over a larger area;<sup>51</sup>
- A plan to demonstrate that heavy-duty (50 horsepower or more) off-road vehicles to be used in the construction project will achieve a project wide fleet-average 20% NOX reduction and 45% particulate reduction compared to the most recent California Air Resources Board fleet average; and
- Limiting emissions from all off-road diesel powered equipment to a maximum of 40% opacity (the degree to which light is obscured) for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or 2 on the Ringelmann smoke chart) shall be repaired immediately.

1.3-15

#### Cumulative NOx Emissions from the Marathon and Agincourt Project Sites

The Marathon Project and Agincourt Project will be constructed within one mile of each other. Both Projects are scheduled to begin construction in 2013 which is expected to last for nine months. Workers, site personnel, nearby residents, and schoolchildren (described below) will be exposed to both Projects' cumulative air emissions over this period. The IS/MNDs prepared for both Projects, however, do not address cumulative impacts from air quality, except to state:

The proposed Project will not 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). The project will contribute criteria pollutants in the area during the short-term project construction period (see Table 1, above). None of the activities associated with the proposed Project will create a substantial permanent increase in the emissions of criteria pollutants that will be cumulatively considerable (Marathon and Agincourt IS/MND, p. 27).

Our review shows that, in fact, construction of both Projects will result in a significant increase of the ozone precursor, NOx.<sup>52</sup>

1.3-16

NOx emissions from the Marathon Project are estimated to be 20.78 tons/year and 17.59 tons/year from the Agincourt Project. The combined total of these emissions, at 38.37 tons/year, exceeds the MDAQMD NOx emissions threshold of 25 tons/year. Both Projects are located in the Mojave Desert Air Basin which is designated non-attainment for ozone.<sup>53</sup> Thus, significant emissions of ozone precursors, such as NOx, may result in a further degradation of air quality. Construction workers, nearby residents, and schoolchildren may be exposed to significant concentrations of NOx during construction of these two Projects. Exposure to NOx can cause or worsen respiratory disease, such as emphysema and

1.3-17

<sup>51</sup> See Attachment N.

<sup>52</sup> U.S. EPA, Ozone Implementation. <http://www.epa.gov/ttnnaqs/ozone/> Accessed January 22, 2013.

<sup>53</sup> U.S. EPA, Status of SIP Requirements, California Air Pollutants. [http://www.epa.gov/oar/urbanair/sipstatus/reports/ca\\_areabypoll.html](http://www.epa.gov/oar/urbanair/sipstatus/reports/ca_areabypoll.html) Accessed January 22, 2013.



bronchitis, and worsen existing heart disease.<sup>54</sup> Inhalation of ozone can result in coughing, throat irritation, chest tightness, wheezing, shortness of breath, and pain, burning, and discomfort in the chest while breathing. It can also lead to decreased lung function and inflammation of airways.<sup>55</sup>

A DEIR, for each Project, should be prepared to disclose that construction of both Projects will result in cumulatively significant NOx emissions. Mitigation measures, identified in the previous section, should be included to ensure that emissions can be reduced to below threshold.

#### *Diesel Particulate Matter Emissions at the Marathon and Agincourt Project Sites*

Project construction at the Marathon and Agincourt Project sites requires the use of equipment such as graders, bulldozers, compactors, excavators, backhoes, and pier drivers. The Greenhouse Gas Memoranda prepared for both Projects state that all on-site construction equipment are assumed to be fueled on diesel (p. 3). Diesel particulate matter (DPM) is a component of the exhaust generated from using diesel-fueled equipment. There is no discussion in either IS/MND about DPM and potential health effects on construction workers, nearby residents, and schoolchildren who may be exposed to emissions.

The California Office of Environmental Health Hazard Assessment (OEHHA) states that truck drivers and equipment operators who are exposed to diesel exhaust are more likely to develop cancer than those not exposed. Short-term exposures to diesel exhaust include eye, nose, throat, and lung irritation, coughs, headaches, nausea, and lung tissue damage.<sup>56</sup>

The U.S. EPA has classified DPM to be a likely human carcinogen.<sup>57</sup> A human health risk assessment (HRA) to determine the cancer risks to workers, nearby residents, and schoolchildren from construction of both Projects should be prepared. The HRA should consider that both Projects are proposed to be constructed simultaneously and that workers and residents will be exposed to emissions from both Projects. HRA results should be compared to cancer risk significance thresholds set by the OEHHA.

A DEIR should be prepared to disclose the results of the HRA as well as mitigation measures that should be implemented to reduce any potential risks, to include:

- Regular preventive maintenance to prevent emission increases due to engine problems;
- Use of low sulfur and low aromatic fuel meeting California standards for motor vehicle diesel fuel;
- Reduce equipment and vehicle idle times. Diesel equipment standing idle for more than five minutes shall be turned off. This includes trucks waiting to deliver or receive aggregate or other

<sup>54</sup> U.S. EPA, Nitrogen Dioxide Health. <http://www.epa.gov/air/nitrogenoxides/health.html> Accessed January 22, 2013.

<sup>55</sup> U.S. EPA, Health Effects of Ozone in the General Population, <http://www.epa.gov/apti/ozonehealth/population.html> Accessed January 22, 2013.

<sup>56</sup> Office of Environmental Health Hazard Assessment, Health Effects of Diesel Exhaust. [http://oehha.ca.gov/public\\_info/facts/dieselfacts.html](http://oehha.ca.gov/public_info/facts/dieselfacts.html) Accessed January 22, 2013.

<sup>57</sup> U.S. EPA, Diesel Exhaust. <http://www.epa.gov/region1/eco/diesel/> Accessed January 22, 2013.



bulk materials. Rotating drum concrete trucks could keep their engines running continuously as long as they were onsite;

- Use of low-emitting Diesel engines meeting federal emissions standards;
- Diesel engines from 50 to 750 horsepower are to meet Tier 3 California Emission Standards for Off-road Compression-Ignition Engines;
- Off-road equipment with diesel engines larger than 750 horsepower shall meet Tier 2 California Emission Standards;
- All equipment shall be turned off when not in use. Engine idling of all equipment shall be minimized;
- All equipment engines shall be maintained in good operating condition and in tune per manufacturers' specification; and
- Meet Tier 3 California emission standards for off-road compression-ignition engines (for engines between 50 horsepower and 750 horsepower).

1.3-20

#### Impacts to Sensitive Receptors near the Marathon and Agincourt Project Sites

The IS/MNDs for both Projects state nearby residents will not be exposed to "substantial pollutant concentrations" of construction emissions (IS/MND, p. 27). However, as we have shown, construction of the Marathon Project will result in significant daily NOx emissions. In addition, construction of both Projects will result in cumulatively significant NOx emissions. Therefore, the IS/MNDs' claims that the Projects will not expose residents to substantial pollutant concentrations is not supported.

1.3-21

1.3-22

There are residences located directly to the north, south, and west of the Marathon Project site. There are residences in all four directions of the Agincourt Project site. The Lucerne Valley Middle School is also located approximately two miles to the west of both Project sites. Construction of both Projects will require earthmoving and generate dust over their nine-month construction period. The IS/MNDs prepared for the Projects do not address the potential for nearby residents and schoolchildren to be exposed to PM10 and DPM emissions as well as cumulative emissions of NOx over the Projects' nine-month construction periods. Residents and schoolchildren can also be exposed to residual pesticides in soils from the Agincourt Project site.

1.3-23

Dust, containing potential residual concentrations of pesticides, may be transported by wind and affect nearby residents and schoolchildren. Inhalation of pesticides has been linked to asthma in recent research.<sup>58,59</sup> A report prepared by the California Department of Health identifies pesticides as an asthma trigger.<sup>60</sup> Exposure to PM10 can result in damage to lung tissue, cancer, and premature death.<sup>61</sup>

1.3-24

<sup>58</sup> Penn State University Integrated Pest Management Program, Asthma, Pests, and Pesticides.

<http://extension.psu.edu/ipm/resources/urbanphilly/partnerships/handouts/asthma-pests.pdf> Accessed January 23, 2013.

<sup>59</sup> U.S. National Library of Medicine, Pesticides and Asthma. <http://www.ncbi.nlm.nih.gov/pubmed/21368619> Accessed January 23, 2013.

<sup>60</sup> California Department of Public Health, Strategic Plan for Asthma in California, 2008-2012.

<http://www.cdph.ca.gov/programs/caphi/Documents/AsthmaStrategicPlan.5-5-08.pdf>, p. 22. Accessed January 23, 2013.

<sup>61</sup> U.S. EPA, Particulate Matter. <http://www.epa.gov/airtrends/airtrnd95/pm10.html> Accessed January 23, 2013.

1.3-25

Children are especially susceptible to higher risks.<sup>62</sup> Exposure to DPM, NOx, and ozone can result in the adverse health impacts listed in the previous sections.

A DEIR needs to be prepared that discloses the potential health impacts to nearby residents and schoolchildren from construction of both Projects.

Sincerely,



Matt Hagemann, P.G., C.Hg., QSD, QSP



Uma Bhandaram

---

<sup>62</sup> 2009 Imperial County State Implementation Plan for Particulate Matter less than 10 microns in Aerodynamic Diameter.  
<http://www.co.imperial.ca.us/airpollution/attainment%20plans/final%20ic%202009%20pm10%20sip%20document.pdf>, p. 1-2. Accessed January 23, 2013.



**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364  
 SACRAMENTO, CA 95814  
 (916) 653-6251  
 Fax (916) 657-5390  
 Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)  
[ds\\_nahc@pacbell.net](mailto:ds_nahc@pacbell.net)



Clear  
 01/25/13  
 e

RECEIVED

PLANNING DIVISION

December 28, 2012

JAN 14 2013

Mr. Nelson Miller, Contract Planner

STATE CLEARING HOUSE

**County of San Bernardino Department of Land Use****Services – Planning Division**

15900 Smoke Tree Drive  
 Hesperia, CA 92345

Re: SCH#2012121078 CEQA Notice of Completion; proposed Mitigated Negative Declaration for the "AGINCOURT SOLAR – Conditional Use Permit P201200011 Project;" located in the Lucerne Valley; San Bernardino County, California

Dear Mr. Miller:

The California Native American Heritage Commission (NAHC) is the State of California 'trustee agency' for the preservation and protection of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3<sup>rd</sup> 604).

This letter includes state and federal statutes relating to Native American historic properties or resources of religious and cultural significance to American Indian tribes law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendment s effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance.' In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC advises the Lead Agency to request a Sacred Lands File search of the NAHC if one has not been done for the 'area of potential effect' or APE previously.

The NAHC "Sacred Sites," as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r ).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural

significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.95, the NAHC requests cooperation from other public agencies in order that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties, including archaeological studies. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and California Public Resources Code Section 21083.2 (Archaeological Resources) that requires documentation, data recovery of cultural resources, construction to avoid sites and the possible use of covenant easements to protect sites.

2.1-2

2.1-3

2.1-4

2.1-5

2.1-6

2.1-7

2.1-8

Furthermore, the NAHC if the proposed project is under the jurisdiction of the statutes and regulations of the National Environmental Policy Act (e.g. NEPA; 42 U.S.C. 4321-43351). Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq.*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254( r) and may also be protected under Section 304 of the NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

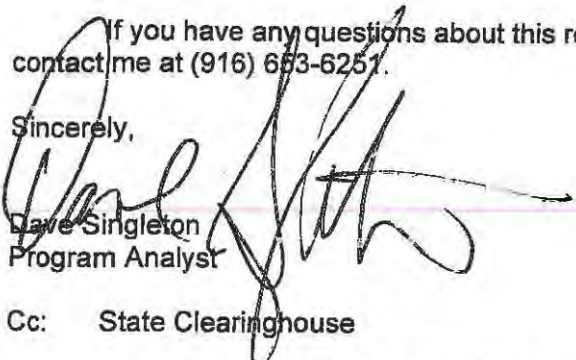
Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for inadvertent discovery of human remains mandate the processes to be followed in the event of a discovery of human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

Finally, when Native American cultural sites and/or Native American burial sites are prevalent within the project site, the NAHC recommends 'avoidance' of the site as referenced by CEQA Guidelines Section 15370(a).

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 663-6257.

Sincerely,



Dave Singleton  
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List



Lisa Orris Evans  
9070 Chickasaw Trail  
PO Box 981  
Lucerne Valley, CA 92356

760-524-7318  
Email: lisainlucerne@gmail.com

January 30, 2013

Ref: Ref: AGINCOURT SOLAR, LLC Project and MARATHON SOLAR, LLC Project,  
Lucerne Valley, CA

I would like to take the opportunity to comment on the Initial Study and Environmental Review for this project. It is my understanding the Agincourt project location is on Camp Rock Road, west side, approximately 1,290 feet south of Arroyo. Assessor Parcel Numbers: 0449-172-75 and 0449-631-02 and the Marathon project to the south, Assessor Parcel Numbers: 0449-172-75 and 0449-631-02.

This location is directly above the sub-division of my property and residence. I firmly believe this project is not going to help this community at all. The study states it will be a good source of jobs, I disagree. It also states it will help the local economy, again I disagree.

As you are aware, the study looks thorough, but only highlights what will make it look good. Let's start with the Joshua trees, study claims 792. The project area is one of the well covered Joshua tree areas in the valley and is very abundant compared to other outlying areas. Why would one want to destroy this beautiful native landscape? What about the desert tortoise, I have them pass through my yard often. As for the Owl, this is their habitat too. The study does not discuss much about the birds, coyote, grey fox, rabbits, snakes, etc, again their habitat.

I would also like to mention Air Quality, Visual Impact, Hydrological Analysis, Drainage, and Water Quality Management. All of the above state little to no impact but, they will affect our community, our property values, our flood insurance rates, our environment, and more. There is so much land available for a solar project in the Lucerne Valley area. Why would one want to put one right above a sub-division and directly through the natural run-off's.

In recent years we have had severe flash flooding in this area that has changed the drainage flow. In fact some of the traditional channels have filled and are now dispersing in elongated water flows. Disrupting it more will only create more havoc in our sub-division.

Who is going to claim responsibility during the next flash flood and my home is deep in mud/silt. Do we have any recourse for declining property values from this project? It just does not make sense that the Environmental Review for a project this large does not foresee any great impact. I hope that you, Mr. Miller, are able to see through the smokescreen.

Sincerely,



Lisa Orris Evans  
Resident & Homeowner

RECEIVED  
FEB 01 2013  
PLANNING DIVISION



# Michael & Maria Atteberry

36455 Cochise Trail® Lucerne Valley, CA. 92356 • Phone: 760-248-7781 •  
E-Mail: latinapura01@gmail.com

FISCAL ADMIN

4

2013 JAN 23 PM 3: 16

Date: 1-22-13

Marathon Solar Facility

LLC and Agincourt Solar,

Dear Mr. Elliot MacDougall:

This letter is to let you know about our concern about you company mention above.

You Company is going to affect our land, wild life, and the life of the residents in this town in the worst possible way if you don't take us in consideration.

Let me star first with the wild life and the animals that surround this area. You Company Mention in the local News Papers (The Leader) that you state in the news is not turtles in this area" well let me inform you that you are wrong, we due have turtles, lizards, coyotes, gray fox, jack rabbits, cotton tail rabbits, king snake, garden snake, Mojave racers snake, Mojave green snake, kangaroo rats, pack rats, mice, red tail hawks, spiral hawks, ground howls, barn howls, Quail, hamming birds, doves, sparrows, thrashers, wild canary, turkey buzzers, ravens, red head wood pecker, plus the insects and the plants life that are surround us and they going to be impact with the construction of you solar plant!. All this list of wild life and info that we state is because my parents, Aunts, And Uncle they move and live here since 1951, then in 1977 I homesteaded the 10 Acres beside the land you want to build you solar plant Company till today's date. And I state together with all the neighbors we live in this area see turtles cross our properties and walk this land, together with the rest of the animals, plants, and trees mention above.

4-1

Just to think that you solar plant company going to take away our quite days and nights, and have to put up with glair and night lights and the lost of the sun rise together with our full of star nights makes us really upset.

4-2

Also the most important point in this letter is the natural wash that runs all over Lucerne Valley town and one's of the bigger ones cross over the pat of you construction plan, if you block those natural water wash you are going to flood our properties

4-3

And if that happen we (Lucerne Valley home owners) will hold you **Liabile for all damages!** Also speaking about home owners building you solar plan company next to our properties is going to decreases' the value of our land and we also going to hold you and you solar plant company responsible for that!

4-4

Hope you company take all this in considerations, and we coming in terms that you company mention above and us (Lucerne Valley home owners) come in agreeable terms, so we both parties can be in peace.

Sincerely,

Michael & Maria Atteberry





Jubilee Mutual Water Company, Inc.  
 P.O. Box 1016  
 8828 Joshua Ave.  
 Lucerne Valley, CA 92356  
 (760) 248-7883  
 Mon, Wed and Fri. 9:00 am – 1:00 pm  
 Email: jubileewaterco@gmail.com

January 24, 2013

Ref: MARATHON SOLAR, LLC Project and AGINCOURT SOLAR, LLC Project,  
 Lucerne Valley, CA

The Board of Directors of Jubilee Mutual Water Company, Inc. (JMWC) would like to comment on the Initial Study and Environmental Review for this project. It is our understanding the Agincourt project location is on Camp Rock Road, west side, approximately 1,290 feet south of Arroyo with the Marathon project south of that. Marathon Assessor Parcel Numbers: 0449-172-75 and 0449-631-02 & Agincourt Assessor Parcel Numbers 0449-641-27 and 0449-641-04.

JMWC services a one square mile area known as the Russell Track. It encompasses the streets within the boundaries of the East ½ of Visalia, the South ½ of Foothill, the West ½ of Joshua, and the North ½ of Arroyo. We have 2 storage tanks south of Arroyo at 8828 Joshua and the North/South water distribution lines are on Chickasaw, Blackhawk, Palomar, and Anza. Our two working Wells are on the North/West side of the Foothill/Anza intersection.

Our main concerns are the effects drainage will have on our infrastructure. The 231+ acres of solar panels could ultimately re-channel the water flow. This could have a potential impact on our sub-division and beyond. In the past seven years, we have had severe flash flooding in this area which has changed the drainage courses to sheet flow beyond the traditional channels. Although the hydrology and drainage studies would indicate otherwise, we do foresee your facilities potentially creating havoc with the natural run-off and possibly damaging the integrity of our water system. Please consider revising your plans to include more on-site retention to help mitigate any chances of increased drainage flows to the north of your projects.

Sincerely:

Rudy Cervantes  
 President  
 Jubilee Mutual Water Company, Inc.

RECEIVED  
 FEB 01 2013  
 PLANNING DIVISION



Jubilee Mutual Water Company, Inc.  
P.O. Box 1016  
8828 Joshua Ave.  
Lucerne Valley, CA 92356  
(760) 248-7883  
Mon, Wed and Fri. 9:00 am – 1:00 pm  
Email: jubileewaterco@gmail.com

6

January 10, 2013

Nelson Miller, Contract Planner  
Land Use Services Department, Planning Division  
High Desert Office  
15900 Smoke Tree Street  
Hesperia, CA 92345

Ref: AGINCOURT SOLAR LLC Project, Lucerne Valley, California  
WATER SUPPLY ASSESSMENT study

Mr. Miller:

It has come to my attention that you are the Planner for this project and the person to communicate with regarding this company's concerns regarding this project. We have received the notice of this project. We had one of our Directors do some research into the referenced study for its effect on this company.

I would like to set the record straight regarding the mention of this company as a possible source for construction water as referenced. First of all in section ES.2 the study properly cites reference of the Watermaster and the fact that the ESTE Basin is in a safe yield condition. A large scale development could alter this condition in the future but I don't think that this project would fall into that category alone. But, the cumulative impact from a number of these types of projects may have an impact. What would this mean is that if groundwater started to be pumped in the 100s of AF beyond current levels and the basin was no longer considered safe yield, then future ramp-downs could be exercised by the adjudicating court, which would diminish the free production allowance that this as well as other water purveyors in the basin would be allowed to pump without a source of makeup water. This would eventually cost the users.

In section ES.3, the study references that this company's unused FPA of 114 AF in 2009-2010. Our staff has confirmed that this is correct. So, we do not disagree with these facts. We see that the authors of the study are trying to show that temporary water is available for construction. However, in section 1.1 the report references that "key personnel" had been interviewed at this company, which to my knowledge is untrue. Neither I, nor any other key personnel in this company had any interviews with anyone representing this project. The only person that we can't verify could have been contacted was an office secretary who left the company one year ago. This person was not key personnel. It appears that the project will obtain the water needed from BBARWA, which I'm sure would be a logical source. I think that water could be available to the project developers from the Morongo Basin pipeline project that runs along Foothill Road through our community.

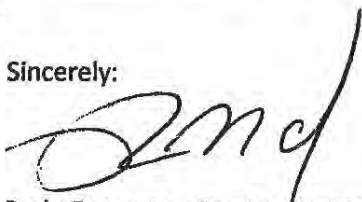
Please be informed that this water company is a shareholder not-for-profit water purveyor, as are most water companies in Lucerne Valley (excepting Golden State Water Company) otherwise known as a mutual water company. I didn't see this fact pointed out in the study. These types of water purveyors usually only deliver water to its shareholders and usually don't sell water to contractors. This water company has made an official policy to not supply any water to others than its shareholders and for



emergency uses (fire departments). Therefore, the study erroneously inners that this water company would be a source for its required construction water of 11 to 15 AF and the 2 AF needed every year for maintenance. I also feel that the other mutual water companies in Lucerne Valley may be in this similar position. We protect our water allotment because in the past we have had to purchase unused FPA water to meet our needs and just because we have a carryover doesn't mean that we are going to sell any water outside of the shareholders usage.

In conclusion, I feel that the study should be revised to reflect these facts and am waiting to see that such is done. I will be taking this project application and its sister project, MARATHON SOLAR LLC, to the Board of Directors for further input. We see that these projects are in the vicinity of the Cushenbury Creek Drainage washes that have troubled this community and its water structures in the past. This company wants to feel that the project drainage designs will more than adequately protect the Russell Tract and all upstream and downstream properties form increasing the drainage flows during our brief rainstorms that can produce up more than 2 inches of downpour per hour, as they have in the past.

Sincerely:



Rudy Cervantes, President of Jubilee Mutual Water Company Inc.

6-3

6-4

RECEIVED  
JAN 14 2013

PLANNING DIVISION

Jan 20, 2013

RECEIVED

JAN 23 2013

County of San Bernardino  
Land Use Service Department  
385 N. Arrowhead, CA 92415-012

PLANNING DIVISION

I believe in Democracy, but what is it called when a firm called WDC Capital Partners, can come into the desert of houses from our homes without notifying us, planning to put a 10-Megawatt Project called Agincourt Solar and a 20-Megawatt Solar, without notifying most of us.

My first husband and I improved our lives in 1953 at 36330 Cockie Trail. Along with 8 other families that improved on this road at the same time. We hand dug our roads, built our homes, and each had their wells dug. I am the only one living from that time, but some of their children and grand children live on these averages.

It will be an eye sore to have those parcels so close. Will my tortoise's ever come to my yard again so I can feed them lettuce? What about the Hoary toads, the Kangaroo rats, the quail and all the other little creatures?

Would the people tha are building these panels like them so close to their homes? I am ~~now~~ now 90 years old, but what about the young people that live here. We all have lovely homes.

What will happen should another flash flood come? We now only have one way out and will have to go beside those unsightly panels every time we go for mail.

This is a large desert they certainly could be built away from homes.

I love this desert as it is.

With regards,

Claire Huck  
36330 Cochise Trail  
P.O. Box 1163  
Lucerne Valley  
CA 92356-1163



2013 JAN 23 PM 3:15

Harry + Patricia Porter

This marathon And Agincourt project  
is going across from me.

This will be Annoyance and Nuisances.

I like looking out at this beautiful land.

Not Solar panel's that Blind you and light  
panel coming in your home West Sun.

Light at night be big nuisances up here  
the road - flooding it can cause. you don't  
live here we do.

Talk To all off us - here us out we

Can't drive so you need come here

Harry Porter

JAN 20 2013

Robin McCartney  
8583 Cherokee Tr  
PO Box 1637  
Lucas Valley CA 92356  
760 248 7971 "night"

FISCAL ADMIN

2013 JAN 20 AM 9 15

9

Hi I'm Robin McCartney

I writing to you in response to the Marathon project which is EAST of ME And the Agriscount which is South east of me which behind me.

Am 4 house down from this project. My sister and I and other's was not notified of this project. Thanks to my neighbor and other we was told. you was to talk to MAC Board on this it didn't happen thank to Supervisor Ramos which I'm not happy with does return call's

This is 5 generation of land here - 60 year's My Gpa + Gma bought this land started out 20 ACRES Now 5 ACRES they build the roads Cherokee Tr and Cochise Tr. My Gpa, Gma, Dad, Uncle, next door Clain Huck which I know boys build there home put there own well on it. all by hand all the road and there home. My sister and I our land owner and I live here most My young live AFTER Gma Gpa die I lived here is So nice quite beautiful you can see the stars here But if this project's our put her it will be a eye sore visavally. Then when the PV Move EAST to West - West will be blinded by light from solar Panel then night the light from the project will be like it Dark. This will physiologic harm to us as a community. The Noise will being harm to my ears - I have special hearing that other don't have. even though it will be noise Vibration ground booming noise to then the large generator on site. Just Can't have this.



There will be flooding hazard after grading off site, If flood run off carry into our basin will erosion damage ditch berm ditch & water impack on our well run off the sewer in our wells coming down there washing Panel by month not 2x month you got mines up here that Blast tiny dirt comes down then the grey water. yek!!.

Then you have the earthquake south mountain terrain which can break the solar panel. Can cause Cancer.

This will be a nuisance to our road payment damage to Campbrook Rd 18 and old women Spring Rd. more crime to our area.

This use to be Native American Indian land at one time and Military Bombing range to . . .

My Family Blackfoot Indian.

Dessent To noise we had them last summer ask all the neighbor the men that came stay 20 maybe 30 min you can look it that amoug time And My neighbor Jerry I talk to them they did come there just getting pay to look LOL - yep can fine hole quite. owles here too so are long goats come from MT and Wolf - Foxes - quill ect.  
Robin McCortney

① Mr. N. Miller  
Marathon  
LLC - Agincourt  
Mr. Ellis MacDougall

Jan 20 2013

RECEIVED  
10  
JAN 23 2013

PLANNING DIVISION

Hello !! MY NAME IS Robin Mc Carthy  
8583 Cherokee Tr / Cochise Tr Lucerne Valley, CA.  
MY FAMILY own this land 1948 and 1952 started  
Building on it. Improved it by building  
road of Cherokee + Cochise MY Grandma Michael  
MY Neighbor Clair Huck build these roads by  
hand then there homes and wells MY DAD House  
was next Door where John Long live now.  
This is now 5 generation of family here 60 yrs  
of Quite, NO Light block ore night sky very  
little noise once while blasting from mines,  
I like you to look at this picture Quite beautiful  
montaine, Nice ~~weather~~ <sup>weather</sup>, Sunrise and Sunset's.  
Desert with animal's, CAUSTES Joshua, Circle  
grease wood our Turtles, Wolf, Coyotes, grey fox,  
red fox, red tail hawk, sparrow hawks, eagle's  
ground owls, barn owls, quail, humming birds  
thrasher, Dove, Sparrow, turkey buzzer  
red head wood pecker, blue jay, oriole,  
even nasty ravens, insects, Plants  
Snakes who keep nasty Kangaroo + pack rats  
I can go on what you be doing The Physiologi a  
harm to us seeing those solar Palms the  
noise. Im pack from runoff to our well  
house's, road's. hazard grading flood runoff  
Carry into our basin will erode berm, ditches

10-1  
10-2

ect... water going in our wells.

You said 2 x month wash panel. You don't get it it will 6 x month or more because mine blasting the Fine dust come down. Then the grey water that your thinging of going down in our wells yek!!!

Then you have the fault in South Mountain terrians which can break the panel's can cause cancer.

Our Roads Camprock - Hwy 18 - 247 East Old Women Spring road. going up down it have trucks More cars. We have trouble all ready keep up with the roads getting fix.

More crime in area too. You said it help our town store come on! When the rock crawl, road races, come our store only get maybe 5%. With your 160-200 from out state not Lucerne Valley residents working here store get's 1% maybe less that go for gas station, resterauns, other buseys

Transmissish line - SCE said NO impormine from this. This power going to LA Not even us. so sad ☹. Mr Miller you don't live here, Nor Does Elliot MacDougall

10-3

10-4

10-5

10-6



My Family was Black Foot Indian other tribes live here to.

This use to be military bombing range to!!!

"The 2 guy that came to do the toroise stay 20 to 30 min they didn't ready look. My neighbor Jerry and I talk to them. They didn't really look. you ask all the community and town we have toroise, owls too!!! it funny it take months to do this look not 30 min.

You only send 4 letters to home owes up here and you said you talk to them. NOT!!! And you mention Jubill Water helping that not true. Maybe the grey water but not Jubill water. We our all very close and talk to each other,

you buy this land under some name then put solar panels in wrong, you took private land not Public or BLM land cause it more problems getting permits. Solar Fine, on top homes or in small yards. Not 238 acer of land Marathon & Agincourt This is my view I pray you understand we do not what this

Thank You.

*John McCarty*



**Richard Selby**  
**P. O. Box 1152**  
**Lucerne Valley, CA 92356**

January 28, 2013

Nelson Miller – Case Planner  
 San Bernardino County  
 Land Use Services, Planning Division  
 High Desert Office  
 15900 Smoke Tree Street  
 Hesperia, CA 92345

**RECEIVED**  
 JAN 28 2013  
**PLANNING DIVISION**

Ref: P201200011/CUP AGINCOURT SOLAR LLC & P201200012/CUP MARATHON SOLAR LLC.

Mr. Miller:

I am responding to these two projects within the extended comment period as you have informed me. As you know, I have concerns about these two sister projects and since they are applied for by the same developer and my concerns affect both projects, I will comment on one as the same as the other unless noted.

I appreciate this opportunity to respond to these projects at this time.

First, I would like to set the stage for my involvement in these projects. I was the Chairman of the past Lucerne Valley Municipal Advisory Council (LVMAC) as was appointed by the past Supervisor, Niel Derry. I also chaired the Land Use Committee (LUC) to the LVMAC. Last September, the LVMAC was notified through the County Service Area 29 (CSA29) office of these projects. Having specific knowledge of the area that these projects are located, I immediately asked the then planner Matt Slowik for copies of the Drainage Studies for these projects. Mr. Slowik replied in short order with such. The reason I requested these studies is because of the serious drainage issues with this part of Lucerne Valley, since I live within a mile of these locations and have experienced flooding from the Cushenbury Creek drainage. I took these applications and the drainage studies to the LUC to review and to come up with at least preliminary issues of concern. That meeting resulted in two letters that were forwarded to Mr. Slowik dated October 9, 2012. In these letters, the LUC raised the concern of how the project proponents address the flooding potential in the area of the projects. These letters also pointed out that the Mojave Water Agency has looked at placing a detention basin(s) project south of these locations, to meet a requirement to help mitigate flooding and percolate groundwater as part of their regional management plan in the ESTE Subarea (Lucerne Valley). San Bernardino County Flood Control District, Flood Control Planning Division had prepared a study, "Cushenbury Creek Drainage Study, Proposed Detention Basins", in January of 2011 that addressed this proposal. The study had designed this project for a 100 year storm event which has the effect of pushing the project up to a 30 million dollar cost, but local concerns are going to approach the county to look at this as maybe a 10 year event for project design to help lower the cost. I should mention that if this project was in place that it would have no negative affect on these solar projects.

The LUC was waiting for comments from County Flood Control when the November elections came around and by December 3<sup>rd</sup>, Mr. Derry was no longer our supervisor since Mr. Ramos had won the election. At that time, the LVMAC was dissolved as so was its committees. We haven't yet heard any response from County Flood Control.

[1]



Then, I receive emails from you regarding the closing of the comment period. Unfortunately, I will not be able to respond to these projects from a community basis since the LVMAC hadn't put these projects on their agenda for public comment. What the LUC would have most likely done if the LVMAC could have been able to agendaize these projects, would have brought up the issues of the drainage as well as the environmental issues of the relocation of over 900 Joshua Trees and the displacement of any protected wildlife issues. Also, in May of 2011, the LVMAC had approved a list of recommendations of siting criteria for large scale solar projects (over 20 acres). The LVMAC had developed this list from comments from the community of issues that resulted in recommended mitigations that the community felt it could accept in able to live with these solar panel fields for years to come. Some of these points would be larger than the minimal setbacks from roadways than are required, view obstructing fencing and/or landscape buffering, height limitations on all solar apparatus as a few measures and also addressing the economic impacts of these types of projects on this community. But, the timing of this is unfortunate since we do not have a new LVMAC in place at this time and do not have any indication from Supervisor Ramos' office that there will be MAC appointed any time soon. I believe that the applicant was not informed of the referenced recommendations, which is a failing of the project planner who started with these projects. On January 17<sup>th</sup>, I spoke with a Mr. Jason Tundermann of Lincoln Renewable Energy in Denver Colorado regarding these projects. He made it apparent that his company is involved and is listed as the applicant representative. It appears that they will facilitate the delivery of the power. He also informed me that a Power Purchase Agreement was in place with Edison. Mr. Tundermann was not aware of any local community issues or the fact that there was a Guideline for Recommendations in place for these types of projects. He is quickly becoming in contact with these issues and with those in the community who have concerns.

Now with all that being said, I would like to focus on the issues that I as an individual can raise as concerns since I no longer represent the community from the LVMAC standpoint.

The Cushenbury Creek Drainage area was very well outlined in the applicant's drainage study and showed that the watershed line in the San Bernsrdino mountains forms a funnel of drainages that when rain or flooding is occurring, drains down to the northwest through the area of the projects and continues to the Lucerne Valley Dry Lake. This course travels through the Russel Tract, where I live, and through other northward residences, across State highway 247, through other residences and farms to the dry lake location. The problem with the study is that it claims that this drainage travels through the washes as you would see on the aerial maps, but it is not confined by these washes. The studies also point out that this drainage area is an "undetermined risk area" as per FEMA. That means that FEMA hasn't evaluated this drainage for flooding. We should be maximizing our concerns, not minimizing them as in the studies. Seven years ago, we in this area experienced a flood event that occurred without raining in Lucerne Valley. A warm tropical rain storm had come over the mountains right after a colder snow storm event and melted the new snow on the mountains which caused runoff from the mountains and that from the watershed that contributes to the Cushenbury Creek, and also other drainage patterns, flooded down through the washes with so much force that the erosion created a sheetflow across the surrounding desert and quickly filled the washes with material leaving our local unmaintained dirt roads as the new drainage courses. Since then, we have at least two more rain flood events and now our roads are the new drainage pathes, which now have the affect of flooding out houses in the Russel Tract and beyond. The county does not maintain the dirt roads here and this now leaves the local residences vulnerable to flood damage. I have explained this because this drainage is more critical than the drainage studies conclude. I believe the drainage studies minimize the affect that clearing over 200 acres of desert will have on the area. As a condition for approval, I would have recommended that these projects include more detension basins to help mitigate future flooding.

11-1

11-2

With regards to relocating over 900 Joshua trees, I think that the Initial Studies minimize the problems with this issue. Living in this desert for over 40 years, I have seen that it is very difficult to transplant these protected trees. The industry will claim a 50% survival rate but I've seen up to only 25% survival rate. Requiring a Plant Protection Plan will not guarantee an adequate survival of these disturbed trees.

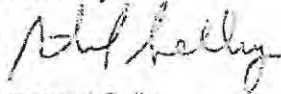
As a condition of approval, I would require that these, as well as the other desert plants to be saved, be transplanted around the projects perimeters as buffering from the locals viewsheds.

Since one of these types of photovoltaic solar projects, or even any other types of solar projects, have yet to be built in Lucerne Valley, we are not really sure as to how well using palliatives for dust control will work with this type of soil, but I would hope that if developed, that the issue of dust control be very well enforced. Over 200 acres of cleared desert out here results in major dust storms.

Since the County Development Code allows for these types of projects under conditional use to be developed, I don't know if I have raised enough concerns to stop the mitigated conditional approvals of them. But, I have grave concerns when it comes to the drainage issues knowing some history of how the flooding works around here and I am not confident that the developers will help mitigate these concerns since they have done all that the county has asked of them, and more. If these projects develop and then we find that the flooding becomes worse, I will have to point the finger at the county for allowing them to begin with.

It is in my opinion that at this time, with these studies as presented and without further mitigations regarding the concerns that I have pointed out, these two projects are the wrong projects in the wrong places at the wrong time.

Sincerely:



Richard Selby





**Mojave Desert Air Quality Management District**  
14306 Park Avenue, Victorville, CA 92392-2310  
760.245.1661 • fax 760.245.2699  
Visit our web site: <http://www.mdaqmd.ca.gov>  
Eldon Heaston, Executive Director

January 8, 2013

Nelson Miller, Contract, Senior Planner  
San Bernardino County Land Use Services Department/Planning Division  
15900 Smoke Tree Street  
Hesperia, CA 92345-3222

**Project: Initial Study, P201200011/CUP (Agincourt Solar)**

Dear Mr. Miller:

The Mojave Desert Air Quality Management District (District) has received the Initial Study for P201200011/CUP (Agincourt Solar). This project is a conditional use permit to establish a 10 megawatt (MW) solar photovoltaic power generating facility on approximately 65 acres of a 79.2 acres. The project is located adjacent to Camp Rock Road, south of Rosewood Street, approximately 1.7 miles north of the intersection of Camp Rock Road and State Route 18 in Lucerne Valley.

The District has reviewed the Initial Study and concurs with the determination of "Less than Significant" and "No Impact" for Air Quality issues. The District also concurs that the proposed Air Quality Mitigation Measures (AQ-1 through AQ-3) represent feasible mitigation. The District has no additional comments at this time.

Thank you for the opportunity to review this planning document. If you have any questions regarding this letter, please contact me at (760) 245-1661, extension 6726, or Tracy Walters at extension 6122.

Sincerely,

**Alan J. De Salvio**  
Supervising Air Quality Engineer

AJD/tw

P201200011 CUP Agincourt IS

**RECEIVED**  
JAN 10 2013

**PLANNING DIVISION**

City of Adelanto    Town of Apple Valley    City of Barstow    City of Blythe    City of Hesperia    City of Needles    County of Riverside    County of San Bernardino    City of Twentynine Palms    City of Victorville    Town of Yucca Valley

## Conner, Christopher - LUS

---

**From:** Jason Tundermann <jtundermann@lrenergy.com>  
**Sent:** Thursday, April 25, 2013 4:51 PM  
**To:** Conner, Christopher - LUS  
**Cc:** 'Elliott MacDougall'  
**Subject:** Local support emails

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Chris,  
Per our conversation just now, please find in the thread below emails from two more of the Lucerne Valley community leaders (Chuck Bell & Roger Peterson) expressing support for the project after learning more about our hydrology plans. Both were members of the Lucerne Valley M.A.C., along with Richard Selby.

---

**From:** Chuck Bell [mailto:chuckb@sisp.net]  
**Sent:** Saturday, March 30, 2013 10:37 AM  
**To:** 'Roger Peterson'; Jason Tundermann  
**Cc:** raselby@hotmail.com; sfritz@sdd.sbcounty.gov; jean.magee@ymail.com  
**Subject:** RE: Thank you for your time

Jason:

Goes for me too. Appreciate you working with us on this.

Chuck Bell

---

**From:** Roger Peterson [mailto:n6ujm@gotsky.com]  
**Sent:** Friday, March 29, 2013 1:35 PM  
**To:** Jason Tundermann  
**Cc:** chuckb@sisp.net; raselby@hotmail.com; sfritz@sdd.sbcounty.gov; jean.magee@ymail.com  
**Subject:** Re: Thank you for your time

Jason,  
Thank you for being sensitive to the public's requests regarding this project. Please pass that on to your company.

Good luck with your project,

-Roger Peterson

[ ]  
(o|||llllo)  
[]=o==[]

--- jtundermann@lrenergy.com wrote:

From: Jason Tundermann <jtundermann@lrenergy.com>  
To: Chuck Bell <chuckb@sisp.net>, 'Richard Selby' <raselby@hotmail.com>, 'Sharon Fritz' <sfritz@sdd.sbcounty.gov>  
CC: 'Roger Peterson' <n6ujm@gotsky.com>, 'Jean Magee' <jean.magee@ymail.com>

Subject: Thank you for your time  
Date: Fri, 29 Mar 2013 17:56:19 +0000

Dear Richard, Chuck, Roger & Jean,

I just wanted to thank you all again for carving out time to meet with me on Wednesday. I'm glad the measures we discussed help address your primary concerns about the potential hydrologic effects of the projects. Please let me know if any additional questions come up, and always feel free to reach out to me directly at any time – contact info below.

I will let you know as the projects continue to move through the planning process, including when any hearing dates get scheduled.

All the best,

Jason

**Jason Tundermann**

Director of Development

Lincoln Renewable Energy, LLC

1675 Larimer Street, Suite 440

Denver, CO 80202

w - (303) 755-2358

c - (303) 241-6768

f - (303) 433-6312

<http://www.lincolnrenewableenergy.com/>



---

**From:** Chuck Bell [<mailto:chuckb@sisp.net>]  
**Sent:** Monday, March 25, 2013 6:20 PM  
**To:** 'Richard Selby'; Jason Tundermann; 'Sharon Fritz'



**Cc:** 'Roger Peterson'; 'Jean Magee'  
**Subject:** RE: Meeting in Lucerne Valley, CA

I'm good for an hour meeting at 3 on Wed.

Chuck

---

**From:** Richard Selby [<mailto:raselby@hotmail.com>]  
**Sent:** Monday, March 25, 2013 10:02 AM  
**To:** [jtundermann@lrenergy.com](mailto:jtundermann@lrenergy.com); Sharon Fritz  
**Cc:** Chuck Bell; Roger Peterson; Jean Magee  
**Subject:** RE: Meeting in Lucerne Valley, CA

The only other time would be Wed the 27th @ 3:00 at the same place. Chuck Bell & myself can meet with you then. Night meetings not work. Chuck is a long time resident & has been involved with almost any issue in LV & was a Planning Commissioner in the past. He will have the most beneficial comments and insights.  
Richard

---

**From:** [jtundermann@lrenergy.com](mailto:jtundermann@lrenergy.com)  
**To:** [raselby@hotmail.com](mailto:raselby@hotmail.com); [sfritz@sdd.sbcounty.gov](mailto:sfritz@sdd.sbcounty.gov)  
**Subject:** RE: Meeting in Lucerne Valley, CA  
**Date:** Mon, 25 Mar 2013 16:19:45 +0000

Richard,

Thank you for reaching out. Unfortunately, I have a meeting at the County offices in San Bernardino during that time so won't be able to leave for Lucerne Valley until after that meeting ends.

It sounds like other meeting times for the full group are not an option this week. In case there is an opportunity to meet with you (or some other subset of local stakeholders) individually, I have the following times available during this trip:

- I could be up in the Lucerne Valley region by 6:30pm Tue if a dinner meeting is an option;
- I can be in L.V. on Wed any time after 11:30am, including through dinner.

Please let me know if anyone might be available to meet during the times above. I'd be happy to host a group lunch/dinner somewhere locally if that makes it easier for people to attend. If the times above aren't an option for

anyone, perhaps we can schedule a time for a call either today, Friday or next week – if so, please propose some times that work for you. If you need to reach me, my cell number is 303.241.6768.

Thanks very much,

Jason

---

**From:** Richard Selby [<mailto:raseby@hotmail.com>]

**Sent:** Monday, March 25, 2013 9:00 AM

**To:** Jason Tundermann; Sharon Fritz

**Subject:** Meeting in Lucerne Valley, CA

Mr. Tundermann:

Sorry to have missed you on your last trip but that was unavoidable. I have set up a meeting for you with myself & a couple of the Land Use Committee members in regards to your AGINCOURT & MARATHON solar projects at the CSA 29 office for Tuesday March 26th @ 2:00 p.m. The meeting address is 33187 State Highway 247 (Old Woman Springs Road) in L.V. This is at the local park office next to the park & the fire stations where you have contacted Sharon Fritz previously. I hope this meets with your satisfaction since it is the only time & place available this week for this meeting. I assume that I will see you there. Have a good trip.

Till then;

Richard Selby