Final Initial Study/ Mitigated Negative Declaration

Mitigation Monitoring and Reporting Program, Response to Comments, and Errata

West Antelope Solar Energy Project, Unincorporated Los Angeles County, California

Project No. R2012-01589-(5)
Conditional Use Permit No. 201200086
Environmental Assessment No. 201200158
SCH No. 2013101055

Prepared for

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TABLE OF CONTENTS

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SECTION 1.0 INTRODUCTION

Pursuant to the California Environmental Quality Act (CEQA), the potential environmental effects of the proposed West Antelope Solar Energy Project (hereinafter referred to as the "Project") have been analyzed in a Draft Initial Study/Mitigated Negative Declaration (IS/MND) (SCH No. 2013101055) dated October 2013.

Section 15074(b) of the State CEQA Guidelines states that, prior to approving a project, the lead agency must consider the proposed IS/MND together with any comments received during the public review process. The lead agency must adopt the proposed IS/MND, only if it finds on the basis of the whole record before it, that there is no substantial evidence that the project would have a significant effect on the environment and that the IS/MND reflects the lead agency's independent judgment and analysis. Section 2.0, Response to Comments, includes all letters directly received during and after the close of the 30-day public review period, as well as the Los Angeles County ("County") written responses to all comments received. Section 4.0, Errata, includes revisions to the text of the IS/MND either in response to a comment or in order to clarify information.

Section 15074(d) of the State CEQA Guidelines states that, when adopting an MND, the lead agency shall adopt a program for reporting on or monitoring the changes that it has either required in the project or made a condition of approval to reduce or avoid significant environmental effects. Section 3.0, Mitigation Monitoring and Reporting Program (MMRP), describes the mitigation program to be implemented by the County.

1.1 CEQA AND PUBLIC REVIEW OF THE IS/MND

In accordance with Section 15073 of the State CEQA Guidelines, an MND must be subject to a 30-day public review period when submitted to the State Clearinghouse for review by State agencies. The Draft IS/MND was made available for public review from Monday, October 21, 2013, through Wednesday, November 20, 2013. Consistent with Sections 15072(b) and 15072(d) of the State CEQA Guidelines, the Notice of Intent to Adopt a Mitigated Negative Declaration (NOI) was published in the *Antelope Valley Press* and *La Opinión* and is on file at the Los Angeles County Registrar-Recorder/County Clerk in the City of Norwalk. The NOI by itself or the Draft IS/MND and NOI was provided to 17 interested agencies and/or groups; hardcopies of the NOI and IS/MND were made available for review at the Los Angeles County Department of Regional Planning (LACDRP) Headquarters and the Lancaster Public Library during business hours; electronic files of the NOI and IS/MND were available online at http://planning.lacounty.gov/.

The County has reviewed all comments received from agencies, organizations and/or individuals related to the subject IS/MND to determine whether any substantial new environmental issues have been raised. Based on the evaluation in the Draft IS/MND, together with all comments received, the County has determined that no substantial new environmental issues have been raised and that all issues raised in the comments have been adequately addressed in the Draft IS/MND and/or in the Responses to Comments, Errata, and Mitigation Monitoring and Reporting Program. All potential impacts associated with the proposed Project were found to be less than significant with incorporation of relevant mitigation measures, where applicable. Therefore, the proposed Project would not result in any significant impacts, and a Mitigated Negative Declaration in accordance with CEQA is the appropriate environmental document for the proposed Project.

Therefore, this document, combined with the Draft IS/MND, constitutes the Final IS/MND for the proposed West Antelope Solar Energy Project. This document includes all directly received public comment letters; the County responses; and the State Clearinghouse letter that documents compliance with State agency CEQA review requirements. The County of Los Angeles Planning Commission will consider the proposed IS/MND together with the comments received during the public review process, and can consider adoption of West Antelope Solar Energy Project Final IS/MND and approval of the Project.

1.2 PROJECT DESCRIPTION SUMMARY

The proposed Project site is located in unincorporated Los Angeles County, just outside the western boundaries of the City of Lancaster. The Project site consists of 15 contiguous parcels totaling approximately 263 acres. The Project site is bound by (but does not include) parcels 3267-004-014, 3267-004-015, 3267-004-030, and 3267-004-031 (just south of West Avenue I-8/Lancaster Boulevard) to the north, 110th Street West to the east, West Avenue J-8 to the south, and 115th Street West to the west. The Project site is bisected by West Avenue J, which divides it into a North Portion and a South Portion.

The Project would develop this currently vacant 263-acre site with a solar energy facility that could produce up to 20 megawatt alternating current (MWac) of renewable electric power during daytime hours. The electricity generated by the Project would be transmitted to Southern California Edison's (SCE's) nearby Antelope Substation located at 95th Street West and West Avenue J. An off-site grid-tie transmission line (Grid-Tie) would run east from the Project site, parallel with West Avenue J, for approximately 1.5 miles. The Grid-Tie would enter the Antelope Substation in order to connect the Project to the existing transmission infrastructure. The IS/MND addresses the potential environmental impacts from both the on-site build out of the Solar Energy Project and the off-site Grid-Tie and connection to the Antelope Substation. The proposed Project would consist of the following components:

- A solar field of approximately 1,600 north-south rows of crystalline silicon photovoltaic (PV) panels, mounted on single-axis tracking systems on steel support structures;
- An electrical collection and inverter system that aggregates the output from the PV panels and converts the electricity from direct current (DC) to alternating current (AC);
- A substation where all of the facility's output is combined and transformed to a voltage of 66 kilovolts (kV);
- A meteorological data collection system configured to collect meteorological information at the height of the PV panels;
- Construction of a trail, as requested by the County Department of Parks and Recreation, along the eastern boundary of the Project site, which would implement a portion of the proposed California Poppy Trail;
- Civil infrastructure, including driveways, internal access roads, drainage design, secure fencing, landscaping, and two water tanks; and
- An off-site 66-kV, 1.5-mile-long transmission line that runs from the Project site's eastern boundary to the Antelope Substation along West Avenue J.

The Project is expected to be in operation for at least 20 years or longer if the Project remains economically viable. At the end of the economically useful life of the Project, the Property would be restored to its pre-developed state in accordance with County requirements and an approved Decommissioning Plan.

SECTION 2.0 RESPONSES TO COMMENTS

Letters commenting on the information and analysis in the Draft IS/MND were received from the parties listed below during and subsequent to the public review period (i.e., May 13, 2013 through June 26, 2013).

Federal Agencies

- None

State Agencies

- Governor's Office of Planning and Research (OPR), November 19, 2013
- California Department of Transportation, District 7 (Caltrans), October 30, 2013
- California Department of Fish and Wildlife (CDFW), November 18, 2013

Regional Agencies

- Antelope Valley Air Quality Management District (AVAQMD), October 29, 2013
- Lahontan Regional Water Quality Control Board (Water Board), November 15, 2013

Utilities

- Southern California Edison (SCE), November 20, 2013

Organizations

- Friends of Antelope Valley Open Space (FAVOS), November 19, 2013
- Antelope Acres Town Council (AATC) - Kerekes, November 18, 2013
- Antelope Acres Town Council (AATC) - Schuder, November 18, 2013
- Concerned Citizens of the Western Antelope Valley (CCWAV), November 20, 2013

Individuals

- Judy Watson (JWatson), November 17, 2013

Other

- Lozeau Drury, LLP (Lozeau), November 20, 2013
- Pless Environmental, Inc., November 18, 2013
- K. Shawn Smallwood, Ph.D., November 16, 2013

Each letter listed above is included in this document, followed by the County response to each comment. Each comment letter has been divided into sequential numbered comments (e.g., 1, 2, 3), as shown on the enclosed letters. Each numbered comment corresponds to a matching numbered response.

2.1 TOPICAL RESPONSES

Topical responses are provided for issue areas where there were several public comments on the same topic. In order to reduce repetition, topical responses have been provided to address the following issues:

- Topical Response No. 1: Why a Mitigated Negative Declaration Was Prepared and Not an Environmental Impact Report
- Topical Response No. 2: Construction Schedule
- Topical Response No. 3: Air Quality
- Topical Response No. 4: Dust Control Plan
- Topical Response No. 5: Vegetative Windbreak
- Topical Response No. 6: Valley Fever
- Topical Response No. 7: Cumulative Impacts

2.1.1 TOPICAL RESPONSE NO. 1: WHY A MITIGAGED NEGATIVE DECLARATION WAS PREPARED AND NOT AN ENVIRONMENTAL IMPACT REPORT

Comments have been made that the proposed Project requires the preparation of an Environmental Impact Report (EIR), rather than an Initial Study/Mitigated Negative Declaration (IS/MND). As discussed in Section 21080 of the California Environmental Quality Act (CEQA) Statutes, when faced with a discretionary project that is not exempt from CEQA, a Lead Agency must prepare an "Initial Study" to determine whether the project may have a significant adverse effect on the environment. The Initial Study is based on a checklist which identifies the various environmental impacts which may result from development. The Initial Study must provide support for the checklist findings and note or reference the source or content of the data relied upon in its preparation.

If the analysis in the Initial Study determines that all adverse impacts cannot be eliminated or reduced to less than significant with mitigation, the Lead Agency must prepare an EIR. However, if there is no substantial evidence for such an effect, or if the potential effect can be reduced to a level of insignificance through project revisions or mitigation, an MND can be adopted (Section 21064.5). The Initial Study prepared for the proposed Project identified potentially significant impacts to Aesthetics, Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Recreation, Utilities/Service Systems, and Mandatory Findings of Significance prior to mitigation. Implementation of the mitigation measures, as detailed in each environmental issue analysis presented in Section 4.0 of the IS/MND, would reduce all potentially significant impacts to a less than significant level. Therefore, according to the State CEQA Statutes and Guidelines, an MND would be the appropriate document for the proposed Project.

As stated in some of the comments regarding this issue, the determination to prepare either a Negative Declaration or an EIR is subject to the "fair argument" test (*Laurel Heights Improvement Assoc. v. U.C. Regents* [1993] 47 Cal.4th 376). If a fair argument can be raised on the basis of "substantial evidence" in the record that the project may have a significant adverse environmental impact—even if evidence also exists to the contrary—then an EIR is required. Pursuant to Section 21080 of CEQA, substantial evidence includes "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts". It does not include "argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly inaccurate or erroneous, or evidence of social or economic impacts which do not contribute to,

or are not caused by, physical impacts on the environment". Further, public controversy over the possible environmental effects of a project is not sufficient reason to require an EIR "if there is no substantial evidence in light of the whole record before the lead agency that the project may have a significant effect on the environment" (Section 21082.2).

According to Section 21064.5 of the State CEQA Statutes, the Lead Agency is authorized to use its own independent and objective judgment, based on the information before it, to determine that the level of mitigation or project revision being provided would be sufficient to ensure that "clearly no significant effect on the environment would occur" (Section 21064.5). Further, there must be evidence in the record as a whole to support that conclusion. Based on the substantial evidence presented in the Initial Study, it was determined by the County of Los Angeles Department of Regional Planning, and corroborated by the County Department of Parks and Recreation, Fire Department, Department of Public Health, and Department of Public Works, that the mitigation measures would be sufficient to avoid or eliminate all potentially significant impacts and that an EIR is not required. Furthermore, as all significant impacts will be reduced to levels below significant with the adoption of identified mitigation measures, an MND is the appropriate environmental document.

2.1.2 TOPICAL RESPONSE NO. 2: CONSTRUCTION SCHEDULE

Comments have been made that there is a need for a revised construction schedule because the schedule discussed in the IS/MND is outdated. Currently, Table 3-5 on page 3-13 of the IS/MND assumes a construction start date of 4th quarter 2013. In response to these comments, the construction schedule is herein revised to assume that construction would begin in the 1st quarter 2014. The following text on page 3-13 of the IS/MND has been revised as follows and as set forth in Section 4.0, Errata:

Construction Phasing and Schedule

Construction of the Project is anticipated to commence in the ~~fourth quarter 2013~~ **first quarter 2014** and would require approximately six months to complete. Table 3-5, Project Construction Schedule, provides the Project's proposed schedule. While the schedule may be modified due to the date of County Project approval as well other Project approval/permits, this table illustrates the approximate duration of major Project activities. Construction activities would occur between the hours of 7:00 AM and 7:00 PM Monday through Saturday.

TABLE 3-5
PROJECT CONSTRUCTION SCHEDULE

Project Activity	Timing
Right-of-way/property acquisition	3rd quarter 2012
Conditional Use Permit approved	~~3rd quarter 2013~~ **1st quarter 2014**
Acquisition of additional required permits	~~3rd quarter 2013~~ **1st quarter 2014**
Construction begins	~~4th quarter 2013~~ **1st quarter 2014**
Completion of construction	~~2nd quarter 2014~~ **3rd quarter 2014**
Project operational	~~2nd quarter 2014~~ **3rd quarter 2014**
Source: TA-Acacia.	

Based on the revised schedule, the Project is expected to be operational by the 3rd quarter 2014. The six month construction period assumed in the original schedule would remain the same. Therefore, impacts directly tied to the duration of construction, such as Air Quality, Greenhouse Gases, Noise, and Traffic, would not change. However, Mitigation Measures (MM) AQ-1 currently states "Earth-moving activities on the Project site would be scheduled during winter months, when it is anticipated that natural rainfall would assist with mitigation of fugitive dust". The portion of this statement referring to "winter months" will not be accurate under the revised construction schedule; however, earth-moving activities would commence at the beginning of March and continue through April, which is considered to be within the "rainy" season in Southern California. The following text on page 3-10 of the IS/MND and MM AQ-1 in Section 4.3.3, Mitigation Measures of the IS/MND have been modified as follows and as set forth in Section 4.0, Errata:

- Construction Scheduling: Grading activities shall be temporarily halted and/or site watering shall be increased during wind speeds that exceed 25 miles per hour, or when visible dust plumes have the potential to be transported: 1) off the Project site or 2) 200 feet beyond the centerline of the construction of linear facilities (such as the Grid-Tie). Earth-moving activities on the Project site shall be scheduled ~~during winter months~~ **to occur during the latter portion of the rainy season**, when it is anticipated that natural rainfall shall assist with mitigation of fugitive dust.

This revision to MM AQ-1 does not affect the Project's mandate to fully comply with the Antelope Valley Air Quality Management District's (AVAQMD's) Rule 403, which requires preparation of a Dust Control Plan for controlling fugitive dust and avoiding nuisances related to emissions. Implementation of the various strategies and performance standards would ensure that impacts related to particulate pollutant emissions would be mitigated to a less than significant level, regardless of the season of construction.

The revised schedule would mean that construction would coincide with the nesting bird season, which starts in February and lasts through August. However, MM BIO-6 contains provisions to allow for Project-related activities to occur during that period, including completion of a pre-construction nesting bird survey. If an active nest is located within or adjacent to the construction area and the Biologist determines that work activities may impact nesting, the Biologist would demarcate an appropriate buffer zone around the nest, generally prohibiting construction activities within a designated radius. It is anticipated that implementation of the provisions contained in MM BIO-6 would reduce impacts related to nesting birds to a less than significant level.

2.1.3 TOPICAL RESPONSE NO. 3: AIR QUALITY

Comments have been made that question some of the input data used for the calculation of construction-phase criteria air pollutant emissions and the determination that the emissions would be less than significant. The construction phase criteria air pollutant emissions calculations are shown in Appendix B of the IS/MND and are summarized in Table 4-5 on page 4-19 of the IS/MND. The calculations are conservative and were shown to be less than significant. They are considered to be conservative because they use data from the California Air Resources Board's (CARB's) Model OFFROAD 2007, which was the current standard when the IS/MND analysis was started. CARB research determined OFFROAD 2007 construction equipment load factors were substantially higher than shown in field data, and revised factors were incorporated in the updated model OFFROAD 2011.

Additional conservative elements of the IS/MND emissions calculations included (1) diesel engine generators typical for many construction projects; however, the proposed Project plans to use gasoline generators that have substantially less nitrogen oxide (NOx) emissions and (2) no emission reductions were taken to acknowledge that contractors commonly have many pieces of Tier 2, Tier 3, and Tier 4 equipment in their inventories. These are equipment with lower-emission diesel engines that have been required in new off-road equipment manufactured since 2004. The reduced emissions engines are designated Tier 2, Tier 3, Tier 4, with each tier representing stricter standards for lower emissions.

The construction phase emission calculations for the proposed Project have been updated using the OFFROAD 2011 model for construction equipment emissions. Some input data have been changed in response to specific comments, as detailed below. The results of the updated calculations, as shown in Table AQ-1, show that (1) the estimated construction emissions of volatile organic compounds (VOC), NOx, and carbon monoxide (CO) are less than what is shown in Appendix B and Table 4-5 of the IS/MND and (2) estimated emissions of respirable particulate matter with a diameter of 10 microns or less (PM10) and fine particulate matter with a diameter of 2.5 microns or less (PM2.5) are greater than previously estimated.

TABLE AQ-1
ESTIMATED ANNUAL CONSTRUCTION EMISSIONS (TONS)

	VOC	NOx	CO	SOx	PM10	PM2.5
Estimated emissions – IS/MND	1.3	11.8	6.4	<0.1	0.7	0.5
Revised emissions	**0.6**	**5.7**	**4.1**	**<0.1**	**1.4**	**0.7**

IS/MND: Initial Study/Mitigated Negative Declaration; VOC: volatile organic compound(s); NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less.

The conservative assumptions previously noted relative to (1) generators powered by diesel engines and (2) no use of Tier 2, Tier 3, or Tier 4 construction equipment, have been retained in the revised calculations shown in Table AQ-1. Revised inputs incorporated into the construction emission analysis shown in Table AQ-1include:

- **On-Site Water Trucks.** The IS/MND calculation assumed that each phase of construction would use one water truck for four hours per day, which is typical for grading and earth moving projects where water is required to avoid fugitive dust emissions. A commenter correctly noted that the IS/MND emissions analysis did not include the very conservative/worst case assumption for water use of five water trucks working for ten hours per day (see Table 3-8 on page 3-12 of the IS/MND). The five trucks for ten hours assumption has been included in the revised calculations summarized in Table AQ-1. It is noted that these additional water trucks remain on site and do not contribute to the daily travel of the larger water trucks to and from the Project site. The truck travel for these larger water trucks, which refill the smaller trucks on-site, was included in the original calculations of emissions for on-road trucking and for traffic impacts discussed in the IS/MND.

- **Fugitive Dust from Material Handling.** A commenter correctly noted that the IS/MND analysis did not include this source. This has been added to the revised calculations summarized in Table AQ-1.

- **Fugitive Dust from Vehicle Travel on Paved Roads.** A commenter correctly noted that the IS/MND analysis did not include this source, which is typically a relatively very small quantity. This has been added to the revised calculations summarized in Table AQ-1.

- **Project Construction Year.** Due to the delay in the proposed Project, OFFROAD 2011 and EMFAC 2011 emission factors for 2014 were used.

A commenter stated that the IS/MND analysis erred in not comparing emissions to daily emissions thresholds included in the AVAQMD's CEQA Guidelines because the Project construction period would be less than one year. BonTerra Consulting's previous experience with AVAQMD has been that the annual emissions threshold is appropriate to use for all projects, including the proposed Project. However, having received a comment regarding this methodology, an inquiry was made to AVAQMD in December 2013, and their reply was that a conservative approach to a six-month project would be to consider half the annual thresholds. This approach is shown in Table AQ-2 below, and is shown in Section 4.0, Errata, as a replacement for Table 4-5 in the IS/MND. As shown in Table AQ-2, proposed Project emissions would be less than half the annual thresholds. Thus, as previously concluded in the IS/MND, construction emissions would be less than significant using this conservative standard.

TABLE AQ-2
ESTIMATED ANNUAL CONSTRUCTION EMISSIONS (TONS)

	VOC	NOx	CO	SOx	PM10	PM2.5
Estimated project emissions	0.6	5.7	4.1	<0.1	1.4	0.7
One half of AVAQMD Annual Thresholds	***12.5***	***12.5***	***50***	***12.5***	***7.5***	***7.5***
Exceeds AVAQMD Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

VOC: volatile organic compound(s); NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; AVAQMD: Antelope Valley Air Quality Management District.

The results shown in Tables AQ-1 and AQ-2 are hereby incorporated into the Final IS/MND and associated technical appendices, and the revised IS/MND text is included in Section 4.0, Errata.

2.1.4 TOPICAL RESPONSE NO. 4: DUST CONTROL PLAN

Comments have been made stating concerns about the proposed Project's contribution to the problem of fugitive dust emissions and blowing dust. Comments have noted severe dust storms that occurred in the spring of 2013, as well as the problems of dust control in the region. As noted in some of the comments, the AVAQMD issued violations to the operator of the Antelope Valley Solar Ranch One (AVSR1) project that is currently under construction.

As discussed throughout the IS/MND, the proposed Project has many features to prevent significant direct or cumulative impact from fugitive dust emissions as follows:

1. Although the fenced site would include more than 175 acres, there would be no mass grading. The total area of disturbance is estimated at less than 31.5 acres, as shown in Table 3-2 on page 3-10 of the IS/MND.

2. The Project would incorporate the following construction-phase dust- and erosion-control measures, as stated on pages 3-10 and 3-11, as well as stated in the revised MM AQ-1 provided in Section 4.0, Errata:

   <u>Dust and Erosion Control</u>

   During construction, the Project would comply with Antelope Valley Air Quality Management District's (AVAQMD's) Rule 403,

Fugitive Dust to prepare and implement a Dust Control Plan (see MM AQ-1) for controlling fugitive dust and avoiding nuisance. Additionally the Project would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) as required by the State Water Resources Control Board's Construction General Permit, which would further control water and wind erosion during construction.

Importantly, the Dust Control Plan must be flexible to accommodate for changing weather and wind circumstances, and includes requirements of water and/or other erosion control measures "as needed" in order to ensure attainment of the performance standard for prohibition of "the presence of such dust remains visible in the atmosphere beyond the Property Line of the emission source," per Antelope Valley Air Quality Management District's (AVAQMD's) Rule 403, Fugitive Dust. MM AQ-1 from the IS/MND, including revisions incorporated through the Section 4.0, Errata, includes a number of strategies during construction to control fugitive dust due to high winds from the Project site:

- Minimal Grading and Ground Disturbance: The Project would perform the minimum amount of grading and disturb the minimum amount of existing vegetation to construct the Project. Grading would generally be limited to the proposed access roads, retention basins, Project Substation foundation, inverter pads, water tank pads, and trail areas. The existing vegetation in all other areas would be mowed to a height consistent with vegetation management requirements and left in place.
- Vehicle Use: The Project would only use construction vehicles with tires and would prohibit use of equipment with rotating wheel tracks (e.g. tank treads or caterpillar tracks).
- Construction Scheduling: Grading activities would be temporarily halted and/or site watering would be increased during wind speeds that exceed 25 miles per hour, or when visible dust plumes have the potential to be transported: 1) off the Project site or 2) 200 feet beyond the centerline of the construction of linear facilities (such as the Grid-Tie). Earth-moving activities on the Project site would be scheduled to occur during the latter portion of the rainy season, when it is anticipated that natural rainfall would assist with mitigation of fugitive dust.
- Water Application: The Project would apply water to the construction site as necessary to control fugitive dust. As required by the AVAQMD, when water is used as fugitive dust control, watering is required three times a day and increased to a minimum of four times a day if there is evidence of visible wind-driven fugitive dust.
- Soil Binders/Wood Mulch: Soil binders and wood mulch would be applied as necessary.
- Stock Piles Stabilization: All stock not currently in use would be stabilized from erosion through the use of watering, soil binders, or protected with a plastic or geo-textile mat.

- Final Stabilization: Prior to completion of construction, all disturbed areas would be permanently stabilized through the use of an all-weather surface treatment and existing vegetation would be maintained at a maximum height of 6 inches, per LACFD requirements.
- Monitoring: A qualified construction mitigation manager (CMM) or delegate would be retained to be on-site during all grading activities to ensure compliance with the approved Dust Control Plan. The CMM or delegate would monitor all construction activities for visible dust plumes. The CMM or Delegate would promptly implement additional dust plume reduction measures in the event that such visible dust plumes are observed. Additional measures to be implemented, as necessary, would include increased watering, application of dust palliatives, and/or scaled back construction activities up to and including temporary work cessation.

3. The Project would incorporate the following operational dust-control measure, as stated on pages 3-16 of the IS/MND:

    - After construction is complete, the roads would be maintained on an as-needed basis. It is anticipated that road maintenance would occur annually, depending on local weather and frequency of use. Internal road maintenance would involve superficial re-grading and erosion control measures, as needed. As previously discussed, all disturbed areas would be permanently stabilized through the use of an all-weather surface treatment.

4. The Project would incorporate the following measure related to a Construction Staging Plan and, if necessary, a Revegetation Plan, as stated in the revised MM CML-2, provided in Section 4.0, Errata:

    - Prior to the issuance of a grading permit, a Construction Staging Plan (CSP) shall be submitted for review and approval to the County. Prior to energization of the Project, if the as-built plan reveals the need for restoration after construction, a Revegetation Plan shall be submitted for review and approval to the County.

    - The CSP will detail access routes, storage areas, high-traffic areas, and methods for the installation of the panels and other equipment in non-graded areas. The CSP will ensure that construction staging areas are sited in upland areas outside stream channels and other surface waters on or around the Project site. Buffer areas will be identified and exclusion fencing will be used to protect the water resource and to prevent unauthorized vehicles or equipment from entering or otherwise disturbing stream channels. Construction equipment will be required to use existing roadways to the extent feasible. A qualified construction mitigation manager (CMM) or delegate will be responsible for documenting adherence to the CSP during the construction phase of the Project.

    - A post-construction “as-built” plan will be required prior to energization of the Project, which shall detail areas of disturbance needing further restorative work in order to meet the expected performance goals. Restoration performance goals shall be based upon the quality of the on-site vegetation at the time of the CUP approval. In the event that the as-

built plan reveals the need for restoration after construction, a Revegetation Plan that details steps proposed for the restoration of disturbed areas after construction will be required to be prepared and implemented. The Revegetation Plan shall include a five-year annual reporting program to document the site's recovery towards these expected criteria, and shall include provisions for adaptive management contingencies if adequate revegetation has not occurred within a three year period from energization.

- After the five-year monitoring period has elapsed, the mitigation may be deemed complete if the performance goals have been satisfied. Further mitigation may be required, subject to enforcement penalties, if the performance goals have not been met.

- Maintenance of the site in keeping with performance goal criteria shall be a condition of the CUP, subject to enforcement penalties, and shall be confirmed through a requirement in the Project MMRP that annual reporting shall continue for the life of the Project.

5. Upon decommissioning of the proposed plant, all disturbed areas (including access roads, retention basins, and equipment foundations) would be removed and restored to the previous or better condition than prior to construction, as stated on page 3-18 of the IS/MND.

6. MM AQ-1, found on pages 4-22 and 4-23 of the IS/MND and revised in Section 4.0, Errata, re-states the construction phase dust-control measures and thereby incorporates these measures into the Mitigation Monitoring and Reporting Program (MMRP).

The AVAQMD's Rule 403 requirement for a Dust Control Plan was reiterated by AVAQMD in their comment on the Notice of Intent to adopt the Project IS/MND. In the comment, the AVAQMD noted that (1) watering frequency shall be increased if there is evidence of visible wind-driven fugitive dust; (2) the Dust Control Plan shall demonstrate adequate water or dust suppressant application equipment to mitigate all disturbed areas; and (3) all disturbed surface areas shall meet the definition of a stabilized surface upon completion of construction.

Comments have been raised that the dust-control measures specified in Dust Control Plans approved by AVAQMD for other solar projects in the Antelope Valley have not been effective, and there have been emissions of fugitive dust that are detrimental to the population surrounding these other project sites. Whether the production of fugitive dust at these project sites is because of the effectiveness (or lack thereof) of the measure itself, as stipulated in that Dust Control Plan, or how the measure was implemented is unknown. Regardless, the intent of the Dust Control Plan pursuant to AVAQMD's Rule 403 is to meet the following performance standard:

(1) A person shall not cause or allow the emissions of Fugitive Dust from:

(a) Any Active Operation, Open Storage Pile, or Disturbed Surface Area such that the presence of such dust remains visible in the atmosphere beyond the Property Line of the emission source; or

(b) Any applicable source such that the dust causes 20 percent opacity or greater during each observation and the total duration of such observations (not necessarily consecutive) is a cumulative three minutes

or more in any one hour. Only opacity readings from a single source shall be included in the cumulative total used to determine compliance.

It is anticipated that the AVAQMD, in light of the recent high wind events and experience with ongoing construction projects, particularly those that have necessitated the issuance of violations pursuant to Rule 403, will be especially diligent in their review of the proposed Project's Dust Control Plan, and will not approve the Dust Control Plan until they are satisfied that the plan contains measures that will result in avoidance of fugitive dust violations. Additionally, the Project Applicant has been in communication with the Antelope Valley Dustbusters, a locally based multi-agency working group, organized and convened to formulate dust mitigation strategies, as recommended by some commenters, and will continue to coordinate with this group if requested by the County and/or AVAQMD. Based on the above elements, the proposed Project would have neither a direct nor a cumulative significant impact on fugitive dust emissions.

2.1.5 TOPICAL RESPONSE NO. 5: VEGETATIVE WINDBREAK

Comments have been made about the need for a vegetative windbreak as part of the proposed Project. It is an accurate statement that the Project design does not currently include "windbreak trees", interpreted to mean a linear planting of a tall plant species expressly intended to reduce wind velocities across the site as one method of managing fugitive dust.

Regarding plant selection for the proposed Project, the Landscape Plan for the Project must be reviewed and approved by the County of Los Angeles Department of Regional Planning and must comply with the County's Drought-Tolerant Landscaping requirements (Section 22.52.2200 et. seq. of the County Code). This includes selecting plants from a County-approved drought-tolerant plant list that has both native and non-native species that are non-invasive and regionally appropriate. Long-term irrigation (i.e., longer than three years) would not be required for the proposed Project because plant species appropriate to the high desert would be installed. Once established, these species would rely on rainfall for irrigation, as in the existing condition, and would therefore avoid long-term demand on potable water, which is a constrained resource in the Antelope Valley.

Based on visual reconnaissance by BonTerra Consulting biologists, it was noted that tamarisk (*Tamarix* spp.), which is an invasive and water-intensive non-native plant species, was commonly used for windbreaks in the Antelope Valley. Because it is an invasive species that can have significant indirect impacts to biological diversity, tamarisk is identified on the County's list of non-permitted plants. As such, the "windbreak" vegetation that local residents may be accustomed to seeing would not be appropriate for the Project, and would eliminate the benefits of the County-approved plant list described above. It is also noted that plant species appropriate for a high-desert climate generally do not have characteristics that provide substantial wind resistance, such as dense evergreen foliage, thick trunks or stems, and ability to be tightly spaced. These characteristics are most often associated with species requiring substantial water, which would require permanent supplemental irrigation in a location like Antelope Valley.

The Project's Landscaping Plan will incorporate the most appropriate native or non-native plant species in accordance with the County's Drought Tolerant Landscaping requirements that are large enough to provide for visual screening of the site. Because the County of Los Angeles Department of Regional Planning is not currently recommending the implementation of windbreaks, other measures of dust control have been required of the Project. Please refer to Topical Response No. 4, Dust Control Plan.

2.1.6 TOPICAL RESPONSE NO. 6: VALLEY FEVER

Comments have been made that the Draft IS/MND does not adequately address Valley Fever, which are interpreted as comments on the effectiveness of dust control, since inhalation of Valley Fever spores entrained in windblown dust is the means by which Valley Fever is contracted. Please refer to the discussion on pages 4-21 and 4-22 of the IS/MND, as well as Topical Response No. 4, Dust Control Plan. It is noted that, because the site is currently a large expanse of undeveloped land that experiences periodic high winds, there is already a risk of Valley Fever for residents in the Project area due to wind/dust conditions.

However, even the minimal grading required for Project development could increase the risk of Valley Fever exposure if spores are present on the Project site and become airborne in fugitive dust. This is acknowledged and addressed beginning on page 4-21 of the IS/MND. Valley Fever is a known concern in the region and is a priority issue for the County and AVAQMD. As such, the Dust Control Plan being prepared in accordance with AVAQMD Rule 403, and prepared to the satisfaction of the County and AVAQMD, will include robust measures and performance standards to ensure that fugitive dust does not leave the boundaries of the Project site (see Topical Response 4- Dust Control Plan). Implementation of the Dust Control Plan will ensure that the potential for increased exposure to Valley Fever due to Project earthmoving activities would not be significant.

2.1.7 TOPICAL RESPONSE NO. 7: CUMULATIVE IMPACTS

Comments have been made regarding a need for a revised cumulative impacts analysis in the IS/MND. Cumulative impacts are currently discussed in Section 4.19, Mandatory Findings of Significance, of the IS/MND. Exhibit 4-16, Cumulative Impacts, shows a map of all the related projects within a three-mile radius of the proposed Project that were considered as part of the analysis. This list was compiled based on information provided by the County of Los Angeles Department of Regional Planning and the City of Lancaster Planning Department on March 28, 2013 and March 6, 2013, respectively.

Comments state that the IS/MND's related projects list omits a project located adjacent to the proposed Project, known as the Plainview Solarworks Project, within the City of Lancaster. As indicated by Ms. Jocelyn Swain of the City of Lancaster Planning Department via phone call with BonTerra Consulting staff on December 10, 2013, the application for the Plainview Solarworks Project was submitted in May 2013, indicating that it was not included on the list of related project provided to BonTerra Consulting by the City of Lancaster in March. As such, all known solar projects in the City of Lancaster at the time of inquiry were included in the IS/MND. Unlike EIRs, which require that "a list of past, present, and probably future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency" be included in the analysis of cumulative impacts, there is no equivalent requirement for MNDs (State CEQA Guidelines, Section 15130[b][1][A]). Therefore, it was not statutorily required that the Plainview Solarworks Project be considered in the cumulative discussion. Nevertheless, it has been added to Table 4-19, Cumulative Projects Within Three Miles of the Project Site in Section 4.0, Errata.

The environmental documentation for the Plainview Solarworks Project does not contain information regarding anticipated construction scheduling; therefore, it is difficult to ascertain if construction-related impacts would coincide with that of the proposed Project. However, even if it is assumed that construction would occur concurrently for both projects and that both projects are roughly the same size, the cumulative impact conclusions of the IS/MND would not be altered, and impacts associated with construction cumulative projects concurrently would remain less than significant.

Additionally, comments state that the cumulative impact analysis in the IS/MND fails to provide meaningful assessment of the cumulative impact of the proposed Project in light of nearby renewable energy projects proposed in the area, and that the existing fugitive dust conditions in the western Antelope Valley will be exacerbated by the proposed Project. The discussion of cumulative impacts on pages 4-114 through 4-121 is based on the existing conditions at the time of the IS/MND preparation, which is the baseline condition from which all impacts are assessed. Therefore, the existing windy and sometimes dusty conditions in the Project area are important considerations in determining the significance of impacts and the need for mitigation. For example, the thresholds for determining significance set forth by the AVAQMD are developed based on the specific conditions within the AVAQMD service area, and MM AQ-1 set forth in Section 4.3.3 of the IS/MND (and revised in Section 4.0, Errata) related to air quality is designed to specifically address the Project's impacts in the context of the current air quality conditions in the Antelope Valley and the Project site, specifically. This existing condition includes SCE development, farmland, existing solar facilities, and other developed area within the western Antelope Valley.

The proposed Project cannot be held responsible for how other solar projects in Antelope Valley were constructed or are being operated. The County of Los Angeles and the AVAQMD are aware, in part due to the diligence of local community advocates, of the fugitive dust concerns in the community. Both the County of Los Angeles and the AVAQMD will be responsible for reviewing and approving a Dust Control Plan that is adequate to address the existing conditions in the Project area.

The IS/MND acknowledges that implementation of the Project, in conjunction with the related projects in the surrounding area, would result in cumulative impacts. This includes cumulative impacts related to Aesthetics (impacts related to the character of the Project's surrounding area) and Biological Resources (cumulative loss of lands potentially contributes to the general loss of potential foraging habitat for a variety of bird species, including Swainson's hawk). In order to mitigate these impacts and avoid the need for a take permit, MM CML-1 requires the Project Applicant to provide dedicated open-space lands at a minimum 2:1 ratio of replacement for the lands disturbed by Project implementation. In response to the CDFW letter submitted during the public review period, the County is now requiring 2:1 mitigation for the entire fenced area of the Project. With a fenced area of 178.5 acres, a total of 357 acres of mitigation is required. The 84 acres of the Project site outside the fenced area may still count towards satisfaction of the total required acreage. Thus, the remaining 273 acres must be acquired off-site. Additionally, the County requires a Decommissioning Plan for the Project to be prepared. This Plan would ensure that the land is returned to a beneficial use upon termination of the use of the property as a solar site. As required by MM CML-1, mitigation lands must be selected in consultation with CDFW and preserved with a conservation easement or other form of legal dedication in perpetuity, or until the Project site is restored to its pre-developed conditions per the requirements of the approved Decommissioning Plan. Lands may be deeded to a land management-conservation entity with prior approval from the County.

In addition to the Decommissioning Plan, MM CML-2 requires that if the as-built plan reveals the need for restoration after construction, a Revegetation Plan shall be submitted for review and approval to the County prior to energization of the Project. The Revegetation Plan will detail steps proposed for the restoration of disturbed areas in the event that the as-built plan reveals the need for restoration after construction. Restoration performance goals shall be based upon the quality of the on-site vegetation at the time of the CUP approval. The Revegetation Plan shall include a five-year annual reporting program to document the site's recovery towards these expected criteria, and shall include provisions for adaptive management contingencies if adequate revegetation has not occurred within a three-year period from energization. Therefore, with the combination of the 2:1 mitigation requirement (which includes preservation of off-site

land in perpetuity) and the finite nature of Project-related impacts to Aesthetics and Biological Resources due to the eventual implementation of the Decommissioning Plan, all cumulative impacts would be less than significant.

2.2 STATE AGENCIES

- Governor's Office of Planning and Research (OPR), November 19, 2013
- California Department of Transportation, District 7 (Caltrans), October 30, 2013
- California Department of Fish and Wildlife (CDFW), November 18, 2013

OPR

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

November 19, 2013

Anthony Curzi
Los Angeles County
320 West Temple Street
Los Angeles, CA 90012

Subject: West Antelope Solar Energy Project R2012-01589 / CUP 201200086 / ENV 201200158
SCH#: 2013101055

Dear Anthony Curzi:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on November 18, 2013, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

1

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2013101055
Project Title West Antelope Solar Energy Project R2012-01589 / CUP 201200086 / ENV 201200158
Lead Agency Los Angeles County

Type **MND** Mitigated Negative Declaration

Description The Project would develop the approximately 263-acre site with solar energy facilities that have a total system capacity of 20 megawatts. The Project would consist of (1) mounted solar PV panels; (2) an electrical collection system; (3) the Project Substation; (4) an underground (or partially underground) transmission line along Avenue J to the SCE Antelope Substation; (5) a meteorological data collection system; and (6) civil infrastructure including driveways, internal access roads, drainage design, a hiking trail, secure fencing, landscaping, and two water tanks.

Lead Agency Contact

Name Anthony Curzi
Agency Los Angeles County
Phone 213 974 6443 **Fax**
email
Address 320 West Temple Street
City Los Angeles **State** CA **Zip** 90012

Project Location

County Los Angeles
City Lancaster
Region
Lat / Long 34° 41' 22" N / 118° 19' 43" W
Cross Streets 110th Street West and West Avenue J
Parcel No. Various
Township 7N **Range** 14W **Section** Mutli **Base**

Proximity to:

Highways
Airports
Railways
Waterways
Schools
Land Use Vacant with transmission lines.
Z: A-2-5
GPD: N-1

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Landuse; Cumulative Effects; Other Issues

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 5; Department of Parks and Recreation; Department of Water Resources; Caltrans, District 7; Air Resources Board; Regional Water Quality Control Bd., Region 6 (Victorville); Native American Heritage Commission; California Energy Commission; Public Utilities Commission

Date Received 10/18/2013 **Start of Review** 10/18/2013 **End of Review** 11/18/2013

1 (cont.)

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, TRANSPORTATION PLANNING
IGR/CEQA BRANCH
100 MAIN STREET, MS # 16
LOS ANGELES, CA 90012-3606
PHONE: (213) 897-9140
FAX: (213) 897-1337

Flex your power!
Be energy efficient!

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11/18/13
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STATE CLEARING HOUSE

October 30, 2013

Mr. Anthony Curzi
County of Los Angeles
320 West Temple Street
Los Angeles, CA 90012

IGR/CEQA No. 131044AL-MND
West Antelope Solar Energy Project
R2012-01589 / CUP 201200086 / ENV 201200158
Vic. LA-14 / PM R67.96
SCH #: 2013101055

Dear Mr. Curzi:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project consists of developing a photovoltaic (PV) solar energy farm on a 263-acre site. The project site is about 7 miles away from SR-14.

Storm water run-off is a sensitive issue for Los Angeles County. Please be mindful that projects should be designed to discharge clean run-off water.

Transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a transportation permit from Caltrans. It is recommended that large size truck trips be limited to off-peak commute periods.

If you have any questions, please feel free to contact Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 131044AL.

1 (cont.)

Sincerely,

DIANNA WATSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

2.2.1 GOVERNOR'S OFFICE OF PLANNING AND RESEARCH (OPR)

November 19, 2013

Response OPR-1

This letter acknowledges receipt of the IS/MND for the public review period, which closed at OPR on November 18, 2013. In accordance with Section 15073 of the State CEQA Guidelines, a Negative Declaration or Mitigated Negative Declaration must be subject to a 30-day public review period when submitted to the State Clearinghouse for review by State agencies. Therefore, the OPR letter states that the mandatory 30-day review period lasted from October 18, 2013, through November 18, 2013.

This letter acknowledges that the County has complied with the State Clearinghouse review requirements for draft environmental documents pursuant to CEQA. The only letter received by OPR at the time of their letter was from Caltrans dated October 30, 2013.

Caltrans

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY EDMUND G. BROWN, JR., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, TRANSPORTATION PLANNING
IGR/CEQA BRANCH
100 MAIN STREET, MS # 16
LOS ANGELES, CA 90012-3606
PHONE: (213) 897-9140
FAX: (213) 897-1337

Flex your power!
Be energy efficient!

October 30, 2013

Mr. Anthony Curzi
County of Los Angeles
320 West Temple Street
Los Angeles, CA 90012

IGR/CEQA No. 131044AL-MND
West Antelope Solar Energy Project
R2012-01589 / CUP 201200086 / ENV 201200158
Vic. LA-14 / PM R67.96
SCH #: 2013101055

Dear Mr. Curzi:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project consists of developing a photovoltaic (PV) solar energy farm on a 263-acre site. The project site is about 7 miles away from SR-14.

Storm water run-off is a sensitive issue for Los Angeles County. Please be mindful that projects should be designed to discharge clean run-off water. 1

Transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a transportation permit from Caltrans. It is recommended that large size truck trips be limited to off-peak commute periods. 2

If you have any questions, please feel free to contact Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 131044AL.

Sincerely,

DIANNA WATSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, TRANSPORTATION PLANNING
IGR/CEQA BRANCH
100 MAIN STREET, MS # 16
LOS ANGELES, CA

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Mr. Anthony Curzi
County of Los Angeles
320 West Temple Street
Los Angel

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2.2.2 DEPARTMENT OF TRANSPORTATION, DISTRICT 7 (CALTRANS)

October 30, 2013

Response Caltrans-1

As discussed on pages 4-69 through 4-71 of the IS/MND, the Project shall be implemented in compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2009-009-DWQb as amended by Order No. 2010-0014-DWQ [NPDES No. CAS000002]), and shall be designed and constructed in compliance with the water quality plan/hydrology requirements of the adopted Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit (Order No. R4-2012-0175, NPDES No. CAS004001) and *Los Angeles County Department of Public Works' 2009 Low Impact Development (LID) Standard Manual* (LACDPW 2009). The Water Quality Plan/Hydrology will be based on calculations contained in a Drainage Analysis prepared by the Project Engineer in accordance with the *Los Angeles County Department of Public Works' Hydrology Manual* (LACDPW 2006a). As required by the County, appropriate post-construction treatment-control Best Management Practices (BMPs) pursuant to the water quality plan/hydrology requirements would be incorporated into the Project design.

Response Caltrans-2

The following text has been added to page 4-103, Section 4.17.2, of the IS/MND as follows, and as stated in Section 4.0, Errata:

> The limited amount of construction activity for the grading and vehicle trips by the construction crew for delivery of building materials (i.e., to be used for PV panels, mounting structures and poles/foundations, the equipment buildings, conduit trenching, fencing, and lighting) is not expected to cause traffic congestion on area roadways and intersections. There is capacity on local intersections and streets near the site, which are all operating at Level of Service (LOS) A, to handle traffic volume increases due to construction traffic. **The movement of large equipment on public roadways shall be made in compliance with the Los Angeles County Code (Title 16, Highway), which requires a moving permit and which includes provisions regarding the size of vehicles/equipment; night moves; moving in inclement weather; parking on streets; travel outside peak hours and holidays; over-length, over-height, and over-width requirements; lighting; signs; and restricted routes. Oversized transport vehicles on State highways, if required, would need to obtain a transportation permit from the California Department of Transportation (Caltrans).** This impact would also be temporary and less than significant.

The following text has been added to page 3-20, Section 3.5.2, Ministerial Permits, of the IS/MND as follows and as stated in Section 4.0, Errata:

- **California Department of Transportation (Caltrans): Transportation Permit for Oversized Vehicles, if necessary.**

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

November 18, 2013

Mr. Anthony Curzi
County of Los Angeles
320 West Temple Street, 13th Floor
Los Angeles, CA 90012

Subject: Comments on the Initial Study/Mitigated Negative Declaration for the West Antelope Solar Energy Project, Unincorporated County of Los Angeles (SCH# 2013101055)

Dear Mr. Curzi:

The California Department of Fish and Wildlife (Department) has reviewed the Initial Study/and Mitigated Negative Declaration (IS/MND) prepared by the County of Los Angeles Department of Regional Planning (Lead Agency) and the associated appendices prepared by Bonterra Consulting for the proposed construction of West Antelope Solar Energy Project (Project).

The proposed Project is located in unincorporated Los Angeles County, just west of the City of Lancaster in an area referred to as the Northwest Antelope Valley. The Project is approximately 44 miles north of downtown Los Angeles and approximately 4.5 miles west of the nearest developed subdivision within the City of Lancaster. The Project consists of 15 contiguous parcels totaling approximately 263 acres. The Project includes Assessor's Parcel numbers: 3267-004-016, 3267-004-017, 3267-004-018, 3267-004-025, 3267-004-026, 3267-004-027, 3267-004-028, 3267-004-029, 3267-004-044, 3267-004-045, 3267-004-046, 3267-014-017, 3267-014-018, 3267-014-019, and 3267-014-020. The Project is bound by West Avenue I-8/Lancaster Boulevard to the north, 110th Street West to the east, West Avenue J-8 to the south, and 115th Street West to the west.

Department Jurisdiction. The following statements and comments have been prepared pursuant to the Department's authority as a Trustee Agency with jurisdiction over natural resources potentially affected by the project (California Environmental Quality Act [CEQA] Guidelines § 15386) and as a Responsible Agency under CEQA Guidelines section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (CESA – Chapter 1.5 of the Fish and G. Code) and/or require a Lake and Streambed Alteration Agreement (Fish and G. Code § 2050 et seq.).

Burrowing Owl. The analysis of the Project's potential impacts to burrowing owl included in the IS/MND references California Burrowing Owl Consortium Survey Protocol and Mitigation Guidelines. The Department has released subsequent updated guidance in the form of the 2012 CDFW Staff Report on Burrowing Owl Mitigation (Burrowing Owl Staff Report) which allows added flexibility by promoting contextual analysis of burrowing owl impacts tailored to the proposed project. The Department recommends that an Impact Assessment per the Burrowing Owl Staff Report should be prepared. 1

The IS/MND indicates, while the proposed solar field may not host an active burrowing owl complex, an active burrowing owl complex (burrowing owl complex 2) is within the transmission 2

alignment. Additional active burrowing owl complexes are located immediately adjacent to the Project. The Project's solar field supports contiguous foraging habitat for these owls. The IS/MND biological measures define impacted lands as "…directly impacted occupied burrows and immediately adjacent habitat areas" but only requires mitigation for impacts to occupied burrows. Therefore, the IS/MND's burrowing owl analysis does not address the loss of foraging habitat for adjacent resident burrowing owls due to the development of the Project. The Department considers the loss of foraging habitat adjacent to occupied burrows as an impact to burrowing owl and does not limit the impact strictly to the physical burrow structure. Both the Burrowing Owl Staff Report and the Burrowing Owl Survey Protocol and Mitigation Guidelines (California Burrowing Owl Consortium, 1993) discuss the degradation and loss of foraging habitat adjacent to occupied burrows as a project related impact. 2 (cont.)

The Department requests the Lead Agency require the applicant to provide an analysis of how the loss of burrowing owl forage habitat on site could impact the persistence of the surrounding burrowing owl colonies, which appear to be productive. The Department recommends tying impacts to occupied burrows to the supporting habitat, without which, occupied burrows could not persist.

The Department has the following comments specific to the mitigation measures in the IS/MND:

MM BIO1-A1. The Burrowing Owl Staff Report makes recommendations for establishing restricted activity dates and setbacks based upon the time of year and level of disturbance associated with the proposed activity. The Department recommends referring to these recommendations or providing an analysis on the parameters unique to the Project which may influence the establishment of appropriate activity dates and setback distances. 3

MM BIO1-A4. The Department recommends that construction within a restricted activity setback only resume once a qualified avian biologist determines that that fledglings are no longer dependent upon the parents, and are otherwise independent of the nest to avoid conflicts with Fish and Game Code section 3503.5. MM BIO1-A4 should clarify that construction at an active burrow site must not result in the loss of an active burrowing owl nest or result in the direct take (Fish and G. code § 86) of a burrowing owl, their nests, or fledglings (Fish and G. code § 3503.5). 4

MM BIO1-Set B. As per the Burrowing Owl Staff Report, the long-term effects of eviction or active relocation are not well known at this time. Because of this limitation, the Burrowing Owl Staff Report recommends: 5

- A burrowing Owl Exclusion Plan is developed and approved by the applicable local CDFW office;
- Permanent loss of occupied burrow(s) and habitat is mitigated in accordance with the guidelines set forth in the Burrowing Owl Staff Report;
- Site monitoring is performed prior to, during and following exclusions of burrowing owl;
- Document the successful use of artificial or natural burrows by excluded owls on an adjoining mitigation site.

Measure Set B of MM Bio-1 further requires the preservation of burrowing owl mitigation lands at a 1:1 ratio if impacts to occupied burrows are unavoidable. According to the IS/MND, Active Burrowing Owl Complex 2 included one pair of adult burrowing owl and three juveniles. Active 6

Burrowing Owl Complex 2 is within the alignment of the Project's transmission line and should be considered active, triggering the mitigation measures contained in MM BIO-1 including notifying and consulting with the Department. Active Burrowing Owl Complex 1 supported two pairs of adult burrowing owl, producing at least four juveniles in addition to the complex of 15 burrowing owls and multiple juveniles located immediately north and east of Active Burrowing Owl Complex 1. The Department requests the site-specific analysis used in determining the appropriateness of a 1:1 burrowing owl impact replacement ratio be included in the IS/MND. The Burrowing Owl Staff Report offers guidance on some of the parameters which should be included in determining an appropriate mitigation proposal. 6 (cont.)

In accordance with Measure Set B of the MM BIO-1, burrowing owl mitigation lands shall be preserved either in perpetuity or for the length of the Project impacts. While typically burrowing owl mitigation land is preserved in perpetuity, this measure allows the management of burrowing owl mitigation to be limited to the duration of the Project. If the mitigation lands will be preserved for the duration of the Project, the Department requests that the Decommissioning Plan include measures to restore the habitat (see decommissioning comment below) and place a conservation easement on the Project site following the successful restoration and occupancy of burrowing owl. 7

Swainson's Hawk. MM BIO-2 requires additional Swainson's hawk surveys if construction activities are conducted between September 16, 2013 and March 31, 2013. It should be noted that Swainson's hawk begin their northern migration in February and may arrive and begin nesting or staging activities as early as March. Typically raptors are most sensitive to disturbances early in their nesting cycles. For these reasons, the Department recommends that surveys are based upon a survey period beginning March 1st. 8

The applicant is conditioned by MM BIO-2 to consult with the Department to determine the appropriateness of an Incidental Take Permit (ITP) pursuant to Fish and Game Code section 2801 based on whether the Swainson's hawk nest is determined to be "successful" or not. The Department has released guidance (Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California, 2010) in which the Department considers a Swainson's hawk nest site to be active if it was used at least once within the past five years and that impacts to suitable habitat or individual birds within a five-mile radius of an active nest are considered significant and have the potential for "take" as defined by Fish and Game Code section 86. One Swainson's hawk nest within approximately ½ mile of the Project is known to have been utilized within the last five years. The Department is not able to issue an ITP after a take of a threatened or endangered species has occurred. The Department recommends the applicant pursue an ITP should the potential for take of a threatened or endangered species exist. 9

The IS/MND states that "…the Project site contains relatively low quality potential foraging habitat that is expected to be used, if used at all, by only non-breeding Swainson's hawks." Native and non-native grasslands are utilized by Swainson's hawk for forage and both native and non-native grasslands have been identified on the Project site. The September 6, 2012 Swainson's hawk Surveys Letter Report (Bonterra Consulting) identified a Swainson's hawk was "…observed foraging south of the alfalfa field near 120th Street West and West Avenue I on April 27, 2012…" immediately west of the Project site. While small mammal prey may be present at the Project site in low numbers, nevertheless they are present as are invertebrates 10

(consumed by fledglings and adults alike). Therefore, the Department believes there is a high potential that Swainson's hawk would also forage on the project site and augment forage for the nearby nest. 10 (cont.)

Project Decommissioning. The Project is anticipated to have a useful life of at least 20 years, which may be extended at that time. As part of the Los Angeles County Department of Regional Planning requirements, the Project must be restored to its pre-developed state once the Project has reached the end of economically useful life pursuant to an approved Decommissioning Plan. According to the IS/MND, the decommissioning plan "…would include information regarding decommissioning timing; equipment removal; and habitat restoration for the site in accordance with Los Angeles County, State, and federal regulations and requirements." The Department requests that the Decommissioning Plan include specific, measurable performance standards for restoring lost habitat which includes some form of financial assurance that the Decommissioning Plan will be implemented. Additionally, both the IS/MND and Decommissioning Plan should include a discussion of the repeated impacts of construction activity associated with the decommissioning of the Project. The Department requests that the Decommissioning Plan be circulated for public review and comment. 11

Habitat Mitigation. At the request of the Los Angeles County Department of Regional Planning, Bonterra Consulting prepared a Post-Construction Biological Memorandum (September 26, 2013) which states:

"Based on direction from the Los Angeles County Department of Regional Planning (County), a 2:1 mitigation ratio for impacts associated with developed/disturbed areas is required. The Project site contains 263.0 acres, of which 178.5 acres are contained within perimeter fencing. All lands outside of this fencing (i.e. 84.5 acres) will remain undisturbed. As shown in Table 1, of the 178.5 acres within the perimeter fencing, 76.0 acres would be impacted by development, resulting in a total of 102.5 acres of undisturbed open space remaining within the fenced area. Therefore, based on the 76.0 acres of impacted lands mitigated at a 2:1 ratio, a total of 152.0 acres of mitigation is required."

The IS/MND does not reflect the recommended 2:1 biological mitigation ratio articulated within the memorandum. The memorandum states that 84.5 acres within the fenced Project site would remain undisturbed and would therefore not require mitigation. While the Department acknowledges that the solar panels will be pier mounted, and have interstitial spaces, the IS/MND should include an analysis as to how the biologic functions of the 178.5 acres remain intact, specifically for Swainson's hawk, foraging raptors, and burrowing owl . The Department believes that it is appropriate for the IS/MND to specify compensatory mitigation and the analysis behind the determination. The Department also requests that the mitigation analysis is extended to include impacts associated with the transmission line fuel modification zones. 12

Impact to Streams. The IS/MND identifies two ephemeral drainage features. Based on the information provided within the IS/MND, it is estimated that approximately 0.04 acre of Department jurisdictional stream may be on site or impacted by the Project. The Department has regulatory authority over activities in streams and/or lakes that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream, or use material from a streambed. For any such activities, the project applicant (or "entity") must provide written notification to the Department pursuant to section 1600 et seq. of the Fish and Game Code. Based on this notification and other 13

information, the Department determines whether a Lake and Streambed Alteration Agreement (LSA) with the applicant is required prior to conducting the proposed activities. The Department's issuance of a LSA for a project that is subject to CEQA will require CEQA compliance actions by the Department as a responsible agency. The Department, as a responsible agency under CEQA may consider the Lead Agency's CEQA document for the Project. To minimize additional requirements by the Department pursuant to section 1600 et seq. or under CEQA, the IS/MND should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the LSA.

13 (cont.)

Thank you for this opportunity to comment on the IS/MND. Questions regarding this letter and further coordination regarding these issues should be directed to Eric Weiss, Senior Environmental Scientist (Specialist), at (858) 467-4289 or Eric.Weiss@wildlife.ca.gov.

Sincerely,

Edmund Pert
Regional Manager
South Coast Region

References:

BonTerra Consulting. 2013 (September 25). Memorandum from K. Keeling, BonTerra Consulting, to J. Decruyenaere and A. Curzi, Los Angeles County Department of Regional Planning. Pasadena, CA: BonTerra (Appendix C-5)

———. 2012a (August). Jurisdictional Delineation Report, West Antelope Solar Project. Irvine, CA: BonTerra (Appendix C-1).

———. 2012c (August). Results of Focused Rare Plant Surveys for the West Antelope Solar Project, Unincorporated Los Angeles County, California. Irvine, CA: BonTerra (Appendix C-4).

———. 2012d (September). Results of Western Burrowing Owl Surveys at the West Antelope Solar Project Site near the City of Lancaster, Unincorporated Los Angeles County, California. Pasadena, CA: BonTerra Consulting (Appendix C-2).

———. 2012e (September). Results of Swainson's Hawk Surveys for the West Antelope Solar Project near the City of Lancaster, Unincorporated

California Department of Fish and Game, California Wildlife Habitat Relationships website: (http://www.dfg.ca.gov/biogeodata)

California Natural Diversity Database, website: http://www.dfg.ca.gov/biogeodata

Renewable Energy Action Team, Best Management Practices and Guidance Manual, desert renewable energy projects: http://www.energy.ca.gov/2010publications/REAT-1000-2010-009/REAT-1000-2010-009.PDF

ec: Betty J. Courtney, CDFW, Betty.Courtney@wildlife.ca.gov
Erinn Wilson, CDFW, Erinn.Wilson@wildlife.ca.gov
Eric Weiss, CDFW, Eric.Weiss@wildlife.ca.gov

2.2.3 DEPARTMENT OF FISH AND WILDLIFE (CDFW)

November 18, 2013

Response CDFW-1

Although not explicitly stated in the IS/MND, the methods and impact assessment approach for the burrowing owl were consistent with the CDFW's Staff Report on Burrowing Owl Mitigation (2012). The burrowing owl impact assessment is presented on pages 4-31 and 4-32. Other aspects of the assessment are included in MM BIO-1. Therefore, no additional burrowing owl impact assessment is necessary. However, additional language has been incorporated into Section 4.0, Errata, specifying that the impact assessment was prepared in accordance with the CDFW's Staff Report on Burrowing Owl Mitigation (2012).

> If burrows occupied by burrowing owls are detected on the Project site **or within 200 meters of proposed construction activities**, the Project Applicant shall notify the CDFW and shall implement the appropriate actions, which may include creating a no-work buffer or relocating the burrow. If burrows occupied by burrowing owls are detected within ~~500 feet~~ **200 meters** of the off-site Grid-Tie or other disturbance areas, the Project Biologist shall monitor the owl(s) to ensure that the Project does not negatively impact breeding.

Response CDFW-2

Section 4.4 of the IS/MND, specifically pages 4-31 and 4-32, discusses impacts of the Project on the burrowing owl as a species. Although mitigation is determined to be required only for direct impacts to burrowing owl, indirect impacts to adjacent habitat is considered in the assessment and determined to be less than significant. As described in Section 4.4 of the IS/MND, the site itself is both unoccupied, and less suitable for the burrowing owl than nearby occupied habitat. Therefore, although occupied habitat occurs nearby, it is incorrect to assume that the site is automatically high value foraging area for those birds. The nearby fields supporting the burrowing owl colony are less disturbed than those on the Project site. After Project implementation, there will continue to be foraging opportunities both within the solar plant facility and in the surrounding Project-preserved open spaces. As required in revised MM BIO-5, the perimeter fencing to be built surrounding the Project site will be raised at regular intervals above ground level to allow for the passage of wildlife to the lesser of either: 18 inches above grade or to the maximum height allowed by the California Public Utilities Commission (CPUC).

Although there will be an overall loss of foraging habitat in the area for these owls, the loss relative to the existing amount of foraging habitat available for these owls is not considered substantial enough to warrant a finding of significance. Therefore, the requested analysis is already incorporated within the IS/MND and no additional analysis is warranted.

Response CDFW-3

As requested, a reference to the recommended restricted activity dates and distances within the CDFW's Staff Report on Burrowing Owl Mitigation (2012) has been incorporated into MM BIO-1 part A1, as included in Section 4.0, Errata.

MM BIO-1 A pre-construction survey for the burrowing owl shall be conducted ~~within 14 days~~ prior to start of construction/ground-breaking activities. **Beginning 30 days prior to the start of construction, surveys shall be conducted weekly with the final survey occurring 1 day prior to the start of construction. During the first survey, a habitat assessment will be conducted to identify potentially suitable burrows which shall become the focus of subsequent surveys.** For those burrows located along the Grid-Tie transmission route off the Project site, a second survey will be conducted within 24 hours of any ground-breaking activities. If these surveys do not detect occupied burrowing owls, then no further mitigation is required. If burrows occupied by burrowing owls are detected on the Project site, the Project Applicant shall notify the California Department of Fish and Wildlife (CDFW)[1] and shall implement the following actions prior to construction (either Set A for breeding burrowing owls [March to July] or Set B for non-breeding burrowing owls [August to February]). **Buffer distances are based on the recommended restricted activity dates and setback distances by level of disturbance listed in the CDFW's 2012 Staff Report on Burrowing Owl Mitigation.**

Set A Measures (for Breeding Burrowing Owls, between March and July)

A1) No work shall occur within 500 ~~feet~~ **meters** of the active nesting burrow **unless on-site biologists determines specific conditions would allow a smaller buffer**; the CDFW ~~may~~ **shall** be consulted to determine whether a reduced buffer is acceptable.

A2) Provide weekly monitoring of the burrowing owl nesting burrow to determine nesting outcome.

A3) Provide CDFW with monthly updates of burrowing owl nesting success.

A4) Resume construction at the burrow site once the **qualified** Biologist **has made the** ~~determines~~ **determination** that **the burrow is no longer in use** ~~fledglings have left the nest~~.

If burrows occupied by burrowing owls are detected within ~~500 feet~~ **200 meters** of the off-site Grid-Tie or other disturbance areas, the Project Biologist shall monitor the owl(s) to ensure that the Project does not negatively impact breeding. If negative indirect impacts are suspected, the Project Biologist shall propose measures to reduce indirect impacts to the owl(s) during construction.

Set B Measures (for Non-Breeding Burrowing Owls, between August and February)

B1) A qualified Biologist shall notify the CDFW of the occupied burrow location and that either passive or active relocation measures will be implemented **if burrow destruction is necessary for project completion**.

B2) The Biologist shall remove the burrow **if avoidance is not feasible**.

[1] The California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW) effective January 1, 2013.

If impacts to burrowing owl occupied burrows are unavoidable, preservation of lands containing potentially suitable burrowing owl habitat shall be preserved at a 1:1 ratio **and in accordance with guidance of the CDFW's 2012 Staff Report on Burrowing Owl Mitigation. The 1:1 ratio is expected to be adequate due to the homogenous landscape of the Project area resulting in very high likelihood of highly similar, and thereby successful, mitigation lands.** Impacted lands shall be defined as the directly impacted occupied burrows and immediately adjacent habitat areas. Replacement lands shall be within the Project region (i.e. western Antelope Valley) and shall be located as close to the Project site as feasible. Vegetation types present and condition of mitigation lands shall be similar to those found on the impacted occupied burrowing owl lands. If suitable natural burrows are not present within the Project site, artificial burrows shall be constructed in accordance **with guidance of the CDFW's 2012 Staff Report on Burrowing Owl Mitigation and** California Burrowing Owl Consortium (1993) Guidelines. Maintenance of such lands shall be the responsibility of the Project Applicant and shall ensure that conditions and general biological value remain consistent over time. Mitigation lands shall be preserved in perpetuity, or for the length of Project impacts if temporal, with a conservation easement or other form of legal dedication. Lands may be deeded to a land management-conservation entity with prior approval from the County. Mitigation lands and deeds or conservation easements proposed shall be approved by the County prior to issuance of grading permits.

Within 60 days of recordation of the permanent deed restriction(s) or conservation easement(s), a Maintenance Plan for the off-site mitigation lands shall be submitted to the County for review and approval. The plan shall include the maintenance requirements for the mitigation area, based on the characteristics of the mitigation land and the mitigation requirements described above. The Maintenance Plan shall also describe the performance standards for determining that mitigation requirements for the lands have been met.

Response CDFW-4

Although the IS/MND language was intended to mean that "nesting" includes all aspects of nesting, such as parental rearing of fledglings, the recommendation to confirm with a biologist that all aspects of nesting are complete prior to construction has been added, as requested, to provide greater clarity to MM Bio-1 part A4 (see Response CDFW-3 above), as included in Section 4.0, Errata.

Response CDFW-5

As requested, Burrowing Owl Staff Report recommendations including a Burrowing Owl Exclusion Plan with approval from the CDFW; mitigation in accordance with the Burrowing Owl Staff Report for permanent loss of burrowing owl occupied burrows; site monitoring to be performed before, during and after exclusions of burrowing owl; and documentation of the successful use of artificial or natural burrows on the mitigation site have been added to MM BIO-1 part B (see Response CDFW-3 above), as included in Section 4.0, Errata.

Response CDFW-6

Although the presence of burrowing owl were identified along the transmission line in 2013, it is possible that direct impacts to occupied burrows may be avoided depending on the design details of the transmission line. Therefore, MM BIO-1 is only required to be implemented if direct impacts to occupied burrowing owl are determined to be unavoidable. The IS/MND includes a

site-specific impact analysis leading to the proposed mitigation ratio of 1:1. Additionally, as requested, more site-specific discussion within MM BIO-1 part B (see Response CDFW-3 above) has been provided in Section 4.0, Errata to provide greater clarification regarding the mitigation ratio determination.

Response CDFW-7

The Decommissioning Plan will include measures for restoration as stated in Section 3.2.4 of the IS/MND. However, additional details have been added to text on page 4-33 of the IS/MND to provide greater clarification, as included in Section 4.0, Errata. If habitat is restored and occupancy returned, mitigation is not expected to require preservation in perpetuity to fully mitigate for the Project impact. Therefore, a conservation easement may not be placed over the site in perpetuity. Also see Response CDFW-11 below.

> Further, as part of the Project, a Decommissioning Plan **with specific, measureable performance standards as well as financial assurance** would be prepared and submitted for approval to Los Angeles County prior to the issuance of a grading permit for the Project.

Response CDFW-8

For clarification, Page 4-38 of the IS/MND states that, if work is conducted between September 16 and March 31 no survey is required. The dates chosen for surveys were from the CDFW's Swainson's Hawk Survey Protocol. However, the recommended date change from April 1 to March 1 has been incorporated as provided in Section 4.0, Errata.

> **MM BIO-2** If construction activities on the Project site and along the Grid-Tie alignment are completed between September 16~~, 2013~~ and March 31~~, 2014~~ (i.e., **the** non-nesting season), then additional surveys for Swainson's hawk are not required.
>
> If new or ongoing construction activities (i.e., additional removal of potential foraging habitat through ground-disturbing activities) would occur on the Project site and along the Grid-Tie alignment ~~after~~ **between** April ~~1, 2014~~ **and September 15**, surveys for Swainson's hawk shall be conducted following the 2010 CDFG survey protocol for the Antelope Valley prior to or concurrent with construction activities. If no active nests are detected, then no further mitigation is necessary.

Response CDFW-9

It is understood that the CDFW refers to guidance within the *Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California* to determine potential for take of Swainson's hawk. In summary, the CDFW Survey Protocol states that a Swainson's hawk nest site is considered active if it has been used within the past five years and that impacts to suitable habitat within five miles of an active nest are considered significant and have the potential for take.

As stated on pages 4-32 and 4-33 of the IS/MND, results of the focused surveys conducted by BonTerra Consulting were negative for breeding Swainson's hawk within the five-mile survey radius. A review of historical records in the CDFW's California National Diversity Database (CNDDB) indicates no successful nesting attempts within the five-mile radius of the Project site

within the past five years. Two failed nesting attempts, however, have been reported within this buffer. There is no specific guidance regarding unsuccessful nesting attempts, but it is our interpretation, based on our understanding of the species' biology, that such attempts are outliers and not representative of current breeding area of the species.

The IS/MND demonstrates on pages 4-32 through 4-33 that there is no potential for take of the Swainson's hawk based on the findings of no active successful nests within five miles and a lack of core potentially suitable breeding habitat within close proximity to the site. Furthermore, the IS/MND provides additional assurance that no take will occur by including MM BIO-2 to conduct additional surveys. As required by MM BIO-2, if the survey detects an active Swainson's hawk nest within a five-mile radius of the Project site, all construction activities must fully and immediately cease and the CDFW shall be notified. If the nest is determined to be unsuccessful by a qualified Biologist, the Project Applicant may resume construction activities as long as no other active nests are located within a five-mile radius of the Project site. If Swainson's hawk nests are determined to be successful, the Project Applicant shall consult with CDFW to determine if a "take" authorization of a State-listed species (per the California Endangered Species Act) is warranted. If warranted, the Project Applicant shall pursue a CDFW Incidental Take Permit, which will include conditions requiring impact minimization to the Swainson's hawk, including establishment of an avoidance buffer, as well as identification of mitigation lands for purchase that are within the known Antelope Valley breeding range of Swainson's hawk and that provide comparable habitat value to the Project site; the purchased lands will be at a minimum 2:1 ratio and subject to CDFW approval.

We concur with the CDFW comment recommending that the Project Applicant pursue an Incidental Take Permit should the potential for take exist. Implementation of MM BIO-2 results in avoidance of potential take of the Swainson's hawk without an Incidental Take Permit. Therefore, there is no potential for the Project to result in a take of the Swainson's hawk without explicit authorization through an Incidental Take Permit.

Response CDFW-10

The Los Angeles County Department of Regional Planning concurs with this comment in that, if an active nest is located nearby, there is potential for Swainson's hawks to occasionally utilize the site for foraging. However, there are no active nests located nearby. In the extremely unlikely event that nesting occurs nearby, implementation of MM BIO-2 would require an immediate stop to all activity. Also see Response CDFW- 9 above.

Response CDFW-11

The IS/MND contains a full environmental assessment of all impacts associated with Project implementation, including impacts associated with the implementation of the Decommissioning Plan. Additional clarification will be provided in the Section 4.0, Errata that the decommissioning Plan must include specific, measureable performance standards as well as financial assurance. Additionally, please refer to Response CDFW-7 above.

Response CDFW-12

As discussed in the Memorandum, the 2:1 ratio (which is the minimum mitigation ratio required by CDFW's Swainson's hawk protocol) would only apply to areas of the Project site that would be impacted. Additionally, the Memorandum discussed the possibility of applying undeveloped portions of the fenced area and areas between the panels as credit towards the mitigation requirement. Under these assumptions, only 16.27 additional acres of mitigation would need to be obtained off-site. However, in response to the CDFW letter submitted during the public

review period, the County is now requiring 2:1 mitigation for the entire fenced area of the Project. Based on a fenced area of 178.5 acres, a total of 357 acres of mitigation is required. The 84 acres of the Project site outside the fenced area may still count towards satisfaction of the total required acreage. Thus, the remaining 273 acres must be acquired off-site. As required by MM CML-1, mitigation lands must be selected in consultation with CDFW and preserved with a conservation easement or other form of legal dedication in perpetuity, or until the Project site is restored to its pre-developed conditions per the requirements of the approved Decommissioning Plan. Lands may be deeded to a land management-conservation entity with prior approval from the County.

Section 3.2.1, Project Components, states that the Grid-Tie transmission line will either be undergrounded or strung on existing above-ground poles. Such impacts would therefore be considered temporary and only occurring during a brief construction period. The County-required fuel modification zone is entirely contained within the Project footprint. The transmission line will either be underground or overhead on poles, and no fuel modification zone will be required. Therefore, the requested analyses has been provided in the IS/MND and no additional analysis is warranted or needed.

Response CDFW-13

The requested analysis is provided in the IS/MND on pages 4-25 and 4-34 in Section 4.4, Biological Resources, and is addressed specifically MM BIO-3 on page 4-39. No impacts to jurisdictional streambeds are anticipated and mitigation is included in the event that impacts are determined to be unavoidable.

2.3 REGIONAL AGENCIES

- Antelope Valley Air Quality Management District (AVAQMD), October 29, 2013
- Lahontan Regional Water Quality Control Board (Water Board), November 15, 2013

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AVAQMD

Antelope Valley Air Quality Management District
43301 Division St., Suite 206
Lancaster, CA 93535-4649

661.723.8070
Fax 661.723.3450

Eldon Heaston, Executive Director

In reply, please refer to AV1013/086

October 29, 2013

Mr. Anthony Curzi
County of Los Angeles Dept. of Regional Planning
320 West Temple St., 13th floor
Los Angeles, CA. 90012

RE: Notice of Intent to adopt Mitigated Negative Declaration-CUP 201200086

Mr. Curzi,

The Antelope Valley Air Quality Management District (District) has reviewed the notice of intent to adopt a mitigated negative declaration.

Phased construction reduces the amount of Disturbed Surface Area at any one time and address the requirements for Pre-activity in AVAQMD Rule 403(C)(4)(a)(i)b. 1

The District requires the submittal and approval of a Dust Control Plan prior to construction activities on a site that includes five acres or more of a Disturbed Surface Area for non-residential developments. When water is used as fugitive dust control, watering is required three times a day and increased to a minimum of four times a day if there is evidence of visible Wind-Driven Fugitive Dust AVAQMD Rule 403-Fugitive Dust (11)(d). The Dust Control Plan shall demonstrate adequate water or dust suppressant application equipment to mitigate all Disturbed Areas. 2

Signage must be posted at the Project site in accordance with AVAQMD Rule (Appendix A). Compliance with the provisions of District Rule 403 must be implemented in the grading and construction phases of the project, and all disturbed surface areas must meet definition of stabilized surface upon completion of project. 3

Thank you for the opportunity to review this planning document. If you have any questions regarding this letter, please contact me at (661) 723-8070 x2.

Sincerely,

Bret Banks
Operations Manager

RECEIVED
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BY:

BBbjl

Clean Cities
Antelope Valley

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

In accordance with Section 15072 of the California Environmental Quality Act Guidelines, this notice is to inform public agencies, County residents and the general public that the County of Los Angeles ("County") has completed an Initial Study/Mitigated Negative Declaration ("IS/MND") for the following proposed project:

Project Title: **R2012-01589-(5) / CUP 201200086 / ENV 201200158** ("West Antelope Solar Energy Project")

Project Location: The proposed Project site is located in unincorporated Los Angeles County, just outside the western boundaries of the City of Lancaster. The Project site consists of 15 contiguous parcels totaling approximately 263 acres located northwest and southwest of the intersection of 110th Street West and West Avenue J. West Avenue J bisects the Project site, dividing it into a North Portion and a South Portion.

Project Description: The proposed Project would develop the currently vacant 263-acre site with a solar energy facility that could produce up to a 20-megawatt alternating current of renewable electric power during daytime hours. The Project would consist of: (1) mounted solar photovoltaic ("PV") panels; (2) an electrical collection system; (3) the Project Substation; (4) an underground transmission line along Avenue J within the unincorporated area to the Southern California Edison ("SCE") Antelope Substation; (5) a meteorological data collection system; and (6) civil infrastructure including driveways, internal access roads, drainage design, a hiking trail, secure fencing, landscaping, and two water tanks. The electricity generated by the Project would be transmitted to SCE's nearby Antelope Substation located at 95th Street West and West Avenue J. An off-site grid-tie transmission line (Grid-Tie) would run east from the Project site, parallel with West Avenue J, approximately 1.5 miles. The Grid-Tie would enter the Antelope Substation in order to connect the Project to the existing transmission infrastructure. The Project site is not identified on any hazardous materials list compiled pursuant to Section 65962.5 of the Government Code. Grading and ground disturbance for the Project would be minimal and would be primarily limited to access roads and the retention basins, but would also include the Project Substation pad, inverter pads, water tank pads, and trail area.

The proposed Project is to be in operation by mid-2014. The Project is expected to be in operation for at least 20 years or longer if the Project remains economically viable. At the end of the Project, the 263-acre property will be restored in accordance with County requirements and an approved Decommissioning Plan.

Implementation of the proposed Project would result in potentially significant impacts to Aesthetics, Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Recreation, Utilities/Service Systems, and Mandatory Findings of Significant (for cumulative impacts) prior to implementation of mitigation measures ("MMs"). With incorporation of the MMs into the Project, all potentially significant environmental impacts would be reduced to less than significant levels.

Public Review Period:	**Monday, October 21, 2013 through Wednesday, November 20, 2013**
Lead Agency:	County of Los Angeles
Contact Person:	Mr. Anthony Curzi County of Los Angeles Department of Regional Planning 320 West Temple Street, 13th Floor Los Angeles, California 90012

Availability of Mitigated Negative Declaration: The IS/MND and all technical reports will be available for public review online at http://planning.lacounty.gov/. Hardcopies will be available for review during business hours at the Lancaster Public Library, 601 West Lancaster Boulevard, Lancaster, California, 93534 and at the Los Angeles County Department of Regional Planning, 320 W. Temple Street, 13th Floor (Room 1348), Los Angeles, California 90012.

Notice of Public Hearing: A public hearing for this Project has not yet been scheduled. A separate notice will be mailed when the public hearing is scheduled.

Methods of Submitting Comments: Please submit any comments on the IS/MND to Mr. Anthony Curzi at the above listed address or email to: acurzi@planning.lacounty.gov before 5:00 p.m. on **Wednesday, November 20, 2013.**

2.3.1 ANTELOPE VALLEY AIR QUALITY MANAGEMENT DISTRICT (AVAQMD)

October 29, 2013

Response AVAQMD-1

As discussed on pages 3-8 through 3-13 of the IS/MND, grading and ground disturbance for the Project would be minimal. As stated in Table 3-2 of the IS/MND, approximately 23.50 acres (77.40 percent) of the total disturbed acreage on the Project site (i.e., 30.36 acres) is due to implementation of access roads; and the remaining impacted acreage would include the Project Substation, inverter pads, water tank pads, retention basins, and trail areas. Active areas of ground disturbance are limited to 3 acres per day, although up to a maximum of 20 acres could be in some stage of disturbance at any given time, as noted in Table 3-3, Total Estimated Water for Project Construction, on page 3-12 of the IS/MND. In accordance with MM AQ-1 on pages 4-22 and 4-23 (and revised in Section 4.0, Errata), the acreage of the construction area that has been previously disturbed would be stabilized with soil binders and mulch as necessary to meet AVAQMD Rule 403, Fugitive Dust, requirements. The requirements for pre-activity in AVAQMD Rule 403(C)(4)(a)(i)b will be included in the Dust Control Plan that will be prepared for the Project.

Response AVAQMD-2

As discussed on pages 3-10 and 3-11 of the IS/MND and as required by MM AQ-1 on pages 4-22 and 4-23 (and revised in Section 4.0, Errata), the Project would comply with AVAQMD's Rule 403, Fugitive Dust, to prepare a Dust Control Plan for controlling fugitive dust and avoiding nuisance. The Dust Control Plan would include strategies to reduce short-term particulate pollutant emissions including, but not limited to, application of water a minimum of three times per day and increased to a minimum of four times per day if there is evidence of visible wind-driven fugitive dust. The Dust Control Plan would be submitted to the AVAQMD for review and approval prior to construction activities.

Response AVAQMD-3

As discussed on pages 3-10 and 3-11 of the IS/MND and as required by MM AQ-1 on pages 4-22 and 4-23 (and revised in Section 4.0, Errata), the Project would comply with AVAQMD's Rule 403, Fugitive Dust, to prepare a Dust Control Plan for controlling fugitive dust and avoiding nuisance. The Dust Control Plan will include a provision for signage, including identifying the number and locations of signs to be posted. Additionally, as required by Rule 403 and as stated in MM AQ-1, prior to completion of construction, all disturbed areas would be permanently stabilized through the use of an all-weather surface treatment.

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CALIFORNIA Water Boards

EDMUND G. BROWN JR. GOVERNOR

MATTHEW RODRIQUEZ SECRETARY FOR ENVIRONMENTAL PROTECTION

Lahontan Regional Water Quality Control Board

November 15, 2013

File: Environmental File Review
Los Angeles County

Anthony Curzi
Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012
acurzi@lacounty.gov

COMMENTS ON THE INITIAL STUDY / MITIGATED NEGATIVE DECLARATION, WEST ANTELOPE SOLAR ENERGY PROJECT, UNINCORPORATED LOS ANGELES COUNTY, STATE CLEARINGHOUSE NO. 2013101055

The California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received the Initial Study/Mitigated Negative Declaration (IS/MND) for the above-referenced project (Project) on October 21, 2013. BonTerra Consulting prepared the IS/MND on behalf of Los Angeles County (County). The County acting as lead agency, submitted the IS/MND in compliance with provisions of CEQA. Based on the IS/MND prepared for the Project, the County has determined that unless mitigation is incorporated as detailed in the above environmental document, the Project could result in potentially significant impacts to the environment. Water Board staff, acting as a responsible agency, is providing these comments to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations, title 14, section 15096. Based on our review of the IS/MND, best management practices (BMPs) that effectively treat post-construction stormwater runoff should be included as part of the Project. We encourage the County to consider our comments and value our mission to protect waters of the State and maintain water quality in the Lahontan Region.

Project Description

The proposed Project is a photovoltaic (PV) solar energy facility to be located in an unincorporated area of west Antelope Valley, near the intersection of 110th Street West and Avenue J. The Project will permanently disturb 263 acres of unoccupied land, just west and contiguous to the western boundary of the City of Lancaster. The solar field will be comprised of approximately 1,600 north-south rows of crystalline silicon PV panels, mounted on single-axis tracking systems, and will generate as much as 20 megawatts (MW) of electricity. Electricity generated by the facility will be transmitted to Southern California Edison's (SCE) Antelope Valley Substation, located east of the proposed Project at 95th Street West and Avenue J. A grid-tie transmission line will be installed running parallel to Avenue J, to connect the solar facility with the Antelope Valley Substation. The Project will include installation of an electrical collection and

inverter system to convert direct current (DC) electricity from the solar panels into alternating current (AC) electricity for commercial and residential use. A substation will be constructed at the Project site to combine the output of all active PV cells into a voltage of 66 kilovolts (kV). A meteorological data collection system will be constructed to collect meteorological information at the height of the PV panels. The Antelope Valley California Poppy State Natural Preserve lies approximately 4 miles northwest of the Project site; construction of a foot trail at the eastern boundary of the site that will become part of the proposed California Poppy Trail will be included as part of the Project. Finally, the Project will require construction of numerous driveways, internal access roads, drainage conduits, fencing, landscaping, and 2 water tanks.

Authority

All groundwater and surface waters are considered waters of the State. All waters of the State are protected under California law. State law assigns responsibility for protection of water quality in the Lahontan Region to the Lahontan Water Board. Some waters of the State are also waters of the U.S. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the U.S.

The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State within the Lahontan Region. The Basin Plan sets forth water quality standards for surface water and groundwater of the Region, which include designated beneficial uses as well as narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan can be accessed via the Water Board's web site at http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml.

Specific Comments

1. The discussion on minimizing impact to the existing hydrological features at the site was inadequate. Such discussion should be included, at a minimum, in the Stormwater Pollution Prevention Plan (SWPPP), and in the section 4.7 Geology and Soils. We request that construction staging areas be sited in upland areas outside stream channels and other surface waters on or around the Project site. Buffer areas should be identified and exclusion fencing used to protect the water resource and prevent unauthorized vehicles or equipment from entering or otherwise disturbing stream channels. Construction equipment should use existing roadways to the extent feasible. All temporary impacts should be restored (recontoured and revegetated) to match pre-Project conditions. Monitoring and maintenance for a period of no less than three years should be performed to ensure the success of the restored areas. 1

2. There is a discrepancy in the total project area in different sections of the environmental document. The IS/MND reports that the project area is 267 acres; 2

however, the Project description and Appendix G-2 describe the project area as 263 acres. 2 (cont.)

3. Water Board staff appreciates the attention given to describing potential hazardous substances that may be used during construction, and the list of mitigation measures for minimizing and controlling hazardous wastes and non-hazardous wastes, in Section 4.9 of the IS/MND. 3

Permitting Requirements

A number of activities associated with the proposed Project appear to have the potential to impact waters of the State and therefore may require permits issued by either the State Water Resources Control Board (State Water Board) or Lahontan Water Board. Only one of these (construction stormwater permit) was briefly alluded to in Section 3.5 of the IS/MND, Anticipated Project Approvals/Responsible Agencies. Discussion of the applicability of each of the permits below should be included in the IS/MND:

4. Land disturbances of more than 1 acre may require a Clean Water Act (CWA), section 402(p) stormwater permit, including a National Pollution Discharge Elimination System (NPDES) General Construction Stormwater Permit, Order 2009-0009-DWQ (as amended), obtained from the State Water Board, or an individual stormwater permit obtained from the Lahontan Water Board; 4

5. Depending on the Standard Industrial Classification (SIC) code for industrial-type activities at the site, the Project may require an NPDES General Industrial Stormwater Permit, Order 97-03-DWQ, obtained from the State Water Board, or an individual stormwater permit obtained from the Lahontan Water Board. The IS/MND did not discuss the possibility of the need for an Industrial Stormwater Permit. 5

6. Streambed alteration and/or discharge of fill material to a surface water may require a CWA, section 401 water quality certification for impacts to federal waters (waters of the U.S.), or dredge-and-fill waste discharge requirements for impacts to non-federal waters, both issued by the Lahontan Water Board. In the sections addressing surface water impacts, the possibility of a need for a water quality 401 water quality certification was not mentioned. 6

7. The discussion of Discretionary Permits in Section 3.5.1 of the IS/MND is inaccurate. The sentence that reads "This would only be required if jurisdictional drainage features would be impacted" should read "…would only be required if ***federal*** jurisdictional drainage features would be impacted." For impacts that are not federal jurisdictional, the Lahontan RWQCB may issue dredge-and-fill waste discharge requirements under the section CWA 401 water quality certification program. The project proponent is encouraged to contact the Lahontan RWQCB staff to determine applicability and state-wide or region-specific permitting action. 7

In our response to the Notice of Consultation for this Project, Water Board staff recommended to the Project proponent that the potential need for the above permits be addressed. We request that specific Project activities that may trigger these permitting actions be identified in the appropriate sections of the environmental document. Should Project implementation result in activities that will trigger these permitting actions, the Project proponent must consult with Water Board staff. Information regarding these permits, including application forms, can be downloaded from our web site at http://www.waterboards.ca.gov/lahontan/.

Please note that obtaining a permit and conducting monitoring does not constitute adequate mitigation. Development and implementation of acceptable mitigation is required. Water Board staff request the environmental document specifically describe the best management practices and other measures used to mitigate Project impacts. 8

Thank you for the opportunity to comment on the IS/MND. If you have any questions regarding this letter, please contact me at (760) 241-7391or at (tbrowne@waterboards.ca.gov) or Patrice Copeland, Senior Engineering Geologist, at (760) 241-7404 (pcopeland@waterboards.ca.gov).

Tom Browne, PhD, PE
Water Resources Control Engineer

cc: Department of Fish and Wildlife, Inland Deserts Region
(via email, askregion6@wildlife.ca.gov)

TB\rc\U:\CEQA Reviews\West Antelope Solar\IS-MND files rev SCH 18 Oct 13\final west antelope solar IS-MND.docx

2.3.2 LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD (WATER BOARD)

November 15, 2013

Response Water Board-1

A copy of the preliminary Storm Water Pollution Prevention Plan (SWPPP) can be found in Appendix F-3 of the IS/MND; the specific construction-related BMPs to be implemented on the Project site will be determined upon preparation of the Final SWPPP, prior to issuance of grading permits. The Final SWPPP will be prepared toward the end of Final Engineering (about one month or so prior to construction), and uploaded to Water Boards Storm Water Multiple Application and Report Tracking System (SMARTS), where it can be reviewed by the Water Board. Once it is approved, annual fees are paid and a Waste Discharger Identification Number (WDID) is issued.

As requested by the Water Board, the requested text has been added to the revised MM CML-2, provided in Section 4.0, Errata, as follows:

MM CML-2 Prior to the issuance of a grading permit, a Construction Staging Plan (CSP) shall be submitted for review and approval to the County. Prior to energization of the Project, if the as-built plan reveals the need for restoration after construction, a Revegetation Plan shall be submitted for review and approval to the County.

The CSP will detail access routes, storage areas, high-traffic areas, and methods for the installation of the panels and other equipment in non-graded areas. **The CSP will ensure that construction staging areas are sited in upland areas outside stream channels and other surface waters on or around the Project site. Buffer areas will be identified and exclusion fencing will be used to protect the water resource and to prevent unauthorized vehicles or equipment from entering or otherwise disturbing stream channels. Construction equipment will be required to use existing roadways to the extent feasible.** A qualified construction mitigation manager (CMM) or delegate will be responsible for documenting adherence to the CSP during the construction phase of the project.

A post-construction “as-built” plan will be required prior to energization of the project, which shall detail areas of disturbance needing further restorative work in order to meet the expected criteria upon which the cumulative impacts analyses were based. In the event that the as-built plan reveals the need for restoration after construction, a Revegetation Plan that details steps proposed for the restoration of disturbed areas after construction will be required to be prepared and implemented. Restoration performance goals shall be based upon the quality of the on-site vegetation at the time of the CUP approval. The Revegetation Plan shall include a five-year annual reporting program to document the site’s recovery towards these expected criteria, and shall include provisions for adaptive management contingencies if adequate revegetation has not occurred within a three year period from energization.

> After the five year monitoring period has elapsed, the mitigation may be deemed complete if the performance goals have been satisfied. Further mitigation may be required, subject to enforcement penalties, if the performance goals have not been met.
>
> Maintenance of the site in keeping with performance goal criteria shall be a condition of the CUP, subject to enforcement penalties, and shall be confirmed through a requirement in the Project MMRP that annual reporting shall continue for the life of the Project.

As discussed on pages 3-17 and 3-18 of the IS/MND, implementation of the Decommissioning Plan will ensure that the land is returned to pre-Project conditions upon termination of the use of the property as a solar site. All disturbed areas, including access roads, retention basins, and equipment foundations would be removed and restored to the previous or better condition than prior to construction. Contouring of the site would be conducted using standard grading and/or farming equipment to return the land to approximately match the pre-construction surface conditions. The site drainage features would be restored to their original condition. Temporary erosion- and sediment-control measures (e.g., soil stabilizers) would be used as needed. The original site conditions would be recorded prior to beginning construction for referral during final restoration.

If determined to be necessary by the Project as-built plan, the revised MM CML-2 provided in Section 4.0, Errata requires that a Revegetation Plan to be prepared for the Project. The Revegetation Plan would includes a five-year annual reporting program to document the site's recovery towards the performance goals in the Revegetation Plan, and shall include provisions for adaptive management contingencies if adequate revegetation has not occurred within a three year period from energization (i.e., the time at which the energy facility is energized).

Response Water Board-2

As stated in Table 3-1, Site Parcel Summary, on page 3-1 of the IS/MND, and throughout the entirety of the document, the Project has a total gross acreage of 263 acres. A search of the IS/MND could not locate a reference to the site being 267 acres. Any unseen references to the Project site being 267 acres are erroneous and hereby revised to state 263 acres.

Response Water Board-3

Comment acknowledged.

Response Water Board-4

As discussed on pages 4-69 and 4-70 of the IS/MND, implementation of the Project has the potential to generate storm water pollutants during the construction phase. Storm water runoff from the Project site could contain pollutants such as soils and sediments that are released during grading and excavation activities, as well as chemical and petroleum-related pollutants due to spills or leaks from heavy equipment and machinery. Prior to the issuance of a grading permit, the Legally Responsible Person (LRP) shall electronically file Permit Registration Documents (PRDs) with the State Water Resources Control Board (SWRCB) in order to obtain coverage under National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2009-009-DWQ as amended by Order No. 2010-0014-DWQ and 2012-0006-DWQ

[NPDES No. CAS000002]) or the latest approved general permit. This permit is required for construction activities, including demolition, clearing, grading, and excavation, and other land disturbance activities that result in the disturbance of one acre or more of total land area.

Response Water Board-5

The following text has been added to page 4-72 of the IS/MND, as follows, and as stated in Section 4.0, Errata, to clarify that a NPDES General Industrial Stormwater Permit is not required for the Project:

> **The Project is categorized as SIC Code 4931 (NAICS Code 221111). SIC Code 4931 is not on the current list of regulated standard industrial codes which would be subject to the General Industrial Stormwater Permit.** Further, compliance with MM HAZ-5 in Section 4.9, Hazards and Hazardous Materials, requires that only water is used for cleaning PV panels and no other cleaning agents or additives can be used. Therefore, compliance with MM HAZ-5 would ensure the use of water on the PV panels would have a less than significant impact on surface water and groundwater quality.

Response Water Board-6

As discussed on page 4-34 of the IS/MND, it is anticipated that resources under the jurisdiction of the Water Board would be entirely avoided by Project design, and no impact would result. If avoidance of impacts to off-site drainage features is not possible during installation of the Grid-Tie line connecting the Project to the Antelope Substation. The following revisions to page 4-34 of the IS/MND is made to clarify the management of on-site jurisdictional resources, and are included in Section 4.0, Errata:

> To ensure avoidance, MM BIO-4 requires that all areas containing jurisdictional resources be staked **or fenced at or outside the edge of the impact areas where they interface with jurisdictional features to demarcate areas where human and equipment access and disturbance from grading are prohibited prior to commencement of grading activities.** ~~by a qualified Regulatory Specialist prior to the initiation of any construction-related activities that involve ground disturbance.~~ **A qualified Biologist shall monitor all site-preparation and grading activities near these interfaces during construction. Staging areas shall be restricted to approved impact areas only.** ~~Also, ground-disturbing construction activities within these areas would be monitored by a qualified Regulatory Specialist/Biologist.~~ Implementation of MMs BIO-3 and BIO-4 would ensure that impacts to jurisdictional features are less than significant.

Also, as requested by the Water Board, the discussion of potential jurisdictional impacts as shown above, which was previously only included in Section 4.4, Biological Resources, has been added to Section 4.10, Hydrology and Water Quality. The following text has been added to page 4-75 of Section 4.10.2 of the Final IS/MND under Threshold d) and fully addresses both on-site and off-site jurisdictional features, associated permitting triggers, and mitigation measures:

> As required by the County, the LACDPW shall ensure that appropriate hydrology and hydraulic analyses for the Water Quality Plan/Hydrology and *2009 Low Impact Development (LID) Standard Manual* compliance have been satisfied. Therefore, construction of appropriate BMPs in compliance with the Water Quality Plan/Hydrology and LID would be implemented to ensure that storm

water runoff is retained and infiltrated on site per County standards to ensure that no on-site or off-site flooding would occur. Compliance with this requirement would also ensure that Project implementation would result in a less than significant impact related to flooding.

As mentioned in Section 4.4, Biological Resources, the Project area contains ephemeral drainage features that may be considered jurisdictional by regulatory agencies. The extent of potential CDFW and RWQCB jurisdiction in the Project survey area has been identified as 0.04 acre (0.02 hectare). However, it is anticipated that the on-site drainage would be entirely avoided by Project implementation through design, and no impact would result (BonTerra Consulting 2012a).

To further ensure avoidance, MM BIO-4 requires that all areas containing jurisdictional resources be staked or fenced at or outside the edge of the impact areas where they interface with jurisdictional features to demarcate areas where human and equipment access and disturbance from grading are prohibited prior to commencement of grading activities. A qualified Biologist shall monitor all site-preparation and grading activities near these interfaces during construction. Staging areas shall be restricted to approved impact areas only.

However, the off-site drain features may be impacted by trenching associated with installation of the Grid-Tie line connecting the Project to the Antelope Substation. If avoidance of these drainages is not feasible through underground tunneling or other means, then pursuant to MM BIO-3, the Project Applicant will need to consult with applicable agencies to get the appropriate permits. If jurisdictional waters cannot be avoided, impacts resulting from Project implementation would require Section 401 clearance from the RWCQB and a Section 1602 Streambed Alteration Agreement (SAA) from the CDFW. The SAA must address the initial construction and long-term operation and maintenance of any structures in areas identified as "Waters of the State" (such as a culvert or desilting basin) that may require periodic maintenance if these are included in the Project design. As required by MM BIO-3, the Project Applicant must obtain permit approval from the RWQCB and the CDFW and ensure no net loss of wetlands through avoidance and/or compensatory mitigation.

As required by the County, a Decommissioning Plan would be prepared and submitted for approval to Los Angeles County prior to the issuance of a grading permit for the Project. The Plan would ensure the land is returned to its pre-developed state upon termination of the use of the land as a solar site (which would be in 20 years at the earliest), including restoration of all drainage features. Therefore, any impacts related to drainage patterns would exist only for the life of the proposed Project, and the site would be restored to its pre-developed conditions.

Response Water Board-7

As requested by the Water Board, the following text on page 3-20 of the IS/MND has been modified, as follows, and as stated in Section 4.0, Errata:

3.5.1 Discretionary Permits

- California Energy Commission: Certification as an eligible renewable resource.
- California Department of Fish and Wildlife: Section 1604 Streambed Alteration Agreement (Note: This would only be required if jurisdictional drainage features would be impacted).
- Lahontan Regional Water Quality Control Board: Section 401 Water Quality Certification (Note: This would only be required if **federal** jurisdictional drainage features would be impacted).
- County of Los Angeles: Conditional Use Permit for the West Antelope Solar Project (Case No. R2012-01589).

Please refer to Response Water Board-6 regarding the discussion of on-site and off-site jurisdictional features associated permitting triggers, and mitigation measures.

Response Water Board-8

Please refer to Response Water Board-6 regarding the discussion of on-site and off-site jurisdictional features, associated permitting triggers, and mitigation measures. Specifically, as discussed above, no direct impacts to the on-site or off-site jurisdictional features are anticipated, and therefore, no mitigation is required under CEQA. However, MM BIO-4 directs the jurisdictional areas to be staked or fenced prior to grading to demarcate those areas that cannot be disturbed, and any ground-disturbing activities near these areas will be monitored by a qualified Biologist. Regarding off-site jurisdictional features, if avoidance of these drainages is not feasible through underground tunneling or other means, then pursuant to MM BIO-3, the Project Applicant will need to consult with applicable agencies to get the appropriate permits.

It is acknowledged and agreed that obtaining a permit does not constitute mitigation; because of this, MM BIO-3 includes a performance standard that "the Project Applicant shall ensure that the Project would result in no net loss of 'Waters of the State' by providing mitigation through impact avoidance; impact minimization; and/or compensatory mitigation for the impact, as determined in the Streambed Alteration Agreement". The requirement for no net loss, which is another way of saying a minimum of 1:1 replacement, ensures that a minimum standard for mitigation is required. Additional measure above and beyond this minimum will be negotiated with the affected agency(ies) and implementation of these conditions would reduce potential impacts to a less than significant level.

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2.4 UTILITIES

- Southern California Edison (SCE), November 20, 2013

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SCE

SOUTHERN CALIFORNIA EDISON
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RECEIVED
NOV 27 2013
BY:

November 20, 2013

Mr. Anthony Curzi
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, California 90012

RE: Initial Study/Mitigated Negative Declaration (IS/MND) for West Antelope Solar Energy Project (Project) - Project No. R2012-01589-(5) / Conditional Use Permit 201200086

Dear Mr. Curzi:

Southern California Edison (SCE) appreciates the opportunity to comment on the IS/MND for the West Antelope Solar Energy Project ("Project"). The IS/MND describes the Project as a proposal to construct and operate a utility scale, customer-constructed 20 mega-watt (MW) solar generating facility near the intersection of W Avenue J and 110th St W in unincorporated Los Angeles County, just outside the western boundaries of the City of Lancaster. Electrical power would be transferred between the solar generating facility and the existing SCE Antelope Substation via a new 66 kilo-volt (kV) grid-tie transmission line (Grid-tie) along Avenue J in Lancaster.

The comments contained herein are intended to clarify the IS/MND and address the California Public Utilities Commission (CPUC) General Order 131-D (GO 131-D) requirements for construction of electric facilities over 50 kV by electric utilities under CPUC jurisdiction, such as SCE. Since the facilities necessary for SCE to support this project involve the construction of electrical facilities over 50 kV, SCE's portion of the work is subject to GO 131-D.

If power lines or substations to be relocated or constructed by SCE have undergone environmental review pursuant to CEQA as part of a larger project, and for which the final CEQA document (e.g. Environmental Impact Report (EIR) or Negative Declaration) finds no significant unavoidable environmental impacts caused by the proposed line or substation then SCE may submit this final CEQA document to the CPUC in lieu of undergoing a separate CEQA environmental review for SCE work.

However, if construction of SCE's facilities are not adequately addressed in the CEQA review for the larger project, the required additional CEQA review at the CPUC for the SCE construction could delay CPUC approval of the SCE portion of the project.

SCE understands that a description of the electrical facilities to be constructed by SCE was included by the Project Applicant in their Condition Use Permit (CUP) application to the County. Based on that understanding SCE submits the following comments to the County's IS/MND.

1

- Due to the recent approval of the nearby Plainview Solar Works Project referenced on page 3-5 of the IS/MND for the West Antelope Solar Energy Project, the ongoing construction of SCE's poles and underground structures under the Plainview Solar Works Project, and the planned construction of a 70-foot tubular steel pole also approved under the Plainview Solar Works Project CUP, SCE recommends the following changes to page 3-5 of the IS/MND which are shown underlined or crossed out below. [1]

  The Project Applicant is currently in discussions with Southern California Edison (SCE), the City of Lancaster, and Silverado Power to determine the best path for the Grid-Tie to connect to the Antelope Substation. This MND covers the CEQA analysis for the Project-related transmission line work to be completed by SCE. Silverado Power's proposed transmission poles ***and SCE's poles and underground structures*** *are analyzed in a separate CEQA document. The two alternatives under consideration are described below:*

  Path A: …

  Path B: Under this alternative, shown in Exhibit 3-3E, Proposed Path B Grid-Tie Transmission Line, the Grid-Tie would run underground (approximately 20 feet from centerline of Avenue J) all the way to a riser pole and would hand-off overhead to SCE at approximately 99th Street West. At this point, the Grid-Tie would hand-off to SCE at the first 75-foot-tall pole with a pole switch; SCE would also construct an identical second pole with a pole switch and a 70-foot-tall ~~***lightweight***~~ ***tubular*** *steel riser pole that would transition back underground, until connecting into the 66-kV bus at the Antelope Substation.*

2

- Similar to the above comment, SCE recommends the following change on page 3-9 for Off-Site Activities to clarify that structures are already under construction.

  The Project would connect to the existing transmission grid via a 66-kV Grid-Tie transmission line that runs approximately 1.5 miles east to the SCE Antelope Substation, as previously discussed. Placing the Grid-Tie underground would require minor off-site trenching and would include excavation to a depth of approximately three to four feet deep along the southern edge of West Avenue J. Under both proposed alternatives, the riser would hand-off overhead to Southern California Edison (SCE) at approximately 99th Street West, where it would travel along two switch poles and another riser pole before transitioning back underground, until connecting into the 66-kV bus at the

3

[1] . The City of Lancaster acting as the CEQA lead agency to the nearby Plainview Solar Works Project (CUP No. 13-06), a customer-constructed solar generating facility with a 66 kV Grid-tie to the Antelope Substation, approved the CUP No. 13-06 prior to the IS/MND being issued. The West Antelope Solar Energy Project and the Plainview Solar Works Project will share some of the Grid-tie pole and underground electrical facilities which are currently under SCE construction.

2 (cont.)

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*Antelope Substation. As part of this hand-off, SCE would **install cable within** ~~construct~~ an underground trench, including several vaults.*

3 (cont.)

- MM Haz-1 at page 4-65 states that any hazardous materials encountered on the project site will be transported off-site by properly managed hazardous waste haulers who shall comply with all applicable State and federal regulations. Although oil is not considered a hazardous material under the federal Department of Transportation (DOT) standards, oil is considered a hazardous material and a hazardous waste (free flowing oil) by the State of California, yet if oil is spilled to the soil, the soil would most likely not meet hazardous waste criteria, especially if the oil that is spilled is mineral oil. As such, SCE believes mitigation measure MM Haz-1 would be more accurate if it stated as follows:

  *MM HAZ-1 During construction activities, any hazardous materials encountered on the Project site requiring off-site disposal **that meet hazardous waste criteria**, shall be transported off site by a properly licensed hazardous waste hauler who shall comply with all applicable State and federal requirements, including California Department of Transportation (Caltrans) regulations under Title 49 of the Code of Federal Regulations (CFR). Hazardous materials that may be encountered during proposed Project implementation would be handled, treated, and/or disposed of in accordance with applicable regulations and/or the requirements of the local oversight agency(ies).*

4

SCE respectfully requests that this updated project information to be incorporated within the County's CEQA review.

Once again, SCE appreciates the opportunity to comment on the IS/MND. If you have any questions regarding this letter, please do not hesitate to contact me at (626) 893-0261 or Rodney.Preijers@sce.com.

Sincerely,

Rodney Preijers
Project Manager, Major Projects Organization
Southern California Edison Company
6 Pointe Drive
Brea, California 92821

cc: Antonio Rodriguez, Canadian Solar Project Manager

Jason Evans, TUUSSO Energy Principal

Patricia Bartoli-Wible, SCE Region Manager

2.4.1 SOUTHERN CALIFORNIA EDISON (SCE)

November 20, 2013

Response SCE-1

Southern California Edison's (SCE) summary of the proposed Project is accurate, and the purpose of the comments provided is understood. The IS/MND for the West Antelope Solar Energy Project is intended to provide adequate CEQA review to enable SCE to submit the document to the California Public Utilities Commission (CPUC) in lieu of a separate CEQA document prepared by SCE.

Response SCE-2

The requested edits to page 3-5 of the Draft IS/MND have been made and are presented in Section 4.0, Errata, of this document. The requested edits are solely to clarify the Project description for purposes of SCE's use of the CEQA document and do not affect the conclusions of the Draft IS/MND.

> The Project Applicant is currently in discussions with Southern California Edison (SCE), the City of Lancaster, and Silverado Power to determine the best path for the Grid-Tie to connect to the Antelope Substation. This MND covers the CEQA analysis for the Project-related transmission line work to be completed by SCE. Silverado Power's proposed transmission poles **and SCE's poles and underground structures** are analyzed in a separate CEQA document. The two alternatives under consideration are described below:
>
> **Path A:** As shown in Exhibit 3-3D, Proposed Path A Grid-Tie Transmission Line, the Grid-Tie would run underground or overhead along the southern edge of West Avenue J (approximately 20 feet from centerline of the road) until it reaches Silverado Power's collector substation at 105th Street West. At that point, the Grid-Tie, if underground, would transition from underground to overhead up a riser pole. The overhead line would be strung along Silverado Power's planned overhead transmission poles (approximately 44 feet from centerline of West Avenue J).[2] At approximately 99th Street West (about 10 feet west of the western boundary of SCE's right-of-way for the 220-kV transmission lines), the Grid-Tie would hand-off to SCE at the first 75-foot-tall pole with a pole switch; SCE would also construct an identical second pole with a pole switch, and a 70-foot-tall ~~lightweight~~ **tubular** steel riser pole, where it would transition back underground, until connecting into the 66-kV bus at the Antelope Substation.

Response SCE-3

The requested edit to page 3-9 of the Draft IS/MND has been made and is presented in Section 4.0, Errata. The requested edit is solely to clarify the Project description for purposes of SCE's use of the CEQA document and does not affect the conclusions of the Draft IS/MND.

> Under both proposed alternatives, the riser would hand-off overhead to Southern California Edison (SCE) at approximately 99th Street West, where it would travel along two switch poles and another riser pole before transitioning back underground, until connecting into the 66-kV bus at the Antelope Substation. As part of this hand-off, SCE would **install cable within** ~~construct~~ an underground trench, including several vaults.

[2] The Silverado Power project is analyzed in a separate CEQA document by the City of Lancaster.

Response SCE-4

The requested edit to MM HAZ-1 on page 4-65 of the Draft IS/MND has been made and is presented in Section 4.0, Errata, of this document. The requested edit is solely to clarify the Project description for purposes of SCE's use of the CEQA document, and does not affect the conclusions of the Draft IS/MND.

MM HAZ-1 During construction activities, any hazardous materials encountered on the Project site requiring off-site disposal **that meet hazardous waste criteria** shall be transported off site by a properly licensed hazardous waste hauler who shall comply with all applicable State and federal requirements, including California Department of Transportation (Caltrans) regulations under Title 49 of the *Code of Federal Regulations* (CFR). Hazardous materials that may be encountered during proposed Project implementation would be handled, treated, and/or disposed of in accordance with applicable regulations and/or the requirements of the local oversight agency(ies).

2.5 ORGANIZATIONS

- Friends of Antelope Valley Open Space (FAVOS), November 19, 2013
- Antelope Acres Town Council- Kerekes, November 18, 2013
- Antelope Acres Town Council- Schuder, November 18, 2013
- Concerned Citizens of the Western Antelope Valley (CCWAV), November 20, 2013

FAVOS

To: Los Angeles County Department of Regional Planning

From: Margaret Rhyne on Behalf of Friends of Antelope Valley Open Space

Re: West Antelope Solar Project, R2012-01589-(5)

Conditional Use Permit No. 20120086

Date: November 19, 2013

Friends of Antelope Valley Open Space along with Concerned Citizens of the West Antelope Valley met with Mr. Greg Blue, Community Outreach Coordinator, Canadian Solar and Mr. Antonio Rodriguez, Manager of Engineering & Project Development, Canadian Solar on November 7 in the hope that some of our serious concerns with the possible approval of an MND for the West Antelope Solar Project would be addressed. Instead, the information relayed to us during the presentation presented by Mr. Blue and Mr. Rodriguez raised even more concerns and reinforces our conclusion that a full Environmental Impact Report for this project is mandatory. 1

Existing Biological Resources

On Nov 7, Mr. Greg Blue and Mr. Rodriguez gave a presentation that included a section on "Responses to Stakeholder's Concerns." In that section the following was stated:

"Flora / Fauna – Focused surveys were performed for Swainson's Hawk and burrowing owls – none found. " (please see copy on page 7 of this document)

This despite the facts that the West Antelope Solar MND documents foraging Swainson's Hawks and active burrows for burrowing owls on the site. Quoting from the West Antelope Solar "Initial Study/ Mitigated Negative Declaration"

Page 4-31: "**The focused burrow survey resulted in the identification of a total of 20 burrows, burrow clusters, or shelters that showed evidence of current, historic, or potential burrowing owl occupation."**

Page 4-32 **"Swainson's hawks were observed in the survey area during surveys on April 12, 19, and 27 and May 9 and 15, 2012."**

This misrepresentation is stunning and further erodes our trust in both this company and the overall planning process. We can only assume that Canadian Solar's representatives either had not read the document prepared for them by BonTerra Consulting and/or assumed that we had not. 2

Further, this same presentation states that **"Despite less than significant impacts [Canadian Solar has] agreed to 2:1 mitigation for impacted land of similarly situated land located as close to the site as possible."** (Please see copy on page 8 of this document)

This sounds very positive except that we were then told that the mitigation land will not be "close to the site" but actually will be mostly "onsite" and fragmented. We see no map in the project documents showing these lands. We requested a map at our November 7 meeting and were told that a copy would be sent. We have not received this copy.

In fact, in the project documents on page 4-121, we find that only 16.27 acres will be "off site" and 3

135.75 will be onsite, again with no map provided. In addition, the total proposed mitigation land is 152.02 acres when the total project area is in fact 263 acres, again making the assertion concerning 2:1 mitigation misleading. With 152.02 acres proposed as mitigation, and a ratio of 2:1 stated for that mitigation, this means that the project proponents are asserting that within the entire 263 acres project, **only 76 acres are "impacted."**

3 (cont.)

Concerning the proposal for fragmented mitigation land, we see no documentation that this will be adequate mitigation for the flora and fauna impacted by this project. The proponent's own project documents reveal that this mitigation plan is in fact inadequate. Appendix C-5, "Post-Construction Biological Value of Project Site Memorandum" describes that the 152.02 acres of mitigation land will be divided into at least 3 different segments (Appendix C-5, page 6):

TABLE 3
ON-SITE AND OFF-SITE MITIGATION ACRES

	Total Acres
On-site Mitigation Land: Outside fenced area	84.5
On-site Mitigation Land: Within fenced area	51.25[a]
Off-site Mitigation Land	16.27
TOTAL MITIGATION LAND	**152.0**

[a] This acreage was calculated by applying the 0.5:1 biological value to the 102.5 acres of open space within the fenced area.

In this same appendix, Table 2, "Comparison of Special Status Wildlife Species Likely to Occur Pre/Post Project" reveals that **four special status species, ferruginous hawks, northern harriers, prairie falcons and Swainson's Hawks,** that now occur or are likely to occur on the site, after construction **are expected to occur only in the 84.5 acres outside the fenced area**. Under the heading "Likelihood to Occur Post-Project in 102.5 acre disturbed open space within fence**" all four of the special status species listed above are labeled "not expected to occur."**

4

In the conclusion portion of this appendix, project biologists admit that the project will reduce habitat values for four special status species:

"Project implementation will result in lower habitat values for four species: northern harrier; ferruginous hawk; prairie falcon; and long-billed curlew." (Appendix C-5, page 5)

The conclusion also asserts that the project implementation will result in "increased value" for four special status species:

"This analysis indicates that the post-Project conditions will result in increased value for three species: Swainson's hawk (future potential nesting trees – marginal increased value); burrowing owl (open spaces managed to allow its occupation); and loggerhead shrike (potential nest sites with increased foraging opportunities)." (Appendix C-5, page 5)

5

However, concerning Swainson's Hawks, this claim is valid only if the landscaping plan is amended. Currently the plan calls for irrigation for only three years. No proof is given that any trees listed in Appendix A, Landscape Plan (Afgan pine, Tecate cypress, and desert almond) will survive once irrigation ends. Only area native Joshua Trees and perhaps California Junipers, if successfully planted in sufficient numbers, could be reasonably expected to thrive in this area without irrigation beyond three years. For other trees listed in the landscape plan, after irrigation is ended, "marginal increased value" for Swainson's Hawks and "potential nesting sites for loggerhead shrikes" will no longer exist resulting in lower, not increased, habitat value for these special status species as well.

Claims concerning "increased value" for burrowing owls also lacks justification. Currently there are 263 acres on this site for burrowing owl habitat. The project will result in, at best, 152.02 acres of remaining habitat, a loss of over 100 acres. Without more information concerning how "open spaces managed to allow its occupation" will increase habitat the claim for "increased value" is also not justified.

5 (cont.)

Also of concern is the provision for 16.27 acres of off-site mitigation land. Will this be secured before construction begins? Will more land be purchased if the exact stated amount cannot be secured? Will this be one contiguous parcel connected to other protected lands in the area?

The mitigation plan for this project becomes even more alarming after reading this paragraph from page 4-15:

> However, the cumulative loss of open space and conversion to industrial uses in the western Antelope Valley could be considered to be a cumulatively considerable aesthetic impact and/or a significant degradation to the character of the Project's surrounding area. As discussed below, MM CML-1 mandates that areas disturbed by Project implementation, including graded areas and areas covered by the solar arrays, shall be replaced at a minimum 1:1 ratio with open space land within the western Antelope Valley of a comparable biological value. The replacement lands must be preserved as open space in perpetuity.

It is impossible to imagine that the 16.27 acres of offsite mitigation listed in the table on the previous page or the fragmented 135.75 onsite "mitigation" land, which includes acreage inside a chain link fence, will satisfy this need to mitigate what is admitted by the project documents to be a "cumulatively considerable aesthetic impact and/or significant degradation to the character of the Project's surrounding area."

6

March Construction Date

Safeguards listed in the project documents that purport to protect existing biological values are also now evidently invalid due to a change from a previously stated winter construction period to one now beginning in March. In the presentation given to our group on Nov. 7, the "Permitting Timeline" section reveals that construction will begin in March "March – Construction commences 1st week of March." (please see copy on page 9 of this document)

However Appendix H "Mitigation Monitoring and Reporting Program" states that

7

"To ensure compliance with the Migratory Bird Treaty Act (MBTA) and Section 3503.5 of the California Fish and Game Code, construction activities shall be conducted during the nonnesting season (September 1–January 31) to avoid any potential disturbance of avian breeding activities." With construction now rescheduled for the first week of March, this project evidently will now to be out of compliance with the Migratory Bird Act.

In addition, a March date for project implementation also contradicts a safe guard listed in the project documents concerning fugitive dust. Page 3-10:

"Earth-moving activities on the Project site would be scheduled during winter months, when it is anticipated that natural rainfall would assist with mitigation of fugitive dust."

Winter would be a better time for construction. However the new March date for the onset of project construction could not be worse for area residents as this is the windiest season in the Antelope Valley. Strong and persistent winds last throughout the spring, directly coinciding with the planned construction activities for the West Antelope Solar Project.

Further, the change to March for project implementation also negates statements in the project documents concerning possible impacts to the views from the hiking trails of the Antelope Valley California Poppy Reserve SNR. Page 4-7:

"… these trails are primarily used only during the wildflower bloom season, which generally occurs from mid-March through mid-April. Therefore, implementation of the Project would not significantly obstruct views from an existing regional hiking or riding trail and no mitigation would be required."

7 (cont.)

Community Benefits

Mentioned under Local Community Benefits is **"Construction of one mile of the California Poppy trail adjacent to the site."** The poppy trail was proposed for this area because it is well-known locally as supporting large expanses of California Poppies. The October 2013 addition of a yearly publication, the "Welcome" magazine published by the Antelope Valley Press, includes a map labeling the area planned for the West Antelope Solar project as a prime poppy viewing area. A copy of this map is provided on page 10. A trail in that area is attractive and was therefore planned directly because of the viewing opportunities provided by spring annuals. **This proposed industrial solar installation will destroy these poppy lands, eliminating the scenic views that created the plan for a trail in the first place**. It is difficult to imagine that walking along a security fence topped with barbed wire with views of solar panels is going to be a benefit to the local community. The Welcome Magazine describes the wildflower display now enjoyed by the Antelope Valley community, enjoyment that greatly benefits the community but will significantly decrease if this project is approved:

"The Antelope Valley comes alive in the spring with brilliant colors as the California Poppy and other desert wildflowers bloom. This map shows a variety of locales around the Antelope Valley where wildflowers can be found, usually between mid-March and mid-May."

8

Potentially Significant Impacts

Silverado West is in the planning stages for a nearby industrial solar installation also in the West Antelope Valley portion of Los Angeles County. Project 2 of this proposed installation is located within 1 mile of the West Antelope Solar Project at 110th West and Avenue K. Terrain, previous land use for agriculture, biological resources, and other features of the Silverado project lands are virtually identical to project land for the proposed West Antelope Solar.

Repeatedly, in the Initial Study for Silverado's proposed project, assessments of potential impacts to Aesthetics, Air Quality, Biological Resources, and Cultural Resources are classified as having "Potentially Significant Impact" thus requiring an EIR:

Aesthetics

Would the project:

- Have a substantial adverse effect on a scenic vista?
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- Substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character, or other features?
- Create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area?

The answer to all four of the above questions concerning Aesthetics is *POTENTIALLY SIGNIFICANT IMPACTS* thus requiring an EIR.

Air Quality

Would the project:

- Conflict with or obstruct implementation of applicable air quality plans of either the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD (AVAQMD)?
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- 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)?
- Expose sensitive receptors to substantial pollutant concentrations?
- (note: Sensitive receptors include playgrounds and schools such as Del Sur School.)
- Create objectionable odors affecting a substantial number of people?

The answer to all six of the above questions concerning Air Quality is *POTENTIALLY SIGNIFICANT IMPACTS*, again requiring an EIR.

Biological Resources

Would the project:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS)?
- Have a substantial adverse effect on any sensitive natural communities?
- 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.

9

The answer to all three of the above questions concerning Biological Resources is *POTENTIALLY SIGNIFICANT IMPACTS*, again requiring an *EIR.*

Cultural Resources

Would the project:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines § 15064.5?
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or contain rock formations indicating potential paleontological resources?

The answer to all three of the above questions concerning Biological Resources is *POTENTIALLY SIGNIFICANT IMPACTS*, again requiring an EIR.

How is it possible that at least 16 items on the Environmental Checklist for Silverado's proposed LA County project, planned for nearly identical areas, have "potentially negative impacts" necessitating an EIR when the West Antelope Solar project does not?

Questions about the project Environmental Checklist; grave concerns and unanswered questions regarding proposed mitigation measures; admitted loss of habitat for special status species due to post project biological effects; the change in implementation date; and claims concerning community benefits all warrant the closer examination that only an EIR can provide.

This project must be required to submit an Environmental Impact Report so that these many questions and concerns can have the full, thoughtful, and detailed review that they deserve. Both responsible planning and genuine respect for the people, plants and animals of the West Antelope Valley dictate that the approval of a Mitigated Negative Declaration for the West Antelope Solar Project be rejected.

9 (cont.)

Canadian Solar

Tuusso Energy

West Antelope Solar Project Update

November 2013

Presented to Friends of Antelope Valley Open Space

And

Concerned Citizens of the West Antelope Valley

November 7, 2013

Responses to Stakeholder's Concerns

After meeting with stakeholders over the last year we heard several major concerns and in response we then made adjustments to the project.

- *Fugitive Dust* – Based on early discussions with the County the project was designed so that there will be no grading for solar arrays and our Dust Control plan is in compliance with County guidelines and the Board Resolution
- *Flora / Fauna* - Focused surveys were performed for Swainson's Hawk and burrowing owls – none found. Additional Pre-construction surveys will be performed. Habitat improvement with tree-lined perimeter and wildlife fencing will allow migratory animals to continue to cross site.
- *Visual / Aesthetics* - Perimeter landscaping using native, drought-tolerant vegetation. Gen-tie line is undergrounded to the substation
- *Job Creation* - Project will use local labor as much as possible and this will be a union project

CanadianSolar

TUUSSO ENERGY

Canadian Solar

Tuusso Energy

West Antelope Solar Project Update

November 2013

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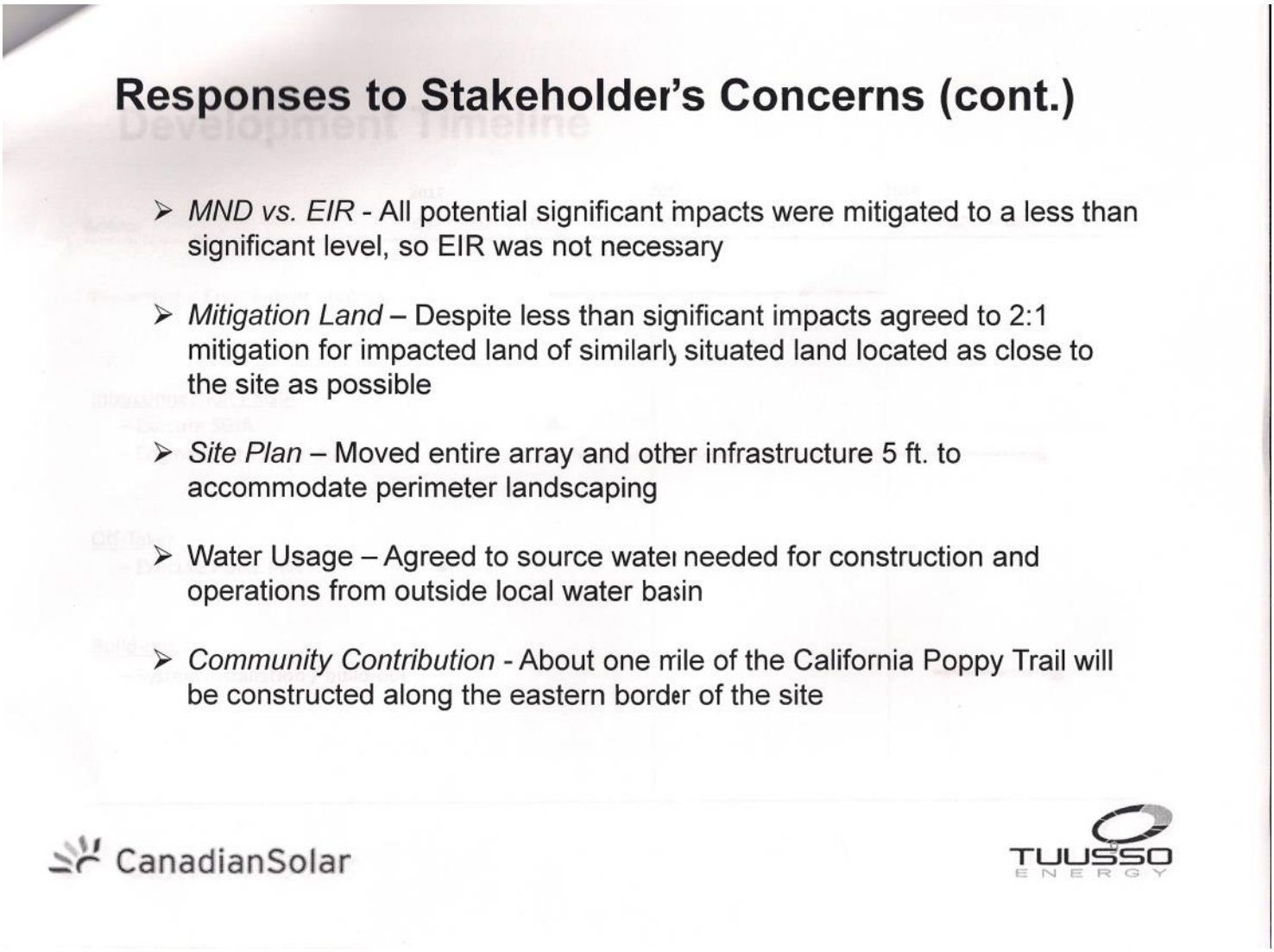
And

Concerned Citizens of the West Antelope Valley

November 7, 2013



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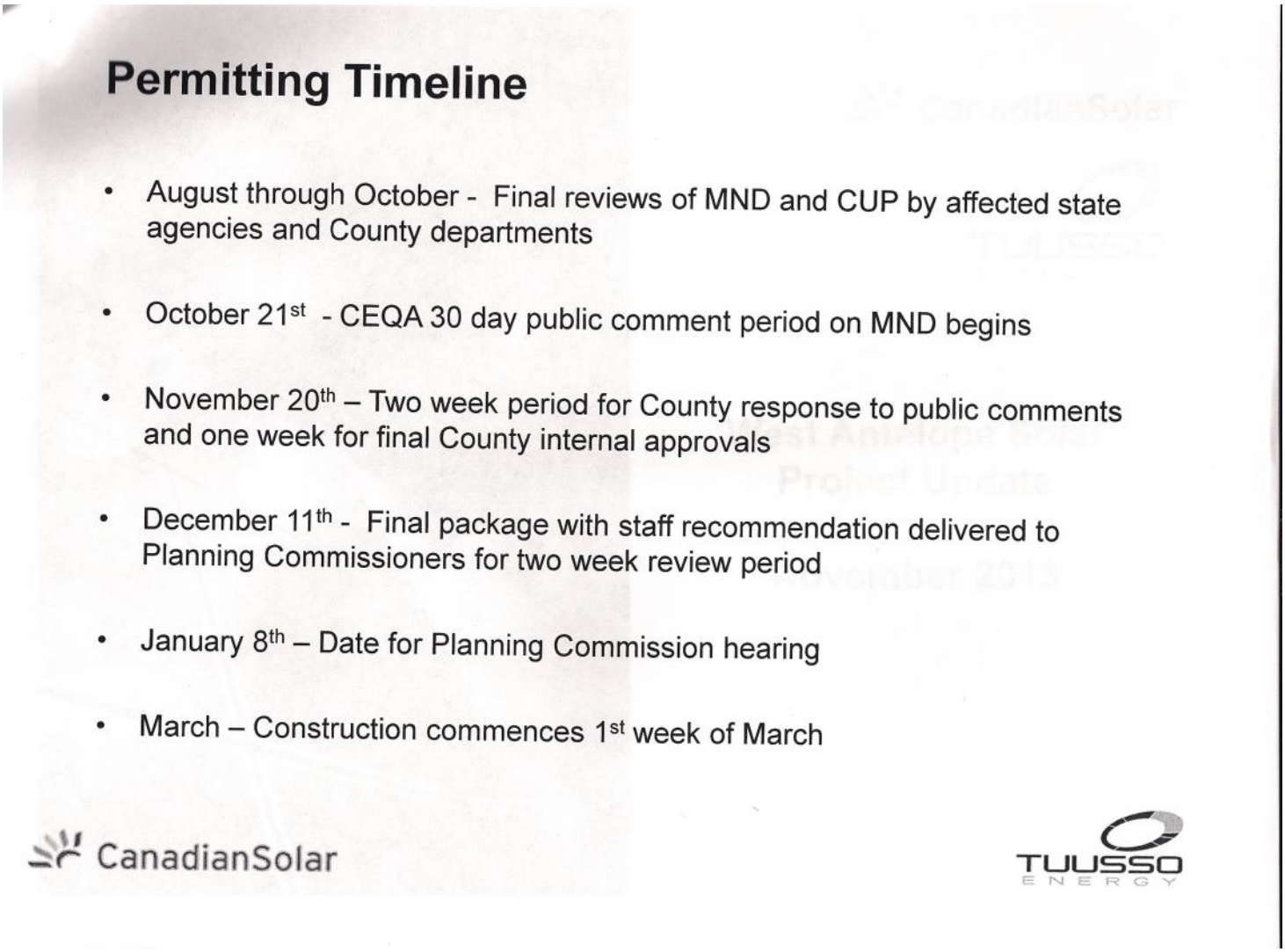
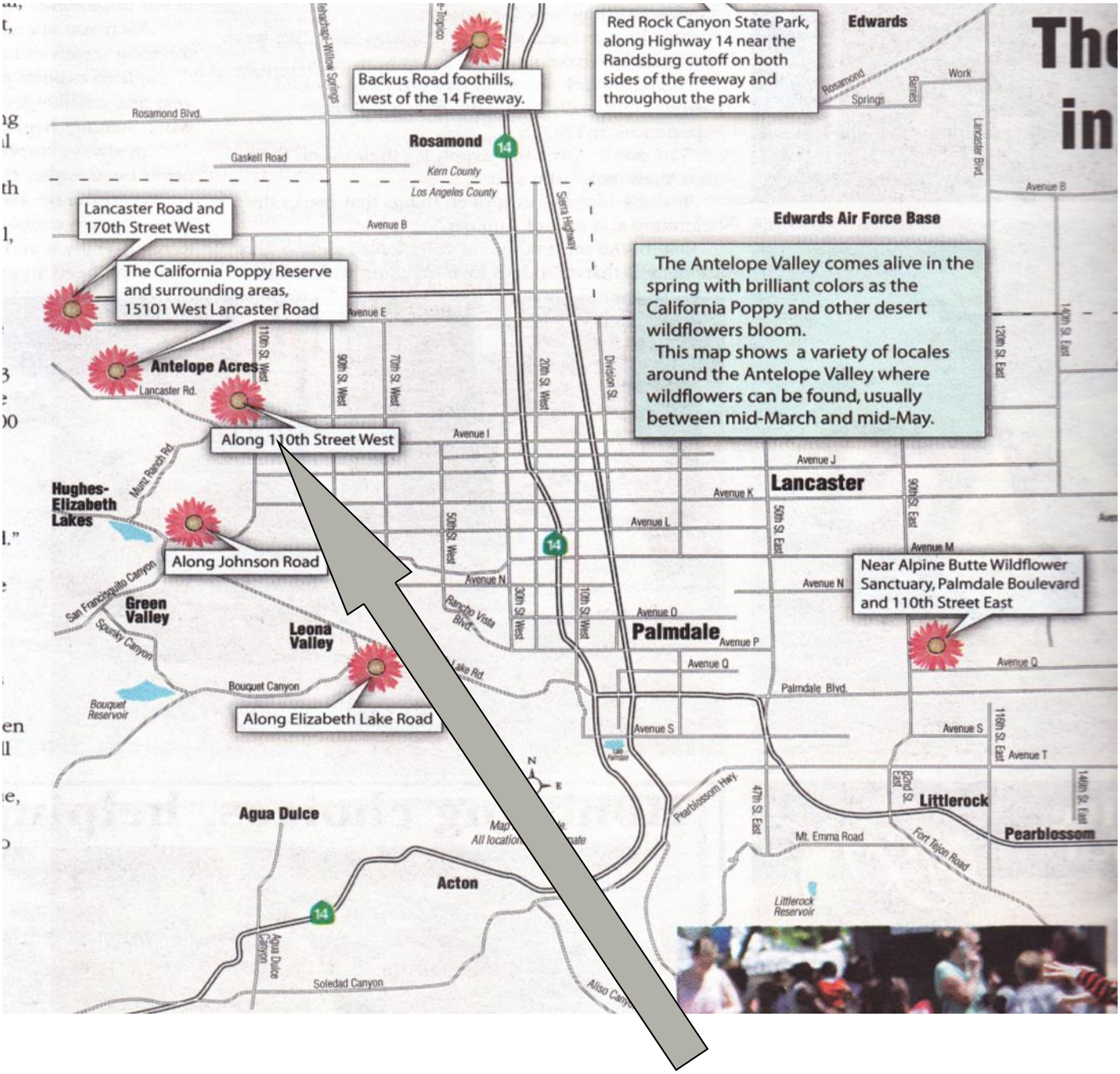


Antelope Valley Press Welcome Magazine

October 2013

“The Antelope Valley comes alive in the spring with brilliant colors as the California Poppy and other desert wildflowers bloom. This map shows a variety of locales around the Antelope Valley where wildflowers can be found, usually between mid-March and mid-May.”



Location of Proposed West Antelope Solar Project

2.5.1 FRIENDS OF ANTELOPE VALLEY OPEN SPACE (FAVOS)

November 19, 2013

Response FAVOS-1

These comments are noted and will be included in the public record for the proposed Project. However, these comments do not raise any environmental issues that CEQA requires be addressed in an MND.

Response FAVOS-2

As stated by the commenter, the remarks made by Project representatives in a public presentation to community groups on November 7, 2013, were incorrect. It is regrettable that survey findings were incorrectly communicated in the slide presentation and the commenter is requested to refer to the documentation presented in the IS/MND, which is the appropriate documentation to reference for information related to environmental impacts. As discussed in Section 4.3, Biological Resources, of the IS/MND, the Project's impacts to Swainson's hawk and burrowing owl were evaluated consistent with the requirements of CEQA and currently accepted guidelines for each species (i.e., California Burrowing Owl Consortium; California Energy Commission [CEC] and California Department of Fish and Wildlife [CDFW]; and Swainson's Hawk Technical Advisory Committee [SWTAC]).

Response FAVOS-3

As discussed in Section 4.19, Mandatory Findings of Significance and required by MM CML-1 of the IS/MND, the Project required to provide dedicated open-space lands at a minimum 2:1 ratio for the lands disturbed by Project implementation to mitigate cumulatively considerable impacts related to the general loss of potential habitat for a variety of bird species. Numerous other biological resources also benefit from the dedication of these lands including all plant and animal species that may potentially use the site, local wildlife movement, and streambeds.

A Memorandum prepared by BonTerra Consulting and included in Appendix C-5 of the IS/MND, Post-Construction Biological Value of the West Antelope Solar Project Site Memorandum, provides a detailed analysis of the post-construction biological value of the Project site and assesses the appropriate amount of mitigation land required for Project impacts. Mitigation lands may occur on site and off site; must be located within the Project region (i.e., western Antelope Valley); and must be located as close to the Project site as feasible.

As discussed in the Memorandum, the 2:1 ratio (which is the minimum mitigation ratio required by CDFW's Swainson's hawk protocol) would only apply to areas of the Project site that would be impacted. Additionally, the Memorandum discussed the possibility of applying undeveloped portions of the fenced area and areas between the panels as credit towards the mitigation requirement. Under these assumptions, only 16.27 additional acres of mitigation would need to be obtained off-site. However, in response to the CDFW letter submitted during the public review period, the County is now requiring 2:1 mitigation for the entire fenced area of the Project. Based on a fenced area of 178.5 acres, a total of 357 acres of mitigation is required. The 84 acres of the Project site outside the fenced area may still count towards satisfaction of the total required acreage. Thus, the remaining 273 acres must be acquired off-site. As required by MM CML-1, mitigation lands must be selected in consultation with CDFW and preserved with a conservation easement or other form of legal dedication in perpetuity, or until the Project site is restored to its pre-developed conditions per the requirements of the approved

Decommissioning Plan. Lands may be deeded to a land management-conservation entity with prior approval from the County.

The Project Applicant is currently in discussions with a land conservancy group to secure appropriate mitigation lands. Therefore, a map showing the location of the site is not yet available. However, a location can be provided once acquisition is finalized and approved by the County prior to issuance of grading permits. Mitigation lands and deeds or conservation easements proposed shall be approved by the County prior to issuance of grading permits.

With regard to the appropriateness of the mitigation, according to Section 21064.5 of the State CEQA Statutes, the Lead Agency is authorized to use its own independent and objective judgment, based on the information before it, to determine that the level of mitigation or project revision being provided would be sufficient to ensure that "clearly no significant effect on the environment would occur" (Section 21064.5). Further, there must be evidence in the record as a whole to support that conclusion. Based on the substantial evidence presented in the Initial Study, it was determined by the County of Los Angeles Department of Regional Planning that the mitigation measures would be sufficient to avoid or eliminate all potentially significant cumulative impacts to biological resources.

Response FAVOS-4

Tables 4-7 and 4-8, as well as text discussions within Section 4.4.2 of the IS/MND, describe the special status species that have the potential to occur on the Project site and analyze the potential for impacts to these species. Any impacts that would be considered potentially significant have corresponding mitigation measures. The loss of 178.5 acres of open space within the region would not have a substantial effect on the regional populations of the species mentioned in the comment or other more common species. The impact on these species is recognized and clearly addressed in the IS/MND.

Response FAVOS-5

As stated on page 4-5 of the IS/MND, "MM AES-1 requires the preparation of a Landscape Plan, subject to the review and approval of the County of Los Angeles, mandating the planting of drought-tolerant plants for the exterior of the Project site along portions of the perimeter fence facing 110th Street West, West Avenue J, and the northern side of the Project site. This landscaping would provide a visual buffer between the public roadways and the solar facilities, and views into the Project site would be obscured and naturalized through the use of the required landscaping along the perimeter fencing. A Preliminary Landscape Plan is included in Appendix A of this IS/MND". As such, the Landscaping Plan is subject to revision and refinement, to the satisfaction of the County Department of Regional Planning.

Section 4.4 of the IS/MND, specifically pages 4-31 and 4-32, discusses impacts of the Project on the burrowing owl as a species. Although mitigation is determined to be required only for direct impacts to burrowing owl, indirect impacts to adjacent habitat are considered in the assessment and determined to be less than significant. As described in Section 4.4 of the IS/MND, the site itself is both unoccupied as well as less suitable for the burrowing owl. Although occupied habitat occurs nearby, it is incorrect to assume that the site is automatically high value foraging area for those birds. Lands supporting the nearby burrowing owl colony are less disturbed than those on the Project site. After Project implementation, there will continue to be foraging opportunities both within the solar plant facility and in the surrounding preserved open spaces and areas beyond. As required in revised MM BIO-5, the perimeter fencing surrounding the Project site will be raised at regular intervals above ground level to allow for the

passage of wildlife to the lesser of either: 18 inches above grade or to the maximum height allowed by the California Public Utilities Commission (CPUC).

Although, there will be an overall loss of foraging habitat in the area for these owls, the loss, relative to the existing amount of foraging habitat available for these owls, is not considered substantial enough to warrant a finding of significance. However, as noted by the commenter, the Appendix C-5, Memorandum of Post Construction Biological Value to the IS/MND states that the post-Project conditions will result in increased value for three species: Swainson's hawk (future potential nesting trees – marginal increased value); burrowing owl (open spaces managed to allow its occupation); and loggerhead shrike (potential nest sites with increased foraging opportunities). This assessment is based on the fact that the Project, in its post-developed condition, will be required to provide on-site and off-site mitigation lands (see MM CML-1), which would result in a benefit to the burrowing owl. Increased post-Project value is tied to the increased benefit of lands managed under a conservation easement to allow for, and facilitate, its occupation.

Response FAVOS-6

The Project Applicant is currently in discussions with a land conservancy group to secure appropriate mitigation lands. As required by MM CML-1, mitigation lands must be secured prior to issuance of grading permits. However, the commenter does not offer any evidence on how the mitigation measure would not adequately mitigate potential cumulative impacts; therefore, no further response can be provided.

Response FAVOS-7

Please refer to Topical Response No. 2, Construction Schedule.

With regard to views from trails, it is acknowledged that delay of the construction schedule would coincide with the wildflower bloom season. However, as stated on page 4-6 of the IS/MND, due to distance and/or intervening topography, views of the Project site from nearby hiking trails would be limited. A portion of the un-built County designated trail alignment for the California Poppy Trail would be constructed as part of the Project. However, since the trail is not yet constructed, there are no viewers from this un-built trail that could be substantially affected.

Response FAVOS-8

As discussed in Section 4.2, Biological Resources, of the IS/MND, it is acknowledged that grasslands within the Project site contain wildflowers as previously described. The distribution of patches of wildflowers typically varies from year to year, sometimes widely, so mapping of such features for any one season is not considered to be meaningful. It can be generally said that patches of varying densities of wildflowers are likely to occur in many areas of grasslands on the site. This can also be said generally for most of the Antelope Valley that is undeveloped. Therefore, although wildflower fields are visible during the blooming season, the grading of the roads on the site and installation and operation of the solar panels would not constitute a substantial impact to the wildflower fields in the region due to the prevalence of similar habitat throughout much of the region.

While wildflower fields are aesthetically pleasing, the annual grassland found on the Project site is not considered to be a special status vegetation type, nor are they protected as part of a preserve, such as the Antelope Valley California Poppy Reserve, located four miles to the west. As discussed on page 4-79 of the IS/MND, electricity-generating plants are a conditionally allowed use in the Heavy Agricultural (A-2-5) zone as long as a Conditional Use Permit (CUP) is

obtained. The Project is also consistent with Los Angeles County's Non-Urban 1 land use designation as it meets the definition of a "utility installation" referenced in the listing of non-urban non-residential land uses allowed in remote areas designated Non-Urban 1 (LACDRP 1986).

Additionally, in order to mitigate cumulative impacts related to Aesthetics (impacts to the character of the Project's surrounding area), the revised MM CML-1 requires the Project Applicant to provide dedicated open-space lands at a minimum 2:1 ratio of replacement for the fenced area of the Project, which will result in a minimum of 273 acres of off-site mitigation land preserved. Additionally, 84 acres will be preserved on site, and all mitigation lands are subject to a conservation easement or other form of legal dedication in perpetuity, or until the Project site is restored to its pre-developed conditions. Additionally, the County requires that a Decommissioning Plan for the Project is prepared. This Plan would ensure that the land is returned to a beneficial use upon termination of the use of the property as a solar site.

Response FAVOS-9

As described in the June 13, 2012 Notice of Preparation for Silverado Power's West Los Angeles County proposed development, the project would consist of six solar generating facilities at six different site locations throughout western Antelope Valley. These six sites together would include development of approximately 747.1 acres and would produce 172 megawatts (MW) of solar power in total. The scope and size of this project is considerably larger than the proposed Project discussed in this document, which is only 263 acres and would produce 20 MW. The analyses contained in the Silverado Initial Study is a preliminary evaluation intended to inform the public about potential environmental impacts of the project as a whole, not as individual sites. Additionally, the Initial Study is only the first step in the CEQA process; the EIR prepared for the Silverado project determined that there would be no significant impacts after mitigation. The Silverado project has mitigation measures and conditions of approval that are different from the proposed Project, and the impact assessments and conclusions made in the Silverado EIR cannot be directly applied to the proposed Project.

PO Box 6708
Lancaster, CA 93539-6708

Antelope Acres Town Council
aatowncouncil.org

November 18, 2013

Mr. Anthony Curzi
Zoning Permits North Section
Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

RE: Initial Study/MND
West Antelope Solar Project, R2012-01589-(5)
Conditional Use Permit No. 20120086

Dear Mr. Curzi,

Please find enclosed the response of the Antelope Acres Town Council to the above project, West Antelope Solar Project.

Please note that I will be emailing a report I did for Silverado's CUPs #12-08 and #12-09, which I want to include in this response as it relates to wildlife of the immediate area. Much of the area has been affected already. This area is some of the last remaining wildlife areas in all of Antelope Acres.

Sincerely,

Robert Kerekes
Pres. AATC

Response to
West Antelope Solar Energy Project
R2012-01589-(5)
Initial Study/Mitigated Negative Declaration
First Section by
Robert Kerekes President AATC
Second Section by
Julie Schuder Councilwoman AATC
For The Antelope Acres Town Council

In light of recent developments as concerns Fugitive Soil/Blowing Dust as occurred during the windy season of 2013, particularly from March through the end of May there are grave concerns about the contribution of this facility, in conjunction with other facilities in the neighborhood, including the very largest facility in that general area, which is Southern California Edison, that the cumulative effects are already devastating, and overwhelming and any further construction of facilities will only add to the very large, serious fugitive soil problem that our area now faces. 1

We feel these problems need to be addressed before the establishment of any further solar facility projects are approved.

The project site is situated on land that has a typical lack of diversity of flora and fauna. The following excerpt from the MND pg. 4-26 explains what and why. Italics and bold print by Robert Kerekes. 2

Wildlife

Although the Project site is undeveloped open space, a relatively low level of wildlife diversity is present due to the singular type of habitat found across the Project site. *The site was previously disturbed, so much of the original habitat was cleared. Further, the Project site is bound by the SCE TRTP corridor* on the western and southern edges and 110th Street West along the eastern edge, resulting in increase edge effects (e.g., higher occurrence of invasive species, fires, and wildlife/human interactions) in these areas on the perimeter of the Project site. ***The transmission line corridor to the Antelope Substation along West Avenue J consists mainly of ruderal and disturbed areas as a result of the existing infrastructure.*** Based on initial site visits by BonTerra Consulting's biologists and their experience and familiarity with the Project site and vicinity, it was determined that focused surveys for the western burrowing owl (*Athene cunicularia*) and the Swainson's hawk (*Buteo swainsoni*) were necessary.

To paraphrase: *site previously disturbed...much of original habitat cleared.....bound by SCE TRTP corridor.* ***The transmission line corridor to the Antelope Substation along West Avenue J consists mainly of ruderal and disturbed areas as a result of the existing infrastructure.*** That Existing Infrastructure is huge. It is described, by BonTerra Consulting, as mainly ruderal and disturbed. Ruderal means

trashed, a wasteland. That means that all of the surrounding area, under the aegis of Southern California Edison, is of the same ruderal and disturbed condition. Such conditions are the very same ones that have been totally devastated by the winds of 2013. Just to the west, running from west to east and covering a large distance from about 150th Street West, just southeast of the Poppy Preserve entrance, to at least 60th Street West. Five photographs of this plume taken from the site previously sent to Anthony Curzi. Please include those with this report. This long plume reaches its widest where Edison's corridor runs north and south and likewise north and south on the east side of 110th Street West. Areas that had little or no desert brush, desert flora, as has been the case with Edison's infrastructure, and add but more recently abandoned farmland, within the plume, are now barren fields of sand. In some areas almost all of the sand is gone, leaving bare, layers of caliche, or hardpan, a very dense substance that is hard like concrete. It is everywhere.

2 (cont.)

3

We feel that before any more projects are to be developed that this condition of the ruderal landscape that is everywhere on Edison's properties must be addressed with mandatory landscaping requirements of the planting and seeding of drought tolerant, durable natural desert flora, and their continued growth.

Considering the very serious wind conditions of 2013, combined with a two year very severe drought and human denuded land devoid of desert flora, the results of which was severe sand/dust storms such as to cause a traffic pile-up on Rt 14 and

Considering the seriously increased exposure to heavily sand laden air to the inhabitants, both human and otherwise and to the health conditions, such as Valley Fever (on the increase) and respiratory conditions that the inhabitants were exposed to throughout the windy season and

Considering that this project, and others considered for the general area, are and would be on the edge of an already devastating situation and by denuding this project's soil and those of projects to come, that the conditions for further devastation to the area and the inhabitants would be increased.

In addition we would like to include in these considerations the following from page 4-113:

4

c) 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)?

"....viewed in connection with the effects of past projects....." The elephant in the china store is Edison and it's huge infrastructure in that general area. Edison's infrastructure is part and parcel of the renewable energy production facilities all working together for the same objective. As such Edison's projects must be included and they alone are already a huge contributor to the fugitive soil/dust storm conditions. There are currently two other

finished projects in the area, then there is this one and eleven others in line. That just adds more potential for more fugitive soil/dust storm problems.

But what should also be considered are any lands in the general area contributing to the fugitive soil/dust storm conditions and that any projects in the general area, if they would also contribute to the present conditions should not proceed, at this time. A large part of the problem is farmland. This has to be included.

4 (cont.)

Therefore as we are experiencing a severe, two year drought; that the Western Antelope Valley experiences very high seasonal winds; that ruderal lands from past and current projects and farmland have contributed heavily to the current barren soil conditions and to the severe fugitive soil/dust storm conditions during the windy season of 2013.

That we could experience another year of drought and, should that happen, the conditions will become worse.

Even if the drought breaks and we have rains, wonderful, still the current conditions where the soils are now bare will take a long time to recover on their own and they will still contribute to fugitive soil/dust storm conditions.

We therefore contend that all projects that would continue to operate in a manner that would contribute to the current, unhealthy, fugitive soil/dust storm problems be put on hold until such time as the current climatic conditions change.

5

There are other cumulative conditions as regards the release of Greenhouse Gases.

The State and County are both working on reducing the release of, while increasing the capture of Greenhouse Gases. The California State EPA has recently issued recommendations under the title, "*Preparing California for Extreme Heat*", which brings forth some of the same concerns and solutions a part of which is to capture carbon.

Much attention has been paid to the reduction of the release of greenhouse gases by utilizing green renewable electrical energy production. But like any relatively new technology being used very quickly on a mass scale, it isn't quite as it has been presented and has some serious problems.

On pg. 4-54: Climate change may result from natural factors, natural processes, and **human activities that change the composition of the atmosphere and alter the surface and features of the land.**

On pg. 4-55: **4.8.2 PROJECT IMPACTS**

The impact analysis and conclusions in this section apply to both on-site and off-site activities.

a) **Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

This section only takes into account fossil fuel use during the construction phase and also maintenance done over the lifetime of the project. What is missing are the changes to the ground that will cause all barren soil to no longer be a carbon sink but, instead, will re-

6

lease carbon into the atmosphere for the entire operation of the facility, with all likelihood that it continue to do so long after the project is gone.

This is the conclusion of Professor Michael F. Allen, Director Professor of Biology, and Plant Pathology and Microbiology at the University of California, Riverside. In his recent report on Solar Power in the Desert he raises many concerns about the efficacy of building solar facilities in the Mojave Desert.

Go to http://www.basinandrangewatch.org/Michael%20Allen%20paper%20copy.pdf for a copy of Professor Michael F. Allen's article.

A major point he discusses is how desert plants have long root systems and are adapted to the environment, how these desert plants absorb atmospheric carbon and transfer it deeply into the soil where it is absorbed by huge quantities of microorganisms and some of which is transferred into the soil as calcium carbonate.

So at a time when the State and County are looking for ways to diminish the quantity of Green House Gases in the atmosphere, the County is allowing the loss of the ability to sequester carbon over ever increasing areas, cumulative, by the demise of desert flora.

Add that to the figures. And then Professor Allen claims that the bare soil becomes a carbon release zone, emitting carbon for the entire time it is barren of desert flora, but long after.

A layer of Caliche taken on June 7, 2013

Then he goes on to state that there are layers and layers of the substance Caliche, which is richly composed of carbon carbonate. Should the caliche become exposed to the atmosphere it will release an even greater amount of carbon. The world wide deposits of caliche, he states, are about equivalent to the total carbon that currently exists in the atmosphere.

I have seen a lot of caliche now exposed from the loss of soil from many areas, especially Edison's areas. I can ride my bicycle over fields of hardpan (caliche) now where before I could not.

We do not see any reason, logic, or sense in that while attempting to curb the release of Greenhouse Gas Emissions by the reduction of the burning of fossil fuels in the production of electricity, by eliminating, in a cumulative process, large areas of flora and soil that work as a carbon sink, only to turn those areas into carbon release areas, in the production of electricity.

If that were not enough add the effects of having so much barren area such as heavy increases of fugitive soil/dust storms such as to put the health of all living things, down wind, in jeopardy, with increased exposures to Fugitive soil carrying diseases such as Val-

6 (cont.)

ley Fever and various respiratory ailments, and others. 6 (cont.)

We believe that the Fugitive Soil/Dust Storm problem has yet to be solved. Not clearing the land first but leaving flora in the soil as construction proceeds is a useful tool, that will help reduce fugitive soil problems, but not solve them. 7

I have sent photographs of the Tuusso project that is now operating between Avenues H and J at 95th Street West where those very methods were incorporated. As the construction developed more and more soil became exposed to the atmosphere and by the end everything was barren. Susan Tae has photographs of mine showing that and I request they be added to this document. Included in the photographs is one showing a previously existing farmer's windbreak on the west side of the project and a photograph of the barren soil looking due west from the west side of the windbreak. 8

In Canadian Solar's November 2013 "Responses to Stakeholder's Concerns" concerning Fugitive Soil they state, *Based on early discussions with the County the project was designed so that there will be no grading for solar arrays and our Dust Control plan* ***is in compliance with County guidelines and the Board Resolution.*** Italics and bold mine.

But Current County Guidelines for the control of Fugitive Soil/Dust Storms are obviously inadequate. What is needed are windbreaks and ground cover. Neither is required for this project. The County and the Planning Department has not done either one of these requirements because of the use of water, a diminishing resource. However that is not working.

On the following page is a letter from Brett Banks of the Antelope Valley Air Quality Management District (AVAQMD) to Los Angeles County Supervisor Michael Antonovitch in response to the severe fugitive soil problems with Antelope Valley Solar Ranch One (AVSR1). In there he states the need for a change in their landscaping plans to have to add a perimeter "windbreak". 9

Due to the sheer size of the facility to be really effective a number of windbreaks from north to south would also need to be added. But that would have had to be engineered into the project at the beginning.

This project does not have a windbreak and we believe that it should.

The other element that would reduce fugitive soil is ground covers. Early on ground covers were required by County Planning with the added requirement that they be of indigenous plants. I have that list in my possession. So far no ground covers have been required and there is no such requirement on this project.

Meanwhile we have a very egregious fugitive soil/dust storm problem and facilities such as these are contributing to the problem. Until such time as a long term reliable way of fugitive soil solutions, such as viable, living, flora that guarantees long term solutions, are developed, then there should be no further construction of solar facilities. 10

Further, that the damaged areas need to be addressed as to what can be done to hold back the onslaught, and rejuvenate the damaged areas. Something needs to be done for

those most affected by direct results of the most recent fugitive soil/dust storm.

Further, that no development of any kind will be permitted that will reduce the ability of

Antelope Valley Air Quality Management District
43301 Division St., Suite 206
Lancaster, CA 93535-4649

661.723.8070
Fax 661.723.3450

Eldon Heaston, Executive Director
In reply, please refer to AV0512/036

May 15, 2013

Supervisor Michael Antonovich
1113 W. Avenue M-4, Suite A
Palmdale, CA 93551

Subject: Antelope Valley Solar Ranch One Landscaping Plan

The Honorable Supervisor Antonovich:

During the spring of 2013, the Antelope Valley Air Quality Management District (District) has been actively involved regulating the development of the Antelope Valley Solar Ranch One (AVSR1) solar power generation facility by First Solar Corporation. Due to the size of the facility, extremely high winds, lack of winter precipitation and removal of all natural vegetative groundcover, construction of this facility has caused numerous fugitive dust related incidents that have resulted in the District issuing violations. Now that construction of the facility is nearing the end, the District requests that Los Angeles County reassess the approved Landscaping Plan for the facility perimeter. Due to the sheer size of the facility, the District believes more "windbreak" vegetation should be required around the perimeter of the facility to assist reducing the wind velocity across the ground surface under the individual solar arrays, on perimeter roads, firebreak areas and catch basins.

As you know, the Antelope Valley Dustbusters Research Group was formed in 1991 to develop Best Management Practices (BMP) to mitigate wind erosion, reduce blowing dust and improve local air quality. The Dustbuster's BMPs include suggestions for windbreaks and wind barriers that are effective in greatly reducing the wind velocity. The approved Landscaping Plan for the AVSR1 facility does not meet the general recommendations of the Dustbuster's BMPs and as a result, will provide very little help to provide an effective windbreak.

Thank you for the opportunity to provide comment on this important issue. The District looks forward to continuing to work with Los Angeles County and First Solar to develop a long term, sustainable plan to mitigate future fugitive dust issues during the operation of this facility.

If you have any questions regarding the information provided in this letter, please contact me at 661-723-8070 ext. 2 or at bbanks@avaqmd.ca.gov.

Sincerely,

Bret S. Banks
Operations Manager

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Clean Cities Antelope Valley

10 (cont.)

the occupied area to sequester carbon at the normal rate for the local desert environment. Nor should any development be allowed that would create environmental conditions whereby environmental carbon would be released.

Such goes against the principles of renewable energy.

Such goes in the wrong direction as regards the State's and County's new direction as regards responses to climate change, greenhouse gas emissions, preparing for a hotter climate, and sequestration of carbon.

10 (cont.)

As Regards Windbreaks and Their Many Functions

What seems to be missing with regards to windbreaks is just how many functions they perform. It is understandable that the companies would have to do what seems like extra work and so forth but that the County would not require them is not understandable.

- The benefits of seriously reducing fugitive soil problems. A reduction of wind related problems. This by itself is major.
- The benefits of carbon sequestration. Such windbreaks would be of trees that grow quick enough, large enough, are evergreens to work in winter, and are of a nature to also sequester large amounts of carbon. This would also provide the benefits of making sure the carbon sequestration is not diminished, but could be improved thus helping to meet new, oncoming, rules and guidelines regarding GHGs.
- Create cooling areas that help to keep temperatures down. Right now all the barren areas of projects must behave as a heat sink, thus raising temperatures.
- Create a wildlife refuge. Instead of destroying all habitat in the area create some in addition to everything else the windbreak does. Hawks, birds, insects, bees and so forth will hang out in windbreaks. Many predators help control insects and rodents. Natural controls instead of deadly pesticides, which it appears this project intends to use. Why? For what?

11

- ◊ Create roosting areas for migratory birds, of which we have a great many including Swainson's hawks.
- ◊ Create natural nesting areas.
- ◊ Inhibit desertification, which is now in progress, and needs to be addressed.

As Regards Ground Covers and Their Many Functions

- ◊ The roots of ground cover plants, many of which have deep roots, hold the soil together thus greatly inhibiting fugitive soil/dust storm conditions.
- ◊ Ground covers maintain a healthy, living soil and provide decomposing material thus keeping the top soil maintained and viable.
- ◊ They sequester large amounts of carbon from the atmosphere.
- ◊ They maintain a viable environment for desert wildlife.
- ◊ They help to maintain water in the soil.
- ◊ They inhibit desertification.

11 (cont.)

Sincerely,

Robert Kerekes

2.5.2 ANTELOPE ACRES TOWN COUNCIL – KEREKES (AATC-KEREKES)

November 18, 2013

Response AATC-KEREKES-1

Please refer to Topical Response No. 7- Cumulative Impacts.

Regarding the commenter's request to address the existing dust-control issues within the western Antelope Valley prior to allowing any further solar development, the County has determined that this issue is beyond the scope of this Project-specific application.

Response AATC-KEREKES-2

The IS/MND has only defined, through site surveys conducted by qualified biologists discussed in Section 4.4, Biological Resources, the vegetation types present within the Project site boundaries and within the off-site alignment of the Gen-Tie line. The text quoted from the IS/MND stating "the site was previously disturbed, so much of the original habitat was cleared" does not specifically refer to the SCE corridor, but includes clearing associated with historic agricultural and grazing activities on the Project site as well. Additionally, as discussed in Section 4.4.1 of the IS/MND and depicted on Exhibit 4-6, Vegetation Map, the vegetation on the Project site consists of native annual grassland with small patches of native perennial grasses, and is not vegetation mapped as "ruderal".

Response AATC-KEREKES-3

Please refer to Topical Response No. 7- Cumulative Impacts.

The photographs have been reviewed and considered in the preparation of this Response to Comments document.

Regarding the commenter's request to address landscaping requirements on SCE's properties, the County has determined that this issue is beyond the scope of this Project-specific application.

Response AATC-KEREKES-4

Please refer to Topical Response No. 7, Cumulative Impacts; Topical Response No. 4, Dust Control Plan; and Topical Response No. 6, Valley Fever.

Response AATC-KEREKES-5

Please refer to Topical Response No. 4, Dust Control Plan.

Regarding the commenter's request to address the existing dust-control issues within the western Antelope Valley prior to allowing any further solar development, the County has determined that this issue is beyond the scope of this Project-specific application.

Response AATC-KEREKES-6

The comment purports that the IS/MND (1) fails to account for reducing the areas of the Project site that may function as an existing carbon sink; (2) fails to account for disturbed soil that may become a source of carbon emissions; and (3) implies that, because the greenhouse gas

(GHG) emissions from disturbed soil would continue for many years after the solar plant is decommissioned, the GHG emission reductions resulting from solar generation of electricity would be offset by the loss of carbon sink and creation of soil-based carbon emissions.

The referenced source for the comments is an article entitled "Solar Power in the Desert: Are the current large-scale solar developments really improving California's environment?" authored by Michael F. Allen and Alan McHughen of the University of California, Riverside. In the part of the Allen-McHughen article addressing carbon sequestration, carbon storage is attributed to Microphyll woodlands, with legume trees as the dominant plants. The storage capability is attributed to these deep-rooted plants whereby carbon dioxide (CO_2) is absorbed from the atmosphere with some of the carbon-forming calcium carbonate, also known as caliche, in the soil. However, the Project site does not have Microphyll woodlands or legume trees. As discussed in Section 4.4.1 of the IS/MND and depicted on Exhibit 4-6, Vegetation Map, the vegetation on the Project site consists of native annual grassland with small patches of native perennial grasses, none with deep roots.

In the part of the Allen-McHughen article addressing release of carbon from the soil, it is stated that, "Our deserts have large amounts of CO_2, stored as caliche" and "Carbon in caliche may in fact be released, especially when vegetation and soils are disturbed". The article also states that, ". . .vegetation recovery following disturbance for developing desert lands can also take a century or more". Although the article states, in bold type, that "The magnitude of this carbon storage process (by plants) . . . remains unknown for our California deserts", a value of 50 grams of carbon per square meter per year ($g/m^2/yr$) is used for a quantitative example. In this same quantitative example, a value of 150 $g/m^2/yr$ is used for carbon emissions from disturbance of caliche. Thus, removal of carbon-storing vegetation and disturbance of soil is considered in the article's example as effectively resulting in GHG emissions of 200 $g/m^2/yr$.

Applying this estimate to the proposed Project's planned disturbance of 31.15 acres (Table 3-2 on page 3-10 of the IS/MND) assumes as a worst case that all 31.15 acres contains carbon-storing plants in caliche soil and results in an estimated GHG deficit (loss of carbon storage plus soil generation) of 27.80 tons per year. This number may be compared with the estimated net benefit of reducing global GHG emissions by 9,781 tons per year (page 4-56 of the IS/MND). Thus, the worst case of GHG impacts from loss of plant storage and emissions from disturbed soil would result in a reduction in GHG emissions by 9,753.2 tons per year (a 0.28 percent reduction beyond what was assessed in the IS/MND, which is a negligible difference. There would be no change to the conclusion that GHG emissions would not be cumulatively considerable and the impact would be less than significant.

Decommissioning of the proposed Project would require restoration of the disturbed areas to existing conditions, thereby restoring plants with carbon storage capacity and reducing or eliminating carbon generation from the disturbed caliche. If, as implied in the Allen-McHughen article, restoration would take 100 years and the average GHG deficit would be half of the worst case maximum, then there would be a GHG deficit of approximately 1,388 tons, which would be less than 1 percent of the GHG emissions benefit over a 20-year plant lifetime. There would be no change to the conclusion that GHG emissions would not be cumulatively considerable and the impact would be less than significant.

Response AATC-KEREKES-7

Regarding the Project's minimized grading, the IS/MND states that the Project has been designed to maintain the existing vegetation and to minimize disturbed areas by keeping grading and ground disturbance to a minimum. As discussed on page 3-8 of the IS/MND, because the terrain on the Project site is generally flat, grading and ground disturbance for the

Project would be minimal and would be primarily limited to access roads and retention basins, but would also include the Project Substation, inverter pads, water tank pads, and trail areas. The solar arrays would be installed using pile-driving techniques, rather than grading, to minimize soil disturbance. The commenter is correct that these grading minimization techniques would not eliminate fugitive dust problems, hence the need for additional measures, including but not limited to AQ MM-1 regarding preparation of a fugitive dust plan and revised MM CML-2 regarding completion of a Construction Staging Plan (CSP) and, if necessary, a Revegetation Plan, subject to review and approval to the County.

Response AATC-KEREKES-8

The TUUSSO project located at Avenue H and 95th Street is located within the jurisdiction of the City of Lancaster and is subject to different Lead Agency oversight and a different Mitigation Monitoring and Reporting Program (MMRP) with different mitigation requirements. The proposed Project is subject to the mitigation requirements set forth in the IS/MND and associated MMRP (see Section 3.0), which have been developed to the satisfaction of the County of Los Angeles Department of Regional Planning, Department of Parks and Recreation, Department of Public Health, Fire Department, and Department of Public Works.

Response AATC-KEREKES-9

Please refer to Topical Response No. 5, Vegetative Windbreaks.

Regarding the request for "ground cover" as a desired means of dust control, this too would require a permanent source of irrigation water over the life of the Project, as the commenter suggests. Revised MM CML-2 requires the preparation of an approved Revegetation Plan that will detail steps proposed for the restoration of disturbed areas in the event that the as-built plan reveals the need for restoration after construction. Restoration performance goals shall be based upon the quality of the on-site vegetation at the time of the CUP approval. The Revegetation Plan shall include a five-year annual reporting program to document the site's recovery towards these expected criteria, and shall include provisions for adaptive management contingencies if adequate revegetation has not occurred within a three-year period from energization. Therefore, although irrigated groundcover is not required, the Project Applicant is required to ensure vegetative restoration of the site after construction.

Regarding the commenter's request to change the County of Los Angeles guidelines and landscaping requirements to require the installation of windbreaks and ground cover, as echoed in the AVAQMD letter dated May 15, 2013, the County has determined that this issue is beyond the scope of this Project-specific application.

Response AATC-KEREKES-10

Please refer to Topical Response No. 7, Cumulative Impacts, and Topical Response No. 5, Vegetative Windbreaks.

Additionally, as the commenter points out, the Antelope Valley Air Quality Management District (AVAQMD) is well aware of the community concerns with fugitive dust and will apply this knowledge to their review of the Dust Control Plan prepared by the Project Applicant in compliance with AVAQMD's Rule 403, Fugitive Dust.

Regarding the commenter's request to address the existing dust-control issues within the western Antelope Valley prior to allowing any further solar development, the County has determined that this issue is beyond the scope of this Project-specific application.

Regarding greenhouse gas emissions and carbon sequestration, please see Response AATC-KEREKES-6

Response AATC-KEREKES-11

Please refer to Topical Response No. 5, Vegetative Windbreaks.

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Second Section by
Julie Schuder Councilwoman AATC
For The Antelope Acres Town Council

AATC-Schuder

Mr. Anthony Curzi

Zoning Permits North Section

Los Angeles County Department of Regional Planning

West Temple Street

Los Angeles, CA 90012

RE: Initial Study/MND - West Antelope Solar Energy Project

Dear Mr. Curzi,

My name is Julie Schuder. I am an Antelope Acres resident and a member of the Antelope Acres Town Council. I have reviewed the MND for the West Antelope Solar Energy Project and have several areas of concern. I am writing this letter on behalf of myself and many of my neighbors and fellow Los Angeles County residents, who share these concerns. We would like to thank you in advance for making the health and safety of Los Angeles County residents a priority when making determinations related to construction practices in Los Angeles County.

"Theoretically, the primary purpose of zoning is to segregate uses that are thought to be incompatible. In practice, zoning is used to prevent new development from interfering with existing residents or businesses and to preserve the "character" of a community." -Wikipedia

Zoning and planning laws were and should still be created and upheld with the basic purpose of protecting the county's residents. We depend on you at Los Angeles County to make our safety your priority when considering the approval of constructing utility-scale renewable energy facilities in close proximity to our homes. Please consider this basic request as you review our areas of concern, detailed below.

Sections 3.1.1 and 3.1.3, and Table 4-13 address the location and surrounding land uses. It is noted that the site is located "4.5 miles west of the nearest developed subdivision within the City of Lancaster", that it is largely surrounded by "undeveloped open space" or "very sparse rural residential", and that "the nearest residential property is located approximately 700 feet east of the Project site". It is our strong belief that Los Angeles County officials must protect the health, safety, and property values of its' residents by establishing and enforcing setbacks from existing habitable structures and between utility-scale renewable energy facilities. We depend on County zoning codes to keep industrial areas from moving in next to our homes. Please consider setbacks of 1/2 mile from any existing habitable structure, and at least 1 mile from any other utility-scale

1

renewable energy facility. 1 (cont.)

Regarding Landscaping and Landscape Irrigation, it is stated on the report that the Landscape Plan includes "drought-tolerant vegetation along portions of the exterior of the perimeter fencing to obscure/screen views", but that "no long-term irrigation infrastructure is proposed". After reviewing the preliminary Landscape Plan, I didn't see trees to be planted around the perimeter as a wind break, which is crucial in mitigating fugitive dust. After reviewing *Landscape Plants for the California High Desert* (put out by local agencies), and the City of Lancaster's recommendations in *A Guide to High Desert Landscaping*, I could not find any recommendation that no water at all be applied after plants listed in the Landscape Plan are established, but instead found that ongoing periodic watering is necessary after the plants are established. Please consider requiring a Landscape Plan that has been approved by an outside agency such as Dustbusters, which includes windbreak vegetation and a long-term irrigation infrastructure. 2

Regarding Fire Suppression and Safety, it is noted that "all vegetation would be trimmed to a maximum height of six inches", but there is no measure in place to keep the existing vegetation within the boundaries of the solar array trimmed to a maximum height of six inches after construction is completed. Please consider adding a requirement to mow periodically after construction is complete. 3

Regarding Dust and Erosion Control, the "minimal grading and ground disturbance" section details plans to perform the minimum amount of grading and disturb the minimum amount of existing vegetation to construct the project. Later on page 4-117, the following conflicting statement explains the most basic difficulties with that claim: "Although the Project site would be subjected to minimal grading, the installation of the arrays would still require the use of vehicles, intense foot traffic, and the possible use of dust palliatives, all of which could result in a decreased potential for vegetative recovery through changes in soil structure and trampling of vegetation. As such, the continued presence of onsite vegetation within the fenced area after construction is key to ensure that cumulative impacts will be less than significant. There is not a plan in place to preserve the native landscape under the panels, and it is our opinion that the existing vegetation will be dead when construction is complete. This section also details plans for water application, soil binders, etc. These plans have failed miserably in the past, and they are bound to fail again. There is no provision for windbreak vegetation, furrowing, or berms, to be used for dust and erosion control. Please consider rethinking the dust and erosion control plan, work with an outside agency such as Dustbusters, to devise a plan that has a chance of success, instead of replaying the disaster that we lived through last year. Please consider a plan to replant with native species, and implement an ongoing irrigation infrastructure to decrease fugitive dust. Please also consider not allowing any large scale construction project to work during our extremely windy season, during Feb, Mar, April, May or June. All work should be complete and soil stabilized before February of any year. 4

The sections that addresses Construction Phasing and Scheduling detail plans to halt grading activities and increase watering during windy periods, and states that earth-moving activities shall be scheduled during winter months, in hope that rainfall would assist with mitigation of fugitive dust. Construction is scheduled for the last quarter of this year and the first two quarters of 2014. Antelope Valley's windiest season falls from February through June. 100% of the serious wind events that created dangerous sand storms last year occurred in the spring. It was proven that neither halting activities nor increased watering mitigated fugitive dust from AVSR1. Instead, the water and palliatives blew away with the soil. Please consider the following: requiring that all construction activities take place between July and January, a provision that would require the restabi- 5

lization of the soil within a certain timeframe after grading or being otherwise disturbed (to be completed before the beginning of the windy season [Feb 1]), a provision to maintain areas that have been disturbed (graded or not) after construction, and requiring that all such plans be approved by specialists who are employed by an outside agency.

5 (cont.)

Regarding Water Application and monitoring, it is stated that the project "shall apply water to the construction site as necessary to control fugitive dust". It is stated that "watering is increased to four times a day if there is evidence of visible wind-driven fugitive dust" and that "The CMM is to promptly implement additional dust plume reduction measures as necessary", but that those measures only include increased watering, application of palliatives, and scaled back or ceased construction activities. The simple fact is that the application of water and palliatives during high wind events proves fruitless, as it simply blows away. It does not land on the soil or assist in keeping it in place. This fact seems to be common sense. This process failed miserably at AVSR1, and it will not help in this case either. Antelope Valley residents know that Los Angeles County officials are aware of the fact that this plan has previously failed. Allowing another builder to employe the same practices would put residents' health and safety at risk. Please consider the following; requiring that construction be rescheduled to take place outside of the windy season, to protect the health and safety of Los Angeles County residents (such scheduling change may benefit the project by also saving water), require a plan to maintain areas that have been disturbed (graded or not) after construction, and employ an outside agency such as Dustbusters, to devise a realistic plan for fugitive soil during and after construction.

6

The report states that "Soil Binders/Wood Mulch would be applied as necessary". We do not feel that "as necessary" is sufficient in this instance, and that the use should not be up for interpretation, but that the specific requirements should be clearly defined and be proven effective and available before the project is approved. Please consider specifying conditions under which soil binders and wood mulch are to be applied, the proper process and time to apply, which soil binders are to be used, amount, frequency, availability of mulch, where the soil binders/wood mulch is to come from, etc.

7

Regarding Construction Water Demands, we feel that the numbers are extremely low for three reasons; because the project is scheduled for our windy season, because there is no water delegated for the ongoing periodic watering that is necessary to keep landscaping in place, and because there is no windbreak vegetation listed in the Landscape Plan. If construction will take place during our windy season, there must be a provision added for days where construction is halted due to 25 mph + winds. Shutting down operations due to high winds is to be expected, thus effecting the construction schedule and increasing water demands. Los Angeles County must know how many days AVSR1 was shut down last spring due to high winds. Please consider doing research and making necessary modifications to account for expected delays.

8

We have serious concerns regarding Air Quality as related to this Project and the cumulative effect of the 11 known solar energy projects that are currently proposed within a 3-mile radius of the proposed project and the possibility that construction activity will overlap. It is our opinion that this Project will be unable to comply with AVAQMD Rule 403 if construction takes place during the windy season. The Dust Control Plan is inadequate, similar plans having previously failed. Please consider requiring all construction to take place outside of our windiest season.

9

Regarding Geology and Soils, it is stated that the Project will have a less than significant impact on soil erosion or the loss of topsoil. The soil in the Antelope Valley was described as "HIGHLY ERODIBLE" by the FDA over 50 years ago. We are in a severe draught, and are experience extremely high winds. Disturbing the soil on this property, even with minimal grading, if following the same procedures that have been proven unsuccessful, will definitely result in the loss of topsoil. Please consider requiring all construction activity to take place outside of our windiest season, and that mitigation measures be approved by independent specialists who are not employed by the County or the builder. 10

We're simply asking you at Los Angeles County to prove that the health and safety of EVERY resident is your first priority. Please show us that the County values each resident's life equally, even those of us who live in rural areas. We chose to live in rural Los Angeles County and now depend on your support, to live our lives free of unnecessary dangers due to unsafe building practices. Before approving the Project, please consider the cumulative effects of the projects as a whole, and the effect that it will have on residents. You are our only line of defense, and your responsibility to protect residents can not be taken lightly. 11

Thank you for your time and consideration in this matter. Please call me any time at 530-740-3980 to discuss.

Sincerely,

Julie Schuder

2.5.3 ANTELOPE ACRES TOWN COUNCIL – SCHUDER (AATC-SCHUDER)

November 18, 2013

Response AATC-SCHUDER-1

This comment is noted and will be included in the public record for the proposed Project. Regarding the commenter's request to establish setbacks between habitable structures and renewable energy facilities, the County has determined that this issue is beyond the scope of this Project-specific application.

Response AATC-SCHUDER-2

Please refer to Topical Response No. 5, Vegetative Windbreak.

Additionally, the fact that the Project does not incorporate a long-term irrigation system is not directly related to the County's Drought-Tolerant Landscaping requirements (Section 22.52.2200 et. seq. of the County Code), but is related to the County's concerns related to overdrafting the Antelope Valley Groundwater Basin and ongoing Adjudication proceedings. Therefore, the County requires that Project site watering during construction utilize water obtained from commercial water sources outside the Basin, as discussed on page 4-109 of the IS/MND.

Response AATC-SCHUDER-3

The sentence on page 3-7 of the Draft IS/MND preceding the quote cited in this comment states, "Combustible vegetation on and around the Project boundary would be managed through fuel modification in accordance with the Fire Code or as directed by the Fire Official". Therefore, no measure (assumed to refer to a mitigation measure) is required to maintain the fire safety of the site, by periodic mowing or other means, because Fuel Modification requirements in the County are required under Title 32, Fire Code, of the County Code. The trimming of vegetation to a height of six inches at the completion of the construction period is specified in Section 3.2, Project Description, as an action of the Project to be assessed in the environmental analysis provided in Section 4.0.

Response AATC-SCHUDER-4

Please refer to Topical Response No. 2, Cumulative Impacts; Topical Response No. 4, Dust Control Plan; Topical Response No. 5, Vegetative Windbreak; and Topical Response No. 7, Cumulative Impacts.

The statement referred to under the header of "Dust and Erosion Control" on page 3-10 of the Draft IS/MND that grading activity and ground disturbance would be minimized does not mean that grading and other ground disturbance would not occur, but that it would be constrained as much as possible. This statement remains accurate. The sentence cited from page 4-117 of the Draft IS/MND, from the analysis of cumulative biological resource impacts, pertains to the quality of the soil conditions subsequent to construction activity and not the extent of ground disturbance. It discloses that other forms of ground disturbance beyond the limits of the minimized grading "could result" in a decreased potential for vegetative recovery. This statement acknowledges a worst-case scenario as the basis for potential cumulative biological resource impacts, and does not conflict with the aforementioned statement.

The assertion that there is "not a plan in place to preserve the native landscape under the panels…" is correct, but it does not acknowledge that a plan is required to be in place prior to the Project moving forward. In the event that the as-built plan reveals the need for restoration after construction, revised MM CML-2 requires the preparation of an approved Revegetation Plan that will detail steps proposed for the restoration of disturbed areas. Restoration performance goals shall be based upon the quality of the on-site vegetation at the time of the CUP approval. The Revegetation Plan shall include a five-year annual reporting program to document the site's recovery towards these expected criteria, and shall include provisions for adaptive management contingencies if adequate revegetation has not occurred within a three-year period from energization. Regarding the effectiveness of erosion-/dust-control measures, the proposed Project cannot be held responsible for how other solar projects in the Antelope Valley were constructed or are being operated.

Response AATC-SCHUDER-5

Please refer to Topical Response No. 2, Cumulative Impacts, and Topical Response No. 4, Dust Control Plan.

Regarding the commenter's request to prohibit construction activities between July and January, the County has determined that this issue is beyond the scope of this Project-specific application.

Response AATC-SCHUDER-6

Please refer to Topical Response No. 4, Dust Control Plan.

Response AATC-SCHUDER-7

Please refer to Topical Response No. 4, Dust Control Plan.

In the context of MM AQ-1, "as necessary" means to meet the performance standard of AVAQMD's Rule 403 as per the Dust Control Plan, which requires that fugitive dust shall not be allowed to be visible in the atmosphere beyond the property line of the emission source. Therefore, the frequency of applying any one dust-control measure or a combination of measures will be determined on a daily basis in consideration of meteorological conditions in the area during the construction period.

Response AATC-SCHUDER-8

As stated in Table 3-2 of the IS/MND, approximately 23.5 acres (77.4 percent) of the total disturbed acreage on the Project site (i.e., 30.36 acres) is due to implementation of access roads. As discussed on page 3-6 of the IS/MND, these internal roads, once constructed, are subjected to erosion-control methods, such as application of a soil binder or laying of aggregate. The soil binder would be reapplied annually or as needed to ensure the continued integrity and dust control of the access roads and to avoid conflict with AVAQMD's Rule 403, which states that fugitive dust shall not be allowed to be visible in the atmosphere beyond the property line of the emission source.

As such, the assumptions for water use set forth in Table 3-3 of the IS/MND are conservative. As stated, only three acres of ground disturbance would occur at any one time, and would be subject to daily watering as-needed. A total of 100,000 gallons of water per day is available for this use over the entire 6-month construction period, which is based on 20 acres requiring irrigation. Areas of disturbance (excluding the three acres of active grading and any other areas

previously disturbed but not yet treated) would be subject to soil binders and/or other erosion-control methods immediately upon completion of the grading activities, and those treated areas would not require daily watering. Therefore, this difference between the conservative assumption of 20 acres of disturbance daily for all 6 months, in comparison to the anticipated 3 acres of daily disturbance, ensures that the assumptions are conservative and allow for delays in construction, if required.

Response AATC-SCHUDER-9

Please refer to Topical Response No. 2, Cumulative Impacts, and Topical Response No. 4, Dust Control Plan.

Regarding the commenter's request to prohibit construction activities between July and January, the County has determined that this issue is beyond the scope of this Project-specific application.

Response AATC-SCHUDER-10

The finding of a less than significant impact related to erosion or loss of topsoil does not mean there will be zero erosion/loss of topsoil, but that this will not be substantial (per the CEQA Appendix G required analysis). This finding remains accurate. Regarding the comment which requests that "measures be approved by independent specialists who are not employed by the County or the builder", the County and AVAQMD may take this under consideration as a potential. The precise measures in the Dust Control Plan to be applied to the Project, which was neither available nor assessed as part of the Draft IS/MND, will be approved by the County and AVAQMD.

Regarding the commenter's request to prohibit construction activities between July and January, the County has determined that this issue is beyond the scope of this Project-specific application.

Response AATC-SCHUDER-11

This comment is noted and will be included in the public record for the proposed Project.

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CCWAV

Concerned Citizens of the Western Antelope Valley
Susan Zahnter, Member
P O Box 786
Lake Hughes, CA 93532

20 November 2013

SENT VIA EMAIL

Mr. Anthony Curzi
Los Angeles County Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, CA 90012

RE: West Antelope Solar Project, R2012-01589-(5) / CUP 201200086 / ENV 201200158

Dear Mr. Curzi,

As an Antelope Valley resident and member of Concerned Citizens of the Western Antelope Valley, I would like to respond to the Mitigated Negative Declaration (MND) for the above referenced project. I have ongoing concerns regarding the adverse effects of utility-scale renewable energy projects on rural communities and residents' health; adverse effects on wildlife; and adverse effects on viewshed, that have, so far, evaded adequate solutions, are easily ascertained by poor results evidenced by current projects, in spite of adhering to minimum requirements laid out in conditional use permits resulting from MNDs and Environmental Impact Reviews (EIR). How are we to expect this document's mitgations to satisfy significant impacts to rural communities? I maintain the Initial Study is flawed. According to California Environmental Quality Act Guidelines, potentially significant impacts must be mitigated to a less than significant level. It seems clear after experience with other solar projects that impacts may not easily be mitigated to a level that poses no threat to the health and safety of residents, the natural environment, including viewshed. 1

I would like to first comment on the difficulty in finding information for West Antelope Solar Project on the Los Angeles County Regional Planning Website and its pages associated with Renewable Energy. The Notice of Intent indicates a link (http://planning.lacounty.gov/) which then requires a search for Renewable Energy. Fine. A search of the site via the project name "West Antelope Solar Project" reveals 108 pages, containing 1616 results, none that pertain to this project. The Renewable Energy pages concerning case information does not list the project, even after my notification to Regional Planning (RP) regarding lack of available documents. A search (November 18th) for "R2012-01589-(5)" found 1676 results, none relevant; another search for "Project No R 2012-0189- (5)" found 2959 results and no link to Project pages. A Google search yielded results and the project was found. It would be easy to conclude that the thirty day review period without easy public access to documents equates to obfuscation. At the very least, links to case information should be supplied by both project name and project number and easily accessed by any search on the RP website; and an additional thirty day review period should commence from the date information has been properly placed.. Also noted —the obscure website publication of case information is October 17th, a full three weeks after the the notice was published in the Antelope Valley Press (although within the thirty day notice period). Additionally, letters from public agencies, groups, and individuals should be published as they are received. I was personally supplied with a few documents from public entities, but only when I asked, so, no other member of the public has had access to this information. 2

As previously mentioned, rural communities interspersed within large tracts of agriculturally zoned land have borne the brunt of utility-scale renewable energy projects, and concomitant undesirable effects. The Antelope Valley Areawide Plan 1986 (AVAP), discusses the preservation of rural communities, stating: "Scattered throughout the Antelope Valley are a wide variety of very low density, rural villages which are worthy of protection. Each is uniquely identifiable from its surroundings. Their residents express a sense of community pride and local identity. . . it is important to sustain these areas as unique, low-density "living environments" " (AVAP 1986, Community Recognition, Section III-1). No longer are rural communities unique "living environments" protected by the General Plan (GP) and the AVAP. Communities are made of people, not industrial-scale solar installations faking as farms growing "green energy." 3

Our "unique" communities are at risk from the proliferation of solar projects covering thousands of acres which contribute to the uncontrolled (despite landscape, grading, and soil treatment plans approved by RP, and AVAQMD) deposition of fugitive dust into the air during wind events that occur almost daily. This puts residents at risk for respiratory disease, such as dreaded valley fever—for which there is no cure, increased asthma, and difficulties for those with chronic obstructive pulmonary disease. Policy statements in the AVAP seek to "Promote air quality that is compatible with health, well-being, and enjoyment of life. The public nuisance, property and vegetative damage, and deterioration of aesthetic qualities that result from air pollution contaminants should be prevented to the greatest degree possible"(Policy Statements, Natural Resources, V-17, Number 140). So, how compatible are industrial-scale solar projects, and their inability to prevent fugitive dust, according to this RP policy?

As of yet, no dust control measures have adequately addressed this huge problem, and sounds like a potential significant impact that cannot be mitigated to less than significant. A response letter, dated June 27th, from City of Palmdale's Planning Director Richard Kite regarding the Initial Study, says, "With regards to air quality, the City does not believe that stating the project will comply with the Antelope Valley (AV) Air Quality Management District (AQMD) District Rule 403 (Fugitive Dust) is sufficient to abate potential impacts of PM_{10}. Not only that, but Bret Banks, Director of the AVAQMD has says in his letter to RP, July 1st, that "successful fugitive dust control and site stabilization would result in maintaining vegetation to the highest extent possible. Re-vegetation in desert environments is extremely difficult with 80 percent failure rates seen as typical, even with supplemental irrigation. Project areas which retain vegetative ground cover may achieve stabilization without implementing reseeding efforts." This may well be impossible, in spite of the MND indicating only vehicles with tires would be allowed on the project site, and vegetation would be preserved. Attached photographs show tire tracks currently on project property that have destroyed vegetation. So, it appears the mitigation measure intended to preserve vegetation may be in question, and there is no alternative discussed in the MND. 4

Landscape plans list only perimeter vegetation on the east and north edges. Windbreak trees would be required on the western boundary, and any vegetation will take more than three years of irrigation to establish use for dispersing the force of winds. There is no mitigation measure for the eventuality of failed re-vegetation effort, its low success rate, or the length of time necessary for the growth of windbreak trees. How will dust be adequately controlled for years until the trees reach proper height? Noting the re-vegetation failure rate, how will the decommissioning and restoration at the Project's end be accomplished? Also, since the site is unmanned, it could take hours for a water truck to arrive 5

during a high wind event to quell fugitive dust. Phased earthwork will not matter if vegetation is destroyed during the construction process, and soil stabilization fails, which has been seen to happen. 5 (cont.)

It is further observed the project will destroy wildflower fields on site that help qualify this road as a scenic route in the Scenic Highways Element (SHE) (1974) of the GP, along 110th Street West between Johnson Hill Road and West Avenue I/Lancaster Road. (SHE, Scenic Highway Map System Index, SHA-2, #16, #20). Even though the SHE was not codified, the GP expects proper evaluation of development in designated scenic areas, and includes even "proposed" scenic highways (GP, Scenic Highways, III-54).The Land Use Element details design review for Scenic Highways, in part, stating, "The proposed development should be designed to create a consistent visual relationship with surrounding development with the natural terrain and vegetation," and "structures and landscaping should complement and enhance scenic views" (GP, III-54). Through these statements, one may question the scenic viability of this project, since it will not enhance views due to its large footprint, two acre buildings, solar arrays, drainage basins, transformer buildings, industrial chain-link/barbed wire perimeter fencing, where there is now only open space grasslands and wildflower fields. Furthermore, the GP says, "The project should protect the visual quality of highly scenic areas and views from scenic highways, roads, trails and key vantage points" (GP, Resource Protection, III-72). This would include views from Johnson Road/110th St. West, West Avenue K, and West Avenue I/Lancaster Road near the Antelope Valley Poppy Reserve. Ironically, the project mitigation involving the California Poppy Trail to be built on the eastern boundary of the project, that would propose to provide hikers views of wildflower areas, will destroy the viewshed it seeks to promote. How is that considered mitigation? Please also note that the Antelope Valley Press, in its promotion of the City of Lancaster's Poppy Festival, published an article October 27th, 2013, in its Welcome to the Antelope Valley Magazine, that includes a map of wildflower viewing areas identifying 110th St West as such (see attached). Finally, and perhaps most importantly, the GP in its Land Use Section/Scenic Highways, III-55 states, "Commercial or industrial uses should be conducted entirely within closed buildings, except for restaurants, recreational uses and gasoline service stations." It is apparent that the Project is inconsistent with the scenic highway design standards outlined in the GP, AVAP, and the SHE. 6

The MND maintains few people travel 110th Street West at any given time and "the project site is not near any heavily visited land uses and would not be viewed regularly by the general public" (4.5). This is clearly an unformed statement that should not be taken as fact, as it attempts to soften the scenic impacts of this project. As many as 100,000 people visit the State of California Poppy Reserve and surrounding lands each year, especially during times of exceptional bloom. They also visit other wildflower locations that coincide with scenic highways previously mentioned. At the very least, hundreds of cars pass the location during daily commutes on 110th Street West between Highway 138 and main east/west Avenues D, E, F, G, H, I, J, K, and also from Johnson Hill Road to and from the Lakes Communities, and Santa Clarita. The photo-simulations of viewshed with landscaping shows already grown trees and shrubs and not what the project will look like for several years before those shrubs reach a height that will (partially) shield the project from view (MND Exhibit 4-3B). This photo represents the project simulation from ground level, not from uphill locations to the south, or viewpoints from the Poppy Reserve looking east, or from Lancaster Road looking southeast. The last two viewpoints would not have landscaping or windbreaks, as indicated in in the Landscape Plan. If the trees are only watered for three years, they will die. How will adequate water, beyond the amount obtained by the Project proponents, be supplied, and be supplied beyond the projected twenty year life 7 8

of the project? Other trees around farms under cultivation close by receive regular irrigation and those areas continue to provide windbreaks and habitat for species of special concern and other migratory birds. 8 (cont.)

This leads to the MND's interpretation of the biological value of the project area pertaining to Swainson's hawk. The assertion that the project contains poor quality foraging area for the Swainson's hawk appears to be false. Excerpts from the "Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California," submitted to the Desert Renewable Energy Program by the California Energy Commission and Department of Fish and Game, June 2, 2010 indicate:

> "Renewable energy project development could cause direct, indirect, individual, and cumulative adverse impacts to Swainson's hawks when facility construction and operation areas (such as wind turbines, power plants, solar panels and tower sites, access roads, staging areas, and pulling/splicing locations) occur in areas where hawks are present. Potential impacts include loss of foraging habitat and disruption of breeding activities due to increased dust, noise, and human presence. Direct mortality from vehicle strikes and collisions with wind turbines is also known to occur. Construction disturbance during the breeding season and habitat loss could cause incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment" (2).
>
> Additionally, "A substantial reduction in numbers or habitat of a rare, threatened, or endangered species would be considered a significant impact under CEQA. Potentially significant impacts may result from activities that cause nest abandonment, loss of nest trees, loss of foraging habitat that would reduce nesting success (loss or reduced health or vigor of eggs or young), or direct mortality. Due to the Swainson's hawk's known preference for areas of low vegetation that support abundant prey, such as grasslands or alfalfa fields (Bechard 1982, Babcock 1995), the Department considers conversion of foraging areas to renewable energy power plant facility sites to be habitat loss. For example, solar panel arrays are expected to eliminate most or all foraging potential. Significant habitat loss may result from individual projects and cumulatively, from multiple projects" (2).

9

These two paragraphs indicate the project site is hawk foraging habitat, and appears to be within approximately five miles of a nest occupied in 2010 near Avenue D and 110th Street West described by Element Power Wildflower Green Energy Farm Biological Constraints Analysis and attached map (Appendices, Biota Report, Initial Study, 18, 30). According to the California Department of Fish and Wildlife (CDFW) any nest is considered to be active if occupied once within the last five years, and specifically, "Impacts to suitable habitat or individual birds within a five-mile radius of an active nest will be considered significant and to have the potential to "take" Swainson's hawks as that term is defined in §86 of the Fish and Game Code" (Swainson's Hawk Survey Protocol, 3). This should trigger an EIR and suggested mitigation land to replace habitat of 2:1 acres.

There is no indication in the MND that the CDFW has been consulted regarding mitigation measures required for treatment of Burrowing Owls. Expert evaluation should be conducted due to the presence of potential habitat in the burrows located in the north section of the project and the active burrows 10

along the gen-tie line. Eradication of ground squirrels on site will reduce availability of habitat, and the use of rodenticides, pesticides, and herbicides may eradicate the owls and other raptors near the project site. There is no discussion in the MND regarding the use of such chemicals, thence, no review of potentially deadly poisons to wildlife. Pile-driving equipment may also affect burrows considered potential habitat, and could cause collapse, eliminating possibility of habitation by owls on the project's proposed on site mitigation land. Even though no detection of owls on the north site burrows was found, occupancy of burrowing owl habitat is confirmed at a site when at least one burrowing owl, or its sign at or near a burrow entrance, is observed within the last three years (Staff Report on Burrowing Owl Mitigation, CDFW, 2012,). Since signs can easily be washed away, it would seem prudent to assume that the burrows have been used on the north project boundary area, and treated as "occupied." Additionally, the CDFW Staff Report states "current scientific literature supports the conclusion that mitigation for permanent habitat loss necessitates replacement with an equivalent or greater habitat area for breeding, foraging, wintering, dispersal, presence of burrows, burrow surrogates, presence of fossorial mammal dens, well drained soils, and abundant and available prey within close proximity to the burrow." 10 (cont.)

The ornithological significance of this area has been understated by the MND, which never mentions the designation of this area as an Audubon Important Bird Area (IBA). The description of the Antelope Valley IBA area states:

> The grassland bird community is most impressive in winter, when large numbers of raptors concentrate in the area. Large flocks of Vesper Sparrows, Horned Lark and Mountain Bluebirds also occur here, widely extirpated elsewhere in the Los Angeles area. The agricultural fields, especially alfalfa, are productive year round. Winter brings Mountain Plover, whose flocks are among the last in southern California. After wet winters, nesting grassland species like Northern Harrier linger well into spring, and occasionally even breed. Swainson's Hawk maintains its southernmost breeding outpost in the state here. As this IBA lies in the path of a major spring migrant route for songbirds, these windbreaks can host hundreds of vireos, thrushes and warblers during April and May.

Unfortunately, the MND uses the serious drought conditions of the current moment and excludes the possibility of this area supporting much wildlife as it is described above—during wet years. 11

It is ludicrous to think that the open space in and around solar arrays may be considered suitable for mitigation since they cover the project site and offer no habitat or foraging area for the Swainson's hawk or offer the same for special status species, nor does mitigation land on the perimeter offer buffering from the project itself. It is not replacement land separate from the activities of the operations of the project with equipment and human presence that, obviously, sensitive species avoid. The cumulative loss of lands utilized by common and special status species is considered significant, and the project admittedly "contributes to the general loss and potential habitat for a variety of bird species," and contradictorily states that there will be increased diversity if wildlife using the site if we "disregard[ing] that most of these 'new' species will be generalists that are ubiquitous in the region." How could such a statement offer proof of adequate habitat availability for special status species within the project area? It is also ridiculous to think that the project proponents could purchase land, and just create a smaller project, use the "spare" acreage so they could avoid the expense and difficulty of 12

finding and purchasing suitable identical replacement habitat. Apparently MM CML-1 allows all areas including roads, and area under the solar arrays as "open space" which does nothing to provide suitable habitat for displaced special status species.

12 (cont.)

All in all, the actual mitigation of impacts to rural communities and their unique character goes unanswered. At what point do the thousands of acres of utility-scale solar projects change the "living environments" of our Western Antelope Valley and render communities virtually devoid of the special and common species we enjoy as we are surrounded by industrial development? Planning documents talk much about compatibility in order to protect areas from disturbing effects of improperly placed commercial and industrial developments, but Regional Planning seems to do little in supporting those existing planning goals and objectives that would slow, or even eliminate, the onslaught of so-called "green energy" projects causing serious impact to our communities. Consider, too, the inability of accepted best practices and modern soil stabilizers to contain the fugitive dust that blows from their projects from earth made bare from scraping and tires supposedly "easy on vegetation." Threats to human health like valley fever can niether be ignored nor mitigated easily. Finally, the CDFW protocols recommended mitigation measures and preservation of mitigation land extend beyond what is offered in the MND for significant impacts to wildlife. All of these points represent impacts that cannot be mitigated to less than significant, and would, according to CEQA, recommend an Environmental Impact Review that would more thoroughly attend impacts to communities and their residents, and wildlife as well.

13

Sincerely,

Susan Zahnter

Susan Zahnter
Member, CCWAV

CC: Supervisor Michael Antonovich, Regional Planning Director Richard Bruckner, Planner Mitch Glaser, Planner Thuy Hua

2.5.4 CONCERNED CITIZENS OF THE WESTERN ANTELOPE VALLEY (CCWAV)

November 20, 2013

Response CCWAV-1

Please refer to Topical Response No. 1, Why a Mitigated Negative Declaration Was Prepared and Not an Environmental Impact Report; Topical Response No. 2, Cumulative Impacts; and Topical Response No. 4, Dust Control Plan.

It is noted that a finding of less than significant (including with implementation of mitigation measures) under CEQA is not equivalent to "no threat" to any of the 17 topics presently addressed pursuant to the CEQA Guidelines.

Response CCWAV-2

In compliance with the Section 15072(b) of the State CEQA Guidelines, the Notice of Intent (NOI) was published in the *Antelope Valley Press* and *La Opinión* newspapers and directly mailed to applicable responsible and trustee agencies as well as interested parties that had asked for such notice, including the commenter (Ms. Susan Zahnter) as a representative of the Friends of Antelope Valley Open Space, whose separate comment letter is addressed above. The NOI listed the locations of hard copies of where the Draft IS/MND was available for public review, which included the Lancaster Public Library located approximately 11 miles east of the Project site. Public access to the documents was not obfuscated.

Per the Notice of Intent, a courtesy copy of the document was made available on the Department of Regional Planning website at http://planning.lacounty.gov. A search for the assigned Project number (as indicated on the NOI) yields a link to the document. However, it is not required by CEQA that the document be provided on the internet.

Response CCWAV-3

As stated on page 4-79 of the Draft IS/MND, "Per the Los Angeles County Code, electric generating plants are a conditionally allowed use in the Heavy Agricultural (A-2) zone upon obtaining a Conditional Use Permit (CUP). The Project is also consistent with Los Angeles County's Antelope Valley Areawide Plan Non-Urban 1 land use designation as it meets the definition of a "utility installation" referenced in the listing of non-urban non-residential land uses allowed in remote areas designated Non-Urban 1 (LACDRP 1986)". No General Plan Amendment or zoning change is required for development of the proposed Project.

Response CCWAV-4

Please refer to Topical Response No. 1, Why a Mitigated Negative Declaration Was Prepared and Not an Environmental Impact Report; Topical Response No. 2, Cumulative Impacts; Topical Response No. 4, Dust Control Plan; and Topical Response No. 6, Valley Fever.

As discussed in Response CCWAV-3, the Project complies with land use policies applicable to the site, including the Antelope Valley Areawide Plan.

Response CCWAV-5

Please refer to Topical Response No. 5, Vegetative Windbreak.

Revised MM CML-2 requires the preparation of an approved Revegetation Plan that will detail steps proposed for the restoration of disturbed areas in the event that the as-built plan reveals the need for restoration after construction. Restoration performance goals shall be based upon the quality of the on-site vegetation at the time of the CUP approval. The Revegetation Plan shall include a five-year annual reporting program to document the site's recovery towards these expected criteria, and shall include provisions for adaptive management contingencies if adequate revegetation has not occurred within a three-year period from energization. Therefore, although irrigated groundcover is not required, the Project Applicant is required to ensure vegetative restoration of the site after construction. The complete text of revised MM CML-2 can be found on page 4-122 of the Final IS/MND. The proposed Project cannot be held responsible for how other solar projects in Antelope Valley were designed, constructed, or are being operated. As such, revegetation failure is an assumption that is conclusory and not reflective of the requirements for monitoring of performance standards set forth in MM CML-2.

Response CCWAV-6

Page 4-4 of the Draft IS/MND states:

> There are no officially designated or eligible State scenic highways or vistas in the vicinity of the Project site (Caltrans 2007). A segment of 110th Street West between Lancaster Boulevard/West Avenue I and West Avenue L, located adjacent to the Project site, is identified by the County Scenic Highway Element as a "Second Priority" Scenic Route. Second Priority Scenic Routes are proposed for further study upon completion of all first priority corridor studies (LACDRP 1980). The proposed 2012 Draft General Plan 2035 no longer prioritizes routes for further study, but rather relies on the official State list of Scenic Highways and Corridors (LACDRP 2012b).

Therefore, the Project is not inconsistent with any adopted scenic highway-related policy that is applicable to the Project site.

As stated in MM REC-1 of the IS/MND, the Project shall dedicate and construct a trail along the eastern boundary of the site, adjacent to 110th Street West, for the California Poppy Trail. Buildout of this trail would promote connectivity with regional open spaces, primarily the Antelope Valley California Poppy State Natural Reserve (SNR). The trail must be designed and constructed to the satisfaction of the County and would be dedicated to the Department of Recreation and Parks, who would manage the trail even after decommissioning.

Response CCWAV-7

Please refer to Topical Response No. 5, Vegetative Windbreak.

The sentence on page 4-5 of the Draft IS/MND following the quote cited in this comment states, "Nevertheless, the visual change in character of the Project site from open space to developed solar facilities would be considered a significant impact". Therefore, the cited statement is not utilized for the purpose of substantiating a less than significant impact. Also, it is acknowledged that the Project area experiences a substantial increase in visitors during a portion of the year. However, objectively, the western portion of Lancaster and the surrounding County lands, including the Project site, have a low frequency of regularly occurring public viewers because the site is in a remote and sparsely developed area of the County. This is not equivalent to saying there are no views of the site, and this is not implied. As previously noted, there are no designated or eligible scenic highways in the Project vicinity. It is an accurate statement that the visual simulations of the Project illustrate mature vegetation, which is standard practice as it

shows the visual character during the great majority of the life of the Project. It is also an accurate statement that the visual simulations illustrate views of the Project at ground level on public roadways, as this will be the most frequent, common view experienced by the public. Exhibit 4-4 of the IS/MND does depict all locations that would be visible to/from the Project site. As noted, the western side of the Project site would not have landscaping.

Response CCWAV-8

No additional water supply beyond the 200.96 acre-feet to be provided by Cawelo Water District shown in Table 3-9 of the IS/MND will be required. The successful establishment of vegetation pursuant to the Landscape Plan and the Revegetation Plan will be ensured through the careful selection of plant species appropriate for the region and capable of survival in the western Antelope Valley climate. Regarding plant selection for the proposed Project, the Project's Landscape Plan must be reviewed and approved by the County of Los Angeles Department of Regional Planning and must comply with the County's Drought-Tolerant Landscaping requirements (Section 22.52.2200 et. seq. of the County Code). No water supply will be required beyond the decommissioning of the Project. Therefore, the inquiry as to how additional water will be supplied is not applicable, as there would be no additional water demand.

Response CCWAV-9

The comment refers to the CDFW Survey Protocol and the potential impacts from renewable energy projects on Swainson's hawk in general. The comment also reiterates the statements from the protocol that substantial reduction in numbers or habitat would be potentially significant per CEQA. Please see Responses to CDFW-8, CDFW-9, and CDFW-10 (Section 2.1.10). In addition, the IS/MND impact evaluation set forth in Section 4.4 demonstrates that impacts of the Project are expected to be limited to low quality habitat loss for migrating and non-breeding Swainson's hawks, which does not constitute a significant impact on the regional population of the species.

Response CCWAV-10

The CDFW was provided the document and an opportunity to review the IS/MND prior to public review and chose not to respond. The CDFW did respond during the public review period; CDFW comments and subsequent responses regarding the burrowing owls can be found in Section 2.1.10, CDFW Responses 1 through 6. Regarding the use of herbicides/pesticides, the Project Applicant would not be involved in the long-term maintenance of the Gen-Tie line, which is within the SCE Easement. All vegetation management on the Project site would be handled in compliance with the Project's Landscaping Plan and Revegetation Plan (see revised MM CML-2), which must be executed in compliance with County requirements and standards. Any use of herbicides and/or pesticides, if required by the County, would be in accordance with the manufacturers specifications in accordance with the approved Landscaping Plan and Revegetation Plan restrictions, and would have a less than significant impact on flora and fauna in the Project area.

Response CCWAV-11

Although the Audubon special area of the Antelope Valley is not specifically mentioned because it covers such a large portion of the area, the IS/MND provides a complete analysis per CEQA requirements. While the region may provide resources for many bird species in general, the site does not contain the productive agriculture fields or windbreaks mentioned and is generally poor quality due to lack of diversity. Although common and special status birds may utilize the site to

some degree, the temporary loss of the habitat on the site does not constitute a significant impact to the regional populations of the various bird species mentioned

Response CCWAV-12

The Post-Construction Biological Value of Project Site Memorandum in Appendix C-5 of the IS/MND provides in-depth discussion of the biological value that would be retained by the site. The Memorandum indicates that the Project site would lose value for many resources but that some value would be retained and some value gained. Table 2 in Appendix C-5 describes the potential for special status wildlife species to occur on the site as well as the likelihood for utilization post-Project. This analysis indicates that the post-Project conditions will result in increased value for three species: Swainson's hawk (future potential nesting trees – marginal increased value); burrowing owl (open spaces managed to allow for its occupation); and loggerhead shrike (potential nest sites with increased foraging opportunities). Project implementation will result in lower habitat values for four species: northern harrier; ferruginous hawk; prairie falcon; and long-billed curlew. The overall value of the post-Project conditions will remain approximately the same for the remaining species. The biological value is understandably reduced during the period that the Project is active; therefore, the Project Applicant is required to mitigate at a ratio of 2:1 with preserved land.

Response CCWAV-13

Please refer to Topical Response No. 1, Why a Mitigated Negative Declaration Was Prepared and Not an Environmental Impact Report; Topical Response No. 2, Cumulative Impacts; Topical Response No. 4, Dust Control Plan; and Topical Response No. 6, Valley Fever.

Page 4-79 of the Draft IS/MND states:

> Per the Los Angeles County Code, electric generating plants are a conditionally allowed use in the Heavy Agricultural (A-2-5) zone upon obtaining a Conditional Use Permit (CUP). The Project is also consistent with Los Angeles County's Antelope Valley Areawide Plan Non-Urban 1 land use designation as it meets the definition of a "utility installation" referenced in the listing of non-urban non-residential land uses allowed in remote areas designated Non-Urban 1 (LACDRP 1986).

No General Plan Amendment or zone change is required for development of the proposed Project. Regarding the commenter's remark to slow or eliminate the approval of green energy projects, the County has determined that this is beyond the purview of the Project Applicant to address as it is a federal and State mandate to greatly increase the production of renewable energy facilities.

2.6 INDIVIDUALS

- Judy Watson, November 17, 2013

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WATSON

From: Judy Watson [mailto:j_a_c_1940@yahoo.com]
Sent: Sunday, November 17, 2013 3:54 PM
To: Anthony Curzi; Mitch Glaser
Subject: Candian Solar Project

Nov. 17, 2013

As a member CCWAV, Concerned Citizens of West Antelope Valley, we've been fighting for over two years to save the wildflower fields around the Poppy Reserve. When I look over the desert from atop the mountain behind me, I see AV Solar One's, 2,300 acres, NRG Solar's 800 acres and thousands of new acres from Sun Power Solar, plus millions of panels glaring in the sun. More projects are on the books to destroy thousands of acreage of plant life, poppy fields and desert creatures habitat. Plus the added problem of more blowing dust. Solar Panels produce electricity 6-8 hours a day, when the sun shines, more in summer, less in winter. Hundreds of wind turbines stretched out for miles against the base of the Tehatchipi's, some barely spinning while most sat idle during Oct and Nov. Motors start up frequently, to slowly turn the blades to keep them 'oiled up', using electricity, not producing any. There they sit, hundreds of them, dead in the water. The huge amount of desert being destroyed, the billions of tax dollars spent for these projects, with only 0-5 permanent jobs, for a relatively small amount of electricity produced, somehow the numbers don't add up. Very little 'promised' jobs for the local residents came to pass. These company's brought in their own crews. It did not boost Antelope Valleys economy, whatsoever. Is it really worth the amount of land destroyed? This is for our kids future? They'll have to look at picture books to see what the desert used to look like. Co2 is also destroyed by clearing the land and wiping out vegetation. What do you do with worn out blades, and solar panels that are good for only 15-30 years? Europe, has unrecyclable blades and toxic panels piling up with no where to dispose of them. Why is it this country never learns from other country's mistakes. Green Energy can never replace Oil and Coal in the consumption it is used. They produce power 24/7, plus keep thousands employed. We only need to find a cleaner way to produce it. The other solution is Solar panels on every home, business shopping center, hospital, and government building. Direct power, where it's needed, nothing lost or wasted being transmitted through power lines traveling for miles. By putting solar panels on all existing structures, no new land is destroyed, saving the environment.

1

2

3

Judy Watson
46460 Kings Canyon Rd.
Lancaster, Calif.
93536

2.6.1 JUDY WATSON (WATSON)

November 17, 2013

Response Watson-1

These comments are noted and will be included in the public record for the proposed Project. However, these comments do not raise any environmental issues specific to the proposed Project that CEQA requires be addressed in the IS/MND.

Response Watson-2

As discussed on pages 3-17 and 3-18 of the IS/MND, implementation of the Decommissioning Plan will ensure that the land is returned to pre-Project conditions upon termination of the use of the property as a solar site. Additionally, the Decommissioning Plan will contain provisions to ensure that used materials, including solar panels, are properly recycled.

Response Watson-3

These comments are noted and will be included in the public record for the proposed Project. However, these comments do not raise any environmental issues specific to the proposed Project that CEQA requires be addressed in the IS/MND.

2.7 OTHER

- Lozeau Drury, LLP (Lozeau), November 20, 2013
- Pless Environmental, Inc. (Pless), November 18, 2013
- K. Shawn Smallwood, Ph.D. (Smallwood), November 16, 2013

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BY ELECTRONIC MAIL

November 20, 2013

Anthony Curzi
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, California 90012
acurzi@planning.lacounty.gov

RE: Comments on Initial Study and Mitigated Negative Declaration for West Antelope Solar Energy Project (SCH 2013101055; R2012-01589 / CUP 201200086 / ENV 201200158)

Dear Mr. Curzi:

I am writing on behalf of Laborers International Union of North America, Local Union 300 ("LIUNA" or "LIUNA Local 300"), and its members living in Los Angeles County, including individual Lancaster-area residents Jose Aldaco, Miguel Sebreros, and Anthony Medley (collectively "LIUNA"), to request that the County prepare an environmental impact report ("EIR") for the West Antelope Solar Energy Project ("West Antelope Project"). An EIR is required because substantial evidence exists establishing a "fair argument" that the Project may have adverse environmental impacts. An EIR is required to analyze these impacts and to identify feasible mitigation measures and alternatives. 1

The West Antelope Project is one of many solar projects approved or under review in and around the City of Lancaster. The West Antelope Project will be immediately adjacent to two other pending solar energy projects located immediately south and east of the West Antelope Project's proposed location – the Western Antelope Blue Sky Ranch Project (R2011-00798) and the Plainview Solarworks Project. 2

The MND does not identify the Plainview Solarworks Project. Another three PV projects -- Silver Sun Greenworks (R2011-00801), Antelope Solar Farm (R2011-00377), Antelope Solar Greenworks (R2011-00807), and Theme (R2011-01025) are immediately north of the Project, the Silver Sun Greenworks project only being separated from the Project by a single parcel. The 30-MW Plainview Solarworks 3

Project bordering the West Antelope Project immediately to the east will cover another 254 acres of undeveloped land and, together with the proposed Project, will transform Avenue J from a country road with wide open vistas of the adjacent mountains and fields of burrowing owls and other wildlife, to a two-mile long gauntlet of barbed wire chain link fences and solar panels stretching as far as the eye can see. The fencing in of the country side and replacement with industrial-scale solar farms will extend essentially continuously north and south of the Project as well for several miles. Coupling those unavoidable visual impacts with air pollution and biological resource impacts left unaddressed by the proposed mitigated negative declaration, requires the County to prepare an EIR for the West Antelope Project. 3 (cont.)

These comments are supported by the expert analysis of air quality expert Petra Pless, Ph.D. Dr. Pless's comments are attached hereto as Exhibit A and are incorporated herein in full by reference. These comments are also supported by the expert analysis of wildlife biologist Dr. Shawn Smallwood, Ph.D. Dr. Smallwood's comments are attached hereto as Exhibit B and are incorporated herein in full by reference. These comments are "expert testimony" creating a "fair argument" that the Project may have adverse environmental impacts. In addition, this comment documents the Project's substantial visual impacts on Jose Aldaco, Miguel Sebreros, and Anthony Medley, local residents of Lancaster and members of LIUNA Local 300, who use Avenue J and currently experience views of wildlife, open space, and mountain vistas as they travel through this area. This evidence of those individual's direct aesthetic experience of the Project site and surrounding area also is substantial evidence of a fair argument that the Project may have adverse environmental impacts, requiring the preparation of an EIR. 4

PROJECT DESCRIPTION

The proposed Project consists of the construction and operation of a 20-MW solar PV project on approximately 263 acres immediately west of Lancaster, at 110th Street West and West Avenue J. MND, pp. 3-1 – 3-2. Within the 263-acre Project area, 178.5 acres will be covered by the Project's 1,600 rows of PV panels, as well as a substation, electrical collection system, two 15- to 18-foot tall water tanks, fencing, roads and driveways. *Id.*, pp. 3-3 - 3-8. Much of the habitat within that 178.5-acre area will be covered by PV panels and any remaining vegetation will be regularly mowed for the life of the Project. *Id.*, Exhibit 3-3A & p. 3-9 The Project also includes the construction of a transmission line to the SCE Antelope Substation. *Id.*, p. 3-5. Once constructed, the Project's PV panels will be six- to eight-feet in height. *Id.*, p. 3-3. The entire Project will be surrounded by a six-foot tall chain link fence topped by another foot of barbed wire. *Id.* To construct the Project, construction equipment and trucks will emit as much 330.33 lbs/day of nitrogen oxides ("NOx"). Pless Comments, p. 5. The NOx emissions as well as PM10 emissions from the Project's construction will exceed the Antelope Valley Air Quality Management District's ("AVAQMD") CEQA thresholds of significance by a large margin. *Id.*, pp. 5-7. Once completed, the Project and the five other adjacent and nearby solar projects, will have transformed current open-space into 5

an approximately three-square mile area of industrial solar panels behind barbed wire-topped chain link fences. 5 (cont.)

STANDING

LIUNA Local 300 members, including Messrs. Aldaco, Sebreros, and Medley, enjoy the natural environment of Los Angeles County and the Lancaster area. LIUNA Local 300 members regularly travel through the area where the Project is located and enjoy its wide-open spaces and bountiful wildlife, including burrowing owls, and raptors. LIUNA Local 300 members breathe the air in the vicinity of the Project and are directly affected and concerned about the area's designation as non-attainment by particulate matter and severe non-attainment for ozone pollution. As members of the public, LIUNA Local 300 members possess an ownership interest in public resources present in the regions of and surrounding the Project, including but not limited to raptors and owls occurring there and nearby.

LIUNA represents construction workers and public service employees in many settings, including collective bargaining, seeking employment, training programs, legal rights, job safety, and workplace fairness. LIUNA advocates for programs and policies that promote good jobs and a healthy natural and working environment for workers and their families. An important part of LIUNA's ongoing advocacy involves participating in and, where appropriate, challenging Projects that would result in harmful environmental effects, or the violation of environmental laws, to the detriment of the interests of LIUNA's members. LIUNA strongly supports appropriate development of renewable energy. Renewable energy projects, however, must be carefully sited and designed so as to avoid unnecessary and damaging environmental impacts. They also must receive proper environmental review under CEQA. This is especially true given the recent "gold rush" of solar energy proposals in the southern California region, so graphically demonstrated by the density of solar projects proposed or approved in the Lancaster area. 6

LEGAL BACKGROUND

As the California Supreme Court very recently held, "[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR." *Communities for a Better Environment v. South Coast Air Quality Management Dist. (ConocoPhillips)* (2010) 48 Cal.4th 310, 319-320 ("*CBE v. SCAQMD*"), citing *No Oil, Inc. v. City of Los Angeles*, 13 Cal.3d at 75, 88; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 504–505. "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *Communities for a Better Environment v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 109.

The EIR is the very heart of CEQA. *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1214; *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927. The EIR is an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return." *Bakersfield Citizens*, 124 Cal.App.4th at 1220. The EIR also functions as a "document of accountability," intended to "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." *Laurel Heights Improvements Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 392. The EIR process "protects not only the environment but also informed self-government." *Pocket Protectors*, 124 Cal.App.4th 927.

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." Pub. Resources Code § 21080(d) (emphasis added); see also *Pocket Protectors*, 124 Cal.App.4th at 927. In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR (CEQA Guidelines § 15371), only if there is not even a "fair argument" that the project will have a significant environmental effect. Pub. Resources Code §§ 21100, 21064. Since "[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process," by allowing the agency "to dispense with the duty [to prepare an EIR]," negative declarations are allowed only in cases where "the proposed project will not affect the environment at all." *Citizens of Lake Murray v. San Diego*, 129 Cal.App.3d 436, 440 (1989).

A negative declaration is improper, and an EIR is required, whenever substantial evidence in the record supports a "fair argument" that significant impacts may occur. Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect – even if contrary evidence exists to support the agency's decision. CEQA Guidelines § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 931; *Stanislaus Audubon v. Stanislaus* (1995) 33 Cal.App.4th 144, 150-151 (1995); *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal. App. 4th 1597, 1602. The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. *Pocket Protectors*, 124 Cal.App.4th at 928.

The "fair argument" standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

> This 'fair argument' standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily, public agencies weigh the evidence in the record before them and reach a decision based on a preponderance of the evidence. [Citations]. The fair argument

6 (cont.)

> standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact. The lead agency's decision is thus largely legal rather than factual; it does not resolve conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

Kostka & Zischke, *Practice Under CEQA*, §6.29, pp. 273-274. The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with a ***preference for resolving doubts in favor of environmental review***." *Pocket Protectors*, 124 Cal.App.4th at 928 (emphasis in original).

As a matter of law, "substantial evidence includes . . . expert opinion." Pub. ResourcesCode § 21080(e)(1); CEQA Guidelines § 15064(f)(5). CEQA Guidelines demand that where experts have presented conflicting evidence on the extent of the environmental effects of a project, the agency must consider the environmental effects to be significant and prepare an EIR. CEQA Guidelines § 15064(f)(5); Pub. Resources Code § 21080(e)(1); *Pocket Protectors*, 124 Cal.App.4th at 935. In addition, for certain aesthetic impacts, such as visual impacts, the Courts have recognized that layperson evidence describing direct impacts to their visual experience of a project area is also substantial evidence that may support a fair argument of possible significant impacts. *Ocean View Estates Homeowners Assn., Inc. v. Montecito Water Dist.* (2004) 116 Cal.App.4th 396, 402 ("Opinions that the cover will not be aesthetically pleasing is not the special purview of experts. Personal observations on these nontechnical issues can constitute substantial evidence"). *See also Oro Fino Gold Mining Corp. v. County of El Dorado* (1990) 225 Cal. App. 3d 872, 882.

"Significant environmental effect" is defined very broadly as "a substantial or potentially substantial adverse change in the environment." Pub. Resources Code § 21068; see also Guidelines 15382. An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial." *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 83. In the *Pocket Protectors* case, the court explained how expert opinion and other evidence of impacts is considered. The Court limited agencies and courts to weighing the admissibility of the evidence. *Id.* In the context of reviewing a negative declaration, "neither the lead agency nor a court may 'weigh' conflicting substantial evidence to determine whether an EIR must be prepared in the first instance." *Id.* Where a disagreement arises regarding the validity of a negative declaration, the courts require an EIR. As the *Pocket Protectors* court explained, "It is the function of an EIR, not a negative declaration, to resolve conflicting claims, based on substantial evidence, as to the environmental effects of a project." *Id.* An agency's finding that a project will have no significant environmental impacts will be set aside if there is no support in the record for it. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311.

6 (cont.)

An EIR is required even for a "good" project if there is a "fair argument" that the project may have any adverse impacts. EIRs have been required for a school playground due to anticipated noise impacts (*Eureka Citizens*, 147 Cal.App.4th 357); the construction of residential homes (*Arviv*, 101 Cal.App.4th 1333); a cover to keep pollution out of a reservoir (*Ocean View Estates Homeowners Assn. v. Montecito Water Dist.* (2004) 116 Cal.App.4th 396); a rule banning a deadly refinery chemical (*Ultramar v. SCAQMD* (1993) 17 Cal.App.4th 689); an air pollution regulatory program limiting volatile organic compound emissions (*Dunn-Edwards Corp. v. Bay Area Air Quality Management Dist.* (1992) 9 Cal.App.4th 644)); and countless other "good" projects. The County must prepare an EIR for the Project that strives to make this Project's positive steps toward renewable energy not adversely – and perhaps in the end with proper mitigation positively – effect other resources, especially the already highly polluted air in the Lancaster area and the ever increasing cumulative impacts on burrowing owls, raptors, and other birds. 6 (cont.)

DISCUSSION

A. AN EIR IS REQUIRED BECAUSE THE PROJECT MAY HAVE SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS ON AIR QUALITY, VISUAL IMPACTS, AND BIOLGOCIAL RESOURCES.

The Project may result in significant environmental impacts, including but not limited to 1) direct and cumulative adverse air quality impacts from the Project's emissions of NOx and PM10 during its construction, 2) direct and cumulative adverse impacts to worker and residents' health by exposures to Valley Fever fungal spores, 3) direct and cumulative impacts to special status and other protected avian species, including Swainson's hawks, red-tailed hawks, burrowing owls, ferruginous hawks, and western burrowing owls from habitat loss, direct displacement, collision with PV panels and other Project features, and an inaccurate calculation of the total habitat acres that will become unavailable as a result of the Project, and 4) unmitigated direct and cumulative visual and aesthetic impacts from transforming Avenue J and other country roads from open country to a two-mile stretch of fenced solar PV plants. Each of these impacts and the substantial evidence demonstrating their likelihood are described in detail below. 7

1. Air Quality Impacts.

Dr. Pless identifies a number of serious flaws in the MND's analysis and provides substantial evidence that the Project may have significant adverse impacts on air quality during construction, both from the Project's direct emissions and the cumulative emissions of the numerous adjacent projects the construction of which may overlap with the Project's construction.

a. Numerous assumptions used in the MND's air pollution calculations are not supported by evidence. 8

To begin, the public's review of the MND's air quality assessment is stifled by the failure of the MND to disclose the bases for its numerous assumptions applied in the air pollution computation set forth in Appendix B. MND, App. B ("Air Quality and Greenhouse Gas Worksheets"). Pless Comments, p. 3. Unsupported assumptions include the construction timeline, numbers of equipment and vehicles on-site for each phase of construction, the horsepower of polluting equipment, hours of operation per day, numbers of delivery and haul trucks, roundtrip distances such trucks will have to travel, worker vehicle numbers and distances, water trucks and their distances, and numerous emission factors. *Id*. Without the rationale supporting these assumptions, the public cannot fully review the accuracy of the air quality computations. 8 (cont.)

b. The MND's discussion ignores the daily thresholds of significance promulgated by the local air district.

The most obvious flaw with the MND's analysis is its effort to compare a six-month construction Project to annual significance thresholds adopted by the Antelope Valley Air Quality Management District ("AVAQMD"). Pless Comments, pp. 3-6. The MND acknowledges that the AVAMQD promulgated both annual and daily thresholds of significance for NOx, PM10, and other criteria air pollutants. MND, p. 4-18, Table 4-4. No sooner does the MND acknowledge the daily limits, does it then proceed to make believe they don't exist, exclusively discussing and only applying the annual thresholds. *Id*., p. 4-18 ("[i]t should be noted that because AVAQMD thresholds are presented in tons per year, maximum daily trips are not needed for purposes of estimating emissions and only total annual vehicle trips are considered"). Comparing the emission levels of a six-month long construction project to a full one-year standard is patently misleading. Pless Comments, p. 4. It also is an abuse of discretion because the MND completely ignores the AVAQMD's clear instruction that all projects consider the daily air pollution thresholds to determine the significance of air quality impacts in particular when a project's construction phase is for a period less than one year in duration. 9

The AVAQMD's CEQA Guidelines expressly requires CEQA lead agencies to apply the adopted daily thresholds to address the situation where a project has a construction phase that emits pollutants for less than a year:

> Note that the emission thresholds are given as a daily value and an annual value, so that a multi-phased project (such as a project with a construction phase and a separate operational phase) with phases shorter than one year can be compared to the daily value.

AVAQMD, California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, August 2011, p. 6; (attached as Exhibit C and available at http://www.avaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=2908 ("AVAQMD Guidelines"). The MND is inconsistent with this directive and fails to

compare the Project's construction emissions to the daily thresholds established in the AVAQMD Guidelines. Pless Comments, p. 4. 9 (cont.)

Applying the daily significance thresholds to the Project's construction phases and the emission projections provided by the Project, Dr. Pless calculates the Project's daily emissions of NOx, a potent ozone precursor, as ranging from 268.01 pounds per day ("lbs/day") up to 330.33 lbs/day. Pless Comments, pp. 5-6. These daily emission levels far exceed the AVAQMD's short-term threshold of significance for NOx of 137 lbs/day. *Id.*; AVAMQD Guidelines, p. 7. 10

These figures are based on the unsupported assumptions provided in the MND and Appendix B. However, the assumptions underestimate likely emissions of the Project during construction for several reasons. First, the daily emissions are based on fleet-average emission factors – "individual equipment on site may have much higher emissions." Pless Comments, p. 6. 11 Second, the calculations leave out a number of NOx-emitting equipment included in the Project's application and usually employed to construct solar PV facilities, including welders, pile or vibratory drivers, generator sets, plate compactors, pressure washers, rollers, sweepers/scrubbers, and paving equipment. *Id.* 12 Third, rather than calculate daily emissions based on the highest number of daily truck trips, the MND assumes an average of 50 truck trips per day, underestimating the worst-case daily emission from these sources. *Id.* 13 Fourth, although the Project proposes to utilize 100,000 gallons per day of water for dust suppression, the air pollution calculation only identifies a single truck operating for four hours. *Id.* There is no such thing as a 100,000 gallon water truck. Indeed, the MND elsewhere states that at least five 4,000 gallon trucks working continuously for 10 hours each per day would be necessary to deliver the necessary water. MND, p. 3-11. *See id.* (also estimating that, assuming use of a 6,000-gallon water delivery truck, 17 water truck trips per day would be required). Thus, the MND's calculation underestimates the Project's combustion emissions and the County's reliance upon the MND is an abuse of discretion. 14

In the absence of any other expert thresholds published for the air basin, AVAQMD's thresholds of significance are conclusive levels above which a project will have significant environmental impacts. The California Supreme Court has made clear the substantial importance that air districts' significance thresholds play in providing substantial evidence of significant adverse impacts. *Communities for a Better Environment v. South Coast Air Quality Management Dist.*, 48 Cal.4th at 327 ("As the [South Coast Air Quality Management] District's established significance threshold for NOx is 55 pounds per day, these estimates [of NOx emissions of 201 to 456 pounds per day] constitute substantial evidence supporting a fair argument for a significant adverse impact"). *See also Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 (County applies BAAQMD's "published CEQA quantitative criteria" and "threshold level of cumulative significance"); *Communities for a Better Environment v. California Resources Agency*, 103 Cal.App.4th at 110-111 ("A 'threshold of significance' for a given environmental effect is simply that level at which the lead 15

agency finds the effects of the project to be significant"). And the availability of the AVAMQD's daily significance threshold for NOx is corroborated by Dr. Pless's expert comments, there can be no dispute that substantial evidence exists that the Project's daily emissions of NOx during construction may result in a significant adverse environmental impact.

15 (cont.)

c. There is a fair argument that the Project's emissions of PM10 and PM2.5 during its construction phase may have a significant environmental impact.

Dr. Pless identifies a number of serious shortcomings in the MND's calculation of the Project's particulate matter emissions. Pless Comments, pp. 6-8. Correcting those errors, Dr. Pless recalculates the Project's particulate matter emissions and demonstrates that the Project's emissions will exceed the applicable significance thresholds for PM10 and PM2.5.

16

Dr. Pless points out a number of factors omitted from the MND's PM10 and PM2.5 calculations. Pless Comments, pp. 7-8. These include the MND's failure to account for windblown dust emissions, fugitive dust emissions from vehicles associated with the Project travelling on paved roads, and fugitive dust emissions from dirt piling or material handling. *Id.* As a result, the PM10 and PM2.5 calculations underestimate the actual emissions of these pollutants by the project.

In addition, the MND assumes a soil moisture content of 12 percent for dirt pushing or bulldozing – an entirely unrealistic percentage for the more than 56,000 cubic yards of cut and fill material required for the Project. Pless Comments, p. 7. This would appear to be the moisture content that the County believes can be achieved by the Project's watering efforts. *Id.* That moisture percentage is unrealistic. *Id.* The South Coast Air Quality Management District ("SCAQMD"), which identified the formula used in the MND for estimating PM10 and PM2.5 from dirt pushing and bulldozing, recommends assuming an unmitigated "dry" moisture content of two percent moisture when running its equation. *Id.*; SCAQMD, Fugitive Dust, Table XI-A: Construction and Demolition; http://www.aqmd.gov/ceqa/handbook/mitigation/fugitive/MM_fugitive.html (attached as Exhibit D). Applying that number to the MND's equation results in a projection that the Project will emit 46.3 lbs/day of unmitigated PM10 emissions from dirt pushing or bulldozing alone. Pless Comments, p. 7. To factor in the watering mitigation, SCAQMD recommends a 61 percent control efficiency for watering every 3 hours at disturbed areas within a construction site. *Id.*; SCAQMD, Fugitive Dust, Table XI-A. Dr. Pless applies these SCAQMD recommendations and calculates then PM10 emissions from the project's bulldozing and grading alone will be 18.1 lbs/day. Pless Comments, p. 7. Thus, that PM10 emission source, by itself, exceeds the AVAQMD's daily significance threshold for construction of 15 lbs/day. When combined with all of the other sources of PM10 that will be present during the Project's construction, "emissions would without doubt exceed both daily and annual significance thresholds for construction." *Id.* Dr. Pless's review and calculations are substantial evidence of a

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fair argument that the project may have a significant environmental impact requiring the preparation of an EIR. 17 (cont.)

d. The MND fails to adequately address the Project's cumulative air pollution impacts when considered together with the numerous other solar projects poised for construction in the immediate vicinity.

Los Angeles County in the Project area is designated non-attainment for the state ambient air quality standards for PM10. MND, p. 4-16. The area also is designated as "severe" nonattainment for the federal 1-hour and 8-hour ozone ambient air quality standards, and extreme nonattainment for the state ambient air quality standard. *Id*. As a result, any potentially cumulatively significant emissions from the construction of the Project as well as the numerous other large-scale energy projects in northeast Los Angeles county and the adjacent southern reach of Kern County will result in a worsening of regional air quality. Pless Comment, p. 12. 18

Initially, the MND's cumulative air impacts analysis errs by relying on its improper comparison of the Project's construction impacts only to the AVAQMD's annual significance thresholds for NOx and other pollutants. Pless Comments, p. 4. Noting the Project's emissions are less than the annual thresholds, the MND concludes that "the Project's PM10 and O_3 emissions would not be cumulatively considerable when considered in combination with other proposed projects in the Project vicinity." MND, p. 4-21. On a daily basis, this conclusion is not supported by substantial evidence. Because the Project by itself will exceed daily emissions threshold for NOx, it will be cumulatively considerable. Pless Comments, pp. 4-6. 19

Despite listing eleven other energy projects that it purports to consider, the MND also does not rely on any quantitative assessment of the actual pollutant emissions from any of those projects, even the two projects it identifies directly adjacent to the Project. Pless Comments, p. 12. The MND does not even list the adjacent 30-MW Plainview Solarworks Project. *See* Biological Technical Report, Plainview Solarworks Project (attached as Exhibit E). As Dr. Pless explains:

> Eleven projects were evaluated in the IS/MND for cumulative impacts. Emissions from all eleven projects must be disclosed, to the extent data are available, and summed in an environmental impact report ("EIR"). Results should be compared to thresholds to determine whether the proposed Project is cumulatively significant. The EIR should also identify the construction timetables of all projects. The EIR should quantify and evaluate potential health risk impacts to workers and nearby residents.

Pless Comments, p. 12. Dr. Pless calculates that, even assuming the MND's calculation of NOx emissions of 12 tons per year from the Project is accurate, just one additional 26-MW solar plant in the vicinity with an overlapping construction schedule 20

will exceed the AVAQMD's significance threshold for NOx. *Id.* Because the basin is currently designated non-attainment for the state 24-hour and annual ambient air quality standards for PM10; "severe" nonattainment for the federal 1-hour and 8-hour ambient air quality standards for ozone ("O_3"), and; extreme nonattainment for the state 1-hour and 8-hour ambient air quality standards for ozone, any significant emissions of these pollutants from the Project will result in a worsening of regional air quality. Pless Comments, p. 12; MND, p. 4-16.

20 (cont.)

Adding in the ozone precursor and PM10 emissions from numerous energy projects in the vicinity of the Project makes it clear that, together with the Project, AVAMQD's thresholds may be exceeded. As a result, a significant cumulative air quality impact may result from the Project.

e. The MND fails to adequately disclose or mitigate the Project's risks of exposing workers and the public to Valley Fever fungal spores.

Valley Fever ((coccidioidomycosis) is a potentially deadly disease, with no known cure or vaccine that has been on the rise in arid parts of California. Pless Comments, pp. 12-14. Valley Fever is spread by the disturbance of fungal spores that are endemic to areas with dry, alakaline soil conditions. MND, p. 4-60; Pless Comments, p. 13. Disturbed or windblown spores can be inhaled by workers and nearby residents, causing pneumonia and other symptoms. *Id.* People with the greatest risk of contracting Valley Fever are construction and agricultural workers. Citing numerous scientific studies, Dr. Pless explains:

> The most at-risk populations are construction and agricultural workers, the very populations that would be directly exposed by the Project. A refereed journal article on occupational exposures notes that "[l]abor groups where occupation involves close contact with the soil are at greater risk, especially if the work involves dusty digging operations."

Pless Comments, p. 15 (citing Schmelzer and Tabershaw, 1968, pp. 107-113, Table 3 & p. 110).

21

The MND relies on the creation of a Dust Control Plan pursuant to AVAMQD Rule 403 as the sole mitigation measure to address the Project's risk of exposing workers and people to the Valley Fever fungal spores. As Dr. Pless explains, Rule 403's Dust Control Plan requirement is not effective at addressing Valley Fever fungal spores:

> While dust exposure is one of the primary risk factors for contracting Valley Fever and dust-control measures are an important defense against infection, it is important to note that visible dust is only an indicator that *Coccidioides ssp.* spores may be airborne in a given area. Freshly generated dust clouds

> usually contain a larger proportion of the more visible coarse particles. However, these larger particles settle more rapidly and the remaining fine respirable particles may be difficult to see.

Pless Comments, p. 19. In addition, "[s]pores of *Coccidioides ssp.* have slow settling rates in air due to their small size (2 to 5 micrometers), low terminal velocity, and possibly also due to their buoyancy, barrel shape and commonly attached empty hyphae cell fragments" and, as a result, "may be present in air that appears relatively clear and dust free." *Id.* (citing Fisher et al., 2000). "Thus, implementation of dust control measures only when visible dust is present will not provide sufficient protection for both site workers and the general public." *Id.* In order to reduce potential exposures, soil disturbing activities should be timed to occur during an area's rainy season. *Id.* Dr. Pless identifies a long list of mitigation measures necessary to control workers and others' exposure to Valley Fever fungal spores. *Id.*, pp. 20-26. Dr. Pless's discussion of the Project's risk of exposing workers and others to Valley Fever fungal spores is substantial evidence of a fair argument that the project may expose people to this deadly disease. The Project's risk of exacerbating Valley Fever in the Antelope Valley and the implementation of mitigation measures must be evaluated in an EIR. 22

2. The Project May Result in Significant Biological Impacts.

Wildlife Biologist, Dr. Shawn Smallwood, Ph.D. concludes that the Project may have significant impacts on numerous special status species, which impacts are either not adequately analyzed in the MND, or not adequately mitigated. Because the Project may adversely affect biological resources, an EIR for the Project must be prepared. 23

a. The MND's Description of the Environmental Setting of Biological Resources is Rife With Unsupported Statements and Inaccuracies.

Numerous statements in the MND attempt to downplay the Project's likely impacts. Some of these statements attempt to paint the existing site as already degraded. For example, Southern California Edison's Tehachapi Renewables Transmission Project right-away that runs along the western and southern edges of the project site results in "increase edge effects" to wildlife. MND, p. 4-26. However, as Dr. Smallwood points out "transmission line right-of-ways often include the last remaining grasslands in the region, and often serve as wildlife movement corridors. More than likely, the adjacency of the SCE TRTP corridor enhances wildlife use of the project site and the region." Smallwood Comments, p. 2. 24

The MND makes numerous unsupported and inaccurate statements about the use of the Project area by Swainson's hawks. The MND incorrectly reports that Swainson's hawks observed during surveys in April and May were "presumed to have been migrants." MND, p. 4-32. However, as Dr. Smallwood explains, this presumption was misleading and clearly incorrect "because Swainson's hawks return from winter 25

migration in early March, and they return to nest. Swainson's hawks observed in April and May are no longer winter migrants; they are present to nest. Observing adult birds in April and subadults in May has no bearing on the breeding status of the adults or subadults." Smallwood Comments, p. 3. Thus, rather than an environmental setting of transient, migrating Swainson's hawks, the observed birds are instead nesting, resident birds. There is no scientific (or evidentiary) basis for the MND's conclusion that only non-breeding, migrating Swainson's hawks – *i.e.*. less likely to be affected – would forage on the project site.

25 (cont.)

The MND continues its effort to downplay the site's potential biological significance by speculating that small mammal prey, a primary food source for breeding Swainson's hawks, "are likely to be available on the Project site in low densities…." MND, p. 4-33. The only "evidence" cited by the MND is speculation based on what the surveyors perceived as agricultural scarring on the site. *Id*. Based on Dr. Smallwood's small mammal surveying and trapping experience in similar habitats, the MND's speculation is unwarranted and likely wrong for the Project site.

> BonTerra Consulting's claims that past site disturbances resulted in limited small mammal populations are not true. I have often obtained >100% trap success (more than 1 small mammal per trap) in places more disturbed than the project site, including on hazardous waste sites, military sites, and many other types of land use. On lands with little to no sign of small mammals, I have seen them in my thermal camera emerge in large numbers from cracks in the soil and from burrows and rock piles. If biologists were able to assess small mammal diversity and abundance by simply walking over the ground, then live-trapping would rarely if ever be used. The truth is that biologists cannot do this, which is why live-trapping is so pervasively used. It was not used at the project site. BonTerra Consulting's conclusions about small mammal abundance and the prey base of Swainson's hawk are unqualified and unreliable.

Smallwood Comments, p. 4.

26

Along the same line, the MND claims a correlation between foraging Swainson's hawks and active agricultural fields. MND, p. 4-33. Thus, the MND implies that because the Project site has not been in active agricultural production for many decades, Swainson's hawk impacts would be unlikely. No studies documenting a correlation coefficient are referenced by the Project's consultants. On the other hand, Dr. Smallwood, based on his own scientific investigations, has calculated "correlations between Swainson's hawk foraging and land use and vegetation cover" and "found that grasslands, which are decreasing in extent, are used disproportionately by foraging Swainson's hawks (Smallwood 1995, Smallwood et al. 1996)." Smallwood Comments, p. 4.

These pervasive, unsubstantiated assertions in the MND misrepresent the

environmental setting of the Project and are substantial evidence that the Project may have significant environmental impacts to Swainson's hawks. 26 (cont.)

b. The MND Fails to Discuss the Project's Impacts on Several Special-Status Species Likely to be Present at the Project Site.

The MND fails to look for numerous special status species that likely are present at the site because of ill-timed surveys. Other protected raptor and owl species, some of which are certain to be present at the site, are left unaddressed by the MND. Lastly, numerous special status species of bats are neither surveyed or discussed by the MND. Because the project may have significant impacts on all of these species, an EIR is required to be prepared for the Project.

The Project's biological surveys in April and May could not have observed the special status mountain plover. Smallwood Comments, p. 5. This species is only present in Antelope Valley during the winter.

Because no night or sonar surveys were conducted for the Project, no special status bat species were looked for by the Project's review. Only night surveys can detect bat species. In order to identify specific species, capture techniques or sonar have to be applied. As Dr. Smallwood explains, "In my experience, little is known of bat species at sites throughout California, and the use of Sonobat yields surprisingly high bat diversity." Smallwood Comments, p. 5. 27

Lastly, several species that Dr. Smallwood identifies as certain to occur at the site are completely ignored by the MND. For example, red-tailed hawks, ferruginous hawks, and western burrowing owls are all certain to occur at the site. Smallwood Comments, p. 6. Every individual of these species are strictly protected by F&G Code §3503.5 which prohibits any take of any of these species. This protection is equivalent, and for some species like these three, is even more stringent than the protections for fully protected species, there being no incidental take or other permits that would authorize any take of these birds. Nevertheless, the Project's impacts on these species are completely overlooked by the MND.

By failing to look for these and other special status species, the MND's description of the existing environment, as well as the related baselines for its biological analysis, are incomplete. To make matters worse, the MND repeatedly states that special status species were not detected, suggesting that the site is not important to such species. Because the MND's underlying surveys either did not look for them, or looked at an irrelevant time, impacts to these species may result from the Project.

c. The MND Fails to Acknowledge the Project's Impacts From Bird Collisions. 28

Dr. Smallwood points out the MND's glaring omission of any analysis or

discussion of bird collisions with the Project. Smallwood Comments, pp. 7-10. Although the precise number of birds that will collide with the Project's panels cannot be counted in advance, bird collisions with the Project are certain. *Id.* Dr. Smallwood describes his careful assessment of the limited data to date and, factoring in the uncertainties posed by the limited monitoring data to date, his calculation of the range of possible number of birds likely to collide with the Project's PV panels "will result in only 10% of the fatalities compared to the rate observed at Solar One," the one solar project where sufficient monitoring of collisions has been published, Dr. Smallwood "predict[s] that the West Antelope Valley Solar Project will kill 43 birds per year...." *Id.*, p. 10. "Assuming PV panels will result in half the fatalities per MW as occurred at Solar One, and extrapolating this rate to the 20 MW West Antelope Valley Solar Project, I would predict 216 bird fatalities per year...." *Id.* The MND fails to address this likely impact to both protected bird species as well as all bird species flying in the vicinity of the Project. An EIR must be prepared to evaluate this potentially significant adverse impact. "If the added project goes forward, it would be very important to require sound fatality monitoring. It would be helpful to perform avian behavior surveys in advance of construction, in order to characterize avian flight paths and the types of behaviors of endemic species that could contribute to collision risk (Smallwood et al. 2009, 2010)." *Id.*

Other agencies with responsibility to evaluate solar PV projects pursuant to CEQA have determined that avian collisions with PV solar projects are certain to occur. For example, the California Energy Commission recently issued a final staff assessment for the Blythe Solar Power Project in Riverside County. Blythe Solar Power Project, Staff Assessment – Part B (October 11, 2013) (excerpts attached as Exhibit F) ("BSPP Staff Assessment"). The BSPP Staff Assessment acknowledges that, although "[t]he extent and severity of potential collision impacts on avian species under the modified BSPP is not quantifiable, yet are certain to occur. Based on the extent of injury or mortality, and the species affected, this effect will likely be significant. Impacts could remain cumulatively considerable after implementation of all feasible mitigation measures." BSPP Staff Assessment, p. 4.2-88. *See id.*, pp. 4.2-7 – 4.2-8. Dr. Smallwood, although agreeing that uncertainty regarding predicting the number of avian collisions with a solar project plainly exist, he does not agree with the BSPP Staff Assessment's notion that one cannot quantify arrange of estimated collisions that take into account the uncertainty. *See* Smallwood Comments, pp. 8-10. The BSPP Staff Assessment provides a description of the likely causes of increased collisions with solar PV facilities such as proposed by the Project:

> The reflective characteristics of PV panels likely vary depending on the position of the sun, viewing angle, tilt of the panels, and other variables. PV solar arrays sometimes reflect the sky, including clouds, and can appear lighter in color. At other times and under different conditions, the PV arrays may appear dark like a still body of water. While it remains unclear how wildlife (primarily birds and bats, but also insects) perceive solar fields, and if the solar collectors are attractive under certain

28 (cont.)

> conditions, it is well documented that solar fields, including large PV array fields, can pose risks to birds or bats (pers. comm. REAT agency biologists regarding the Desert Sunlight Solar Farm, and Monthly Compliance Reports for Genesis Solar Electric Project7, Ivanpah Solar Electric Generating System, Abengoa Mojave Solar, and SEGS VIII and SEGS IX.

28 (cont.)

Blythe Assessment, p. 4.2-87. *See also id.*, p. 4.2-89 ("Avian species migrating nearby or over PV project sites may be drawn to the panels partly due to the polarization; however, many confounding variables exist, such as the potential for PV fields to appear as a body of water").[1]

d. The Project May Have Cumulative Impacts on Wildlife.

Recognizing that several projects may together have a considerable impact, CEQA requires an agency to consider the "cumulative impacts" of a project along with other projects in the area. PRC § 21083(b); CEQA Guidelines § 15355(b). If a project may have cumulative impacts, the agency must prepare an EIR, since "a project may have a significant effect on the environment if '[t]he possible effects of a project are individually limited but cumulatively considerable.'" *CBE v. CRA*, 103 Cal.App.4th at 98, 114; *Kings County Farm Bur. v. City of Hanford* (1990) 221 Cal.App.3d 692, 721. It is vital that an agency assess "'the environmental damage [that] often occurs incrementally from a variety of small sources . . .'" *Bakersfield Citizens For Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1214.

29

i. The MND does not include a cumulative impact analysis when it merely assumes that all of the many solar and wind project's are fully mitigated and have no significant impacts that, when combined, will not be cumulative.

The MND applies a flawed cumulative impact analysis and fails to provide any meaningful assessment of the cumulative impact of the Project in light of the numerous large, adjacent, and nearby solar PV projects either already approved or proposed in the Lancaster area. Rather than assess the Project's cumulative impacts, the MND simply assumes that because the Project contains mitigations, and other nearby PV projects are required to have mitigation measures as well, no cumulative impacts will result. *See, e.g.* MND, p. 4-33 (discussing Swainson's hawks, MND asserts that because "[o]ther projects in the region that would impact breeding Swainson's hawk

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[1] *See also id.*, p. 4.2-5. ("Operation of the project may result in avian collisions with panels, power lines, or other project features. Aside from a risk of collision with power lines or project features, fully protected species associated with the site have the potential for risk of overheating, disorientation, and other anthropogenic forms of injury or mortality. Currently, the exact source of injury or mortality to birds on renewable energy sites is unclear, yet the risks are certain.")

foraging habitat have been typically required to mitigate through preservation of similar suitable habitat for breeding hawks[,]" "the cumulative impact of this and other projects in the vicinity would not result in a substantial loss of foraging ground or result in genetic isolation and is considered to be a less than significant impact"). Dr. Smallwood explains the technical problem with this "cumulative" impact discussion:

> If the analysis was merely to confirm that all projects in the region mitigated their project-specific impacts, then cumulative effects analysis would simply be a matter of checking that each of the regional projects did indeed mitigate their impacts. In the case of this project, [the MND] assumes that all the other projects fully mitigated their impacts. Based on my review of many of these other projects in the Antelope Valley, I have seen that this was not the case due to (1) inadequate surveys needed to characterize existing environmental conditions, (2) inadequate impact assessments, and (3) insufficient and ineffective mitigation.

30 (cont.)

Smallwood Comments, pp. 4-5.

ii. The MND omits an adjacent, highly relevant 30-MW solar PV project from its cumulative impact analysis.

An obvious flaw in the MND's cumulative impact analysis is its failure to identify the PV solar project proposed to be constructed along Avenue J immediately adjacent to the Project site. The Plainview Solarworks Project is a 30-MW solar PV project proposed to cover 254-acres of farmland bordering the eastern edge of the Project site and extending all the way down Avenue J to the Antelope Substation. Exhibit E. The presence of the Plainview Project has serious cumulative impact implications on bird and wildlife resources as well as visual resources. *See* Smallwood Comments, p. 11.

31

iii. The Project may have cumulative impacts to special status and protected bird species.

In terms of avian impacts, Dr. Smallwood notes that the Plainview Solarworks Project exemplifies how the MND's assumption that all PV solar projects individual mitigations do not preclude cumulative impacts. Although the surveys conducted for the West Antelope Project detected a robust colony of burrowing owls in the Plainview Project area, no burrowing owls were acknowledged by that project's initial study. As Dr. Smallwood explains:

32

> Most of the nesting burrowing owls occurred just outside the [West Antelope] project boundary and within the area surveyed for burrowing owls as part of the Plainview Solar Works project. Even though these nesting burrowing owls were highly visible on the Plainview Solar Works project area (see the photos in Attachment A of the MND Technical Documents), they were not detected by the consultants who performed

> the biological surveys in support of Plainview Solar Works (Noreas Environmental Engineering and Science 2013). Therefore, the impact assessment of Plainview Solar Works concluded that the likelihood potential of burrowing owl occurrence was "low." The only mitigation for burrowing owl impacts at Plainview Solar Works included pre-construction surveys, which …would come too late to perform an impact assessment that meets CDFG's (2012) standards. Therefore, BonTerra Consulting was incorrect to assume that cumulative impacts would be less than significant because other projects in the region would have mitigated their project-specific impacts.

Smallwood Comment, p. 5. Thus, even with regard to burrowing owls only, the MND's analysis clearly lacks the necessary details and analysis to support its general conclusion that assumes all projects' mitigations will prevent cumulative impacts.

Given the extensive number of large-scale PV and wind projects in Antelope Valley, it is clear that cumulative impacts to bird species are likely. There is no meaningful cumulative impact assessment of the numerous energy project's constructed or proposed for construction in the Antelope Valley. The region has been targeted for development of at least 38,236 acres (4,803 MW) of solar projects (Figure 1). In order to assess the cumulative impacts of these numerous solar and wind projects, the MND had to provide the total habitat losses that will accrue, an assessment of the density of species, especially special status species, relying on that total lost habitat, and the number of individual birds and animals that will be taken or disturbed by the numerous projects. Only then could the MND claim to have provided sufficient information to draw any conclusion regarding the West Antelope Projects' cumulative impacts. Dr. Smallwood describes each of these necessary steps in some detail: 32 (cont.)

> The simplest form of cumulative impacts assessment would be to estimate habitat loss in acreages of vegetation cover types that are associated with each special-status species and that are undergoing or likely to undergo conversions to solar projects and other types of projects. For example, if all of the 38,236 acres of planned or ongoing solar projects were considered burrowing owl habitat, then a simple cumulative impacts analysis would lead to the conclusion that 38,236 acres (155 km^2) of burrowing owl habitat will be lost within the near future, including 263 acres from the proposed project.
>
> A more scientific and more useful assessment would multiply the acres of foreseeable habitat loss by the average density of the species in that habitat. For example, if the average density of burrowing owls in the region was 4 pair per km^2, then the cumulative project impacts would be 620 breeding pairs of burrowing owls. A density of 4 pair per km^2would be

> reasonable over large areas in this region, given the synthesis of breeding pair densities in Smallwood et al. (2013).
>
> The next level of cumulative impacts assessment would be to add the loss of individuals due to collision with the PV arrays, electric distribution lines, transmission lines, and autos servicing the projects. It would also estimate the loss of individuals and larger demographic units due to barriers to movement, or due to habitat fragmentation.

Smallwood Comments, pp. 11-12. The MND does not attempt any of these true cumulative impact assessments. Dr. Smallwood goes on to estimate the number of bird fatalities that may result from the cumulative solar projects listed in the MND, which do not even include the adjacent Plainview Project, as ranging from 10,362 bird fatalities per year up to 51,808 bird fatalities per year. *Id.*, p. 12. Likewise, because of the vast habitat areas being or proposed to be converted to solar PV projects, the cumulative impacts to nesting owls and foraging raptors may be significant. *See id.*, p. 11. 32 (cont.)

iv. The Project may have cumulative adverse impacts to wildlife movement.

The numerous solar projects cutting across the Antelope Valley are creating a wall disrupting the north-south movement of wildlife in the Valley and seriously fragmenting the undeveloped habitat through the Valley. Nevertheless, the MND cavalierly concludes that "[t]here is no indication of concentrated movement through the Project site or adjacent lands" and that "[t]he Project would not affect regional wildlife movement or interfere substantially with the movement of any native resident or migratory …wildlife species in areas surrounding the site…," and, hence, any impacts to wildlife movement are less than significant. MND, p. 4-35. No direct surveys or other scientific information were gathered at and around the Project site in support of these contentions. Smallwood Comments, p. 10 ('[t]hese conclusions were based on no directed scientific observations or measurements…"). As Dr. Smallwood explains, "[m]ovement areas could have been identified by animal sign or by spending a little time watching the movements of wildlife in the area." *Id.* "Movement areas can also be predicted based on knowledge of how particular species use landscapes. The project's likely barrier effects could then be mapped and some assessment provided." *Id.* Because no effort was made to identify or describe the movement of species in the area, the MND's conclusion that the Project will have no direct or cumulative impacts on wildlife movement is not supported by substantial evidence. On the other hand, Dr. Smallwood provides substantial evidence that the wall of solar projects proposed for the Lancaster area "will prove devastating to wildlife in the area." *Id.* 33

> That the project will interfere with wildlife movement should be obvious, given the extent of planned an ongoing solar and wind projects in the region (Figure 1). Planned and ongoing solar projects, including the West Antelope Solar Energy Project, nearly extend the entire north-south

> distance of the Antelope Valley, thereby cutting off east-west movement of terrestrial wildlife (Figure 1). Such an outcome will prove devastating to wildlife in the area.

Smallwood Comments, p. 10.

Even the mitigation measure purporting to address any interference with wildlife movement by raising the bottom of the Project's fence from the ground at intervals (MM BIO-5) may not mitigate any direct disruption of individual animal's attempts to cross the site. Instead, that measure will just as likely kill animals attempting to utilize them "by allowing individuals access to an industrial site where they can be killed … by predators using the fencing and solar arrays as hunting perches…." Smallwood Comments, p. 13. Once inside the facility's fenceline, the Project site "would lack mammal burrows into which they might normally escape predation." *Id.*

Likewise, the MND's suggestion that "…any impacts to wildlife movement would exist only for the life of the proposed Project, and the site would be restored to its pre-developed conditions." MND, p. 4-35. Dr. Smallwood's reaction to this wishful assertion is firmly in the negative: 33 (cont.)

> There is no evidence that habitat restoration has ever succeeded in restoring project sites to pre-development conditions. In fact, such a restoration is essentially impossible, given the overwhelming complexities of inter-specific relationships among soil micro-organisms and other flora and fauna (Hole 1981) and of ecosystem flows and storages of energy, nutrients, and water (Ricklefs et al. 1984). It is misleading to claim that restoration to pre-development conditions can take place. It cannot and will not happen.

Smallwood Comments, p. 3. Because Dr. Smallwood's analysis confirms that the Project may directly or cumulatively result in a significant impact on wildlife movement, an EIR must be prepared for the Project.

B. The MND's Calculation of Mitigation Acreage Understates the Actual Acres of Habitat That Will Be Denied to Burrowing Owls, Swainson's Hawks, and Other Wildlife And, as a Result, the Project's Habitat Impacts May Remain. 34

Attachment C-5 of the MND's appendices provides the basis for the MND's calculation of how much mitigation acreage must be provided for the Project to address impacts to burrowing owls and Swainson's hawks. The attachment goes through a strained and incredulous analysis explaining why the thin areas between the solar panels and other Project features should continue to be deemed functioning owl and hawk habitat and thus not have to be compensated for by the Project. Attachment C-5 claims that:

> As shown in Table 1, of the 178.5 acres within the perimeter fencing, 76.0 acres would be impacted by development, resulting in a total of 102.5 acres of undisturbed open space remaining within the fenced area. Therefore, based on the 76.0 acres of impacted lands mitigated at a 2:1 ratio, a total of 152.0 acres of mitigation is required.

MND, Appendix C-1, p. 5. This effort to minimize the Project's habitat mitigation responsibilities ignores fundamental behavior of both burrowing owls and Swainson's hawks.

The 178.5 acres within the Project's fencing as well as the remnant 84.5 acres immediately outside the Project's fence (and looking ahead to the Western Antelope Blue Sky Ranch Project, Plainview Solarworks Project, and Silver Sun Greenworks, effectively fenced in by the three solar projects) will not function as burrowing owl habitat at all once the Project is constructed. Dr. Smallwood, with years of experience studying burrowing owls, points out the obvious flaw in the MND's assertion:

> Burrowing owls do not nest in close proximity to trees or to other tall structures. Most likely, the planting of trees, the installation of a cyclone fence, and the installation of PV panels on steel supports will prevent burrowing owls from nesting or foraging on the 102.5 acres of open space. These conditions will also prevent Swainson's hawks from foraging on the project site, because they avoid orchards and vineyards, or environments with rows of structures. The basis for mitigation of both burrowing owls and Swainson's hawks should consist of the 263 acres of the project.

Smallwood Comments, pp. 13-14. Dr. Smallwood also notes that other adjacent solar projects planned for adjacent parcels will prevent burrowing owls from easily avoiding the phalanx of solar panel fields and barbed wire fencing. *Id.* ("Burrowing owl habitat will be entirely destroyed by the West Antelope Solar Energy project within the project boundary and out to about 150 m from the boundary"); *Id.* ("It would be ridiculous to claim that burrowing owls would continue to nest among rows of solar panels or next to trees").

The MND also arbitrarily reduces on-site acreage to the Swainson's hawk 2:1 habitation mitigation. The MND's claim that any on-site acreage within the Project area is still available to Swainson's hawks for foraging is patently inconsistent with the hawks' known behavioral patterns. "It is well known that Swainson's hawks avoid vineyards and orchards (Smallwood 1995, Smallwood et al. 1996). The arrays of PV panels will have the same effect, and Swainson's hawks will not forage on the project site once the PV arrays are installed. The habitat loss due to the project will be total." Smallwood Comments, p. 3. Thus, the MND's discounting of the rows between solar panels or areas adjacent to the Project's fences and claim that the Project's panels and fences

34 (cont.)

will only "have the potential to hinder" Swainson's hawk access is inaccurate and misleading. MND, p. 4-33.

34 (cont.)

C. The Project's Significant Direct and Cumulative Visual Impacts Are Not Mitigated by the Planting of a Few Trees.

The Project will be completely surrounded by a six-foot tall chain-link fence with another foot of barbed wire along the top of the entire fence. MND, p. 3-7. This jail-like edifice will dominate Avenue J and roads around the Project. Along Avenue J, the Project will abut the Plainview Solarworks Project, which itself will extend another 1.5 miles and also be surrounded by chain link fence and barbed-wire. Solar facilities to the north and south of the Project also will include similar fencing. A resident of Lancaster heading out for a drive towards the western mountains would encounter about a 2-mile stretch of barbed wire-topped, chain link fencing – like driving through a low-security prison compound rather than the open spaces dominating the site currently. *See* MND, Figures 4-1, 4-2, 4-3A, 4-3B.

"Any substantial negative effect of a project on view and other features of beauty could constitute a significant environmental impact under CEQA." *Ocean View Estates*, 116 Cal.App.4th at 401. Appendix G to the CEQA Guidelines recommends that the lead agency consider the following questions: "... Would the project: "a) Have a substantial adverse effect on a scenic vista? ... c) Substantially degrade the existing visual character or quality of the site and its surroundings? [or] "d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?" CEQA Guidelines, App. G, Section I ("Aesthetics").

The MND acknowledges that the Project will have visual impacts: "the visual change in character of the Project site from open space to developed solar facilities would be considered a significant impact." MND, p. 4-5. The MND suggests three mitigations will eliminate the Project's significant visual impacts. MM AES-1 requires that drought-tolerant vegetation be planted in front of the perimeter fence. MND, p. 4-9. The visual simulations included in the MND show small trees and shrubs at several foot intervals. MND, Figures 4-3A & 4-3(B). This measure, of course, does not restore the open vistas currently experienced at the Project site. Nor will the vegetation entirely block the lengthy stretch of fencing and barbed wire. Moreover, the planted vegetation will also block the vistas currently enjoyed by passing residents. Persons who currently enjoy the open vistas at the site will be as negatively affected by the Project's chain link fence and barbed wiring with or without the drought resistant vegetation.

The other two mitigations – MMAES2 and MMAES-3 – do nothing to eliminate the visual impacts of the Project. Even downward-shielded, motion-activated lights along the periphery of the Project will not address the day-time visual disturbance of the site. Nor will the reflective surface of the PV panels or the color of the Project's water tanks and structures somehow restore the visual impacts disrupted by the Project's fencing and acres of panels.

35

Numerous other solar projects much like the proposed project have been identified as causing visual impacts, even after the implementation of mitigation. Thus, for example, the EIR prepared for the pending 40-MW, 324-acre Kingbird Solar Photovoltaic Project proposed in Kern County, after conducting a thorough analysis of that project's aesthetic visual impacts, concluded that:

> Although the proposed project is generally well-sited for efficiency of energy generation and low impacts on neighboring land uses, the industrial nature of the facilities, when introduced into the project viewshed, would substantially change the existing visual character of the landscape around the site as viewed from sensitive receptors for the life of the project. The proposed facility would substantially modify views in an area that is currently defined by agricultural lands and open space. This results in cultural modifications that are incompatible or promote disharmony with the existing landscape.

Kingbird EIR, p. 4.1-28 (excerpt attached as Exhibit G). And, despite several mitigations which reduced the project's visual impacts including efforts to view-screening vegetation, the Kingbird EIR was forthright in acknowledging that "because there are no feasible mitigation measures that can be implemented to preserve the existing open space landscape character at the project site while at the same time developing a solar energy facility, impacts to visual resources would remain significant and unavoidable despite implementation of these mitigation measures." *Id.* This example is substantial evidence of a fair argument that any solar project replacing even fallowed farmland may have significant visual impacts.

The MND's effort to suggest that only a portion of persons experiencing the area would perceive the Project's fencing and thousands of panels as a negative visual impact only confirms that the Project's may have significant visual impacts. As the MND confirms, at least some "viewers may determine that the change from rural open space to development would be a detrimental alteration to the visual qualities of the area." MND, p. 4-115. This statement alone demonstrates that the Project may have a significant visual impact.

The cumulative visual impacts along Avenue J are even more profound. Travelers and bicyclists passing the Antelope Substation will enter a gauntlet of chain link fences topped with barbed wire and artificially-planted vegetation that will extend for almost two-miles. This is obviously a possibly significant impact on the current open vistas in this area. As a result, an EIR exploring these impacts and additional mitigation must be prepared.

35 (cont.)

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CONCLUSION

Since substantial expert evidence creates a fair argument that the Project may have adverse environmental impacts, an EIR is required, and the MND should not be approved.

Sincerely

Michael R. Lozeau

2.7.1 LOZEAU DRURY, LLP (LOZEAU)

November 20, 2013

Response Lozeau-1

Please refer to Topical Response No. 1, Why a Mitigated Negative Declaration Was Prepared and Not an Environmental Impact Report.

Response Lozeau-2

Please refer to Topical Response No. 6, Cumulative Impacts.

Response Lozeau-3

Please refer to Topical Responses No. 1, Why a Mitigated Negative Declaration Was Prepared and Not an Environmental Impact Report, and No. 6, Cumulative Impacts.

Response Lozeau-4

The Responses to the Comments provided by Dr. Pless (Section 2.7.2) and Dr. Smallwood (Section 2.7.3) are provided by the County Department of Regional Planning staff and BonTerra Consulting Staff. Regarding Biological Resources, responses were provided by Marc T. Blain and Brian E. Daniels. Regarding Air Quality, responses were provided by James Kurtz. A summary of their experience and qualifications is provided below.

Marc Blain, Biological Resources Manager, is a Biologist with 19 years of experience in wildlife biology, conservation biology, natural resource planning, and training in various other areas in the environmental field. He is an expert on the biology and ecology of Southern California wildlife and possesses not only the ability to identify and classify the plants, animals and plant communities of the region, but also the ability to develop sustainable management practices. More specific areas of expertise include avian ecology, wildlife movement, and conservation biology. He is also experienced with the natural resources regulations and compliance requirements of the Federal Endangered Species Act (FESA), the California Endangered Species Act (CESA), the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), the Natural Community Conservation Plan (NCCP), the Clean Water Act (CWA), the Migratory Bird Treaty Act (MBTA), the *California Fish and Game Code*, and other biological statutes of regional Counties and Cities.

- U.S. Fish and Wildlife Service 10(a) Permit (TE No. 007075-2) for coastal California gnatcatcher and southwestern willow flycatcher, expired January 17, 2008
- California Department of Fish and Game Letter of Agreement, Principal Investigator for California gnatcatcher and southwestern willow flycatcher, expired October 31, 2010.
- California Department of Fish and Game - Scientific Collecting Permit (No. SC-00209), expires March 2016.

Brian Daniels has been an active Biologist and Field Ornithologist in California for 36 years with experience throughout the southwestern United States. He has conducted a variety of bird surveys for federal and State agencies, including the U.S. Fish and Wildlife Service (USFWS), the Bureau of Land Management (BLM), and the California Department of Transportation (Caltrans). He is permitted to conduct surveys for the federally listed Threatened coastal California gnatcatcher and federally listed Endangered southwestern willow flycatcher, and least

Bell's vireo, and to monitor the nests of the coastal California gnatcatcher and the federally listed Endangered least Bell's vireo. Mr. Daniels specializes in directed surveys for special status bird species, including the species listed above.

- U.S. Fish and Wildlife Service 10(a) Permit (TE No. 821401-4) for California gnatcatcher and least Bell's vireo, and southwester willow flycatcher, August 30, 2015
- California Department of Fish and Game Letter of Agreement, Field Investigator for California gnatcatcher and least Bell's vireo, and southwester willow flycatcher, expired October 31, 2010, extended through CDFW notification letter.
- California Department of Fish and Game[3] Scientific Collecting Permit (No. SC-00004535), expires June 5, 2015

James Kurtz, Air Quality and Acoustical Manager, is an Engineer with 43 years of technical and project management experience. He has performed air quality analyses since 1974, acoustic analyses since 1989, and climate change/greenhouse gas (GHG) analyses since 2007 for residential, commercial, industrial and infrastructure projects; general and specific plans; interstate highways and major roadways; educational and institutional developments; commuter rail lines; and major utility installations. Most of these studies were for federal, State, and local environmental documents according to California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) requirements. Project end users have included cities and counties, water districts, educational institutions, transportation agencies, private developers, the U.S. Navy, the U.S. Marine Corps, the Federal Aviation Administration (FAA), Utility Companies, Native American tribes, and the National Park Service.

Response Lozeau-5

The introduction and project description are accurate. For discussion of construction related air quality emissions, please refer to Topical Response No. 3, Air Quality.

Response Lozeau-6

Please refer to Topical Response No. 1, Why a Mitigated Negative Declaration Was Prepared and Not an Environmental Impact Report. Regarding "Standing," comment noted.

Response Lozeau-7

The comment provides a summary of specific comments. Please refer to the individual responses for each topic. As these comments restate the comments contained in the Pless and Smallwood comment letters, references to the appropriate responses are provided.

Response Lozeau-8

Please refer to Response to Pless-2 below.

Response Lozeau-9

Please refer to Response to Pless-3 below.

[3] The California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW) effective January 1, 2013.

Response Lozeau-10

Please see Response Pless-2 for additional information regarding the source data and model assumptions applied in the air quality analysis, and to Response Pless-3 and Topical Response No. 3, Air Quality, which demonstrate that emissions of nitrogen oxides (NOx) during construction would be less than both the annual and halved annual Antelope Valley Air Quality Management District (AVAQMD) thresholds.

Response Lozeau-11

Please refer to Response to Pless-6 below.

Response Lozeau-12

Please refer to Response to Pless-7 below.

Response Lozeau-13

Please refer to Response to Pless-8 below.

Response Lozeau-14

Please refer to Response to Pless-9 below.

Response Lozeau-15

Thresholds of significance promulgated by the AVAQMD, or any air district, are not, per se, conclusive levels above which a project will have significant environmental impacts. The relationship of an impact to a threshold must be considered for magnitude, duration, and other related factors. The "availability" of a threshold does not make it the appropriate threshold for all applications. Further, thresholds established by air districts are guidance for Lead Agencies, not requirements. However, for the proposed Project, as described in Topical Response No. 3, Air Quality, for construction phase criteria pollutant emissions, the County has accepted the AVAQMD's suggestion to compare the estimated construction emissions with conservative thresholds that are one-half of the annual thresholds published in the CEQA Guidelines. As shown in the Topical Response, the Project emissions would be substantially less than the suggested thresholds.

Response Lozeau-16

Please refer to Response to Pless-10 below.

Response Lozeau-17

Please refer to Response to Pless-11 below.

Response Lozeau-18

Please refer to Response to Pless-21 below.

Response Lozeau-19

Please refer to Response to Pless-20 below.

Response Lozeau-20

With respect to discussion of the Plainview Solarworks project, please see the Topical Response No. 7, Cumulative Impacts. With respect to discussion of cumulative air quality impacts, please see Response Pless-20.

Response Lozeau-21

Please refer to Topical Response No. 6, Valley Fever.

Response Lozeau-22

Please refer to Topical Response No. 6, Valley Fever.

Response Lozeau-23

Please refer to Topical Response No. 1, Why a Mitigated Negative Declaration Was Prepared and Not an Environmental Impact Report.

Response Lozeau-24

Please refer to Response to Smallwood-2 below.

Response Lozeau-25

Please refer to Response to Smallwood-4 below.

Response Lozeau-26

Please refer to Response to Smallwood-4 below.

Response Lozeau-27

Please refer to Response to Smallwood-6 below.

Response Lozeau-28

Please refer to Response to Smallwood-8 below.

Response Lozeau-29

Please refer to Topical Response No. 7, Cumulative Impacts.

Response Lozeau-30

Please see Response Smallwood-4 and Response Smallwood-8 below. The cumulative impacts discussion within the IS/MND does indeed include a review of other projects in the region. As it is completely infeasible to repeat a biological analysis for each of those projects, the approach used here and elsewhere as a standard is to accept the CEQA analysis that has been approved by local Lead Agencies. This approach is standard practice and provides an adequate assessment of cumulative impacts in accordance with CEQA requirements. The Project would not result in a significant impact and therefore would not create a cumulatively considerable significant impact.

Response Lozeau-31

With respect to discussion of the Plainview Solarworks project, please see the Topical Response No. 7, Cumulative Impacts.

Response Lozeau-32

The Burrowing Owl Survey Report prepared for the proposed Project does not indicate observations of any burrowing owl on the Plainview Solarworks site. Owls were observed to the north of Plainview site, but the area would likely have been excluded from Plainview project burrowing owl surveys. Also, please refer to Response Smallwood-4 and Response Smallwood-8 below.

Response Lozeau-33

Please refer to Response to Smallwood-9 below.

Response Lozeau-34

Please refer to Response to Smallwood-14 below.

Response Lozeau-35

Please refer to Topical Response No. 7, Cumulative Impacts. The IS/MND acknowledges that implementation of the Project, in conjunction with the related projects in the surrounding area, would result in cumulative impacts related to Aesthetics (impacts related to the character of the Project's surrounding area). In order to mitigate these impacts, MM CML-1 requires the Project Applicant to provide dedicated open-space lands at a minimum 2:1 ratio of replacement for the lands disturbed by Project implementation. Additionally, the County requires that a Decommissioning Plan be prepared for the Project. This Plan would ensure that the land is returned to a beneficial use upon termination of the use of the property as a solar site.

In addition to the Decommissioning Plan, revised MM CML-2 requires the preparation of an approved Revegetation Plan that will detail steps proposed for the restoration of disturbed areas in the event that the as-built plan reveals the need for restoration after construction. Restoration performance goals shall be based upon the quality of the on-site vegetation at the time of the CUP approval. The Revegetation Plan shall include a five-year annual reporting program to document the site's recovery towards these expected criteria, and shall include provisions for adaptive management contingencies if adequate revegetation has not occurred within a three-year period from energization. Therefore, although irrigated groundcover is not required, the Project Applicant is required to ensure vegetative restoration of the site after construction. Therefore, the combination of the 2:1 mitigation requirement (which includes preservation of off-site land in perpetuity) and the finite nature of Project-related impacts to Aesthetics and Biological Resources due to the eventual implementation of the Decommissioning Plan lead to the conclusion that all cumulative impacts would be less than significant.

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Pless

November 18, 2013

Via Email

Michael R. Lozeau
Lozeau | Drury LLP
410 12th Street, Suite 250
Oakland, California 94607
michael@lozeaudrury.com

Re: Review of Initial Study/Mitigated Negative Declaration for West Antelope Solar Energy Project

Dear Mr. Lozeau,

Per your request, I have reviewed the Initial Study/Mitigated Negative Declaration ("IS/MND") for the West Antelope Solar Energy Project ("Project"), a photovoltaic solar energy facility proposed by TA – Acacia, LLC ("Applicant") in unincorporated Los Angeles County. The IS/MND was published for public review by the County of Los Angeles ("County") as the lead agency under the California Environmental Quality Act ("CEQA") in October 2013.[1]

I. Project Description

The Project would develop a currently vacant 263-acre site immediately west of the City of Lancaster with a photovoltaic ("PV") solar energy facility that could produce up to 20 megawatts ("MW") of electric power during daytime hours. The Project would consist of the following components: 1

- A solar field of approximately 1,600 north-south rows of crystalline silicon PV panels, mounted on single-axis tracking systems on steel support structures;

[1] County of Los Angeles, Initial Study/Mitigated Negative Declaration, West Antelope Solar Energy Project, Unincorporated Los Angeles County, California, Project No. R2012-01589-(5), Permit No. Conditional Use Permit No. 201200086, Environmental Assessment No. 201200158, October 2013; available at http://planning.lacounty.gov/assets/upl/case/r2012-01589_ismnd.pdf; appendices at http://planning.lacounty.gov/assets/upl/case/r2012-01589_technical-appendices.pdf.

- An electrical collection and inverter system that aggregates the output from the PV panels and converts the electricity from direct current ("DC") to alternating current ("AC");
- A substation where all the facility's output is combined and transformed to a voltage of 66 kilovolts ("kV");
- A meteorological data collection system configured to collect meteorological information at the height of the PV panels;
- A trail that would be constructed (as requested by the County Department of Parks and Recreation) along the eastern boundary of the Project site in order to implement a portion of the proposed California Poppy Trail;
- Civil infrastructure, including driveways, internal access roads, drainage design, secure fencing, landscaping, and two water tanks; and
- An off-site 1.5-mile-long 66-kV transmission line that runs from the Project site's eastern boundary to the Antelope Substation along West Avenue J.[2]

The IS/MND addresses the potential environmental impacts from both the on-site build-out of the Project and the off-site grid-tie and connection to the Antelope Substation.[3]

1 (cont.)

II. The IS/MND's Air Quality Analysis Is Deficient

As discussed below, the IS/MND's analysis of the Project's potential impacts on air quality is deficient because it does not adequately document assumptions for emission estimates, incorrectly determines the significance of emissions and, consequently, fails to identify significant impacts air quality and fails to require mitigation.

2

[2] IS/MND, pp. 3-2 and 3-3.

[3] *Ibid.*

II.A The IS/MND Fails to Adequately Document Assumptions for Air Quality Analysis

The IS/MND provides computations for emissions during Project construction and operation in Appendix B "Air Quality and Greenhouse Gas Worksheets." A number of assumptions for these computations are not supported, including:

- Construction timeline;
- Number of construction equipment, generators, off-highway trucks, and water trucks on site for each phase of construction, their horsepower ("hp") and number of hours operating each day, and load factor ("LF");
- The number of delivery trucks and haul trucks and their roundtrip distance in miles during construction; the number of worker commuter vehicles and their roundtrip distance in miles per day during construction and operation; the number of water trucks and roundtrip distance in miles per day during operation;
- Emission factors for combustion emissions of reactive organic gases ("ROG") (or volatile organic compounds ("VOCs")), nitrogen oxides ("NOx")[4], carbon monoxide ("CO"), sulfur oxides ("SOx"), particulate matter equal to or smaller than 10 micrometers ("PM10") and 2.5 micrometers ("PM2.5") and carbon dioxide-equivalents ("CO_2e") in grams per horsepower-hour ("g/hp-hr") for construction equipment, generators, off-highway trucks, and water trucks;
- Emission factors in grams per trip ("g/trip") and grams per mile ("g/mile") for combustion emissions of the above pollutants from delivery trucks, haul trucks, and construction worker commuter vehicles; and
- Percentage of PM2.5 in PM10 for fugitive dust emission estimates.

2 (cont.)

II.B The IS/MND Incorrectly Determines Significance of Emissions during Project Construction and Fails to Identify Significant Impacts on Air Quality due to Emissions of Nitrogen Oxides

The IS/MND compares estimates for total criteria pollutant and precursor emissions during the 6-month construction period to the annual thresholds of significance established by the Antelope Valley Air Quality Management District ("AVAQMD"), the agency with the primary responsibility for protecting the people and the environment of Antelope Valley from the effects of air pollution through developing and implementing programs and regulations to improve air quality. The IS/MND

3

[4] ROG and NOx are ozone precursors ("O_3").

states "[i]t should be noted that because AVAQMD thresholds are presented in tons per year, maximum daily trips are not needed for purposes of estimating emissions and only total annual vehicle trips are considered."[5] This claim is unsupported and the IS/MND's conclusion that emissions would be less than significant is erroneous.

The AVAQMD advises in its CEQA Guidelines:

> Note that the emission thresholds are given as a daily value and an annual value, *so that a multi-phased project* (such as a project with a construction phase and a separate operational phase) *with phases shorter than one year can be compared to the daily value.*[6]

The AVAQMD's guidance clearly requires comparing short-term construction emissions to the daily significance thresholds. Here, not only does the IS/MND fail to compare emissions to the daily thresholds, it compares total emissions during the six-month construction period to the annual thresholds of significance, thereby "stretching" emissions over a longer period than they actually occur.

3 (cont.)

Figure 1 below shows the timeline of Project construction and summarizes maximum daily emissions of nitrogen oxides ("NOx") in pounds per day ("lbs/day) occurring during each construction phase and from construction commuter vehicles based on information provided in the IS/MND.

4

[5] IS/MND, p. 4-18.

[6] AVAQMD, California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, August 2011, p. 6, *emphasis* added; available at http://www.avaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=2908.

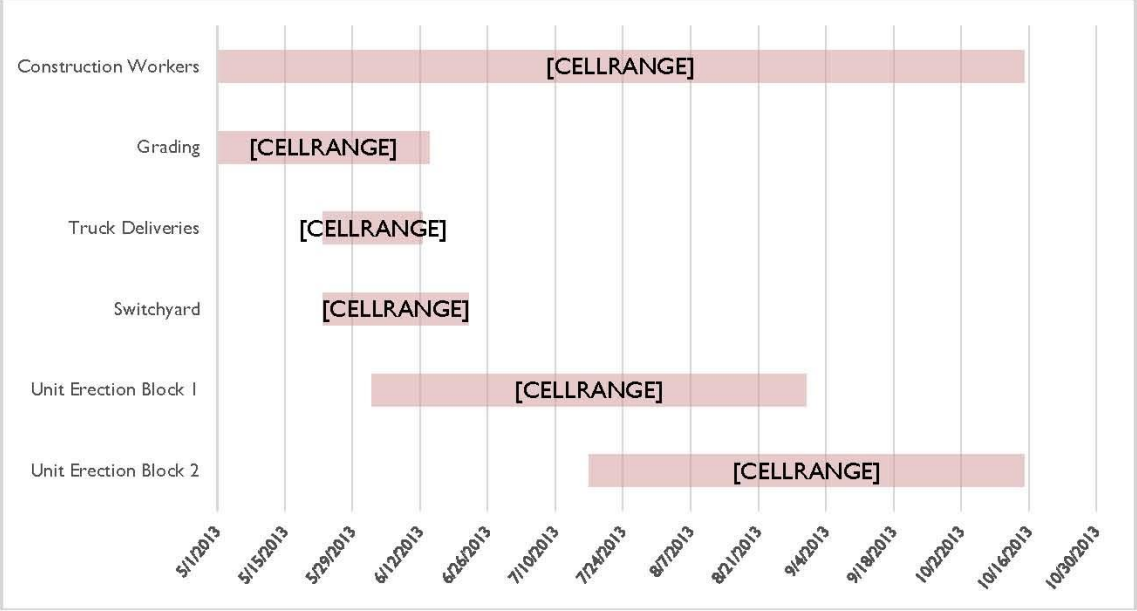

Figure 1: Maximum daily NOx emissions in lbs/day during construction of the Project

Dates for construction phases and daily emissions for unit erection Block 1 and 2, switchyard, and grading from Appendix D; all other daily emissions estimated based on information contained in Appendix B as follows:

Construction workers for all four overlapping phases (June 2 through June 22, 2013): (grading: 10 workers/day + switchyard: 10 worker roundtrips/day + Unit 1 & 2 erection: 89 worker roundtrips/day = total: 109 worker roundtrips/day) x (0.49 grams NOx per mile) x (34 miles/roundtrip) / (453.592 grams/lb) = 4.00 lbs NOx /day; because the IS/MND, Appx. B, fails to account for worker trips during grading, I assumed 10 worker roundtrips based on the number of equipment operating on site during this phase (8)

Construction workers for overlapping unit erection Block 1 and 2 phases (July 17, 2013 through August 31, 2013: (Unit 1 & 2 erection: 89 worker roundtrips/day) x (0.49 grams NOx per mile) x (34 miles/roundtrip) / (453.592 grams/lb) = 3.27 lbs NOx/day

Truck deliveries: (delivery truck: 28.94 lbs NOx/day) + (hauling truck: 7.46 grams NOx/mile x 20 roundtrips/day x 26 miles/roundtrip / 453.592 grams/lb) = 37.49 lbs NOx/day

As the above timeline shows, construction of several phases would occur concurrently. From June 2, 2013 through June 22, 2013, grading, truck deliveries, switchyard construction and unit erection for Block 1 would occur concurrently. The sum of emissions during this time period including 109 worker roundtrips is 330.33 lbs/day.[7] From July 17, 2013 through August 31, 2013, unit erection for Block 1 and Block 2 would occur concurrently. The sum of emissions during this time period including 89 worker roundtrips is 268.01 lbs NOx/day.[8] Therefore, maximum daily NOx emissions from combustion exhaust during construction of the Project by far

4 (cont.)

[7] (Unit 1 erection: 132.37 lbs NOx/day) + (Unit 2 erection: 132.37 lbs NOx/day) + (switchyard: 87.32 lbs NOx/day) + (truck deliveries: 37.49 lbs NOx/day) + (grading: 69.14 lbs NOx/day) + (worker commuter vehicle exhaust: 4.00 lbs NOx/day) = 330.33 lbs NOx/day.

[8] (Unit 1 erection: 132.37 lbs NOx/day) + (Unit 2 erection: 132.37 lbs NOx/day) + (worker commuter vehicle exhaust: 3.27 lbs NOx/day) = 268.01 lbs NOx/day.

exceed the AVAQMD's short-term thresholds of significance for NOx of 137 lbs/day. This is a significant impact that was not identified by the IS/MND. 4 (cont.)

It should be noted that the above daily emission estimates are substantially underestimated. *First*, the emission estimates are based on fleet-average emission factors; individual equipment on site may have much higher emissions. *Second*, the IS/MND's emission calculations are inconsistent with the types of construction equipment on site. The IS/MND's emission calculations account for emissions from graders, dozers, excavators, tractors/loaders/backhoes, water trucks, delivery trucks, and hauling trucks.[9] Elsewhere, the IS/MND indicates that Project construction would also require one or more of the following: driller, forklift, trencher, bobcat, manlift, and 14-ton crane.[10] Based on information for other solar PV projects, construction would also require welders, pile or vibratory drivers, generator sets, plate compactors, pressure washers, rollers, sweepers/scrubbers, paving equipment. This equipment was described as required for construction in the conditional use permit application submitted to the County.[11] *Third*, the IS/MND assumes an average number of 50 truck roundtrips per day.[12] There will likely be days that have considerably higher number of roundtrips. *Fourth*, the Project would require massive amounts of water, 100,000 gallons per day ("gpd"), for dust control during construction.[13] This water would be trucked to the site. It is unclear whether the IS/MND accounts for these trucks. *Fifth*, the IS/MND only accounts for emissions from one water truck on site operating for 4 hours per day. This is inconsistent with information in the IS/MND elsewhere, which indicates that five water trucks would operate continuously for 10 hours per day.[14] Thus, combustion emissions during Project construction are substantially underestimated.

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II.C The IS/MND Substantially Underestimates Fugitive Dust Particulate Matter Emissions during Project Construction and Fails to Identify Significant Impacts on Air Quality

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The IS/MND estimates total construction emissions of PM10 and PM2.5 at 0.8 tons/year and 0.4 tons/year, respectively. Fugitive dust PM10 contributes

[9] IS/MND, Appx. B.

[10] IS/MND, Table 3-6.

[11] TA – Acacia, LLC, Project Narrative for TA – Acacia's West Antelope Solar Project, July 2012, p. 4.

[12] *Ibid*, p. 12 ("It is estimated that a total of approximately 6,000 daily trips would be made during the 6-month construction period. Thus, on average, approximately 50 trips per day would be generated during construction, and IS/MND, Appx. B.

[13] IS/MND, p. 4-14.

[14] IS/MND, p. 3-11.

0.36 tons/year or 10.4 lbs/day and fugitive dust PM2.5 contributes 0.05 tons/year.[15] Review of the IS/MND's calculations and assumptions shows that fugitive dust PM10 and PM2.5 emissions are substantially underestimated and, consequently, the IS/MND fails to identify significant impacts on air quality during construction. 10 (cont.)

First, the IS/MND fails entirely to account for windblown dust emissions, which based on my experience likely have the greatest contribution to fugitive dust PM10 emissions from a construction project in this area. 11

Second, the IS/MND fails to account for fugitive dust emissions from vehicle (trucks and construction worker commuter vehicle) travel on paved roads. 12

Third, the IS/MND fails to account for fugitive dust emissions from dirt piling or material handling. 13

Fourth, the IS/MND calculates fugitive dust PM10 emissions for dirt pushing or bulldozing based on empirical equations contained in the CEQA Guidelines published by the South Coast Air Quality Management District.[16] The IS/MND assumes a moisture content of 12 percent for estimating emissions, presumably factoring in the control efficiency of watering.[17] This moisture content is unrealistic even under the most stringent watering requirements. The Project would require 36,901 cubic yards ("cuyd") of earthmoving for cut (18,648 cuyd) and fill (18,253 cuyd).[18] This material cannot be thoroughly wetted to a moisture content of 12 percent. A more reasonable calculation is to estimate unmitigated emissions assuming a "dry" moisture content of 2 percent and mitigation control efficiencies as recommended by the SCAQMD. Based on the same equation used by the IS/MND, this results in 46.3 lbs/day of unmitigated PM10 emissions from dirt pushing or bulldozing.[19] The SCAQMD recommends a 61 percent control efficiency[20] for watering every 3 hours at disturbed areas within a construction site. Thus, mitigated PM10 emissions from bulldozing and grading can be estimated at 18.1 lbs/day[21], which is in excess of the AVAQMD's daily significance threshold for construction of 15 lbs/day. Thus, the fugitive dust PM10 emissions from dirt pushing and bulldozing after implementation of watering alone would result in a significant 14

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[15] IS/MND, Appx. B.

[16] IS/MND, Appx. B.

[17] *Ibid.*

[18] *See* IS/MND, Table 3-2.

[19] 0.45 × $2.0^{1.5}$/($2^{1.4}$)*2.2046 kg/lb × 6 hours/day = 46.3 lbs/day.

[20] SCAQMD, Fugitive Dust, Table XI-A: Construction and Demolition; http://www.aqmd.gov/ceqa/handbook/mitigation/fugitive/MM_fugitive.html.

[21] (46.3 lbs/day) × (1-0.61) = 18.1 lbs/day.

impact on air quality. This is a significant impact that the IS/MND fails to identify. When combined with all other sources of fugitive dust emissions, emissions would without doubt exceed both daily and annual significance thresholds for construction, requiring a statement of overriding consideration by the County.

14 (cont.)

II.D All Feasible Mitigation for Combustion Exhaust Emissions Must Be Required to Mitigate Significant Impacts on Air Quality during Project Construction

The AVAQMD advises in its CEQA Guidelines:

> A significant project must incorporate mitigation sufficient to reduce its impact to a level that is not significant. A project that cannot be mitigated to a level that is not significant must incorporate *all feasible mitigation*.[22]

Thus, I recommend that the County prepare an EIR that adequately analyzes impacts on air quality (as discussed above for NOx) and requires adequate mitigation. Feasible mitigation for combustion NOx emissions during Project construction include the measures below.

Off-Road Diesel-powered Construction Equipment

Emission controls for off-road construction equipment exist and are feasible for the Project. They include the following requirements, which are summarized from conditions of certification proposed by the California Energy Commission for a photovoltaic solar power plant project currently under review, the Blythe Solar Power Project:

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> **AQ-SC5** Diesel-Fueled Engine Control: The AQCMM [Air Quality Construction Mitigation Manager] shall submit to the CPM [Compliance Project Manager], in the MCR [Monthly Compliance Report], a table that demonstrates compliance with the AQCMP [Air Quality Construction Mitigation Plan] mitigation measures for purposes of controlling diesel construction-related combustion emissions. Any deviation from the AQCMP mitigation measures requires prior CPM notification and approval.
>
> All off-road diesel construction equipment with a rating of 50 hp [horsepower] or greater used in the construction of this facility shall be powered by cleanest engines reasonably and locally available that also comply with the California Air Resources Board's (ARB's) Regulation for In-Use Off-Road Diesel Fleets (California Code of Federal Regulations Title 13, Article 4.8, Chapter 9,

[22] AVAQMD, California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, August 2011, p. 6; available at http://www.avaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=2908.

Section 2449 et. Seq.) and shall be included in the Air Quality Construction Mitigation Plan (AQCMP) required by AQ-SC2. The AQCMP measures shall include the cleanest engines reasonably and locally available in each case:

a. All off-road vehicles with compression ignition engines shall comply with the California Air Resources Board's (ARB's) Regulation for In-Use Off-Road Diesel Fleets.

b. To meet the highest level of emissions reduction available for the engine family of the equipment each piece of diesel-powered equipment shall be powered by a Tier 4 engine (without add-on controls) or Tier 4i engine (without add-on controls), or a Tier 3 engine with a post-combustion retrofit device verified for use on the particular engine powering the device by the ARB or the US EPA. For PM [particulate matter], the retrofit device shall be a particulate filter if verified, or a flow-through filter, or at least an oxidation catalyst. For NOx, the device shall meet the latest Mark level verified to be available (as of January 2012, none meet this NOx requirement).

c. For diesel powered equipment where the requirements of Part "b" cannot be met, the equipment shall be equipped with a Tier 3 engine without retrofit control devices or with a Tier 2 or lower Tier engine using retrofit controls verified by ARB or US EPA as the best available control device to reduce exhaust emissions of PM and nitrogen oxides (NOx) unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types. For purposes of this condition, the use of such devices can be considered "not practical" for the following, as well as other, reasons:

   1. There is no available retrofit control device that has been verified by either the California Air Resources Board or U.S. Environmental Protection Agency to control the engine in question and the highest level of available control using retrofit or Tier 1 engines is being used for the engine in question; or

   2. The use of the retrofit device would unduly restrict the vision of the operator such that the vehicle would be unsafe to operate because the device would impair the operator's vision to the front, sides, or rear of the vehicle.[23]

15 (cont.)

[23] CEC, Blythe Solar Power Project, Amendment to the Blythe Solar Power Project, Staff Assessment – Part A, CEC-700-2013-004-FSA-PTA, Docket No. 09-AFC-6C,September 2013, pp. 4.1-33 through 4.1-35; available at http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-06C/TN200629_20130927T120253_Blythe_Solar_Power_Project_Staff_Assessment__Part_A_Corrected.pdf.

These measures are equally feasible for construction of the Project and should be required for all off-road construction equipment.

On-Road Vehicle Fleet

To reduce combustion exhaust emissions from on-road vehicles during construction of the Project such as concrete trucks, water trucks, and delivery trucks, the County should evaluate the feasibility of requiring a) that ninety percent of the truck carriers contracted by the Applicant be U.S. Environmental Protection Agency ("EPA") SmartWay partners[24] or b) that the Applicant contract with truck carriers whose on-road diesel-powered vehicles are equipped with CARB-certified Tier 3 pollution control equipment capable of achieving at least 25% percent reduction in NOx emissions.[25]

Construction Worker Commuter Vehicles

Construction of the Project would require up to 109 workers during peak construction. To reduce NOx emissions from construction worker commuter vehicles, the Applicant could be required to provide natural-gas powered shuttle buses with pick-up locations in the towns where construction workers will likely lodge or reside.

15 (cont.)

II.E The IS/MND Fails to Identify Potentially Significant Cumulative Impacts on Air Quality during Project Construction

The IS/MND identifies a total of 11 solar energy projects currently proposed within a three-mile radius of the proposed Project and provides information about these projects' MW and acreage. (The IS/MND does not provide totals for these 11 solar energy projects, which can be calculated at 2,170.7 acres and 943.4 MW.) Three of these projects are located within the unincorporated County of Los Angeles and are associated with the Silverado Power Solar Project. The remaining eight are located within the City of Lancaster.[26] With respect to potential cumulative impacts on air quality, the IS/MND finds:

> According to the Notice of Preparation issued for the Silverado Power West Los Angeles County projects, construction is anticipated to begin in 2013 and be completed and operational within 2014, and has the potential to overlap with the proposed Project's construction. Given that the Project's contribution of PM10

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[24] EPA, SmartWay; http://www.epa.gov/smartway/.

[25] CARB, Diesel Certifications, Verification Procedure – Currently Verified; http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm.

[26] IS/MND, p. 4-113.

> during construction, as shown in Table 4-5, is only 6.6 percent of the AVAQMD threshold and the fact that construction activities would be less than six months in duration, the Project's PM10 and O_3 emissions would not be cumulatively considerable when considered in combination with other proposed projects in the Project vicinity. O_3 precursors include VOC and NOx. As shown in Table 4-5, Project construction would result in approximately 1 ton of VOC and 12 tons of NOx emissions, representing approximately 4 percent and 48 percent of the AVAQMD thresholds, respectively. Long-term operations would generate a negligible amount of air pollutants, as shown in Table 4-6, and would not be cumulatively considerable. No mitigation is required.[27]

16 (cont.)

This finding is incorrect. *First*, as discussed in Section II.B, the Project's individual impacts on air quality are significant. Therefore, cumulative impacts are significant as well. *Second*, CEQA guidelines state that a project may be considered to have significant impacts even if the project has environmental effects that are "individually limited but cumulatively considerable".[28] CEQA defines cumulatively considerable to mean

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> … that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of *probable* future projects.[29]

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Accordingly, Project emissions as evaluated in the IS/MND may not exceed thresholds of significance in an individual capacity but the sum of emissions from all projects may exceed thresholds and result in a significantly cumulative impact – a scenario not adequately evaluated by the IS/MND.

The IS/MND does not mention the 254-acre, 30-MW Plainview Solarworks Project immediately east of and adjacent to the Project under review by the City of Lancaster (CUP 13-06).[30] Further, the IS/MND does not provide adequate information for the construction of the 11 solar energy projects currently proposed within a three-mile radius of the proposed Project but allows that while construction schedules for the Silverado Power related-projects, including Projects Nos. 1, 2, and 3, are not anticipated to occur at the same time as the proposed Project, which is scheduled to begin construction in the fall of 2013; however, the IS/MND allows that "if the Silverado

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[27] IS/MND, p. 4-21.

[28] California Natural Resources Agency, 2010 California Environmental Quality Act (CEQA) Statute and Guidelines, p. 108; available at http://ceres.ca.gov/ceqa/docs/2010_CEQA_Statutes_and_Guidelines.pdf.

[29] *Ibid.*, p. 108

[30] http://www.cityoflancasterca.org/Modules/ShowDocument.aspx?documentid=20661.

Power projects are delayed, construction schedules may overlap."[31] Even based on the IS/MND's substantially underestimated emissions of 12 tons of NOx emissions per year, representing approximately 48 percent of the AVAQMD threshold, construction of just one 26-MW project[32] contemporaneously with the Project would result in exceedance of the AVAQMD's annual significance threshold.[33] 20 (cont.)

Further, as the IS/MND notes, Los Angeles County is currently designated non-attainment for the state 24-hour and annual ambient air quality standards for PM10.[34] Any potentially cumulatively significant emissions from Project construction will result in a worsening of regional air quality. Further, Los Angeles County is designated as "severe" nonattainment for the federal 1-hour and 8-hour ambient air quality standards for ozone ("O_3"), and extreme nonattainment for the state 1-hour and 8-hour ambient air quality standards for ozone.[35] 21

Eleven projects were evaluated in the IS/MND for cumulative impacts. Emissions from all eleven projects must be disclosed, to the extent data are available, and summed in an environmental impact report ("EIR"). Results should be compared to thresholds to determine whether the proposed Project is cumulatively significant. The EIR should also identify the construction timetables of all projects. The EIR should quantify and evaluate potential health risk impacts to workers and nearby residents. 22

III. The IS/MND Fails to Adequately Discuss Potential Health Impacts due to Valley Fever and Fails to Require Adequate Mitigation

Valley Fever, or coccidioidomycosis (short cocci), is an infectious disease caused by inhaling the spores of *Coccidioides ssp.*[36], a soil-dwelling fungus. Spores, or arthroconidia, are released into the air when infected soils are disturbed, *e.g.*, by construction activities, agricultural operations, dust storms, or during earthquakes. The disease is endemic (native and common) in the semiarid regions of the southwestern

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[31] IS/MND, p. 4-114.

[32] Assuming for sake of this back-of-the-envelope calculation that construction emissions are roughly proportional to the number of MW produced.

[33] (15 tons NOx/year)/ (12 tons NOx/year/20 MW) = 25 MW.

[34] IS/MND, p. 4-16.

[35] *Ibid.*

[36] Two species of *Coccidioides* are known to cause Valley Fever: *C. immitis*, which is typically found in California, and *C. posadasii*, which is typically found outside California. *See* Center for Disease Control, Coccidioidomycosis (Valley Fever), Information for Health Professionals; http://www.cdc.gov/fungal/coccidioidomycosis/health-professionals.html, accessed August 21, 2013.

during the months of June through December. Typically, the risk of catching Valley Fever begins to increase in June and continues an upward trend until it peaks during the months of August, September and October.[72] Drought periods can have an especially potent impact on Valley Fever if they follow periods of rain.[73] It is thought that during drought years the number of organisms competing with *Coccidioides ssp.* decreases and the fungus remains alive but dormant. When rain finally occurs, the arthroconidia germinate and multiply more than usual because of a decreased number of other competing organisms. When the soil dries out in the summer and fall, the spores can become airborne and potentially infectious.[74] Thus, major onsite and offsite soil-disturbing construction activities should be timed to coincide with the area's rainy season. After soil-disturbing activities conclude, all disturbed soils (including along the many miles of pipelines) should be sufficiently stabilized to prevent air-borne dispersal of cocci spores.

Recommended Measures to Reduce Risk of Valley Fever

Several agencies and scientific studies have developed precautions to protect workers and the public from Valley Fever.

The California Departments of Public Health and Industrial Relations recommend incorporating the following elements into a company's Injury and Illness Prevention Program and project-specific health and safety plans[75]:

1. Determine if the worksite is in an area where Valley Fever is endemic (consistently present). Check with your local health department to determine whether cases have been known to occur in the proximity of your work area. …

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U.S. Geological Survey Open-File Report 00-348, 2000; available at http://geopubs.wr.usgs.gov/open-file/of00-348/of00-348.pdf.

[72] Kern County Public Health Services Department, What Is Valley Fever, Prevention, Valley Fever Risk Factors; available at http://kerncountyvalleyfever.com/what-is-valley-fever/risk-factors/.

[73] Gosia Wozniacka, Associated Press, Fever Hits Thousands in Parched West Farm Region, May 5, 2013, citing Prof. John Galgiani, director of the Valley Fever Center for Excellence at the University of Arizona; available at http://abcnews.go.com/m/story?id=19113795.

[74] Theodore N. Kirkland and Joshua Fierer, Coccidioidomycosis: A Reemerging Infectious Disease, Emerging Infectious Diseases, Vol. 3, No. 2, July-September 1996; available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2626789/pdf/8903229.pdf.

[75] California Department of Public Health and California Department of Industrial Relations, Hazard Evaluation System & Information Service, Preventing Work-Related Coccidioidomycosis (Valley Fever), June 2013; available at http://www.cdph.ca.gov/programs/hesis/Documents/CocciFact.pdf.

2. Train workers and supervisors on the location of Valley Fever endemic areas, how to recognize symptoms of illness …, and ways to minimize exposure. Encourage workers to report respiratory symptoms that last more than a week to a crew leader, foreman, or supervisor.
3. Limit workers' exposure to outdoor dust in disease-endemic areas. For example, suspend work during heavy wind or dust storms and minimize amount of soil disturbed.
4. When soil will be disturbed by heavy equipment or vehicles, wet the soil before disturbing it and continuously wet it while digging to keep dust levels down.
5. Heavy equipment, trucks, and other vehicles generate heavy dust. Provide vehicles with enclosed, air-conditioned cabs and make sure workers keep the windows closed. Heavy equipment cabs should be equipped with high efficiency particulate air (HEPA) filters. Two-way radios can be used for communication so that the windows can remain closed but allow communication with other workers.
6. Consult the local Air Pollution Control District regarding effective measures to control dust during construction. Measures may include seeding and using soil binders or paving and laying building pads as soon as possible after grading.
7. When digging a trench or fire line or performing other soil-disturbing tasks, position workers upwind when possible.
8. Place overnight camps, especially sleeping quarters and dining halls, away from sources of dust such as roadways.
9. When exposure to dust is unavoidable, provide NIOSH-approved respiratory protection with particulate filters rated as N95, N99, N100, P100, or HEPA. Household materials such as washcloths, bandanas, and handkerchiefs do not protect workers from breathing in dust and spores.

   Respirators for employees must be used within a Cal/OSHA compliant respiratory protection program that covers all respirator wearers and includes medical clearance to wear a respirator, fit testing, training, and procedures for cleaning and maintaining respirators.

   Different classes of respirators provide different levels of protection according to their Assigned Protection Factor (APF) (see table below). Powered air-purifying respirators (PAPRs) have a battery-powered blower that pulls air in through filters to clean it before delivering it to the wearer's breathing zone. PAPRs will provide a high level of worker protection, with an APF of 25 or 1000 depending on the model. When PAPRs are not available, provide a well-fitted NIOSH-approved full-face or half-mask respirator with particulate filters.

   Fit-tested half-mask or filtering facepiece respirators are expected to reduce exposure by 90% (still allowing about 10% faceseal leakage), which can result

23 (cont.)

in an unacceptable risk of infection when digging where Valley Fever spores are present.

Respiratory Protection for Reducing Dust and Spore Exposure

	Respirator Type (worn with particulate filters)	Assigned Protection Factor (APF)	Expected Reduction of Exposure to Dust and Spores (%)
	No respirator	None	0
Increasing Protection ↓	Half-mask respirator (elastomeric or filtering facepiece)	10	90
	Powered air-purifying respirator with loose-fitting face covering	25	96
	Full-face respirator	50	98
	Some powered air-purifying respirators are designed to offer higher protection (check with manufacturer)	1000	99.9

Similarly, the Kern County Public Health Services Department recommends:[76]

Practice general prevention measures.

Determine if the work site is in a high risk Valley Fever area (contact the Kern County Public Health Services Department).

Obtain a health assessment prior to being exposed to Valley Fever.

Use non-susceptible workers.

Use machinery and vehicles with enclosed cabs and use air conditioning.

Use dust masks appropriate for the activity performed (see HESIS Fact Sheet).

Remove dusty clothing and store in plastic bags until washed.

In response to an outbreak of Valley Fever in construction workers in 2007, the San Luis Obispo County Public Health Department in conjunction with the California Department of Public Health developed recommendations to limit exposure to Valley Fever based on scientific information from the published literature. They recommend that the following measures be implemented to reduce the possibility of worker illness when workers are exposed to dust in Valley Fever endemic areas:[77]

23 (cont.)

[76] Kern County Public Health Services Department, What Is Valley Fever, Prevention; http://kerncountyvalleyfever.com/what-is-valley-fever/prevention/.

[77] San Luis Obispo County Health Agency, Recommendations for Workers to Prevent Infection by Valley Fever in SLO County; http://www.slocounty.ca.gov/Assets/PH/Epidemiology/Cocci+Recomendations.pdf.

1. *Implement comprehensive Injury and Illness Prevention Program (required by Title 8, Section 3203) ensuring safeguards to prevent Valley Fever are included.*
2. *Work with a medical professional with expertise in cocci to develop a training program for all employees discussing the following issues: potential presence of C. immites in soils; the risks involved with inhaling spores; how to recognize common symptoms (which resemble common viral infections, and may include fatigue, cough, chest pain, fever, rash, headache, and body and joint ache); requesting prompt reporting of suspected symptoms to a supervisor and health care provider; discussing worker entitlement to receive prompt medical care if they suspect symptoms of work-related Valley Fever; and requesting the use of personal protection measures as outlined below.*
3. *Control exposure to dust*:
   - Consult with local Air Pollution Control District Compliance Assistance programs and with California Occupational Safety and Health Administration ("Cal/OSHA") compliance program regarding meeting the requirements of Dust control plans and for specific methods of dust control. These methods may include wetting the soil while ensuring that the wetting process does not raise dust or adversely affect the construction process;
   - Provide high-efficiency particulate ("HEP")-filtered, air-conditioned enclosed cabs on heavy equipment. Train workers on proper use of cabs, such as turning on air conditioning prior to using the equipment.
   - Provide communication methods, such as 2-way radios, for use in enclosed cabs.
   - Provide National Institute for Occupational Safety and Health ("NIOSH")-approved respirators for workers without a prior history of Valley Fever.
   - Half-face respirators equipped with N-100 or P-100 filters should be used during digging. Employees should wear respirators when working near earth moving machinery.
   - Employees should be medically evaluated, fit-tested, and properly trained on the use of the respirators, and a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Protection Standard (8 CCR 5144) should be in place.
   - Prohibit eating and smoking at the worksite, and provide separate, clean eating areas with hand-washing facilities.
   - Avoid outdoor construction operations during unusually windy conditions.
   - Consider limiting outdoor construction during the fall to essential jobs only, as the risk of cocci infection is higher during this season.

23 (cont.)

4. *Prevent transport of cocci outside endemic areas*:

   – Thoroughly clean equipment, vehicles, and other items before they are moved off-site to other work locations;

   – Provide workers with coveralls daily, lockers (or other system for keeping work and street clothing and shoes separate), daily changing and showering facilities.

   – Clothing should be changed after work every day, preferably at the work site;

   – Train workers to recognize that cocci may be transported offsite on contaminated equipment, clothing, and shoes; alternatively, consider installing boot-washing; and

   – Post warnings onsite and consider limiting access to visitors, especially those without adequate training and respiratory protection.

5. *Improve medical surveillance for employees*

   – Employees should have prompt access to medical care, including suspected work-related illnesses and injuries;

   – Work with a medical professional to develop a protocol to medically evaluate employees who have symptoms of Valley Fever;

   – Consider preferentially contracting with 1-2 clinics in the area and communicate with the health care providers in those clinics to ensure that providers are aware that Valley Fever has been reported in the area. This will increase the likelihood that ill workers will receive prompt, proper and consistent medical care;

   – Respirator clearance should include medical evaluation for all new employees, annual re-evaluation for changes in medical status, and annual training, and fit-testing;

   – Please note that skin testing is not recommended for evaluation of Valley Fever;

   – If an employee is diagnosed with Valley Fever, a physician must determine if the employee should be taken off work, when they may return to work, and what type of work activities they may perform.

23 (cont.)

California Energy Commission staff recently recommended the following conditions of certification for Valley Fever for the Blythe Solar Energy Project:

> **WORKER SAFETY-8** The project owner shall develop and implement an enhanced Dust Control Plan that includes the requirements described in AQ-SC3 and additionally requires:

1. Site worker use of dust masks (NIOSH N-95 or better) whenever visible dust is present;
2. Implementation of methods equivalent to Rule 402 of the Kern County Air Pollution Control District (as amended Nov. 3, 2004); and No downwind PM10 ambient concentrations to increase more than 50 micrograms per cubic meter above upwind concentrations as determined by simultaneous upwind and downwind sampling. High-volume particulate matter samplers or other EPA-approved equivalent method(s) for PM10 monitoring shall be used. Samplers shall be:
    a. Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate EPA published documents for EPA-approved equivalent methods(s) for PM10 sampling;
    b. Reasonably placed upwind and downwind of the large operation based on prevailing wind direction and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized; and
    c. Operated during active operations.
3. Implementation of enhanced dust control methods (increased frequency of watering, use of dust suppression chemicals, etc. consistent with AQ-SC4) immediately whenever visible dust comes from or onto the site or when PM10 measurements obtained when implementing ii (above) exceed 50 µg/m^3 [micrograms per cubic meter].[78]

23 (cont.)

In the wake of the recent Valley Fever outbreaks at solar photovoltaic energy project construction sites, in May 2013, the County Board of Supervisors unanimously adopted an amendment proposed to County Codes governing solar power plant construction:

> 79-B. Recommendation as submitted by Supervisor Antonovich: Direct the Directors of Planning, Public Works and Public Health to explore possible County Code amendments to minimize ground disturbance during construction of large scale solar projects, which could expose local residents and workers to valley fever exposure, also require the following from all solar energy facilities in Los Angeles County:
>
> 1. An alternative construction method to mass grading, disking and scraping where solar panel arrays are to be located; and

[78] CEC, Blythe Solar Power Project, Amendment to the Blythe Solar Power Project, Staff Assessment – Part A, CEC-700-2013-004-FSA-PTA, Docket No. 09-AFC-6C,September 2013, p. 4.14-31.; available at http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-06C/TN200629_20130927T120253_Blythe_Solar_Power_Project_Staff_Assessment__Part_A_Corrected.pdf.

2. That any grading, disking and scraping to access roads, walkways, required basins and berms be permanently stabilized with an earth stabilizing product that is acceptable to the Departments of Planning, Public Works and Public Health to prevent fugitive dust. (13-2302)[79]

The IS/MND fails entirely to note these measures.

All of the above measures recommended by the California Departments of Public Health and Industrial Relations, the Kern County Public Health Services Department, the San Luis Obispo County Public Health Department, the California Energy Commission and the County Board of Supervisors are feasible for the Project and the County should consolidate the most health-protective measures for both on-site workers as well as off-site receptors to reduce exposure to Valley Fever in an enhanced dust control plan. This dust control plan should also address site stabilization for the Project's operational phase. 23 (cont.)

IV. The IS/MND Does Not Adequately Address Cumulative Impacts on Water Supply

The Project would require massive amounts of water, 100,000 gallons per day ("gpd"), for dust control during construction.[80] The water would be supplied by the Antelope Valley-East Kern Water Agency to the Cawelo Water District and then trucked to the site.[81] The water supply would originate with State Water Project Table A entitlement water (sourced from northern California).[82] The IS/MND does not adequately discuss the potential cumulative impact from developing solar PV projects on the State Water Project when construction occurs simultaneously. 24

V. Recommendations

Based on the above discussion, I find that the IS/MND is deficient and does not adequately analyze the Project. As a result, the IS/MND fails to identify and adequately mitigate impacts on air quality and public health. I recommend that the County prepare an EIR that a) revises the air quality analysis for Project construction to adequately account for all criteria pollutant and precursor emissions; b) requires adequate mitigation measures to reduce the significant impacts on air quality resulting from 25

[79] Los Angeles County, Board of Supervisors, Statement of Proceedings, May 14, 2013; available at http://file.lacounty.gov/bos/sop/cms1_194872.pdf.

[80] IS/MND, p. 4-14.

[81] *Ibid.*

[82] *Ibid.*

2.7.2 PLESS ENVIRONMENTAL, INC. (PLESS)

November 18, 2013

Response Pless-1

The introduction and project description, as summarized by the commenter, are accurate.

Response Pless-2

The comment states that the pollutant emissions calculations included in Appendix B of the IS/MND do not indicate the sources of the data and/or assumptions. The following source data is provided for information:

- The construction timeline, equipment inventory, numbers of delivery and water truck trips, number of worker trips, and truck and worker trip distances were developed by the County, the County's consultant, and the Project Applicant, and were based on the Project plans and the Project Applicant's prior experience with solar generation projects.
- Construction equipment horsepower, load factors, and pollutant emission factors are from the California Emissions Estimator Model (CalEEMod) version 2011, which is based on the California Air Resources Board (CARB) OFFROAD 2007 model.
- Pollutant emission factors for on-road trucks and worker commute vehicles are from the CARB EMFAC 2011 model.
- All emission factors are for 2013 operations.
- Fugitive dust ratios of fine particulate matter with a diameter of 2.5 microns or less (PM2.5) to respirable particulate matter with a diameter of 10 microns or less (PM10) are from "Appendix A - Updated CEIDARS Table with PM2.5 Fractions" of the South Coast Air Quality Management District (SCAQMD) 2006 document entitled *Final Methodology to Calculate PM2.5 and PM2.5 Significance Thresholds.*

Response Pless-3

BonTerra Consulting's previous experience with the Antelope Valley Air Quality Management District (AVAQMD) has been that the annual emissions threshold is appropriate to use for all projects, including the proposed Project. However, based on this comment, an inquiry was made to AVAQMD in December 2013, and their reply was that a conservative approach to a six-month project would be to consider half the annual threshold. This approach is applied and the revised emissions calculations are presented in Table AQ-2 in Topical Response No. 3, Air Quality. The construction phase emission calculations for the proposed Project have been updated using the OFFROAD 2011 model for construction equipment emissions, which was not available at the time the IS/MND was prepared, and some input data has been changed in response to specific comments, as detailed in Topical Response No. 3. As shown in Table AQ-2, the revised construction emissions would be less than half of the halved annual thresholds and would therefore remain less than significant impact.

Response Pless-4

Please see Response Pless-2 for additional information regarding the source data and model assumptions applied in the air quality analysis; Response Pless-3; and Topical Response No. 3, Air Quality, which demonstrate that NOx emissions during construction would be less than both the annual and halved annual AVAQMD thresholds.

Response Pless-5

While it is possible that individual pieces of equipment may have higher emissions than the fleet average that is used for emissions calculations, it is equally true that individual pieces of equipment may have lower emissions than the fleet average, which is why fleet average values are used. It is highly likely that the emissions of equipment used on the proposed Project will have lower emissions than those predicted using the CARB OFFROAD 2011 model because current typical contractor's fleets include substantial quantities of Tier 2 and Tier 3, and some Tier 4 equipment, which have lower emission rates than the equipment assumed in the OFFROAD 2011 fleets.

Response Pless-6

The equipment selection used for emissions calculation is representative of a typical solar project of the size proposed. At the stage in project planning when an IS/MND is prepared, detailed durations of equipment use for each potential piece of equipment are not known. The comment indicates that emissions from selected pieces of equipment (e.g., generator sets, cranes) are not included, which is incorrect; please refer to Appendix B of the IS/MND and the Appendix to the Topical Response No. 3, Air Quality, in Section 4.0, Errata. The equipment selection includes elements to account for pieces of equipment that may not be individually specified; for example, the switchyard emissions include 2 off-road 400 horsepower off-road trucks and the unit erection emissions include two "other" material handling pieces of equipment that have a greater horsepower rating than typical forklifts or manlifts. Plate compactors and pressure washers are typically less than 20 horsepower and add essentially negligible emissions.

Response Pless-7

As discussed on page 3-13 of the IS/MND, during the peak of construction, a typical day would include the transportation of workers, movement of heavy equipment, and transportation of materials. The anticipated peak traffic day, which would occur when grading and equipment delivery trucks overlap with worker trips for panel installations, would involve approximately 51 round-trip truck trips (including 17 trips for water delivery trucks) and 54 worker round-trips. This peak activity is estimated to occur over approximately ten working days, but may be more or less depending on the actual timing of construction phase overlap. The comment states that there will likely be days when the number of truck trips would be considerably higher than the 50 trip per day average used for the calculations; however, the truck traffic stated above is anticipated to be representative of the peak day (i.e., worst-case). For the vast majority of the construction period, the number of trips will be less.

Response Pless-8

As stated in Response Pless-7 above, the average of 51 trucks per day delivering materials to the Project site includes 17 trips for water delivery trucks.

Response Pless-9

The IS/MND air quality analysis included one water truck for four hours per day in each phase, which is typical for grading operations. However, the commenter states that was not consistent with the very conservative forecast of five water trucks working ten hours per day stated in Table 3-3 on page 3-12 of the IS/MND. Therefore, the revised emissions calculations include five water trucks for ten hours per day. As shown in Table AQ-1 and Table AQ-2 of Topical Response 3, Air Quality, the revised construction emissions for NOx (i.e., combustion) would

remain well below both the annual and halved annual AVAQMD thresholds and would therefore remain a less than significant impact. Please refer to Topical Response No. 3, Air Quality, for additional response to this comment.

Response Pless-10

The comment is an introduction to a section of comments relative to particulate emissions. The claim of substantially underestimated fugitive dust emissions in this comment is conclusory and therefore further response cannot be made.

Response Pless-11

Please refer to Topical Response No. 4, Dust Control Plan.

Windblown dust is an existing condition. Potential increases in windblown dust would be avoided or minimized by the measures included in MM AQ-1 and the Dust Control Plan that must be approved by the AVAQMD.

Response Pless-12

The comment correctly notes that the IS/MND analysis did not include fugitive dust emissions from vehicle travel on paved roads. This is typically a very small quantity, as the roads are paved rather than dirt; nonetheless, this source has been added to the revised emissions calculations presented in Topical Response No. 3, Air Quality. As shown, all emissions remain below the respective AVAQMD thresholds.

Response Pless-13

The comment correctly notes that the IS/MND analysis did not include fugitive dust from material (earth) handling. This has been added to the revised emissions calculations presented in Topical Response No. 3, Air Quality. As shown, all emissions remain below the respective AVAQMD thresholds.

Response Pless-14

Please refer to Topical Response No. 3, Air Quality.

The comment correctly notes that the IS/MND fugitive dust calculations are based on guidance published by the SCAQMD. MM AQ-1 requires watering at least three times daily, which would be increased to a minimum of four times a day if there is evidence of visible wind-driven fugitive dust. The SCAQMD guidance indicating 12 percent moisture content is appropriate for wetted soil; the exposed soil (i.e., the active grading area) on the Project site will be wetted soil due to repeated daily water application. The revised PM10 calculations in Topical Response No. 3, Air Quality, which include the additional emissions of Responses Pless-12 and Pless-13 above, show that emissions would be less than 19 percent of the halved AVAQMD annual threshold, which, per AVAQMD, is a conservative approach for the proposed Project. Also, for the sake of comparison, the PM10 emissions were calculated using an unmitigated, 2 percent moisture content and a 61 percent reduction based on watering 3 times daily. Under this scenario, the estimated construction PM10 emissions would be approximately 3 tons, which is less than half of the conservative 7.5 tons per year halved AVAQMD annual threshold.

Response Pless-15

The comment states that all feasible mitigation for construction exhaust emissions must be required to mitigate significant impacts on air quality during Project construction, and recommends a number of mitigation measures for combustion NOx emissions. However, as discussed herein and substantiated by calculated NOx emissions based on the current state of the practice and consultation with the AVAQMD, construction emissions of NOx would be less than significant. According to Section 15126.4(a)(3) of the State CEQA Guidelines, "mitigation measures are not required for effects which are not found to be significant". Therefore, additional mitigation measures are neither necessary nor required.

Response Pless-16

Project construction emissions have been recalculated and are presented in Topical Response No. 3, Air Quality. Therefore, the statements relative to cumulative emissions on page 4-21 of the IS/MND will be revised as follows, and as stated in Section 4.0, Errata:

> Given that the Project's contribution of PM10 during construction, as shown in Table 4-5, is ~~only 6.6~~ **less than 19** percent of the **conservative** AVAQMD **half annual** threshold and the fact that construction activities would be less than six months in duration, the Project's PM10 and O_3 emissions would not be cumulatively considerable when considered in combination with other proposed Projects in the Project vicinity. O_3 precursors include VOC and NOx. As shown in Table 4-5, Project construction would result in approximately ~~1~~ **0.6** ton of VOC and ~~12~~ **5.7** tons of NOx emissions, representing approximately ~~4~~ **5** percent and ~~48~~ **45** percent of the **conservative, halved annual** AVAQMD thresholds, respectively.

Response Pless-17

The comment is not correct. As shown in Response Pless-16 and Topical Response No. 3, Air Quality, direct impacts on air quality would be less than significant.

Response Pless-18

The comment correctly cites the State CEQA Guidelines relative to cumulatively considerable impacts, but is not correct in implying that the analysis must include a quantitative sum of emissions from all projects. Analysis of cumulative impacts for construction activities considers not only the quantity of emissions, but also the duration of emissions, the nature of other projects, and the regional and local setting.

Response Pless-19

Please refer to Topical Response No. 8, Cumulative Impacts.

Response Pless-20

As noted in Response Pless-18, the analysis of cumulative impacts considers many factors. A primary consideration of whether emissions would be cumulatively considerable on a regional basis is the duration of emissions. Operational emissions are assumed to occur for the foreseeable future, and the magnitude of those emissions is important because these emissions would be permanent additions to regional inventory. Construction emissions are not permanent and, for the proposed Project, would be a very temporary addition to the regional inventory, lasting approximately six months. This duration factor, combined with the relatively low

emissions compared to AVAQMD guidance thresholds (see response to comment Pless-16) are the dominant factors in the County's determination that the impacts would not be cumulatively considerable. For consideration of regional effects, the magnitude of the Project's contribution to the regional condition is the most important aspect. Even if the Project's construction schedule were to overlap with a nearby project, the emissions generated by short-term construction activities, as shown in Table AQ-1 and Table AQ-2 of Topical Response 3, Air Quality, are less than half of the threshold for NOx, and even less for other emissions, and only for a very brief period of time. If emissions were to double as a result of cumulative emissions, the result would still we well under the AVAQMD threshold as can be determined from the data in Table AQ-2. This Project's short-term construction emissions contribution to the regional conditions would not be cumulatively "considerable". Therefore, the analysis does not attempt to quantify the emissions of other solar projects in the Antelope Valley, as this is neither required nor warranted to adequately make a determination regarding cumulative construction air quality impacts.

Response Pless-21

The comment states the federal and State nonattainment designations for PM10 and ozone (O_3) correctly; however, it should be noted that the State PM10 designation is not identified for the 24-hour standard, the annual standard, or both. The comment states that any potential cumulatively significant emissions from Project construction will result in a worsening of regional air quality. This statement may be technically true, as one may argue that any emissions from any source would worsen air quality, often called the "one molecule" theory. However, the standard for the cumulative air quality analysis is whether the emissions would be "cumulatively considerable" and, as stated in the IS/MND and discussed in the preceding responses, the County has determined that the Project's construction emissions would not be cumulatively considerable and the impact would be less than significant.

Response Pless-22

Please refer to Response Pless-20, and Topical Response No. 1, Why a Mitigated Negative Declaration Was Prepared and Not an Environmental Impact Report.

Response Pless-23

Please refer to Topical Response No. 6, Valley Fever.

Response Pless-24

The use of potable water from the Cawelo Water District (via Antelope Valley Eastern Kern Water Agency [AVEK]) is done expressly for the purpose of eliminating likely cumulative impacts to water supply. The Antelope Valley Water Basin is being adjudicated, and the County's requirements for "Sanitation Facilities at Remote Worksite Locations" apply to the Project; this requires that the Project utilize water delivered from sources outside of the Antelope Valley Groundwater Basin.

Regarding the potential impacts of a water district selling banked water, in 2009 the Cawelo District adopted a CEQA-compliant document entitled, *Negative Declaration for Recovery and Sale of Banked Oilfield Produced Water by Cawelo Water District* (SCH No. 2009021083). Therefore, the Cawelo Water District has addressed the environmental impacts of its sale of State Water Project water and its delivery into the California Aqueduct under Article 55 of the State Water Project. Also, the Cawelo Water District submitted a letter to the County of Los Angeles Department of Regional Planning testifying that it (i.e., the Cawelo Water District) can provide adequate water for the Project. These documents are cited in the references

section of the IS/MND as a part of the administrative record. Also, this comment is predicated on the assumption that all active solar projects in the Antelope Valley are obtaining water from the same source (i.e., the State Water Project). This is highly unlikely as the County's requirement for outside water does not apply to projects located within the City of Lancaster, as well as the fact that the County does not specify a particular water source to be used; the eventual contracting with the Cawelo Water District was at the Project Applicant's discretion. Finally, it is noted that the conservatively estimated water demand being contracted for with the Cawelo Water District is a finite volume, rather than an open-ended amount.

A cumulative impact due to water demand would require that the incremental water demands for all solar projects in the Antelope Valley would cause a shortage of water by the Cawelo Water District such that its existing and projected future demands for potable water could not be met. In addition to the facts discussed above, there would be no cumulative impact to State Water Project water because the Cawelo Water District would not agree to supply the Project's, or any other project, if it would endanger its ability to serve its existing contractual requirements.

Response Pless-25

Please refer to response to comments Pless-1 through Pless-24.

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16 November 2013

RE: Comments on the proposed West Antelope Solar Energy Project

I would like to comment on an Initial Study and Negative Declaration (BonTerra Consulting 2013) prepared for the West Antelope Solar Energy Project, which I understand would be rated at a capacity of 20 MW on 263 acres. My qualifications for preparing expert comments are the following. I earned a Ph.D. degree in Ecology from the University of California at Davis in 1990, where I subsequently worked for four years as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, habitat restoration, interactions between wildlife and human infrastructure and activities, conservation of rare and endangered species, and on the ecology of invading species. I have authored numerous papers on special-status species issues, including "Using the best scientific data for endangered species conservation," published in Environmental Management (Smallwood et al. 1999), and "Suggested standards for science applied to conservation issues" published in the Transactions of the Western Section of The Wildlife Society (Smallwood et al. 2001). I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and the Raptor Research Foundation, and I've been a part-time lecturer at California State University, Sacramento. I was also Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management.

I have performed avian surveys in California for twenty-three years (Smallwood et al. 1996, Smallwood and Nakamoto 2009). Over these years, I studied the impacts of human activities and human infrastructure on birds and other animals, including on Swainson's hawks (Smallwood 1995), burrowing owls (Smallwood et al. 2007), and other species (Smallwood and Nakamoto 2009). I studied fossorial animals (i.e., animals that burrow into soil, where they live much of their lives), including pocket gophers (Smallwood and Geng 1997), ground squirrels, kangaroo rats, voles, harvester ants, and many other functionally similar groups. I performed focused studies of how wildlife interact with agricultural fields and associated cultural practices, especially with alfalfa production (Smallwood and Geng 1993, Erichsen et al. 1996, Smallwood et al. 1996, 2001). I have also performed wildlife surveys at many proposed project sites, including at a proposed large solar farm in the Mojave Desert. I performed mammalian carnivore surveys in the project area since 1985, with one of my transects located only 800 m from the project boundary.

SUFFICIENCY OF IMPACT REVIEW

Under CEQA,[1] "[A] paramount consideration is the right of the public to be informed in such a way that it can intelligently weigh the environmental consequences of any contemplated action and have an appropriate voice in the formulation of any decision." The public needs information that is thorough, relevant, unbiased, and honest; the public needs full disclosure of the environmental setting and possible cumulative impacts. Documents presenting information from a biased perspective will tend to include omissions, logical fallacies, internal contradictions, and unfounded responses to substantial issues. In my review of the Initial Study/Negative Declaration (hereafter referred to as Neg Dec), I found these types of problems, indicating that the Neg Dec was insufficient in its provision of relevant information to the public.

The Neg Dec included multiple indicators that the authors were unfamiliar with current environmental review standards and with the wildlife species they addressed. For example, the special-status species list relied on outmoded status assignments from CDFW. It has been nearly six years since CDFW updated the California Species of Special Concern listings (Shuford and Gardeli 2008), but the Neg Dec uses the old listings. 1

In an example of misleading analysis, BonTerra Consulting (2013: 4-26) pointed out that "*…the Project site is bound by the SCE TRTP corridor* [Southern California Edison's Tehachapi Renewables Transmission Project right-away] *on the western and southern edges and 110th Street West along the eastern edge, resulting in increase edge effects (e.g., higher occurrence of invasive species, fires, and wildlife/human interactions) in these areas on the perimeter of the Project site.*" These edge effects, if they indeed occur at any greater frequency than currently occurs on the project site, were cast as negative for wildlife. In fact, transmission line right-of-ways often include the last remaining grasslands in the region, and often serve as wildlife movement corridors. More than likely, the adjacency of the SCE TRTP corridor enhances wildlife use of the project site and the region. 2

The Neg Dec also included irrelevant statements, which were nothing more than filler text. For example, BonTerra Consulting (2013: 4-35) wrote, "*Bird species have potential to nest in native and non-native vegetation on the Project site.*" This is always the case, everywhere on dry land, and so this statement offered nothing of value to the Neg Dec.

In another example, BonTerra Consulting (2013: 4-35) wrote, "*A number of terms such as "wildlife corridor", "travel route", "habitat linkage", and "wildlife crossing" have been used in various wildlife movement studies to refer to areas where wildlife move from one area to another.*" Each of these terms carries very specific meaning. Listing them out in a sentence with the implication that they all mean the same thing was misleading and of no value to the Negative Declaration other than to confuse the issue of the project's impacts on wildlife movement in the region. 3

[1] Environmental Planning and Information Council vs. County of El Dorado (1982) 131 Cal. App. 3d 350, 354.

Even more misleading, BonTerra Consulting (2013: 4-35) claimed that "*…any impacts to wildlife movement would exist only for the life of the proposed Project, and the site would be restored to its pre-developed conditions.*" There is no evidence that habitat restoration has ever succeeded in restoring project sites to pre-development conditions. In fact, such a restoration is essentially impossible, given the overwhelming complexities of inter-specific relationships among soil micro-organisms and other flora and fauna (Hole 1981) and of ecosystem flows and storages of energy, nutrients, and water (Ricklefs et al. 1984). It is misleading to claim that restoration to pre-development conditions can take place. It cannot and will not happen.

3 (cont.)

The Neg Dec presented multiple misleading analyses about Swainson's hawk ecology, which minimized project impact estimates. For example, BonTerra Consulting (2013: 4-32) wrote, "*None of these* [Swainson's] *hawks* [that were observed during surveys] *exhibited any breeding or nesting behaviors and are presumed to have been migrants. As would be expected of migrants in the Antelope Valley, the April sightings were all or mostly adults, while the May sightings were almost all sub-adults (second year birds still retaining some juvenile feathers).*" This analysis was misleading because Swainson's hawks return from winter migration in early March, and they return to nest. Swainson's hawks observed in April and May are no longer winter migrants; they are present to nest. Observing adult birds in April and subadults in May has no bearing on the breeding status of the adults or subadults.

According to BonTerra Consulting (2013: 4-33), "*While suitable nesting habitat is not available on the Project site, the Project site contains relatively low quality potential foraging habitat that is expected to be used, if used at all, by only non-breeding Swainson's hawks.*" However, BonTerra Consulting provided no legitimate reasons for declaring that the project site qualifies as low-quality foraging habitat. Swainson's hawks spent thousands of years foraging on this landscape covered by nearly the same flora and fauna that exists there now. BonTerra Consulting should refrain from making such a claim unless and until it can prove the truth of it. Furthermore, there was no foundation for the conclusion that only non-breeding Swainson's hawks would forage on the project site.

Also According to BonTerra Consulting (2013: 4-33), "*Although most of the site would not be graded, the Project components, including PV panels and appurtenant facilities, have the potential to hinder the Swainson's hawk access to the foraging habitat at the Project site.*" But this is an understatement, and so it is misleading. It is well known that Swainson's hawks avoid vineyards and orchards (Smallwood 1995, Smallwood et al. 1996). The arrays of PV panels will have the same effect, and Swainson's hawks will not forage on the project site once the PV arrays are installed. The habitat loss due to the project will be total.

And then BonTerra Consulting (2013: 4-33) adds more misleading, unfounded conclusions, "*The Project site shows evidence of scarring from historical uses, most likely agricultural, as well occasional tilling and or other type of linear mechanical disturbance to the soils. Consequently, no native scrub or woodland persists on the Project site and the more common annual species dominate the site, as is true for most of the region. Evidently due to the level of disturbance, indicators of small mammal presence were extremely limited based on the biologist's observations. As a result, small mammal prey, a primary food source when breeding, are likely to be available on the Project site in low densities relative to regional sites that support nesting*

4

Swainson's hawks." I have live-trapped small mammals over many thousands of trap-nights and have made thousands of captures. I have also mapped sign of small mammals across large areas for many years, and I have watched them at night using a thermal imaging camera. BonTerra Consulting's claims that past site disturbances resulted in limited small mammal populations are not true. I have often obtained >100% trap success (more than 1 small mammal per trap) in places more disturbed than the project site, including on hazardous waste sites, military sites, and many other types of land use. On lands with little to no sign of small mammals, I have seen them in my thermal camera emerge in large numbers from cracks in the soil and from burrows and rock piles. If biologists were able to assess small mammal diversity and abundance by simply walking over the ground, then live-trapping would rarely if ever be used. The truth is that biologists cannot do this, which is why live-trapping is so pervasively used. It was not used at the project site. BonTerra Consulting's conclusions about small mammal abundance and the prey base of Swainson's hawk are unqualified and unreliable.

According to BonTerra Consulting (2013: 4-33), "*Although Swainson's hawks may forage in a wide variety of habitats, especially in the nonbreeding season, nest records in the Antelope Valley appear to indicate a correlation with active agricultural fields.*" However, I must remind the reader that Swainson's hawks do not forage in California during the non-nesting season because over the winter they are in Mexico and South America. If BonTerra Consulting has a correlation coefficient for the alleged relationship between Swainson's hawk foraging and agricultural fields, then what is it and where can I find the report? I must add that I do have correlations between Swainson's hawk foraging and land use and vegetation cover, and mine are based on my own scientific investigations. I found that grasslands, which are decreasing in extent, are used disproportionately by foraging Swainson's hawks (Smallwood 1995, Smallwood et al. 1996).

BonTerra Consulting (2013: 4-33) also wrote, "*Potentially suitable habitat for non-breeding Swainson's hawks is expansive throughout the region and loss or reduced suitability of a portion of the Project site would not represent a substantial impact on the species and is considered to be a less than significant impact.*" This claim, however, was made without any serious analysis, and did not consider the many expansive solar projects that are destroying and will continue to destroy much of what is left of the expansive habitat in the region. The cumulative impacts to Swainson's hawk from solar development in the Antelope Valley are substantial and significant.

Finally, BonTerra Consulting (2013: 4-33) added, "*Other projects in the region that would impact breeding Swainson's hawk foraging habitat have been typically required to mitigate through preservation of similar suitable habitat for breeding hawks. Therefore, the cumulative impact of this and other projects in the vicinity would not result in a substantial loss of foraging ground or result in genetic isolation and is considered to be a less than significant impact.*" BonTerra Consulting apparently does not understand cumulative impacts or how they should be analyzed under CEQA. If the analysis was merely to confirm that all projects in the region mitigated their project-specific impacts, then cumulative effects analysis would simply be a matter of checking that each of the regional projects did indeed mitigate their impacts. In the case of this project, BonTerra Consulting assumes that all the other projects fully mitigated their impacts. Based on my review of many of these other projects in the Antelope Valley, I have seen that this was not the case due to (1) inadequate surveys needed to characterize existing

4 (cont.)

environmental conditions, (2) inadequate impact assessments, and (3) insufficient and ineffective mitigation.

4 (cont.)

The biological surveys performed by BonTerra Consulting revealed an example of how their cumulative effects analysis was fundamentally flawed. Their burrowing owl surveys, which appeared to me to have been done properly and professionally, detected a colony of burrowing owls on the east side of the West Antelope Solar Project. Most of the nesting burrowing owls occurred just outside the project boundary and within the area surveyed for burrowing owls as part of the Plainview Solar Works project. Even though these nesting burrowing owls were highly visible on the Plainview Solar Works project area (see the photos in Attachment A of the MND Technical Documents), they were not detected by the consultants who performed the biological surveys in support of Plainview Solar Works (Noreas Environmental Engineering and Science 2013). Therefore, the impact assessment of Plainview Solar Works concluded that the likelihood potential of burrowing owl occurrence was "low." The only mitigation for burrowing owl impacts at Plainview Solar Works included pre-construction surveys, which would come too late to perform an impact assessment that meets CDFG's (2012) standards. Therefore, BonTerra Consulting was incorrect to assume that cumulative impacts would be less than significant because other projects in the region would have mitigated their project-specific impacts.

Regardless of whether project-specific impacts were mitigated at all other projects in the region, BonTerra Consulting's analysis was incomplete and flawed. No consideration was made of the total amount of foraging habitat that will be taken by the suite of projects, or of habitat fragmentation and its impacts. The burrowing owls about to be displaced at the Plainview Solar Works project might have moved over to the habitat within the boundary of the West Antelope Solar project, but the latter project will prevent their relocation. Where are these burrowing owls supposed to go? Vast habitat areas are proposed for conversion to solar projects. There are significant cumulative impacts caused by these solar projects.

5

Occurrence of Special-Status Species on or near the Project Site

Biological surveys in April and May could not have yielded detections of multiple special-status species, such as those that winter or stop-over in the area (some of these are included in Table 1). The survey could not have detected mountain plover. Night surveys using an acoustic detector would have been needed to detect bats, and either capture techniques or use of Sonobat would have been needed to identify bats to species. In my experience, little is known of bat species at sites throughout California, and the use of Sonobat yields surprisingly high bat diversity. Without using the appropriate survey methods, many special-status species cannot be detected. It was therefore misleading of the Neg Dec to repeatedly state that particular special-status species were not detected, because there was zero to very little chance of detecting them during spring surveys.

Burrowing owl.—The field surveys for burrowing owl were done according to protocol, and they were done well. Of all the CEQA review documents I have reviewed for solar projects in the Antelope Valley, I believe the surveys performed at the West Antelope Solar Project were far superior.

6

Swainson's hawk.—The field surveys for Swainson's hawk were done according to protocol, and were the best surveys of all that I have seen reported upon in CEQA documents prepared for solar projects in the Antelope Valley.

The impact assessment, however, was flawed, as discussed earlier.

Bats.—Multiple species of bat could, and probably do, occur on the project site (Table 1). Bat use of the project site cannot be detected by diurnal surveys. Bats require evening surveys, or nocturnal surveys using acoustic monitors, thermal imaging, or trapping. The Neg Dec did not provide a scientifically defensible assessment of bat impacts.

Table 1. Special-status species of wildlife that could potentially occur at, or travel through, the proposed West Antelope Solar Project site.

Common name	Scientific name	Status[1]	Occurrence likelihood	
			Neg Dec	Smallwood
Pallid bat	*Antrozous pallidus*	CSC	Not expected	Possible
Townsend's western big-eared bat	*Plecotus t. townsendii*	CSC	Not expected	Possible
Western mastiff bat	*Eumops perotis*	CSC	No mention	Probable
Long-eared myotis	*Myotis evotis*	WBWG	No mention	Probable
Fringed myotis	*Myotis thysanodes*	WBWG	No mention	Probable
Long-legged myotis	*Myotis volans*	WBWG	No mention	Probable
Yuma myotis	*Myotis yumanensis*	CSC	No mention	Probable
American badger	*Taxidea taxus*	CFP	Maybe	Probable
Tehachapi pocket mouse	*Perognathus alticolus*	CSC	No mention	Possible
Mountain plover	*Charadrius montanus*	BCC, BSSC2	Not expected	Possible
Turkey vulture	*Cathartes aura*	CDFG 3503.5	Observed	Probable
California condor	*Gymnogyps californicus*	FE, CE	No mention	Possible
Golden eagle	*Aquila chrysaetos*	CFP, BGEPA	No mention	Probable
Northern harrier	*Circus cyaneus*	SSC3	Maybe	Certain
White-tailed kite	*Elanus leucurus*	CFP	No mention	Probable
Cooper's hawk	*Accipiter cooperi*	CDFG 3503.5	No mention	Probable
Sharp-shinned hawk	*Accipiter striatus*	CDFG 3503.5	No mention	Probable
Ferruginous hawk	*Buteo regalis*	SSC	Observed	Certain
Red-tailed hawk	*Buteo jamaicensis*	CDFG 3503.5	No mention	Certain
Red-shouldered hawk	*Buteo lineatus*	CDFG 3503.5	No mention	Probable
Swainson's hawk	*Buteo swainsoni*	CT	Maybe	Certain
American kestrel	*Falco sparverius*	CDFG 3503.5	No mention	Probable
Merlin	*Falco columbarius*	CDFG 3503.5	No mention	Possible
Prairie falcon	*Falco mexicanus*	CDFG 3503.5	Observed	Probable
Peregrine falcon	*Falco peregrinus*	CE, CFP	No mention	Possible
Barn owl	*Tyto alba*	CDFG 3503.5	No mention	Probable
Great-horned owl	*Bubo virginianus*	CDFG 3503.5	No mention	Probable
Short-eared owl	*Asio flammeus*	SSC3	Not expected	Possible
Western burrowing owl	*Athene cunicularia*	SSC2, FCC	Observed	Certain

7

California horned lark	*Eremophila alpestris actia*	CBRL	No mention	Certain
Loggerhead shrike	*Lanius ludovicianus*	SSC2 (breeding)	Maybe	Certain
LeConte's thrasher	*Taxostoma lecontei*	SSC1	Not expected	Unlikely
Tricolored blackbird	*Agelarius tricolor*	SSC1	Maybe	Possible
Western pond turtle	*Emys marmorata*	CSC	No mention	Unlikely
Desert tortoise	*Gopherus agazzassii*	FT, CT	Not expected	Possible
Silvery legless lizard	*Anniella pulchra pulchra*	SSC	Not expected	Possible
Coast horned lizard	*Phrynosoma blainvillii*	SSC	Not expected	Possible

[1] *Listed as FE = federal endangered, FT = threatened, FCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, BGEPA = Bald and Golden Eagle Protection Act, CE = California endangered, CT = California threatened, CSC = California species of special concern (not threatened with extinction, but rare, very restricted in range, declining throughout range, peripheral portion of species' range, associated with habitat that is declining in extent), CFP = California Fully Protected (CDFG Code 4700), CDFG 3503.5 = California Department of Fish and Game Code 3503.5 (Birds of prey), and SSC2 and SSC3 = California Bird Species of Special Concern priorities 2 and 3, respectively (Shuford and Gardali 2008), CBRL = California Bird Responsibility List, WBWG = Western Bat Working Group listing as moderate or high priority.*

SUFFICIENCY OF IMPACT ASSESSMENT

The Neg Dec was deficient in its impacts assessment because it failed to discuss the impacts to multiple special-status species that were either not considered at all or inappropriately determined to be absent or of low likelihood to occur on or nearby the project site (Table 1). This assessment was deficient for other reasons, as well, including failure to assess the collision risk of the PV solar panels and their support structures, failure to assess the impacts on wildlife movement in the area, and failure to seriously address cumulative impacts.

7 (cont.)

Collision risk

The Neg Dec did not consider that the PV panels will pose some collision risk to birds. A Yuma clapper rail (*Rallus longirostris yumanensis*), which was a member of a species listed as Endangered under the Federal Endangered Species Act, was recently killed at an industrial solar farm near Joshua Tree National Park (http://www.kcet.org /news/rewire/solar/photovoltaic-pv/endangered-bird-dead-at-desert-solar-facility.html). Although it is now known that special-status species are vulnerable at solar projects, the collision risk of PV panels remains largely unknown in an industrial setting. It also remains unknown to what degree collision rates might differ from those measured at Solar One (McCrary et al. 1986), which was a concentrating thermal power plant. In the face of high uncertainty when assessing impacts to rare environmental resources, the accepted standard is to err on the side of caution (National Research Council 1986, Shrader-Frechette and McCoy 1992, O'Brien 2000). Therefore, it should not be assumed that due to less reflectivity in PV panels, the collision rates will necessarily be different. And all this said, the Neg Dec did not even consider the potential for avian collisions with PV panels or support structures.

8

McCrary et al. (1986) remains the only study of direct impacts to birds caused by a solar power plant (Solar One). McCrary et al. (1986) searched for dead birds amongst the heliostat mirrors and around the power tower, and they estimated a bird fatality rate caused by bird collisions with heliostat mirrors and the power tower, and by heat encountered when birds flew through the concentrated sunlight reflected toward the power tower. However, McCrary et al. (1986) appeared to have under-appreciated the magnitude of the impacts caused by Solar One, likely because McCrary et al. (1986) did not know as much as scientists know today about scavenger removal rates and searcher detection error.

McCrary et al. (1986) searched for dead birds during 40 visits to the 10 MW Solar One Project. Their search pattern was not fixed, so it was not as rigorous as modern searches at wind energy projects and other energy generation and transmission facilities. McCrary et al. (1986) placed 19 bird carcasses to estimate the proportion remaining over the average time span between their visits to the project site, though they provided few details about their scavenger removal trial. We know today that the results of removal trials can vary substantially for many reasons, including the species used, time since death, and the number of carcasses placed in one place at one time, and etc. (Smallwood 2007). McCrary et al. (1986) also performed no searcher detection trials, because they concluded that the ground was sufficiently exposed that all available bird carcasses would have been found. This conclusion would not be accepted today, based on modern fatality search protocols.

Because, scientists have performed many more scavenger removal trials and searcher detection trials, as well as many more bird carcass searches since the study of McCrary et al. (1986), I re-calculated the fatality rate estimate from that first study, but this time using national averages to represent scavenger removal rates and searcher detection rates (see Smallwood 2007, 2013). Based on the methods in Smallwood (2007), I have since reviewed more than 400 searcher detection trials and more than 400 scavenger removal trials across North America (Smallwood 2013). From these reviews, I estimated the average proportion of carcasses remaining after 9 days since the last carcass search. I used 9 days for the average search interval, because that was the average search interval in the McCrary et al. (1986) study.

8 (cont.)

The estimator I used was derived from the Horvitz and Thompson (1952):

$$F_A = \frac{F_U}{R_C \times p},$$

where F_U was the unadjusted number of fatalities/MW/year (the found carcasses), and F_A was the fatality rate adjusted for the proportion of carcasses found amongst those that were available to be found, p, and by the average proportion of carcasses remaining since the last fatality search, R_C. The adjustments for p and R_C were estimated from searcher detection trials and scavenger removal trials. I assumed carcasses were deposited at a steady rate from heliostat mirrors and power towers, so I took the average proportion of carcasses remaining each sequential day between searches:

$$R_C = \frac{\sum_{i=1}^{I} R_i}{I},$$

where R_i was proportion of carcasses remaining by the ith day following the initiation of a scavenger removal trial. Thus, the expected proportion of carcasses remaining by the next fatality search should be R_C corresponding with the fatality search interval, I, which was 9 days in the McCrary et al. (1986) study. Note that McCrary et al. (1986) used R_i instead of R_C, which means their fatality rate estimate would have been inflated for this factor alone (their estimate was biased low, however, by assuming they experienced no searcher detection error).

McCrary et al. (1986) reported the mean and standard deviation (SD) of bird carcasses found per visit, but estimating rates for the purpose of extrapolation should include a standard error (SE), which can be approximated as:

$$SE = \frac{SD}{\sqrt{n}},$$

which, in the case of McCrary et al. (1986), with a SD = 1.8 and n = 40 visits, was 0.28 (the calculated mean was 1.75).

Using SE also facilitates carrying of the error terms through the calculation of the fatality rate estimate. For this purpose, I estimated standard error of the adjusted fatality rate, $SE[F_A]$, using the delta method (Goodman 1960):

$$SE[F_A] = \sqrt{\left(\frac{1}{p \times R_C} \times SE[F_U]\right)^2 + \left(\frac{F_U}{p} \times \frac{-1}{R_C^2} \times SE[R_C]\right)^2 + \left(\frac{F_U}{R_C} \times \frac{-1}{p^2} \times SE[p]\right)^2}.$$

Using data reported by McCrary et al. (1986), and adopting their assumptions, their estimated fatality rate was 1.75 fatalities/visit divided by 70% to 90% of placed trial carcasses remaining between visits, or 1.75 ÷ 0.90 = 1.94 and 1.75 ÷ 0.70 = 2.5. Assuming a point estimate of 80% of placed carcasses remaining, then the estimated bird carcasses per visit would be 1.75 ÷ 0.80 = 2.19. Given that there were 40 visits in the year, then 2.19 × 40 = 87.6 bird fatalities per year, or on a per-MW basis, there were 87.6/10 MW = 8.76 bird fatalities per MW per year. Because McCrary et al. (1986) did not report the SE of their proportion of placed trials carcasses remaining, and because they assumed $p = 1$, I could not carry the error terms, so the estimate from their study was 8.76 bird fatalities/MW/year with an 80% confidence interval (CI) of 6.96 to 10.55. The only real challenge remaining is to extrapolate this estimate to the 20 MW West Antelope Solar Project consisting of PV panels instead of power towers and heliostat mirrors.

Assuming PV panels will result in only 10% of the fatalities compared to the rate observed at Solar One, then I would predict that West Antelope Solar Project will kill 18 birds per year (80% CI: 14 to 21). Assuming PV panels will result in half the fatalities per MW as occurred at Solar One, and extrapolating this rate to the 20 MW West Antelope Solar Project, I would predict 88

8 (cont.)

bird fatalities per year (80% CI: 70 to 106). However, these rates need to be adjusted for the proportion of fatalities not found by searchers.

The results of my adjustment trials yielded national averages of R_C = 0.48 (SE = 0.12) for birds over a mean search interval of 9 days and p = 0.676 (SE = 0.029) when ground visibility was characterized as high or very high. Using these values, my estimated fatality rate at McCrary et al.'s project site was 21.57 fatalities/MW/year (80% CI: 7.15 to 36.00). Relying on these adjustments and assuming PV panels will result in only 10% of the fatalities compared to the rate observed at Solar One, then I would predict that the West Antelope Solar Project will kill 43 birds per year (80% CI: 14 to 72). Assuming PV panels will result in half the fatalities per MW as occurred at Solar One, and extrapolating this rate to the 20 MW West Antelope Solar Project, I would predict 216 bird fatalities per year (80% CI: 72 to 360). Clearly, the McCrary et al. (1986) fatality monitoring study resulted in a highly uncertain fatality rate estimate, which was revealed to be even more uncertain when considering national averages of the adjustment factors and when carrying the error terms through the calculations. The direct impact of the West Antelope Solar Project can be said to be highly uncertain at this point. If the added project goes forward, it would be very important to require sound fatality monitoring. It would be helpful to perform avian behavior surveys in advance of construction, in order to characterize avian flight paths and the types of behaviors of endemic species that could contribute to collision risk (Smallwood et al. 2009, 2010).

8 (cont.)

Wildlife Movement

According to BonTerra Consulting (2013: 4-35), "*There is no indication of concentrated movement through the Project site or adjacent lands. The Project would not affect regional wildlife movement or interfere substantially with the movement of any native resident or migratory fish and wildlife species in areas surrounding the site, nor would it impede the use of native wildlife nursery sites. Impacts would be less than significant, and no mitigation is required.*" These conclusions were based on no directed scientific observations or measurements, and fell far short of the Precautionary Principle in risk assessment (O'Brien 2000, National Research Council 1986). Movement areas could have been identified by animal sign or by spending a little time watching the movements of wildlife in the area. Movement areas can also be predicted based on knowledge of how particular species use landscapes. The project's likely barrier effects could then be mapped and some assessment provided. Providing no analysis was deficient, and provided no basis for the conclusions of no significant impacts.

That the project will interfere with wildlife movement should be obvious, given the extent of planned an ongoing solar and wind projects in the region (Figure 1). Planned and ongoing solar projects, including the West Antelope Solar Energy Project, nearly extend the entire north-south distance of the Antelope Valley, thereby cutting off east-west movement of terrestrial wildlife (Figure 1). Such an outcome will prove devastating to wildlife in the area.

9

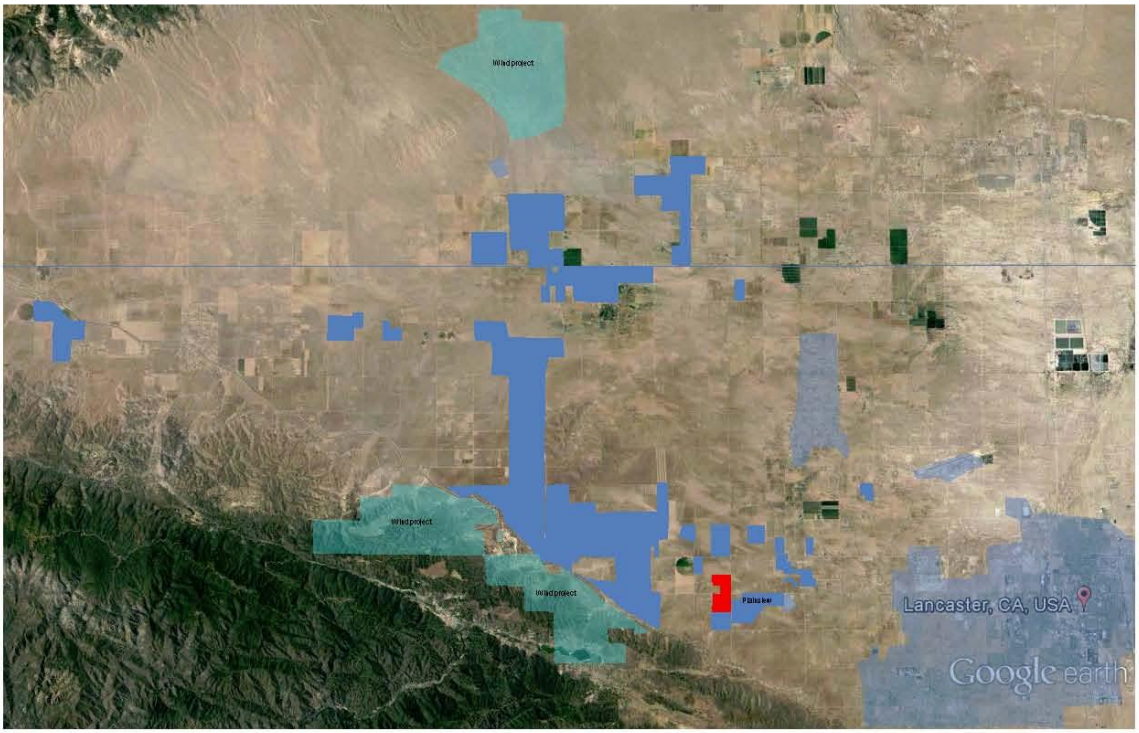

Figure 1. Planned and ongoing solar (dark blue) and wind (light blue) projects in the region, including urban areas and other industrial uses (light blue). The West Antelope Solar Energy Project is shown in red. This map may not be entirely accurate in the boundaries of projects, and is probably incomplete; it is intended to provide an approximation of the existing and foreseeable build-out of renewable energy projects.

Habitat fragmentation is a process that is central to a project's impacts on wildlife movement. It is recognized as one of the most serious threats to the continued existence of terrestrial wildlife (Wilcox and Murphy 1985). BonTerra Consulting (2013) provided analysis of habitat fragmentation. Figure 1 illustrates that an analysis of habitat fragmentation is warranted.

9 (cont.)

Cumulative Impacts

The Neg Dec failed to provide a serious cumulative impact assessment on biological resources. This region has been targeted by energy companies for the development of at least 38,236 acres (4,803 MW) of solar projects (Figure 1). Immediately adjacent to the east is the Plainview Solar Works project, and to the south is another project. Not far to the west is a long, north-south reach of multiple solar projects. As discussed earlier, the Plainville Solar Works project will displace burrowing owls. If these owls lack opportunities to relocate, such as to the West Antelope Solar project, then the cumulative impacts will be substantial and very significant. The same result will hold for many other special-status species.

The simplest form of cumulative impacts assessment would be to estimate habitat loss in acreages of vegetation cover types that are associated with each special-status species and that are undergoing or likely to undergo conversions to solar projects and other types of projects. For

10

example, if all of the 38,236 acres of planned or ongoing solar projects were considered burrowing owl habitat, then a simple cumulative impacts analysis would lead to the conclusion that 38,236 acres (155 km^2) of burrowing owl habitat will be lost within the near future, including 263 acres from the proposed project.

A more scientific and more useful assessment would multiply the acres of foreseeable habitat loss by the average density of the species in that habitat. For example, if the average density of burrowing owls in the region was 4 pair per km^2, then the cumulative project impacts would be 620 breeding pairs of burrowing owls. A density of 4 pair per km^2would be reasonable over large areas in this region, given the synthesis of breeding pair densities in Smallwood et al. (2013).

The next level of cumulative impacts assessment would be to add the loss of individuals due to collision with the PV arrays, electric distribution lines, transmission lines, and autos servicing the projects. It would also estimate the loss of individuals and larger demographic units due to barriers to movement, or due to habitat fragmentation.

For example, a range of collision risk impacts could be predicted for birds by applying the same assumptions and adjustments used in the project-specific impacts assessment to the cumulative impacts upon build-out of the 38,236 acres (4,803 MW) of industrial solar projects in the region. Relying on these adjustments and assuming PV panels will result in only 10% of the fatalities compared to the rate observed at Solar One, then I would predict 38,236 acres of solar developed in the region would kill 10,362 birds per year (80% CI: 3,432 to 17,291). Assuming PV panels will result in half the fatalities per MW as occurred at Solar One, and extrapolating this rate to the 38,236 acres of solar developed in the region, I would predict 51,808 bird fatalities per year (80% CI: 17,159 to 86,454). At this point, in the absence of fatality monitoring results from any solar projects other than Solar One nearly 30 years ago, I have little idea about the likely avian fatality rates that can be attributed to solar projects. However, a professional impacts assessment should include a range of possible impacts, given what we do know (in this case, what we know from the monitoring at Solar One).

10 (cont.)

MITIGATION MEASURES

MM BIO-1

According to BonTerra Consulting (2013: 4-37), "*If impacts to burrowing owl occupied burrows are unavoidable, preservation of lands containing potentially suitable burrowing owl habitat shall be preserved at a 1:1 ratio. Impacted lands shall be defined as the directly impacted occupied burrows and immediately adjacent habitat areas.*" However, this measure is vague because it is unclear what was meant by "immediately adjacent habitat areas." Are these the habitat areas within 1 foot of each burrow? Ten feet? 100 feet? An acreage equal to the average burrowing owl home range? In my experience, mitigation measures like this one must be explicit.

11

MM BIO-2

According to BonTerra Consulting (2013), "*If construction activities on the Project site and along the Grid-Tie alignment are completed between September 16, 2013 and March 31, 2014 (i.e., non-nesting season), then additional surveys for Swainson's hawk are not required.*" However, the nesting season begins at the beginning of March, which is when Swainson's hawks return like clockwork from their southern migration. 12

MM BIO-5

Raising the fence at intervals might minimize the impacts to movement of some species of wildlife, but it might contribute to the deaths of other species by allowing individuals access to an industrial site where they can be killed by autos or by predators using the fencing and solar arrays as hunting perches. Terrestrial wildlife entering the site through raised portions of fence would lack mammal burrows into which they might normally escape predation. It is not obvious that the benefits of raised fencing outweigh the costs to wildlife. 13

Summary Comments on Mitigation Measures

The only compensatory mitigation that was promised was for burrowing owl and Swainson's hawk. The mitigation ratios of 1:1 for burrowing owl and 2:1 for Swainson's hawk appeared clear enough, but their bases (denominator values in the ratios) were vague in BonTerra (2013). It was unclear what was meant by "immediate adjacent habitat areas" as a basis for burrowing owl mitigation, and it was unclear what was meant to be the habitat acreage serving as a basis for Swainson's hawk mitigation. Would this be the 263 acres of the project site? Or some portion of it?

The answers to my questions in the preceding paragraph were available in a technical appendix, if I interpreted the documents accurately. According to Bonterra Consulting in Attachment C-5 of the technical appendix, only 76 acres will be disturbed by the project and the other 102.5 acres will remain as open space within the fenced area of the project. I assume that Attachment C-5 establishes 76 acres as the basis of the compensatory mitigation for burrowing owl and Swainson's hawk, although I have to admit that I am uncertain about the degree to which this memo in Attachment C-5 forms the basis of the mitigation plan. 14

If my interpretation of Attachment C-5 is correct, then I must point out that the mitigation is flawed. According to Bonterra Consulting (Attachment C-5, page 2), "*Wildlife use of the 102.5 acres of habitat within the fence would be different post-Project compared to its current use. The overall diversity of wildlife use would be expected to increase, particularly due to the planting of trees and shrubs along the perimeter fence.*" However, the needed mitigation should not be directed toward increasing wildlife diversity. This said, I must add that it is questionable whether species diversity would truly increase in an area that used to be prairie but is transformed into a grove of trees and fenced within an industrial project. Burrowing owls do not nest in close proximity to trees or to other tall structures. Most likely, the planting of trees, the installation of a cyclone fence, and the installation of PV panels on steel supports will prevent burrowing owls from nesting or foraging on the 102.5 acres of open space. These conditions will

also prevent Swainson's hawks from foraging on the project site, because they avoid orchards and vineyards, or environments with rows of structures. The basis for mitigation of both burrowing owls and Swainson's hawks should consist of the 263 acres of the project. Furthermore, as pointed out earlier, adjacent habitat areas of burrowing owl are planned to be converted into the Plainville Solar Works project, so the burrowing owls are not going to be able to just move over there.

BonTerra Consulting (Attachment C-5 of Tech. App., page 5) stated, "*Based on direction from the Los Angeles County Department of Regional Planning (County), a 2:1 mitigation ratio for impacts associated with developed/disturbed areas is required. The Project site contains 263.0 acres, of which 178.5 acres are contained within perimeter fencing. All lands outside of this fencing (i.e. 84.5 acres) will remain undisturbed. As shown in Table 1, of the 178.5 acres within the perimeter fencing, 76.0 acres would be impacted by development, resulting in a total of 102.5 acres of undisturbed open space remaining within the fenced area. Therefore, based on the 76.0 acres of impacted lands mitigated at a 2:1 ratio, a total of 152.0 acres of mitigation is required.*" As discussed earlier, none of this so-called open space acreage will be useful to burrowing owls, because burrowing owls do not nest amidst tall plants or tall structures. The open spaces at issue will be planted with trees and otherwise surrounded by tall, industrial structures. Burrowing owl habitat will be entirely destroyed by the West Antelope Solar Energy project within the project boundary and out to about 150 m from the boundary.

BonTerra Consulting (Attachment C-5 of Tech. App., page 6) adds, "*…it is the opinion of BonTerra Consulting's senior wildlife biologists that this open space can count towards mitigation and a 0.5:1 biological value would be appropriate, equating to approximately 51.25 acres of mitigation land of equitable biological value and function. Combined with the approximately 84.5 acres of open space outside the fenced area, the Project would provide a total of 135.75 acres of on-site mitigation, meaning that an additional 16.27 acres would need to be acquired off-site in order for the Project to provide the required 152.0 acres of mitigation.* " The opinion of BonTerra's senior wildlife biologist is inconsistent with many years of research on burrowing owls by myself and many of my colleagues on what qualifies as burrowing owl habitat. It would be ridiculous to claim that burrowing owls would continue to nest among rows of solar panels or next to trees. If BonTerra Consulting's senior biologist truly holds this opinion, then he ought to support it with evidence that burrowing owls continue to use the "open space" between rows of PV panels and to nest among trees. The senior biologist's opinion is also inconsistent with the standards in the CDFG (2012) guidelines.

Other than raised portions of fencing, no mitigation was promised for disruptions to wildlife movement in the area. No compensatory mitigation was promised, but it should have been. The habitat fragmentation caused by the cumulative development of solar projects in the region will have a profound, devastating impact on the ability of terrestrial wildlife to move in the region.

No compensatory mitigation was promised for the project's contribution to cumulative impacts.

I suggest that the project applicant provides compensatory mitigation in the form of donations to local wildlife rehabilitators. The project will cause injuries to wildlife, so the applicant should be responsible for contributing to the care and release to the wild of injured animals. Rehabilitation

14 (cont.)

facilities typically operate on very small budgets, so struggle to maintain appropriate staff levels and facilities. More reliable funding is needed, and this funding should come from those causing the impacts.

14 (cont.)

Impact Monitoring

Very little is known of the types or magnitudes of impacts on wildlife caused by industrial solar projects. It would be irresponsible of permitting agencies to allow industrial solar projects to go forward without scientific monitoring of project impacts. Qualified biologists should be funded to search the ground between solar panel arrays on a monthly basis for at least one year to determine whether collision fatalities are an issue. Searches should be done on foot. I suggest searching randomly or systematically selected arrays of solar panels to the extent that equals 20 person-days per month. If collision fatalities are deemed to be an issue, then I suggest extending the fatality monitoring for another two years and adding searcher detection trials to facilitate the accurate estimation of fatality rates. Furthermore, I would suggest performing an analysis of the pattern of fatalities to identify spatial or other trends that can inform mitigation measures to reduce fatality rates. Basic methods for fatality monitoring at a solar energy plant can be found in McCrary et al. (1986), and updated methodology can be found in Smallwood (2007, 2009, 2013), Smallwood and Karas (2009), Smallwood et al. (2013).

15

MITIGATION MONITORING

It has long been known that mitigation pursuant to CEQA has often either failed or has not been implemented, but with no consequences to the take-permit holder (Silva 1990). There should be consequences for not achieving mitigation objectives or performance standards. The project proponents should be required to provide a performance bond in an amount that is sufficient for an independent party to achieve the mitigation objectives originally promised, and in this case, the promises should be much more substantial. A fund is needed to support named individuals or an organization to track the implementation of mitigation measures. Report deadlines should be listed, and who will be the recipients of the reports. In my professional opinion, the Neg Dec's lack of specific mitigation monitoring details renders it inadequate and uncertain, and makes it impossible to gauge whether or to what extent any mitigation measures will lessen potentially significant impacts on species. If these measures are not clearly laid out in the Neg Dec, then there will be no basis to determine that impacts will be less than significant once implemented. Furthermore, without adequate funding allocated in advance, there is no certainty that any proposed mitigation monitoring will actually take place.

16

Shawn Smallwood, Ph.D.

2.7.3 K. SHAWN SMALLWOOD, PH.D. (SMALLWOOD)

November 16, 2013

Response Smallwood-1

The status of all special status species listed in the IS/MND is based on the most current version of the Special Animals list published by the CDFW (January 2011) and the Endangered, Threatened and Rare Plants List (July 2013). The status listed for each species in these publications is the industry standard for the current status of a species. It is unclear what specific status the commenter is questioning.

Response Smallwood-2

The adjacent SCE Tehachapi Renewable Transmission Project (TRTP) transmission line corridor has no evidence of acting as a conduit for wildlife movement regardless of what some transmission line corridors may provide in other locations. As stated on page 4-26 of the IS/MND, the Project site is bound by the SCE TRTP corridor on the western and southern edges and 110th Street West along the eastern edge, resulting in increased edge effects (e.g., higher occurrence of invasive species, fires, and wildlife/human interactions) in these areas on the perimeter of the Project site. The transmission line corridor to the Antelope Substation along West Avenue J consists mainly of ruderal and disturbed areas as a result of the existing infrastructure. Therefore, the transmission line has greater disturbance than adjacent areas of the site, so it likely does increase negative edge effects on the biological resources of the site.

Response Smallwood-3

The IS/MND makes statements, such as the ones reiterated by the commenter, that may seem like filler to experienced biologists; however, the audience for the IS/MND includes non-biologists and the language required to be meaningful to all public readers. The second example provided in the comment regarding to the IS/MND's background information on wildlife movement terminology is similarly intended to define the concepts to all readers and to shed light on terms the general public has likely heard. Regarding the third example, restoration has been proven to work in countless projects throughout the region. Restoration is not a foolproof science and many attempts have been unsuccessful; however, restoration is widely accepted and pursued as mitigation by nearly all lead agencies and State and federal resources agencies. Furthermore, the level of restoration that would be required to restore the minimal loss of movement at the Project site is not difficult to achieve. As required in revised MM BIO-5, the perimeter fencing surrounding the Project site will be raised at regular intervals above ground level to allow for the passage of wildlife to the lesser of either: 18 inches above grade or to the maximum height allowed by the California Public Utilities Commission (CPUC).

Response Smallwood-4

Regarding the question of breeding Swainson's hawks, the IS/MND clearly states that the results of the survey were negative for nests within five miles of the Project site. It is this result that allows the conclusion that birds observed within close proximity to the site are not breeding. That is not to say that they may not be en route to breed elsewhere in the region or beyond. Furthermore, it is true that subadults (first-year birds) are not breeding when they return to the region for the first time. Relative to the site, the Swainson's hawks observed were not breeding birds.

Section 4.4 of the IS/MND also indicates that various surveys conducted on the site noted the limited presence of small mammal burrows. Trapping is unwarranted, unnecessary, and well beyond the standard expectation for the determination that the site appears to have low small mammal use. It is true that mammals can use other features such as rocks and cracks in the soils; however, these are equally rare on the Project site. The long, linear, parallel, lines visible from aerial photography is noted as evidence of mechanical disturbance frequently in the industry. This is added to help explain potentially one reason why there may be lower small mammal populations on the site. In addition, a brief review of California Natural Diversity Database (CNDDB) nesting records and a current aerial photo of the region provide enough data to suggest that there may be a correlation. In addition, BonTerra Consulting Senior Ornithologist Brian Daniels has seen this pattern consistently over many years of conducting surveys throughout the region, providing further support for suggesting the correlation.

The determination of less than significant impacts to Swainson's hawk is fully supported by the existing data. The determination in question is not a cumulative impact assessment and therefore uses only the current condition. The cumulative impacts discussion within the IS/MND does indeed include a review of other projects in the region. As it is completely infeasible to repeat a biological analysis for each of those projects, the approach used here and elsewhere as a standard is to accept the CEQA analysis that has been approved by local Lead Agencies. This approach is standard practice and provides an adequate assessment of cumulative impacts in accordance with CEQA requirements. The Project would not result in a significant impact and therefore would not create a cumulatively considerable significant impact.

Response Smallwood-5

Please see Topical Response No. 7, Cumulative Impacts.

The Burrowing Owl Survey Report prepared for the Project does not indicate observations of any burrowing owl on the Plainview Solarworks site. Owls were observed to the north of the Plainview project, but the area would likely have been excluded from Plainview project burrowing owl surveys. Therefore, this does not provide an example of inadequate documentation of other projects.

Response Smallwood-6

Biological surveys are not conducted to detect all special status species. Very few special status species have established survey protocols. The appropriate special status species surveys for this Project were Swainson's hawk, Burrowing owl, and special status plants; these surveys were conducted within each protocol's proper survey periods. It is unnecessary to prove presence or absence with the remaining potentially occurring special status species because a determination based on habitat and regional distribution is sufficient to make determination for potential impacts. These determinations are conservative and consider all species with remote possibility as potentially occurring and appropriate impact analyses and mitigation (if required) are employed. All special status species potentially occurring on the site are addressed in the report in accordance with State and County CEQA requirements and consistent with industry standards. Special status bat species are discussed on page 4-31 of the IS/MND, and the determination was made based on site habitat conditions and species range, which is standard methodology.

The commenter's assertion that several species definitely occur on site but are "completely ignored" even though they are strictly protected, is inaccurate. Red-tailed hawk is not discussed in the IS/MND because they are not protected as a species, and nesting birds (raptors included) are addressed in the IS/MND in MM BIO-1, MM BIO-2, and MM BIO-6. Ferruginous hawks are

discussed on page 4-30 of the IS/MND because it is a special status species. Burrowing owl is discussed at length in the IS/MND, including mitigation, in addition to the Burrowing Owl Survey Report.

The commenter's assertion that the lack of observation of a special status species is used to indicate that the site is not important to these species is also incorrect. The IS/MND must indicate whether a special status species is observed or not; however, there is no indication in the IS/MND that this information is used to suggest whether or not a special status species is potentially present or absent from the site. Only focused surveys result in such conclusions. All special status species potentially occurring on the Project site are addressed in the IS/MND.

Response Smallwood-7

See Response Smallwood-6 above, which applies to bat species as well.

Response Smallwood-8

The potential impact of bird impact mortalities is not specifically discussed because it is captured within the general discussion of wildlife impacts in Section 4.4 of the IS/MND. Such impacts are typically grouped due to the infeasibility of discussing every potential kind of impact separately. It is expected that objects such as solar arrays may result in bird strike mortalities; however, there is no indication that such impacts have a potential to be substantial at the Project site. The tilt of solar arrays is closer to horizontal then vertical. As such, birds are less likely to strike it at high speeds as they would glass walls and/or windows of some commercial buildings. Therefore, fatalities and impacts are less likely than typical glass windows and walls found commonly throughout the region. The potential for the arrays to be mistaken for water could momentarily draw birds into the site but such illusions would not be expected to result in increased impacts because no diving birds are expected in the Project region. Therefore, the impact of bird strikes is encompassed in the IS/MND wildlife impact discussion.

Response Smallwood-9

The IS/MND includes an impact assessment of wildlife movement using standard methods of the industry. In cases where very specific points of crossing require presence or absence information, long-term wildlife movement monitoring studies may be conducted. However, in cases where pinch points are non-specific, such as the Project site, no such monitoring of specific points is warranted or necessary. The appropriate method involves review of aerial photos of the site, project region, and adjacent regions; knowledge of features that are substantial barriers for some wildlife (such as concrete sloped and fenced aqueducts); topographic maps of the site, project region, and adjacent regions; and a literature review of available regional movement publications. Evidence of movement, or lack of movement, can be gleaned from these sources. Using these methods, an adequate assessment of expected wildlife movement patterns through the project region, and specifically through the Project site, can be developed. Therefore, the methods employed in the IS/MND are appropriate and adequate for CEQA. Although local wildlife paths are expected to be impacted to various degrees depending on the type of animal, there is no evidence of substantial impacts to regional movement.

Response Smallwood-10

Please see Response Smallwood-4 and Response Smallwood-8 above.

Response Smallwood-11

The term "immediately" is included in the IS/MND as a qualifier for the "adjacent" lands. The intent was to define a closer area as a result. The term "immediately adjacent" is fairly common in the industry and, at this scale, is approximately less than 100 feet. Because this is fairly standard, no changes to the IS/MND are warranted.

Response Smallwood-12

Please see Response CDFW-8 in Section 2.1.10.

Response Smallwood-13

The CDFW and Lead Agencies have commented and concurred prior to release of the public draft of the IS/MND that the fence design was the preferred alternative. Furthermore, the impacts described in the comment are not expected to result in substantial impacts to regional populations of any species.

Response Smallwood-14

The IS/MND and supporting attachments, including Appendix C-5, Memorandum of Post Construction Biological Value to the IS/MND, provide an assessment of the mitigation value of the mitigation lands. The analysis states that only the areas entirely unimpacted are expected to retain near current biological values. The balance of areas is acknowledged as having lower biological value post Project. This is precisely the reason that the acreage within these areas only counts as half value. Each acre within these mitigation areas counts only as half an acre credit towards the mitigation requirement. The assessment does not indicate that the various species mentioned in the comment would have high value foraging/or nesting habitat within these areas. Rather, it mentions that there will remain some value and that these species are able to utilize the site to some degree.

Based on experience of BonTerra Consulting Senior Ornithologist Brian Daniels, a recognized expert on the birds of Los Angeles County, the utilization of the site as described in the assessment for the post-project condition for Swainson's hawk and burrowing owl is entirely plausible and expected. Also see Response Smallwood-6 and Response Smallwood-9 above. In addition, mitigation, compensatory or otherwise, is not required for impacts considered less than significant. Therefore, the commenter's suggestion to provide compensatory mitigation for wildlife movement is unwarranted and not required.

Response Smallwood-15

Please see Response Smallwood-8 above. In addition, the commenter's suggestion to provide compensatory mitigation for bird impacts is unwarranted and not required.

Response Smallwood-16

Please see Response CDFW-5 and Response CDFW-11 in Section 2.1.10.

In addition, text has been added to Section 4.0, Errata indicating that a requirement for financial assurance of restoration shall be required in the Decommissioning Plan.

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SECTION 3.0 MITIGATION MONITORING AND REPORTING PROGRAM

Section 21081.6 of CEQA and Section 15097 of the State CEQA Guidelines require a public agency to adopt a Mitigation Monitoring and Reporting Program (MMRP) for assessing and ensuring the implementation of required mitigation measures applied to proposed Projects. Specific reporting and/or monitoring requirements that will be enforced during project implementation shall be adopted simultaneously with final Project approval by the responsible decision-making body.

The MMRP for the West Antelope Solar Energy Project consists of Mitigation Measures (MMs) that will reduce or avoid significant environmental effects associated with Project implementation and reflects any changes to mitigation measures presented in Section 4.0, Errata, of this Final MND. The MMs for the Project are listed in the first column in Table 3-1 below, along with the timeframe for implementing the MM in the second column; the agency or party with primary responsibility for implementing the MM in the third column; and the agency or party with responsibility for monitoring compliance in the fourth column.

MM#	Mitigation	Action Required	When Monitoring to Occur	Responsible Party	Monitoring Agency or Party	Verification of Compliance		
						Initials	Date	Remarks
Aesthetics								
AES-1	The Project shall incorporate landscaping with native, drought-tolerant vegetation for the exterior of the Project Site along the portions of the perimeter fence facing 110th Street West, West Avenue J, and along the northern boundary of the site. A Landscape Plan shall be prepared, subject to the review and approval of the County of Los Angeles. Irrigation via water trucks would be conducted until the landscaping is established. Such landscaping shall be maintained as approved during the operational phase of the Project. All perimeter landscaping shall be planted prior to energization of the solar panels.	Submittal and approval of a Landscape Plan.	Prior to issuance of certificate of occupancy	Applicant	DRP			
		Installation of landscaping as described in the Landscape Plan.	Prior to energization of the solar panels	Applicant	DRP			
		Maintenance of landscaping during operation.	During operation	Operator	DRP			
AES-2	Lighting to be installed in specific locations around the periphery of the Project site, as required for nighttime security purposes, shall consist of modern, low intensity, downward-shielded fixtures that are motion-activated, and shall be directed onto the Project site. Motion-detectors shall be set at a sensitivity level that cannot be triggered by small animal movement.	Review and approval of a lighting plan with mitigation measure requirements incorporated.	Prior to issuance of building permit	Applicant	DRP			
		Installation of lighting as described in plans and specifications.	Prior to energization of the solar panels	Applicant	DRP			
AES-3	The glass used to cover the Project's flat-plate photovoltaic (PV) panels shall be "high-transmission, low-iron" tempered glass and have a reflectance value of 8 percent or less. All other structures and equipment associated with the Project, including the water tanks and Substation, shall be painted with a color chosen to blend with the surroundings and minimize visual impacts.	Review and approval of the site plan with mitigation measure requirements incorporated.	Prior to issuance of building permit	Applicant	DRP			
		Installation of PV panels as described in plans and specifications.	Prior to energization of the solar panels	Applicant	DRP			

MM#	Mitigation	Action Required	When Monitoring to Occur	Responsible Party	Monitoring Agency or Party	Verification of Compliance		
						Initials	Date	Remarks
Air Quality								
AQ-1	During construction of the Project, the Project shall comply with Antelope Valley Air Quality Management District's (AVAQMD's) Rule 403, Fugitive Dust, to prepare a Dust Control Plan for controlling fugitive dust and avoiding nuisance. Compliance with this rule would result in a reduction in short term particulate pollutant emissions. The Dust Control Plan shall be subject to the review and approval of the AVAQMD and shall include the following strategies:• Minimal Grading and Ground Disturbance: The Project shall perform the minimum amount of grading and disturb the minimum amount of existing vegetation to construct the Project. Grading shall generally be limited to the proposed access roads, retention basins, Project Substation foundation, inverter pads, water tank pads, and trail areas. The existing vegetation in all other areas shall be mowed to a height consistent with vegetation management requirements and left in place. • Vehicle Use: The Project shall only use construction vehicles with tires and shall prohibit use of equipment with rotating wheel tracks (e.g. tank treads or caterpillar tracks).• Construction Scheduling: Grading activities shall be temporarily halted and/or site watering shall be increased during wind speeds that exceed 25 miles per hour, or when visible dust plumes have the potential to be transported: 1) off the Project site or 2) 200 feet beyond the centerline of the construction of linear facilities (such as the Grid-Tie). Earth-moving activities on the Project site shall be scheduled during to occur during the latter portion of the	Submittal and approval of a Dust Control Plan.	Prior to issuance of grading or building permits, whichever occurs first	Applicant	DRP			
		Implementation of dust control measures as described in the Dust Control Plan during construction.	During construction	Applicant	AVAQMD Applicant-appointed monitor			
		Implementation of dust control measures as described in the Dust Control Plan during operation.	During operation	Operator	DRP			

MM#	Mitigation	Action Required	When Monitoring to Occur	Responsible Party	Monitoring Agency or Party	Verification of Compliance		
						Initials	Date	Remarks
	rainy season, when it is anticipated that natural rainfall shall assist with mitigation of fugitive dust.• Water Application: The Project shall apply water to the construction site as necessary to control fugitive dust. As required by the AVAQMD, when water is used as fugitive dust control, watering is required three times a day and increased to a minimum of four times a day if there is evidence of visible wind-driven fugitive dust. • Soil Binders/Wood Mulch: Soil binders and wood mulch shall be applied as necessary.• Stock Piles Stabilization: All stock not currently in use shall be stabilized from erosion through the use of watering, soil binders, or protected with a plastic or geo-textile mat. • Final Stabilization: Prior to completion of construction, all disturbed areas shall be permanently stabilized through the use of an all-weather surface treatment and existing vegetation shall be maintained at a maximum height of 6 inches, per LACFD requirements. • Monitoring: A qualified construction mitigation manager (CMM) or delegate shall be retained to be on-site during all grading activities to ensure compliance with the approved Dust Control Plan. The CMM or delegate shall monitor all construction activities for visible dust plumes. The CMM or Delegate shall promptly implement additional dust plume reduction measures in the event that such visible dust plumes are observed. Additional measures to be implemented, as necessary, shall include increased watering, application of dust palliatives, and/or scaled back construction activities up to and including temporary work cessation.							

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Biological Resources								
BIO-1	A pre-construction survey for the burrowing owl shall be conducted prior to start of construction/ground-breaking activities. Beginning 30 days prior to the start of construction, surveys shall be conducted weekly with the final survey occurring 1 day prior to the start of construction. During the first survey, a habitat assessment will be conducted to identify potentially suitable burrows which shall become the focus of subsequent surveys. For those burrows located along the Grid-Tie transmission route off the Project site, a second survey will be conducted within 24 hours of any ground-breaking activities. If these surveys do not detect occupied burrowing owls, then no further mitigation is required. If burrows occupied by burrowing owls are detected on the Project site, the Project Applicant shall notify the California Department of Fish and Wildlife (CDFW) and shall implement the following actions prior to construction (either Set A for breeding burrowing owls [March to July] or Set B for non-breeding burrowing owls [August to February]). Buffer distances are based on the recommended restricted activity dates and setback distances by level of disturbance listed in the CDFW's 2012 Staff Report on Burrowing Owl Mitigation.Set A Measures (for Breeding Burrowing Owls, between March and July) A1) No work shall occur within 500 meters of the active nesting burrow unless on-site biologists determines specific conditions would allow a smaller buffer; the CDFW shall be consulted to determine whether a reduced buffer is acceptable.A2) Provide weekly monitoring of the	Pre-construction Burrowing Owl survey. Review and approval of the Burrowing Owl survey results.	Prior to start of construction or ground-breaking activities	Applicant	DRPCDFW			

MM#	Mitigation	Action Required	When Monitoring to Occur	Responsible Party	Monitoring Agency or Party	Verification of Compliance		
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	burrowing owl nesting burrow to determine nesting outcome. A3) Provide CDFW with monthly updates of burrowing owl nesting success.A4) Resume construction at the burrow site once the qualified Biologist has made the determination that the burrow is no longer in use. Prior to resumption of work and subsequent to approval from the CDFW and County, the burrow shall be safely collapsed if necessary to complete project construction. If burrows occupied by burrowing owls are detected within 200 meters of the off-site Grid-Tie or other disturbance areas, the Project Biologist shall monitor the owl(s) to ensure that the Project does not negatively impact breeding. If negative indirect impacts are suspected, the Project Biologist shall propose measures to reduce indirect impacts to the owl(s) during construction.							
BIO-1(cont'd)	Set B Measures (for Non-Breeding Burrowing Owls, between August and February) B1) A qualified Biologist shall notify the CDFW of the occupied burrow location and that either passive or active relocation measures will be implemented if burrow destruction is necessary for project completion.B2) The Biologist shall remove the burrow if avoidance is not feasible. If impacts to burrowing owl occupied burrows are unavoidable, preservation of lands containing potentially suitable burrowing owl habitat shall be preserved at a 1:1 ratio and in accordance with guidance of the CDFW's 2012 Staff Report on Burrowing Owl Mitigation. The 1:1 ratio is expected to be adequate due to the homoogenous landscape of the project area resulting in very high likelihood of highly similar, and							

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	thereby successful, mitigation lands.. Impacted lands shall be defined as the directly impacted occupied burrows and immediately adjacent habitat areas. Replacement lands shall be within the Project region (i.e. western Antelope Valley) and shall be located as close to the Project site as feasible. Vegetation types present and condition of mitigation lands shall be similar to those found on the impacted occupied burrowing owl lands. If suitable natural burrows are not present within the Project site, artificial burrows shall be constructed in accordance with guidance of the CDFW's 2012 Staff Report on Burrowing Owl Mitigation and California Burrowing Owl Consortium (1993) Guidelines. Maintenance of such lands shall be the responsibility of the Project Applicant and shall ensure that conditions and general biological value remain consistent over time. Mitigation lands shall be preserved in perpetuity, or for the length of project impacts if temporal, with a conservation easement or other form of legal dedication. Lands may be deeded to a land management-conservation entity with prior approval from the County. Mitigation lands and deeds or conservation easements proposed shall be approved by the County prior to issuance of grading permits.Within 60 days of recordation of the permanent deed restriction(s) or conservation easement(s), a Maintenance Plan for the off-site mitigation lands shall be submitted to the County for review and approval. The plan shall include the maintenance requirements for the mitigation area, based on the characteristics of the mitigation land and the mitigation requirements described							

MM#	Mitigation	Action Required	When Monitoring to Occur	Responsible Party	Monitoring Agency or Party	Verification of Compliance		
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	above. The Maintenance Plan shall also describe the performance standards for determining that mitigation requirements for the lands have been met.							
BIO-2	If construction activities on the Project site and along the Grid-Tie alignment are completed between September 16 and March 31 (i.e., non-nesting season), then additional surveys for Swainson's hawk are not required. If new or ongoing construction activities (i.e., additional removal of potential foraging habitat through ground-disturbing activities) would occur on the Project site and along the Grid-Tie alignment between April 1 and September 15, surveys for Swainson's hawk shall be conducted following the 2010 CDFG survey protocol for the Antelope Valley prior to or concurrent with construction activities. If no active nests are detected, then no further mitigation is necessary.If the survey detects an active Swainson's hawk nest within a 5-mile radius of the Project site, all construction activities must fully and immediately cease and the CDFW shall be notified. If the nest is determined to be unsuccessful by a qualified Biologist, the Project Applicant may resume construction activities as long as no other active nests are located within the 5-mile radius of the Project site, as authorized by CDFW and LACDRP. If Swainson's hawk nests are determined to be successful, the Project Applicant shall consult with CDFW to determine if a "take" authorization of a State-listed species (per the California Endangered Species Act) is warranted in light of the mitigation land requirements set forth under MM CML-1. If warranted, the Project Applicant shall pursue a	Pre-construction Swainson's Hawk survey, only if construction or ground-breaking activities occur during the nesting season.	Prior to start of construction/ground-breaking activities	Applicant	DRPCDFW			

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	CDFW permit, which will include any additional conditions requiring impact minimization to the Swainson's hawk.							
BIO-3	If jurisdictional waters cannot be avoided, the Project Applicant shall apply for a Section 401 permit from the Regional Water Quality Control Board (RWQCB) and a 1602 Streambed Alteration Agreement from CDFW. These permits shall be obtained prior to approval of improvement plans; issuance of grading permits; and/or any clearing, grading, or excavation work on the Project site. The Project Applicant shall ensure that the Project would result in no net loss of "Waters of the State" by providing mitigation through impact avoidance; impact minimization; and/or compensatory mitigation for the impact, as determined in the Streambed Alteration Agreement. Compensatory mitigation may consist of (a) obtaining credits from a mitigation bank; (b) making a payment to an in-lieu fee program that would conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities (these programs are generally administered by government agencies or nonprofit organizations that have established an agreement with the regulatory agencies to use in-lieu fee payments collected from permit Applicants); and/or (c) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This last type of compensatory mitigation may be provided at or adjacent to the impact site (i.e., on-site mitigation) or at another location, usually within the same	If juridictional waters cannot be avoided, a Section 401 permit and SAA must be obtained.	Prior to approval of improvement plans; issuance of grading permits; and/or any clearing, grading, or excavation work	Applicant	DRP RWQCB			

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	watershed as the permitted impact (i.e., off-site mitigation). The Project Applicant retains responsibility for the implementation and success of the mitigation project. Evidence of secured permits shall be provided prior to approval of improvement plans; issuance of grading permits; and/or any clearing, grading, or excavation work on the Project site.							
BIO-4	Temporary construction staking or fencing shall be erected under the supervision of a qualified Biologist at or outside the edge of the impact areas where they interface with jurisdictional features. This fencing shall be erected prior to commencement of grading activities and shall demarcate areas where human and equipment access and disturbance from grading are prohibited. A qualified Biologist shall monitor all site preparation and grading activities near these interfaces during construction. Staging areas shall be restricted to approved impact areas only.	Temporary staking or fencing of jurisdictional features.	Prior to start of construction or ground-breaking activities	Applicant/ Construction Manager	DRP			
BIO-5	The perimeter fencing surrounding the Project site will be raised at regular intervals above ground level to allow for the passage of wildlife to the lesser of either: 18 inches above grade or to the maximum height allowed by the PUC.	Review and approval of the site plan with mitigation measure requirements incorporated. Installation of perimeter fencing as described in plans and specifications.	Prior to issuance of grading or building permits, whichever occurs first	Applicant/Construction Manager	DRP			

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BIO-6	To ensure compliance with the Migratory Bird Treaty Act (MBTA) and Section 3503.5 of the California Fish and Game Code, construction activities shall be conducted during the non-nesting season (September 1–January 31) to avoid any potential disturbance of avian breeding activities. Project-related activities with the potential to disturb suitable bird nesting habitat shall be prohibited from February 1 through August 31, unless a Project Biologist acceptable to the Director of Regional Planning surveys the Project area prior to disturbance to confirm the absence of active nests or nesting habitat. Disturbance shall be defined as any activity that physically removes or damages vegetation or habitat or any action that may cause disruption of nesting behavior such as loud noise from equipment or artificial night lighting. If site clearing, construction or other ground disturbance would be conducted within the general nesting season (February 1–August 31), then a pre construction nesting bird survey shall be conducted by a qualified Biologist within three days prior to disturbance. If an active nest is located within or adjacent to the construction area and the Biologist determines that work activities may impact nesting, the Biologist shall demarcate an appropriate buffer zone around the nest, generally prohibiting construction activities within 300 feet (500 feet for raptors) of the active nest. The size of the buffer may vary (depending on site features, the sensitivity of the species, and the type of construction activity), but will be designed to prevent disruption of nesting activity. If construction activities must occur within the buffer zone of an active bird nest, the	Pre-construction nesting bird surveys. Review and approval of the nesting bird survey results.	Prior to start of construction or ground-breaking activities	Applicant/ Construction Manager	DRP CDFW			

MM#	Mitigation	Action Required	When Monitoring to Occur	Responsible Party	Monitoring Agency or Party	Verification of Compliance		
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	Biologist must monitor the construction activities to avoid undue disturbance to the nesting activities. The buffer zone restrictions will be eliminated once the Biologist determines that nesting activity has ceased. Surveys shall be conducted weekly, beginning no earlier than 30 days and ending no later than 3 days prior to the commencement of disturbance. The Project Applicant shall record the results of the recommended protective measures described above and submit the records to the Department of Regional Planning to document compliance with applicable State and Federal laws pertaining to the protection of native birds.							
Cultural Resources								
CUL-1	In the event of the discovery of potential cultural resources during ground-disturbing activities, ground-disturbing activities within 50 feet of the discovery shall be halted and diverted until a qualified Archaeologist assesses the resource for significance. The qualified Archaeologist will assess the resource pursuant to Section 21083.2(g) of the California Public Resources Code and Section 15064.5(a) of the State CEQA Guidelines to make recommendations of significance. The Archaeologist shall provide their recommendations to the County for a determination of significance. If the County determines the resource to be a significant resource, a "unique archaeological resource", or a "historical resource", the Archaeologist shall formulate a mitigation plan in consultation with the County that will mitigate impacts to the resource to a less than significant level. Potential mitigation could include planning construction to	If potential cultural resources are discovered, they must be evaluated. If significant, a mitigation plan must be formulated.	During construction	Applicant/Construction Manager	DRP			

MM#	Mitigation	Action Required	When Monitoring to Occur	Responsible Party	Monitoring Agency or Party	Verification of Compliance		
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	avoid the resource; protection and preservation in place; and/or data recovery excavation of a representative sample of the site's constituents. The Archaeologist shall prepare a report of the results of any study prepared as part of a testing or mitigation plan, following accepted professional practice. The report shall follow guidelines of the California Office of Historic Preservation. Copies of the report shall be submitted to the County of Los Angeles and to the California Historic Resources Information System at the South Central Coastal Information Center (SCCIC).							
CUL-2	Should fossils/paleontological resources be found during ground disturbing activities for the Project, ground-disturbing activities within 50 feet of the discovery shall be halted or diverted until a qualified Paleontologist inspects the find and evaluates it for significance. Work may proceed in other areas of the site, subject to the direction of the Paleontologist. If determined significant, the Paleontologist shall be authorized to quickly and efficiently salvage and remove the fossil from its locality, as appropriate, before ground disturbing activities resume in the area. These actions, as well as final disposition of the resources, shall be subject to the approval of the County of Los Angeles. These would include identification and evaluation of the discovery and curation of the fossil in perpetuity in an accredited scientific institution approved by the County.	If paleontological resources are discovered, they must be evaluated. If significant, a mitigation plan must be formulated.	During construction	Applicant/ Construction Manager	DRP			

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CUL-3	In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found during ground-disturbing activities, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur. The County Coroner shall be notified within 24 hours of the discovery. If the County Coroner determines that the remains are or believed to be Native American, s/he shall notify the NAHC in Sacramento within 24 hours of the discovery. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendents shall complete their inspection within 48 hours of being granted access to the site by the Property Owner. The property owner would then determine, in consultation with a designated Native American representative, the final disposition of the human remains (14 California Code of Regulations §15064.5[e]).	If human remains are discovered, the County Coroner must be notified.	During construction	Applicant/ Construction Manager	DRP Coroner			
Hazards and Hazardous Materials								
HAZ-1	During construction activities, any hazardous materials encountered on the Project site requiring off-site disposal that meet hazardous waste criteria shall be transported off site by a properly licensed hazardous waste hauler who shall comply with all applicable State and federal requirements, including California Department of Transportation (Caltrans) regulations under Title 49 of the Code of Federal Regulations (CFR). Hazardous materials that may be encountered during proposed Project implementation would be handled, treated, and/or	If encountered, transfer and dispose of hazardous materials in compliance with applicable regulations.	During construction	Applicant/Construction Manager	Applicant-appointed monitor			

MM#	Mitigation	Action Required	When Monitoring to Occur	Responsible Party	Monitoring Agency or Party	Verification of Compliance		
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	disposed of in accordance with applicable regulations and/or the requirements of the local oversight agency(ies).							
HAZ-2	The Contractor shall conduct construction activities in compliance with the regulations of the Los Angeles County Fire Department, which serves as the designated Certified Unified Program Agency (CUPA), and shall implement the State and federal regulations related to (1) the Hazardous Waste Generator Program; (2) Hazardous Materials Release Response Plans and Inventory Program; (3) California Accidental Release Prevention Program (Cal-ARP); (4) the aboveground storage tank (AST) Program; and (5) the underground storage tank (UST) Program.	Conduct construction activities in compliance with regulations of LACFD.	During construction	Applicant/ Construction Manager	LACFD			
HAZ-3	Prior to commencement of on-site ground-disturbing activities, the Project Applicant shall obtain a statistically valid number of soil samples from the identified areas and analyze for the presence of organochlorine pesticides and arsenic. The results of testing shall be made available to the County for review and confirmation. If the results of the soil testing show the presence of chemicals below regulatory levels, grading or excavation may proceed accordingly. If chemical levels are above regulatory standards, remediation and/or removal of contaminated soils in compliance with applicable local, State, and federal standards and requirements shall be conducted prior to Project construction.	Pre-construction soil testing and compliance with applicable regulations.	Prior to start of construction or ground-breaking activities	Applicant/ Construction Manager	LACFD			

MM#	Mitigation	Action Required	When Monitoring to Occur	Responsible Party	Monitoring Agency or Party	Verification of Compliance		
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HAZ-4	If abnormal soil staining and/or odors are encountered during grading and excavation activities that could indicate the presence of petroleum hydrocarbons, heavy metals, or other contamination, construction activities shall be halted and an assessment of the soils shall be conducted prior to the continuation of grading or excavation activities. If the results of the soil testing show the presence of chemicals below regulatory levels, grading or excavation may proceed accordingly. If chemical levels are above regulatory standards, remediation and/or removal of contaminated soils in compliance with applicable local, State, and federal standards and requirements shall be conducted prior to Project construction.	Halting of construction and soil testing, if abnormal soil conditions are encountered.	During construction	Applicant/ Construction Manager	Applicant-appointed monitor			
HAZ-5	During operation, the County shall require the use of demineralized water in all photovoltaic (PV) panel cleaning activities. No other cleaning agents or additives shall be used.	Requires use of water only for panel cleaning.	During operation	Applicant/ Operator	Applicant-appointed monitor			
Recreation								
REC-1	The Applicant shall design and construct an eight foot (8') wide trail along the eastern boundary of the Project site, in a manner consistent with the County of Los Angeles Trails Manual (Trails Manual), to form part of Los Angeles County Trail Number 130 (California Poppy Trail) on the Los Angeles County Trails Map. The trail shall be constructed within a twelve foot (12') easement that shall be dedicated and recorded as a separate document. Prior to issuance of Building Permits, the Applicant shall submit detailed grading information for the trail construction to the Department of Parks and Recreation and	Design a trail in compliance with County Trails Manual.	Prior to issuance of grading or building permits, whichever occurs first	Applicant	DPR			
		Construct a trail in compliance with County Trails Manual.	Prior to energization of the solar panels	Applicant	DRP			

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	include all pertinent information required in the Trails Manual.							
Utilities and Service Systems								
UTIL-1	Construction activities on the Project site shall be conducted in compliance with Chapter 20.87 (Construction and Demolition Debris Recycling and Reuse) of the Los Angeles County Code. Therefore, a Recycling and Reuse Plan (RRP) must be submitted to the Los Angeles County Department of Public Works, Environmental Programs Division, prior to permits (grading or building, whichever comes first) being issued for the Project.	Submittal and approval of a RRP.	Prior to issuance of grading or building permits, whichever occurs first	Applicant/ Construction Manager	DPW			
Mandatory Findings of Significance								
CML-1	Prior to the issuance of a grading permit, Project Applicant shall provide dedicated open-space lands at a minimum 2:1 ratio (replacement:impact) for the lands disturbed by Project implementation. The acreage of impacted lands requiring mitigation is calculated to include all graded areas and all areas within the fenced confines of the proposed facility, including areas directly beneath and between solar panels. A total of 357 acres of mitigation land shall therefore be provided by the Project Applicant. The 84 acres of the Project site that shall not be developed may count towards satisfaction of a portion of the total required acreage. The remaining 273 acres shall be acquired off-site. Off-site mitigation lands must be located within the Project region (i.e. western Antelope Valley) and shall be located as close to the Project site as feasible. The vegetation types, overall biological value, and the condition of mitigation lands shall be comparable to those found on the	Obtain dedicated open space	Prior to issuance of grading or building permits, whichever occurs first	Applicant/ Construction Manager	DRP CDFW			

MM#	Mitigation	Action Required	When Monitoring to Occur	Responsible Party	Monitoring Agency or Party	Verification of Compliance		
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	impacted lands on the Project site. Maintenance of such lands shall be the responsibility of the Project Applicant and the mitigation lands must be maintained to ensure conditions and general biological value remain consistent over time. Mitigation lands shall be selected in consultation with CDFW and preserved with a conservation easement or other form of legal dedication in perpetuity, or until the Project site is restored to its pre-developed conditions per the requirements of the approved Decommissioning Plan. Lands may be deeded to a land management-conservation entity with prior approval from the County. Mitigation lands and deeds or conservation easements proposed shall be approved by the County prior to issuance of grading permits. Within 60 days of recordation of the permanent deed restriction(s) or conservation easement(s), a Maintenance Plan for the off-site mitigation lands shall be submitted to the County for review and approval. The plan shall include the maintenance requirements for the mitigation area, based on the characteristics of the mitigation land and the mitigation requirements described above. The Maintenance Plan shall also describe the performance standards for determining that mitigation requirements for the lands have been met.							

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CML-2	Prior to energization of the Project, if the as-built plan reveals the need for restoration after construction, a Revegetation Plan shall be submitted for review and approval to the County. The CSP will detail access routes, storage areas, high-traffic areas, and methods for the installation of the panels and other equipment in non-graded areas. The CSP will ensure that construction staging areas are sited in upland areas outside stream channels and other surface waters on or around the Project site. Buffer areas will be identified and exclusion fencing will be used to protect the water resource and to prevent unauthorized vehicles or equipment from entering or otherwise disturbing stream channels. Construction equipment will be required to use existing roadways to the extent feasible. A qualified construction mitigation manager (CMM) or delegate will be responsible for documenting adherence to the CSP during the construction phase of the project. A post-construction "as-built" plan will be required prior to energization of the project, which shall detail areas of disturbance needing further restorative work in order to meet the expected criteria upon which the cumulative impacts analyses were based. In the event that the as-built plan reveals the need for restoration after construction, a Revegetation Plan that details steps proposed for the restoration of disturbed areas after construction will be required to be prepared and implemented. Restoration performance goals shall be based upon the quality of the on-site vegetation at the time of the CUP approval. The Revegetation Plan shall include a five-year annual reporting	Submittal and approval of a HMMP and CSP	Prior to issuance of grading permit for the CSP, and prior to CUP approval for the HMMP.	Applicant/Construction Manager	DRPApplicant-appointed monitor			

MM#	Mitigation	Action Required	When Monitoring to Occur	Responsible Party	Monitoring Agency or Party	Verification of Compliance		
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	program to document the site's recovery towards these expected criteria, and shall include provisions for adaptive management contingencies if adequate re-vegetation has not occurred within a three year period from energization.After the five year monitoring period has elapsed, the mitigation may be deemed complete if the performance goals have been satisfied. Further mitigation may be required, subject to enforcement penalties, if the performance goals have not been met.Maintenance of the site in keeping with performance goal criteria shall be a condition of the CUP, subject to enforcement penalties, and shall be confirmed through a requirement in the project MMRP that annual reporting shall continue for the life of the project.							

SECTION 4.0 ERRATA

The following text changes are made to the Initial Study and incorporated as part of the Final IS/MND. These changes further substantiate conclusions and/or clarify aspects of the previously circulated document. None of these changes reflect a determination of a new or more significant environmental impact than disclosed in the Draft IS/MND. Changes to the text are noted in **bold** (for added text) or ~~strikeout~~ type (for deleted text).

Page 1-2 (Section 1.0 Executive Summary)

The proposed Project is planned for construction in ~~late 2013~~ **early 2014**, with the facility in operation by mid-2014. The Project is expected to be in operation for at least 20 years or longer if the Project remains economically viable. At the end of the economically useful life of the Project, the Property would be restored to its pre-developed state in accordance with County requirements and an approved Decommissioning Plan.

Page 3-5 (Section 3.0 Project Description)

The Project Applicant is currently in discussions with Southern California Edison (SCE), the City of Lancaster, and Silverado Power to determine the best path for the Grid-Tie to connect to the Antelope Substation. This MND covers the CEQA analysis for the Project-related transmission line work to be completed by SCE. Silverado Power's proposed transmission poles **and SCE's poles and underground structures** are analyzed in a separate CEQA document. The two alternatives under consideration are described below:

> **Path B:** Under this alternative, shown in Exhibit 3-3E, Proposed Path B Grid-Tie Transmission Line, the Grid-Tie would run underground (approximately 20 feet from centerline of Avenue J) all the way to a riser pole and would hand-off overhead to SCE at approximately 99th Street West. At this point, the Grid-Tie would hand-off to SCE at the first 75-foot-tall pole with a pole switch; SCE would also construct an identical second pole with a pole switch and a 70-foot-tall ~~lightweight~~ **tubular** steel riser pole that would transition back underground, until connecting into the 66-kV bus at the Antelope Substation.

Page 3-7 (Section 3.0 Project Description), Page 4-81 (Section 4.11 Land Use and Planning), and Page 4-97 (Section 4.15 Public Services)

As shown on Exhibit 3-3B, the site perimeter would be secured by six-foot-high chain-link fencing with ~~one~~ **two** additional ~~foot~~ **feet** of three-strand barbed wire surrounding the PV system and on-site Project Substation.

Page 3-9 (Section 3.0 Project Description)

The Project would connect to the existing transmission grid via a 66-kV Grid-Tie transmission line that runs approximately 1.5 miles east to the SCE Antelope Substation, as previously discussed. Placing the Grid-Tie underground would require minor off-site trenching and would include excavation to a depth of approximately three to four feet deep along the southern edge of West Avenue J. Under both proposed alternatives, the riser would hand-off overhead to Southern California Edison (SCE) at approximately 99th Street West, where it would travel along two switch poles and another riser pole before transitioning back underground, until connecting into the 66-kV bus at the Antelope Substation. As part of this hand-off, SCE would ~~construct~~ **install cable within** an underground trench, including several vaults.

Page 3-10 (Section 3.0 Project Description) and Page 4-22 (Section 4.4 Air Quality)

MM AQ-1 During construction of the Project, the Project shall comply with Antelope Valley Air Quality Management District's (AVAQMD's) Rule 403, Fugitive Dust, to prepare a Dust Control Plan for controlling fugitive dust and avoiding nuisance. Compliance with this rule would result in a reduction in short-term particulate pollutant emissions. The Dust Control Plan shall include the following strategies:

- Minimal Grading and Ground Disturbance: The Project shall perform the minimum amount of grading and disturb the minimum amount of existing vegetation to construct the Project. Grading shall generally be limited to the proposed access roads, retention basins, Project Substation foundation, inverter pads, water tank pads, and trail areas. The existing vegetation in all other areas shall be mowed to a height consistent with vegetation management requirements and left in place.
- Vehicle Use: The Project shall only use construction vehicles with tires and shall prohibit use of equipment with rotating wheel tracks (e.g. tank treads or caterpillar tracks).
- Construction Scheduling: Grading activities shall be temporarily halted and/or site watering shall be increased during wind speeds that exceed 25 miles per hour, or when visible dust plumes have the potential to be transported: 1) off the Project site or 2) 200 feet beyond the centerline of the construction of linear facilities (such as the Grid-Tie). Earth-moving activities on the Project site shall be scheduled scheduled ~~during winter months~~ **to occur during the latter portion of the rainy season**, when it is anticipated that natural rainfall shall assist with mitigation of fugitive dust.
- Water Application: The Project shall apply water to the construction site as necessary to control fugitive dust. As required by the AVAQMD, when water is used as fugitive dust control, watering is required three times a day and increased to a minimum of four times a day if there is evidence of visible wind-driven fugitive dust.
- Soil Binders/Wood Mulch: Soil binders and wood mulch shall be applied as necessary.
- Stock Piles Stabilization: All stock not currently in use shall be stabilized from erosion through the use of watering, soil binders, or protected with a plastic or geo-textile mat.
- Final Stabilization: Prior to completion of construction, all disturbed areas shall be permanently stabilized through the use of an all-weather surface treatment and existing vegetation shall be maintained at a maximum height of 6 inches, per LACFD requirements.
- Monitoring: A qualified construction mitigation manager (CMM) or delegate shall be retained to be on-site during all grading activities to ensure compliance with the approved Dust Control Plan. The CMM or delegate shall monitor all construction activities for visible dust plumes. The CMM or Delegate shall promptly implement additional dust plume reduction measures in the event that such visible dust plumes are observed. Additional measures to be implemented, as necessary, shall include increased watering, application of dust palliatives, and/or scaled back construction activities up to and including temporary work cessation.

Page 3-13 (Section 3.0 Project Description)

Construction of the Project is anticipated to commence in ~~fourth quarter 2013~~ **first quarter 2014** and would require approximately six months to complete. Table 3-5, Project Construction Schedule, provides the Project's proposed schedule. While the schedule may be modified due to the date of County Project approval as well other Project approval/permits, this table illustrates the approximate duration of major Project activities. Construction activities would occur between the hours of 7:00 AM and 7:00 PM Monday through Saturday.

TABLE 3–5
PROJECT CONSTRUCTION SCHEDULE

Project Activity	Timing
Right-of-way/property acquisition	3rd quarter 2012
Conditional Use Permit approved	~~3rd quarter 2013~~ **1st quarter 2014**
Acquisition of additional required permits	~~3rd quarter 2013~~ **1st quarter 2014**
Construction begins	~~4th quarter 2013~~ **1st quarter 2014**
Completion of construction	~~2nd quarter 2014~~ **3rd quarter 2014**
Project operational	~~2nd quarter 2014~~ **3rd quarter 2014**
Source: TA-Acacia.	

Page 3-17 (Section 3.0 Project Description)

3.2.4 DECOMMISSIONING PLAN

A Decommissioning Plan for the Project would be prepared and submitted for approval to Los Angeles County Department of Regional Planning prior to the issuance of a grading permit. This Plan would ensure that the land is returned to a beneficial use upon termination of the use of the property as a solar site. **The plan will also include financial assurance.**

The Plan would include information regarding decommissioning timing; equipment removal; and habitat restoration **with specific, measureable performance standards** for the site in accordance with Los Angeles County, State, and federal regulations and requirements. The Plan would also include details of ground treatments, erosion control, fertilization, seed sources, vegetation planting methods, and irrigation methods, as well as information on appropriate post-closure uses of the site, which may include agricultural land, open space, or some other use consistent with County plans and ordinances.

Page 3-20 (Section 3.0 Project Description)

3.5.1 DISCRETIONARY PERMITS

- California Energy Commission: Certification as an eligible renewable resource.
- California Department of Fish and Wildlife: Section 1604 Streambed Alteration Agreement (Note: This would only be required if jurisdictional drainage features would be impacted).

- Lahontan Regional Water Quality Control Board: Section 401 Water Quality Certification (Note: This would only be required if **federal** jurisdictional drainage features would be impacted).
- County of Los Angeles: Conditional Use Permit for the West Antelope Solar Project (Case No. R2012-01589).

3.5.2 MINISTERIAL PERMITS

- State Water Resources Board: NPDES Construction General Permit
- County of Los Angeles: Grading Permit, Building Permit, Driveway Permit, and Utility Crossing Permit for West Avenue J and 110th Street West.
- City of Lancaster: Easement for construction within West Avenue J right-of-way.
- **California Department of Transportation (Caltrans): Transportation Permit for Oversized Vehicles, if necessary.**

Page 4-9 (Section 4.1 Aesthetics)

MM AES-1 The Project shall incorporate landscaping with drought-tolerant vegetation for the exterior of the Project site along the portions of the perimeter fence facing 110th Street West, West Avenue J, and along the northern boundary of the site. A Landscape Plan shall be prepared, subject to the review and approval of the County of Los Angeles. Irrigation via water trucks would be conducted until the landscaping is established. **Such landscaping shall be maintained as approved during the operational phase of the Project.** ~~No long-term irrigation infrastructure would be constructed.~~ All perimeter landscaping shall be planted prior to All perimeter landscaping shall be planted prior to **energization of the solar panels**~~issuance of the certificate of occupancy~~.

Page 4-19 (Section 4.3 Air Quality)

TABLE 4–5
ESTIMATED HALF-ANNUAL CONSTRUCTION EMISSIONS (TONS)

	VOC	NOx	CO	SOx	PM10	PM2.5
~~Annual emissions in 2013~~ **Estimated project emissions**	~~1~~ **0.6**	~~12~~ **5.7**	~~6~~ **4.1**	~~<1~~ **<0.1**	~~1~~ **1.4**	~~1~~ **0.7**
***One half of** AVAQMD Annual Thresholds*	~~*25*~~ ***12.5***	~~*25*~~ ***12.5***	~~*100*~~ ***50***	~~*25*~~ ***12.5***	~~*15*~~ ***7.5***	~~*15*~~ ***7.5***
Exceeds AVAQMD Thresholds?	No	No	No	No	No	No

VOC: volatile organic compound(s); NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; **AVAQMD: Antelope Valley Air Quality Management District.**

Source: AVAQMD 2011 (thresholds). See Appendix B for calculations.

Page 4-21 (Section 4.3 Air Quality)

Given that the Project's contribution of PM10 during construction, as shown in Table 4-5, is ~~only 6.6~~ **less than 19** percent of the **conservative** AVAQMD **half annual** threshold and the fact that construction activities would be less than six months in duration, the Project's PM10 and O_3 emissions would not be cumulatively considerable when considered in combination with other proposed Projects in the Project vicinity. O_3 precursors include VOC and NOx. As shown in Table 4-5, Project construction would

result in approximately ~~1~~ **0.6** ton of VOC and ~~12~~ **5.7** tons of NOx emissions, representing approximately ~~4~~ **5** percent and ~~48~~ **45** percent of the **conservative, halved annual** AVAQMD thresholds, respectively.

Pages 4-22 and 4-23 (Section 4.3 Air Quality)

MM AQ-1 During construction of the Project, the Project shall comply with Antelope Valley Air Quality Management District's (AVAQMD's) Rule 403, Fugitive Dust, to prepare a Dust Control Plan for controlling fugitive dust and avoiding nuisance. Compliance with this rule would result in a reduction in short-term particulate pollutant emissions. The Dust Control Plan **shall be subject to the review and approval of the AVAQMD and** shall include the following strategies:

- Minimal Grading and Ground Disturbance: The Project would perform the minimum amount of grading and disturb the minimum amount of existing vegetation to construct the Project. Grading would generally be limited to the proposed access roads, retention basins, Project Substation foundation, inverter pads, water tank pads, and trail areas. The existing vegetation in all other areas would be mowed to a height consistent with vegetation management requirements and left in place.
- Vehicle Use: The Project would only use construction vehicles with tires and would prohibit use of equipment with rotating wheel tracks (e.g. tank treads or caterpillar tracks).
- Construction Scheduling: Grading activities would be temporarily halted and/or site watering would be increased during wind speeds that exceed 25 miles per hour, or when visible dust plumes have the potential to be transported: 1) off the Project site or 2) 200 feet beyond the centerline of the construction of linear facilities (such as the Grid-Tie). Earth-moving activities on the Project site would be scheduled ~~during winter months~~ **to occur during the latter portion of the rainy season**, when it is anticipated that natural rainfall would assist with mitigation of fugitive dust.
- Water Application: The Project would apply water to the construction site as necessary to control fugitive dust. As required by the AVAQMD, when water is used as fugitive dust control, watering is required three times a day and increased to a minimum of four times a day if there is evidence of visible wind-driven fugitive dust. .
- Soil Binders/Wood Mulch: Soil binders and wood mulch would be applied as necessary.
- Stock Piles Stabilization: All stock not currently in use would be stabilized from erosion through the use of watering, soil binders, or protected with a plastic or geo-textile mat.
- Final Stabilization: Prior to completion of construction, all disturbed areas would be permanently stabilized through the use of an all-weather surface treatment and existing vegetation would be maintained at a maximum height of 6 inches, per LACFD requirements.

- Monitoring: A qualified construction mitigation manager (CMM) or delegate would be retained to be on-site during all grading activities to ensure compliance with the approved Dust Control Plan. The CMM or delegate would monitor all construction activities for visible dust plumes. The CMM or Delegate would promptly implement additional dust plume reduction measures in the event that such visible dust plumes are observed. Additional measures to be implemented, as necessary, would include increased watering, application of dust palliatives, and/or scaled back construction activities up to and including temporary work cessation.

Page 4-26 (Section 4.4 Biological Resources)

A single special status **plant** species was observed during the focused surveys: Peirson's morning-glory (*Calystegia peirsonii*), which has a California Rare Plant Rank (CRPR) of 4.2.

Page 4-27 (Section 4.4 Biological Resources)

Less Than Significant With Mitigation. This section is divided into discussions about Special Status Plant Species and Special Status Wildlife Species that occur **or potentially occur** on the Project site. For a discussion of cumulative impacts, refer to Section 4.19, Mandatory Findings of Significance, Threshold (c).

Page 4-31 (Section 4.4 Biological Resources)

Western Burrowing Owl

For the burrowing owl, a total of four 3-hour-long surveys were conducted, with two at sunrise (approximately between 4:45 AM and 7:45 AM) and two at sunset (approximately between 6:00 PM and 9:00 PM) on April 15; May 7 and 29; and June 18, 2012. **Survey methodology was consistent with Appendix D of the CDFW's Staff Report for Burrowing Owl Mitigation (CDFW 2012).** During the first survey, it was determined that several potentially suitable burrows were present on the Project site. After the discovery of potentially suitable burrows on the site, the initial burrowing owl habitat assessment and burrow surveys were conducted concurrently with the first focused burrowing owl survey; surveys concentrated on potential habitat and occupied burrows on the Project Site as well as a 50-foot buffer south of West Avenue J that would serve as the transmission corridor (BonTerra Consulting 2012d).

Page 4-32 (Section 4.4 Biological Resources)

If burrows occupied by burrowing owls are detected on the Project site **or within 200 meters of proposed construction activities**, the Project Applicant shall notify the CDFW and shall implement the appropriate actions, which may include creating a no-work buffer or relocating the burrow. If burrows occupied by burrowing owls are detected within ~~500 feet~~ **200 meters** of the off-site Grid-Tie **or other** disturbance areas, the Project Biologist shall monitor the owl(s) to ensure that the Project does not negatively impact breeding. If negative indirect impacts are suspected, the Project Biologist shall propose measures to reduce indirect impacts to the owl(s) during construction. If impacts to burrowing owl cannot be avoided, preservation of suitable habitat as described in MM BIO-1 shall reduce such impacts to less than significant.

Page 4-33 (Section 4.4 Biological Resources)

Potentially suitable habitat for non-breeding Swainson's hawks is expansive throughout the region and loss or reduced suitability of a portion of the Project site would not represent a substantial impact on the species and is considered to be a less than significant impact. Other projects in the region that would impact breeding Swainson's hawk foraging habitat have been typically required to mitigate through preservation of similar suitable habitat for breeding hawks. Therefore, the cumulative impact of this and other projects in the vicinity would not result in a substantial loss of foraging ground or result in genetic isolation and is considered to be a less than significant impact. However, a pre-construction survey, as identified in MM BIO-2, would be conducted prior to the start of Project construction activities to ensure any potential impacts remain less than significant. **Additionally, MM CML-1 requires 2:1 mitigation for the entire fenced area of the Project. Based on a fenced area of 178.5 acres, a total of 357 acres of mitigation is required. The 84 acres of the Project site outside the fenced area may still count towards satisfaction of the total required acreage. Thus, the remaining 273 acres must be acquired off-site. This is the same ratio of mitigation that CDFW generally requires for projects that have impacts to Swainson's Hawk. Therefore, with incorporation of MM CML-1, the Project's mitigation for cumulative impacts to wildlife species would be less than significant.**

Further, as part of the Project, a Decommissioning Plan **with specific, measureable performance standards as well as financial assurance** would be prepared and submitted for approval to Los Angeles County prior to the issuance of a grading permit for the Project. The Plan would ensure the land is returned to its pre-developed state upon termination of the use of the land as a solar site (which would be in 20 years at the earliest). Therefore, the reduction in habitat value would exist only for the life of the proposed Project, and the site would be restored to its pre-developed conditions.

Pages 4-34 (Section 4.4 Biological Resources)

> To ensure avoidance, MM BIO-4 requires that all areas containing jurisdictional resources be staked **or fenced at or outside the edge of the impact areas where they interface with jurisdictional features to demarcate areas where human and equipment access and disturbance from grading are prohibited prior to commencement of grading activities.** ~~by a qualified Regulatory Specialist prior to the initiation of any construction-related activities that involve ground disturbance.~~ **A qualified Biologist shall monitor all site-preparation and grading activities near these interfaces during construction. Staging areas shall be restricted to approved impact areas only.** ~~Also, ground-disturbing construction activities within these areas would be monitored by a qualified Regulatory Specialist/Biologist.~~ Implementation of MMs BIO-3 and BIO-4 would ensure that impacts to jurisdictional features are less than significant.

Pages 4-37 through 4-39 (Section 4.4 Biological Resources)

MM BIO-1 A pre-construction survey for the burrowing owl shall be conducted ~~within 14 days~~ prior to start of construction/ground-breaking activities. **Beginning 30 days prior to the start of construction, surveys shall be conducted weekly with the final survey occurring 1 day prior to the start of construction. During the first survey, a habitat assessment will be conducted to identify potentially suitable burrows which shall become the focus of subsequent surveys.** For those burrows located along the Grid-Tie transmission route off the Project site, a second survey will be conducted within 24 hours of any ground-breaking activities. If these surveys do not detect occupied burrowing owls, then no further mitigation is required. If burrows occupied by burrowing owls are detected on the Project site, the Project Applicant shall notify the California Department of Fish and Wildlife (CDFW)[4] and shall implement the following actions prior to construction (either Set A for breeding burrowing owls [March to July] or Set B for non-breeding burrowing owls [August to February]). **Buffer distances are based on the recommended restricted activity dates and setback distances by level of disturbance listed in the CDFW's 2012 Staff Report on Burrowing Owl Mitigation.**

Set A Measures (for Breeding Burrowing Owls, between March and July)

A1) No work shall occur within 500 ~~feet~~ **meters** of the active nesting burrow **unless on-site biologists determines specific conditions would allow a smaller buffer**; the CDFW ~~may~~ **shall** be consulted to determine whether a reduced buffer is acceptable.

A2) Provide weekly monitoring of the burrowing owl nesting burrow to determine nesting outcome.

A3) Provide CDFW with monthly updates of burrowing owl nesting success.

A4) Resume construction at the burrow site once the **qualified** Biologist **has made the** ~~determines~~ **determination** that **the burrow is no longer in use** ~~fledglings have left the nest~~. **Prior to resumption of work and subsequent to approval from the CDFW and County, the burrow shall be safely collapsed if necessary to complete project construction.**

If burrows occupied by burrowing owls are detected within ~~500 feet~~ **200 meters** of the off-site Grid-Tie or other disturbance areas, the Project Biologist shall monitor the owl(s) to ensure that the Project does not negatively impact breeding. If negative indirect impacts are suspected, the Project Biologist shall propose measures to reduce indirect impacts to the owl(s) during construction.

Set B Measures (for Non-Breeding Burrowing Owls, between August and February)

B1) A qualified Biologist shall notify the CDFW of the occupied burrow location and that either passive or active relocation measures will be implemented **if burrow destruction is necessary for project completion**.

[4] The California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW) effective January 1, 2013.

B2) The Biologist shall remove the burrow **if avoidance is not feasible**.

If impacts to burrowing owl occupied burrows are unavoidable, preservation of lands containing potentially suitable burrowing owl habitat shall be preserved at a 1:1 ratio **and in accordance with guidance of the CDFW's 2012 Staff Report on Burrowing Owl Mitigation. The 1:1 ratio is expected to be adequate due to the homogenous landscape of the Project area resulting in very high likelihood of highly similar, and thereby successful, mitigation lands.** Impacted lands shall be defined as the directly impacted occupied burrows and immediately adjacent habitat areas. Replacement lands shall be within the Project region (i.e. western Antelope Valley) and shall be located as close to the Project site as feasible. Vegetation types present and condition of mitigation lands shall be similar to those found on the impacted occupied burrowing owl lands. If suitable natural burrows are not present within the Project site, artificial burrows shall be constructed in accordance **with guidance of the CDFW's 2012 Staff Report on Burrowing Owl Mitigation and** California Burrowing Owl Consortium (1993) Guidelines. Maintenance of such lands shall be the responsibility of the Project Applicant and shall ensure that conditions and general biological value remain consistent over time. Mitigation lands shall be preserved in perpetuity, or for the length of Project impacts if temporal, with a conservation easement or other form of legal dedication. Lands may be deeded to a land management-conservation entity with prior approval from the County. Mitigation lands and deeds or conservation easements proposed shall be approved by the County prior to issuance of grading permits.

Within 60 days of recordation of the permanent deed restriction(s) or conservation easement(s), a Maintenance Plan for the off-site mitigation lands shall be submitted to the County for review and approval. The plan shall include the maintenance requirements for the mitigation area, based on the characteristics of the mitigation land and the mitigation requirements described above. The Maintenance Plan shall also describe the performance standards for determining that mitigation requirements for the lands have been met.

MM BIO-2 If construction activities on the Project site and along the Grid-Tie alignment are completed between September 16~~, 2013~~ and March 31~~, 2014~~ (i.e., **the** non-nesting season), then additional surveys for Swainson's hawk are not required.

If new or ongoing construction activities (i.e., additional removal of potential foraging habitat through ground-disturbing activities) would occur on the Project site and along the Grid-Tie alignment ~~after~~ **between** ~~March~~ **April** 1~~, 2014~~ **and September 15**, surveys for Swainson's hawk shall be conducted following the 2010 CDFG survey protocol for the Antelope Valley prior to or concurrent with construction activities. If no active nests are detected, then no further mitigation is necessary.

If the survey detects an active Swainson's hawk nest within a 5-mile radius of the Project site, all construction activities must fully and immediately cease and the CDFW shall be notified. If the nest is determined to be unsuccessful by a qualified Biologist, the Project Applicant may resume construction activities as long as no other active nests are located within the 5-mile radius of the Project site**, as authorized by CDFW and LACDRP**. If Swainson's hawk nests are determined to be successful, the Project Applicant shall consult with CDFW to determine if a "take" authorization of a State-listed species (per the California

Endangered Species Act) is warranted **in light of the mitigation land requirements set forth under MM CML-1**. If warranted, the Project Applicant shall pursue a CDFW permit, which will include **any additional** conditions requiring impact minimization to the Swainson's hawk~~, including establishment of an avoidance buffer, as well as identification of mitigation lands for purchase that are within the known Antelope Valley breeding range of Swainson's hawk and that provide comparable habitat value to the Project site; the purchased lands will be at a minimum 2:1 ratio and subject to CDFW approval~~.

MM BIO-5 The perimeter fencing surrounding the Project site will be raised at regular intervals above ground level to allow for the passage of wildlife to the lesser of either: ~~one foot~~ **18 inches** above grade or to the maximum height allowed by the PUC.

Page 4-65 (Section 4.9 Hazards and Hazardous Materials)

MM HAZ-1 During construction activities, any hazardous materials encountered on the Project site requiring off-site disposal **that meet hazardous waste criteria** shall be transported off site by a properly licensed hazardous waste hauler who shall comply with all applicable State and federal requirements, including California Department of Transportation (Caltrans) regulations under Title 49 of the *Code of Federal Regulations* (CFR). Hazardous materials that may be encountered during proposed Project implementation would be handled, treated, and/or disposed of in accordance with applicable regulations and/or the requirements of the local oversight agency(ies).

Page 4-72 (Section 4.10 Hydrology and Water Quality)

The Project is categorized as SIC Code 4931 (NAICS Code 221111). SIC Code 4931 is not on the current list of regulated standard industrial codes which would be subject to the General Industrial Stormwater Permit. Further, compliance with MM HAZ-5 in Section 4.9, Hazards and Hazardous Materials, requires that only water is used for cleaning PV panels and no other cleaning agents or additives can be used. Therefore, compliance with MM HAZ-5 would ensure the use of water on the PV panels would have a less than significant impact on surface water and groundwater quality.

Page 4-75 (Section 4.10 Hydrology and Water Quality)

As required by the County, the LACDPW shall ensure that appropriate hydrology and hydraulic analyses for the Water Quality Plan/Hydrology and *2009 Low Impact Development (LID) Standard Manual* compliance have been satisfied. Therefore, construction of appropriate BMPs in compliance with the Water Quality Plan/Hydrology and LID would be implemented to ensure that storm water runoff is retained and infiltrated on site per County standards to ensure that no on-site or off-site flooding would occur. Compliance with this requirement would also ensure that Project implementation would result in a less than significant impact related to flooding.

As mentioned in Section 4.4, Biological Resources, the Project area contains ephemeral drainage features that may be considered jurisdictional by regulatory agencies. The extent of potential CDFW and RWQCB jurisdiction in the Project survey area has been identified as 0.04 acre (0.02 hectare). However, it is anticipated that the on-site drainage would be entirely avoided by Project implementation through design, and no impact would result (BonTerra Consulting 2012a).

To further ensure avoidance, MM BIO-4 requires that all areas containing jurisdictional resources be staked or fenced at or outside the edge of the impact areas where they interface with jurisdictional features to demarcate areas where human and equipment access and disturbance from grading are prohibited prior to commencement of grading activities. A qualified Biologist shall monitor all site-preparation and grading activities near these interfaces during construction. Staging areas shall be restricted to approved impact areas only.

However, the off-site drain features may be impacted by trenching associated with installation of the Grid-Tie line connecting the Project to the Antelope Substation. If avoidance of these drainages is not feasible through underground tunneling or other means, then pursuant to MM BIO-3, the Project Applicant will need to consult with applicable agencies to get the appropriate permits. If jurisdictional waters cannot be avoided, impacts resulting from Project implementation would require Section 401 clearance from the RWCQB and a Section 1602 Streambed Alteration Agreement (SAA) from the CDFW. The SAA must address the initial construction and long-term operation and maintenance of any structures in areas identified as "Waters of the State" (such as a culvert or desilting basin) that may require periodic maintenance if these are included in the Project design. As required by MM BIO-3, the Project Applicant must obtain permit approval from the RWQCB and the CDFW and ensure no net loss of wetlands through avoidance and/or compensatory mitigation.

Page 4-103 (Section 4.10 Transportation and Traffic)

The limited amount of construction activity for the grading and vehicle trips by the construction crew for delivery of building materials (i.e., to be used for PV panels, mounting structures and poles/foundations, the equipment buildings, conduit trenching, fencing, and lighting) is not expected to cause traffic congestion on area roadways and intersections. There is capacity on local intersections and streets near the site, which are all operating at Level of Service (LOS) A, to handle traffic volume increases due to construction traffic. **The movement of large equipment on public roadways shall be made in compliance with the Los Angeles County Code (Title 16, Highway), which requires a moving permit and which includes provisions regarding the size of vehicles/equipment; night moves; moving in inclement weather; parking on streets; travel outside peak hours and holidays; over-length, over-height, and over-width requirements; lighting; signs; and restricted routes. Oversized transport vehicles on State highways, if required, would need to obtain a transportation permit from the California Department of Transportation (Caltrans).** This impact would also be temporary and less than significant.

Page 4-114 (Section 4.19 Mandatory Findings of Significance)

TABLE 4-19
CUMULATIVE PROJECTS WITHIN THREE MILES OF THE PROJECT SITE

No.	Project Name (Case Number)	Location	Acres	MW
County of Los Angeles Projects				
1	Western Antelope Blue Sky Ranch* (R2011-00798)	110th St West and W. Ave K	157	40
2	Antelope Solar Greenworks* (R2011-00807)	97th St West and W. Ave I	256	52
3	Silver Sun Greenworks* (R2011-00801)	120th St West and W. Ave I	80	20
City of Lancaster Projects				
4	CUP 10-22	Bound by Ave H, Ave H-8, 80th St West and 90th St West	180	38
5	CUP 11-02	East side of 90th St West between Ave K-8 and Ave K-12	17.74	3.4
6	CUP 11-03	Southwest corner of Ave H and 90th St West	67	10
7	CUP 11-05	East side of 80th St West between Ave J-4 and Ave J-8	80	20
8	CUP 11-07	Southeast corner of Avenue J and 110th St West	40	10
9	CUP 12-08	Bound by Ave H, Ave G, 90th St West and 95th St West	135	20
10	CUP 12-09	Southwest corner of Ave H and 100th St West	158	40
11	CUP 12-15	Roughly bound by Ave F, Ave H, 95th St West, and 110th St West	±1000	330
12	**CUP 13-06**	**Generally bound by Avenue J, Avenue J-12, 110th Street West, and 97th Street West,**	**±254**	**30**

MW: megawatts

* Associated with the Silverado Power Solar Project.

Source: LACDRP 2012a; Lancaster 2013**a; Lancaster 2013b**.

Page 4-115 (Section 4.19 Mandatory Findings of Significance)

However, the cumulative loss of open space and conversion to industrial uses in the western Antelope Valley could be considered to be a cumulatively considerable aesthetic impact and/or a significant degradation to the character of the Project's surrounding area. As discussed below, MM CML-1 mandates that areas disturbed by Project implementation, including ~~graded areas and areas covered by the solar arrays~~ **the entire fenced area**, shall be replaced at a minimum ~~1:1~~ **2:1** ratio with open space land within the western Antelope Valley of a comparable biological value. The replacement lands must be preserved as open space in perpetuity. Compliance with MM CML-1 would ensure that the Project's contribution to the cumulative loss of open space in the western Antelope Valley would be less than significant.

Page 4-116 and 4-117 (Section 4.19 Mandatory Findings of Significance)

The study area for cumulative impacts on Biological Resources includes the western Antelope Valley, which could be impacted by changes in plant and animal habitats in due to increasing

urbanization and population growth in the region. Although project level impacts are considered less than significant, the County of Los Angeles generally considers the cumulative loss of lands potentially utilized by common and special status bird species to be a potentially significant cumulative impact. The Project contributes to the general loss of potential **foraging** habitat for a variety of bird species**, including Swainson's hawk**; therefore, impacts on biological resources are considered to be cumulatively considerable prior to mitigation. MM CML-1 mandates that areas disturbed by Project implementation, including graded areas and areas covered by the solar arrays, shall be replaced at a minimum 2:1 ratio with open space land within the western Antelope Valley of a comparable biological value.

A Memorandum prepared by BonTerra Consulting and included in Appendix C-5 of this document provides a detailed analysis of the post-construction biological value of the Project site and assesses the appropriate amount of mitigation land required for Project impacts. Mitigation lands may occur on-site and off-site, must be located within the Project region (i.e. western Antelope Valley), and must be located as close to the Project site as feasible. ~~Based on the assessment provided in the Memorandum, 16.27 acres of off-site mitigation land, in addition to the on-site open space areas to be preserved, is required.~~ **As discussed in the Memorandum, the 2:1 ratio (which is the minimum mitigation ratio required by CDFW's Swainson's hawk protocol) would only apply to areas of the Project site that would be impacted. Additionally, the Memorandum discussed the possibility of applying undeveloped portions of the fenced area and areas between the panels as credit towards the mitigation requirement. Under these assumptions, only 16.27 additional acres of mitigation would need to be obtained off-site. However, based on further discussions with CDFW, the County is now requiring 2:1 mitigation for the entire fenced area of the Project. Based on a fenced area of 178.5 acres, a total of 357 acres of mitigation is required. The 84 acres of the Project site outside the fenced area may still count towards satisfaction of the total required acreage. Thus, the remaining 273 acres must be acquired off-site.**

Mitigation lands must be **selected in consultation with CDFW and** preserved with a conservation easement or other form of legal dedication in perpetuity, or until the Project site is restored to its pre-developed conditions per the requirements of the approved Decommissioning Plan. Lands may be deeded to a land management-conservation entity with prior approval from the County. Mitigation lands and deeds or conservation easements proposed shall be approved by the County prior to issuance of grading permits.

Although the Project site would be subjected to minimal grading, the installation of the arrays would still require the use of vehicles, intense foot traffic, and the possible use of dust palliatives, all of which could result in a decreased potential for vegetative recovery through changes in soil structure and trampling of vegetation. As such, the continued presence of on-site vegetation within the fenced area after construction is key to ensure that cumulative impacts will be less than significant. MM CML-2 requires the approval of a ~~Habitat Mitigation and Monitoring Plan (HMMP)~~ **Revegetation Plan** that details the steps for the restoration of any disturbed areas after construction, and a Construction Staging Plan (CSP) that details access routes, storage areas, and panel installation methods. A ~~biological monitor~~ **qualified construction mitigation manager (CMM) or delegate** will be present for documenting adherence to the CSP during construction.

Page 4-121 and 4-122 (Section 4.19 Mandatory Findings of Significance)

MM CML-1 Prior to the issuance of a grading permit, Project Applicant shall provide dedicated open-space lands at a minimum 2:1 ratio ~~of~~ **(**replacement**:impact)** for the lands disturbed by Project implementation. The acreage of impacted lands

requiring mitigation ~~was~~ **is** calculated to include all graded areas~~, as well as~~ **and all** areas **within the fenced confines of the proposed facility, including areas directly beneath and between solar panels** ~~covered by the solar array panels and appurtenant facilities~~. A total of ~~152.02~~ **357** acres of mitigation land shall **therefore** be provided by the Project Applicant.~~, with 135.75 acres to be provided on-site and 16.27 acres to be acquired off-site.~~ **The 84 acres of the Project site that shall not be developed may count towards satisfaction of a portion of the total required acreage. The remaining 273 acres shall be acquired off-site.** Off-site mitigation lands must be located within the Project region (i.e. western Antelope Valley) and shall be located as close to the Project site as feasible. The vegetation types, overall biological value, and the condition of mitigation lands shall be comparable to those found on the impacted lands on the Project site. Maintenance of such lands shall be the responsibility of the Project Applicant and the mitigation lands must be maintained to ensure conditions and general biological value remain consistent over time. Mitigation lands shall be **selected in consultation with CDFW and** preserved with a conservation easement or other form of legal dedication in perpetuity, or until the Project site is restored to its pre-developed conditions per the requirements of the approved Decommissioning Plan. Lands may be deeded to a land management-conservation entity with prior approval from the County. Mitigation lands and deeds or conservation easements proposed shall be approved by the County prior to issuance of grading permits.

Within 60 days of recordation of the permanent deed restriction(s) or conservation easement(s), a Maintenance Plan for the off-site mitigation lands shall be submitted to the County for review and approval. The plan shall include the maintenance requirements for the mitigation area, based on the characteristics of the mitigation land and the mitigation requirements described above. The Maintenance Plan shall also describe the performance standards for determining that mitigation requirements for the lands have been met.

MM CML-2 ~~Prior to CUP approval, an approved Habitat Mitigation and Monitoring Plan (HMMP) shall be submitted for review and approval to the County.~~ Prior to the issuance of a grading permit, a Construction Staging Plan (CSP) shall be submitted for review and approval to the County. **Prior to energization of the Project, if the as-built plan reveals the need for restoration after construction, a Revegetation Plan shall be submitted for review and approval to the County.**

~~The HMMP will detail steps proposed for the restoration of disturbed areas in the event that the as-built plan reveals the need for restoration after construction. Criteria upon which the MND's biological impacts analysis was based shall form the basis for the formulation of performance goals in the HMMP. The HMMP shall include a five-year annual reporting program to document the site's recovery towards these expected criteria, and shall include provisions for adaptive management contingencies if adequate re-vegetation has not occurred within a three year period from energization.~~

The CSP will detail access routes, storage areas, high-traffic areas, and methods for the installation of the panels and other equipment in non-graded areas. **The CSP will ensure that construction staging areas are sited in upland areas outside stream channels and other surface**

waters on or around the Project site. Buffer areas will be identified and exclusion fencing will be used to protect the water resource and to prevent unauthorized vehicles or equipment from entering or otherwise disturbing stream channels. Construction equipment will be required to use existing roadways to the extent feasible. ~~The biological monitor~~ **A qualified construction mitigation manager (CMM) or delegate** will be responsible for documenting adherence to the CSP during the construction phase of the project.

A post-construction "as-built" plan will be required prior to energization of the project, which shall detail areas of disturbance needing further restorative work in order to meet the expected criteria upon which the ~~biological and~~ cumulative impacts analyses were based. **In the event that the as-built plan reveals the need for restoration after construction, a Revegetation Plan that details steps proposed for the restoration of disturbed areas after construction will be required to be prepared and implemented. Restoration performance goals shall be based upon the quality of the on-site vegetation at the time of the CUP approval. The Revegetation Plan shall include a five-year annual reporting program to document the site's recovery towards these expected criteria, and shall include provisions for adaptive management contingencies if adequate revegetation has not occurred within a three year period from energization.**

After the five year monitoring period has elapsed, the mitigation may be deemed complete if the performance goals have been satisfied. Further mitigation may be required, subject to enforcement penalties, if the performance goals have not been met. ~~If after the five-year monitoring period has elapsed, it is determined that revegetation of the site or portions thereof is not possible, mitigation in the form of off-site land acquisition shall be provided at a 2:1 ratio for the unrestorable area.~~

Maintenance of the site in keeping with performance goal criteria shall be a condition of the CUP, subject to enforcement penalties, and shall be confirmed through a requirement in the project MMRP that annual reporting shall continue for the life of the project.

Page 4-122 (Section 4.19 Mandatory Findings of Significance)

Lancaster, City of. 2013**a** (March**). Email** from J. Swain, City of Lancaster Planning Department, to E. Paek, BonTerra Consulting. Lancaster, CA: the City.

———. 2013b (June 12). ***CUP 13-06/GPA 13-02/ZC 13-02/Plainview Solar Works Initial Study*****. Prepared by the City of Lancaster Planning Department.**

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