

February 15, 2018

- MEMO TO: Stanislaus County Planning Commission
- FROM: Department of Planning and Community Development

SUBJECT: TIME EXTENSION FOR USE PERMIT APPLICATION NO. 2011-11 – BELTRAN RANCH SOLAR FACILITY

PROJECT DESCRIPTION

This is a request for a time extension and modification of the Conditions of Approval No. 1 to extend the project's development schedule by five years, or until April 18, 2023, to allow for the construction of a 140 megawatts (MW) solar photovoltaic (PV) energy facility on 606± acres of a 1,720± acre site in the A-2-40 and A-2-160 (General Agriculture) zoning district. The project site is located off the end of Davis Road, west of Interstate 5, southwest of the Fink Road Landfill, in the Newman/Crows Landing area. The project was approved on April 18, 2013 (see Attachment 2 – Planning Commission Staff Report, April 18, 2013).

DISCUSSION

The project site is owned by Beltran Farms. The original project applicant was AEG Solar Partners. Coldwell Solar has obtained development rights and applied for the proposed Time Extension and Conditions of Approval modification.

Since 2010, the Planning Commission has approved four large scale solar facilities; however, only one facility has been completely constructed and another facility is partially constructed. Large scale solar facilities are unique in that the developer is required to conduct multiple studies and meet requirements set by the power purchaser and approved by the California Public Utilities Commission before the developer may proceed with construction of the facility and solar specific conditions are needed to insure that suitable time is allowed for development.

Use Permits typically require development to occur within eighteen months of the date of final approval. Per Stanislaus County Zoning Ordinance, the time allowed for development may be extended for a period of one year upon project approval and prior to expiration of the Use Permit. Recognizing the complexities of establishing a solar facility, the project's Condition of Approval No. 1 allowed for development to occur anytime within five years of Use Permit approval. As such, the expiration date for this Use Permit is April 18, 2018. The time extension request from Coldwell Solar dated November 1, 2017, (see Attachment 1) requests a modification to Condition of Approval No. 1 to allow for a total additional time of five years. Consequently, staff recommends that Condition of Approval No. 1 be modified as follows, with new wording in **bold** and deleted wording with a line through it:

1. Use(s) shall be conducted as described in the application and supporting information (including the plot plan) as approved by the Planning Commission and/or Board of

TE for UP 2011-11 Planning Commission Memo February 15, 2018 Page 2

Supervisors and in accordance with other laws and ordinances. Construction of the initial phase of this project shall be allowed to begin within five (5) years of project approval no later than April 18, 2023, provided it can be demonstrated that efforts to secure a Power Purchase Agreement and necessary building permits have been on-going.

This request was circulated to responsible agencies, including those agencies that requested Conditions of Approval be placed on the approved project. Besides the applicant's request to amend Condition of Approval No. 1, no amended or additional Conditions of Approval have been requested. This request, to extend the project by an additional five years for a total of 10 years, is consistent with the Time Extension and Conditions of Approval modification request for UP2010-03 – Fink Road Solar Farm, approved by the Planning Commission on July 20, 2017.

ENVIRONMENTAL REVIEW

Under California law, a request for time extension of a project that previously was subject to CEQA review may be exempt from CEQA or may be evaluated under the standard triggering subsequent or supplemental CEQA review (under Public Resources Code Section 21166 and CEQA Guidelines Section 15162). A Mitigated Negative Declaration was adopted for this project on April 18, 2013. In order to trigger additional review when the project was previously approved with a Mitigated Negative Declaration, a significant environmental effect must be identified. No significant environmental effects were identified by responding agencies and parties.

RECOMMENDATION

- 1. Find there is no evidence on the record of any significant changes involving this project since the time it was originally approved, which could trigger a significant environmental effect.
- 2. Approve the modification to Condition of Approval No. 1 as recommended by Staff, allowing for project construction to begin no later than April 18, 2023, with all other approved Conditions of Approval and Mitigation Measures remaining in effect.

Contact Person:Rachel Wyse, Senior Planner, (209) 525-6330Attachments:Attachment 1 -Attachment 2 -Applicant's Time Extension Request, November 1, 2017Attachment 2 -Planning Commission Staff Report, April 18, 2013Attachment 3 -Planning Commission Meeting Minutes (Excerpt), April 18, 2013



RECEIVED

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STANISLAUS CO. PLANNING & GOMMUNITY DEVELOPMENT DEPT.

Monday, November 1, 2017

Ms. Wyse Stanislaus County Department of Planning 1010 10th Street, Suite 3400 Modesto, CA 95354

RE: CUP 2011-11—Beltran Ranch Solar Facility

Dear Ms. Wyse,

This correspondence shall serve as a request for a Modification of Condition of Approval and extension of five (5) years to our Conditional Use Permit CUP 2011-11; currently set to expire on or about April 30, 2018. Since approximately 2013, Coldwell Solar have been pursuing various agreements for the purchase of energy that would be generated by the Solar Energy System that is the purpose of the Conditional Use Permit. Due to substantial market fluctuations and difficulties working with utility companies, we continue to experience delays. These market conditions have made this endeavor challenging in the originally estimated time frame. Securing an off-taker of the solar energy to be generated by the project has taken longer than we had hoped, but we are currently in process of finalizing an agreement for the project.

In light of these encouraging developments, Coldwell Solar formally requests granting an extension of the above CUP for five (5) years.

Please find attached a check for \$2,379.00 (fee) and call me if you have any questions.

Sincerely,

Tom Cooper Director of Utility Development

> 500 Menlo Drive, Suite 100 | Rocklin, CA 95765 **Phone:** 707.580.8385 | **Fax:** 916.435.9782 **E-mail: tcooper@coldwellsolar.com**

> > **ATTACHMENT 1**

STANISLAUS COUNTY PLANNING COMMISSION

April 18, 2013

STAFF REPORT

USE PERMIT APPLICATION NO. 2011-11 BELTRAN RANCH SOLAR FACILITY (STATE CLEARINGHOUSE NO. 2011112013)

REQUEST: TO ESTABLISH A 140 MEGAWATT SOLAR PHOTOVOLTAIC FACILITY ON 606± ACRES OF A 1,720± ACRE SITE.

APPLICATION INFORMATION

Applicant: Property Owner: Agent: Location:

Section, Township, Range: Supervisorial District: Assessor's Parcel:

Referrals:

Area of Parcel(s): Water Supply: Sewage Disposal: Existing Zoning: General Plan Designation: Sphere of Influence: Community Plan Designation: Williamson Act Contract No.: Environmental Review:

Alternative Energy Group, Inc. Beltran **MVE Civil Solutions** Davis Road, west of I-5, southwest of the Fink Road Landfill, in the Newman/Crows Landing area 35/36-6-7, 30/31-6-8, 1-7-7 Five (Supervisor DeMartini) 025-017-019: 026-012-003: and 027-017-063. 077.080.082 See Exhibit "M" Environmental Review Referrals 1.720± acres Private Well Septic System A-2-40/160 (General Agriculture) Agriculture Not Applicable Not Applicable 76-2170 (APN: 027-017-082) Mitigated Negative Declaration

RECOMMENDATION

Staff recommends the Planning Commission approve this request based on the discussion below and on the whole of the record provided. If the Planning Commission decides to approve the project, "Exhibit A" provides an overview of the required findings for project approval.

PROJECT DESCRIPTION

This is a request to establish a 140 megawatt (MW) solar photovoltaic (PV) facility on 606± acres of a 1,720± acre site. Additional site improvements include: all weather fire access roads; maintenance building; security fencing; construction staging area; office trailer; sheds; and a substation. A 30 foot high overhead power line will be added to the existing above ground power lines to connect the solar facility to the on-site substation. A transmission interconnect to PG&E's

existing Salado-Newman transmission line will also be added. Use Permit 2010-09 – Scatec Westside Solar Ranch was approved on November 4, 2010, to occupy 382 acres of the $1,720\pm$ acre site. If this project is approved and both projects are constructed, $988\pm$ acres of the $1,720\pm$ acre site will be devoted to solar facility development. (See Exhibit B-5 – *Maps [Site Plan].*)

This project will be developed in three (3) phases:

Phase I	Solar Site 1	112± acres	26 MW
Phase II	Solar Site 2	168± acres	40 MW
Phase III	Solar Site 3	326± acres	74 MW
Total		606± acres	140 MW

The basic solar array, or "block," is approximately 1.65 acres in size and is comprised of 20 rows, each containing 48 panels mounted within a structural frame, and supported by 13 steel columns per row. Each block of panels has a central driving motor which continuously moves the rows of panels following the sun east to west to capture maximum solar radiation. The energy of four (4) blocks is delivered to an inverter/transformer, and from the inverter to the sub-station, and then to the PG&E grid. Every block is easily accessible from the network of gravel roads for maintenance and Fire Department access. At completion, there will be approximately 300 arrays containing nearly 280,000 PV panels, 75 inverters, and one substation delivering approximately 140 MW to the PG&E grid at peak performance.

The solar panels are dark in color and non-reflective. The PV panels are low-profile when horizontal resting approximately four (4) feet from the ground. The highest end of the tilted panel stands less than 10 feet above ground level. The rows of panels will be spaced based on a panel tilt angle to prevent them from shading one another. The installation of each increment of 25 MW will take approximately six (6) to eight (8) months. The entire project of 140 MW will take roughly three (3) years to complete once construction is initiated. Additional information can be found in the Applicant's Project Description. (See Exhibit D – Applicant's Project Description.)

Solar Facilities are unique in that actual construction of a facility is dependent on the finalization of Power Purchase Agreements and land lease agreements before construction can begin. Condition of Approval No. 1 recognizes the unique timing of solar projects and allows development to occur anytime within five (5) years of Use Permit Approval. (See Exhibit C - *Conditions of Approval.*)

SITE DESCRIPTION

The subject property is off Davis Road, west of Interstate 5, southwest of the Fink Road Landfill, in the Newman/Crows Landing area. The project site is comprised of six (6) Assessor parcels with a combined acreage of 1,720± acres.

The project site is currently planted in dry crops, grazing land, and almonds and walnuts. Existing structures within the project area include a small storage shed at the East edge of Solar Site III which will remain and a storage building within Solar Site I which will be removed during construction. (See Exhibit B - *Maps*.) Surrounding uses include: the landfill, waste to energy plant, and Fink Road Solar Farm (not yet constructed) to the north; orchards, Beltran Ranch home site, Interstate 5, the California Aqueduct, and Davis Road to the east; rolling hills/grazing land and Crow Creek to the south; and rolling hills/grazing land to the west. The site is currently served by private well water, both domestic and agricultural.

GENERAL PLAN CONSISTENCY

The site is zoned A-2-40 and A-2-160 (General Agriculture) and is designated "Agriculture" in the General Plan. The Agriculture designation of the Land Use Element of the General Plan states that the intent of the agriculture designation recognizes the value and importance of agriculture by acting to preclude incompatible urban development within agricultural areas. This designation establishes agriculture as the primary use in land so designated but allows other uses, which by their unique nature are not compatible with urban uses, provided they do not conflict with the primary use.

The establishment of utilities in the A-2 zoning district is primarily supported by the following goal and objective of the Conservation/Open Space Element of the County General Plan:

<u>Goal Eleven:</u> Conserve resources through promotion of waste reduction, reuse, recycling, composting, ride-share programs, and alternative energy sources such as mini-hydroelectric plants, gas and oil exploration, and transformation facilities such as waste-to-energy plants.

Policy Thirty-One: The County shall provide zoning mechanisms for locating material recovery facilities, recycling facilities, composting facilities, and new energy producers when the proposed location does not conflict with surrounding land uses.

Goal Eleven of the General Plan was written before solar energy was recognized as a valid energy source; however, the Goal clearly recognizes and promotes the development of alternative energy sources. After construction of the facility, the site will be unmanned and monitored via the internet. Maintenance workers will be dispatched as needed for repairs and quarterly washing of the solar panels. Nothing in the record indicates that this project would conflict with surrounding land uses.

The Stanislaus County Agricultural Element incorporates guidelines for the implementation of agricultural buffers applicable to new and expanding non-agricultural uses within or adjacent to the A-2 zoning district. The purpose of these guidelines is to protect the long-term health of agriculture by minimizing conflicts resulting from the interaction of agricultural and non-agricultural uses.

This application was submitted to Planning when an alternative buffer was required; however, since that time, new Agricultural Buffer and Setback Guidelines have been adopted. This project is in compliance with current standards.

Staff believes this project can be found to be consistent with the General Plan and the Buffer and Setback Guidelines and that the Planning Commission can make the necessary findings for approval of this project. The findings necessary for approval are discussed in the following section.

ZONING & SUBDIVISION ORDINANCE CONSISTENCY

Public utilities are permitted in the A-2 zoning district upon approval of a Use Permit as a Tier Three use. Tier Three uses are defined as uses not directly related to agriculture but may be necessary to serve the A-2 district <u>or</u> may be difficult to locate in an urban area. Some Tier Three uses can be people-intensive and, as a result, have the potential to adversely impact agriculture. Tier Three uses may be allowed when the Planning Commission finds that:

1. The use as proposed will not be substantially detrimental to or in conflict with agricultural use of other property in the vicinity; and

2. The parcel on which such use is requested is not located in one of the County's "most productive agricultural areas," as that term is used in the Agricultural Element of the General Plan; <u>or</u> the character of the use that is requested is such that the land may reasonably be returned to agricultural use in the future. "Most productive agricultural area" does not include any land within LAFCO-approved Spheres of Influence of cities or community services districts and sanitary districts serving unincorporated communities.

The site is not located within any LAFCO adopted Spheres of Influence and is designated as "Prime Farmland" by the State Department of Conservation Farmland Mapping and Monitoring Program. The Stanislaus County General Plan states:

"The term "Most Productive Agricultural Areas" will be determined on a case-by-case basis when a proposal is made for the conversion of agricultural land. Factors to be considered include, but are not limited to, soil types and potential for agricultural production; the availability of irrigation water; ownership and parcelization patterns; uniqueness and flexibility of use; the existence of Williamson Act contracts; existing uses and their contributions to the agricultural sector of the local economy."

Based on the site's "Prime Farmland" designation, availability of irrigation, and surrounding uses, staff believes the site meets the County's definition of "Most Productive Agricultural Area". As such, in order to approve the project, the Planning Commission must find that the character of the use is such that the project site may reasonably be returned to agricultural use in the future.

Staff feels that, like Use Permit 2010-09 - Scatec Westside Solar Ranch (a 50 MW solar facility located amidst the Beltran Ranch Solar Facility site), Use Permit 2011-10 - McHenry Solar Farm (a 25 MW solar facility located at 221 Patterson Road, in the Modesto/Riverbank area), and Use Permit 2010-03 – Fink Road Solar Farm (an 80-100 MW solar facility located at 4881 Fink Road), the character of the use that is requested is such that the land may reasonably be returned to agricultural use in the future. The property will be graded; however, none of the topsoil will be removed from the site as a part of this project and the applicant will plant a low vegetated ground cover to stabilize the soil, reduce the potential for sheet flow, and allow storm water to percolate into the ground. Furthermore, a condition of approval has been added to this project requiring the site be reclaimed to agriculture at the end of solar use. (See Exhibit C - *Conditions of Approval*.)

Solar equipment generally has a life span of 20 to 25 years. When the solar facility is no longer functional, the equipment will be removed and the land may be returned to agricultural use. (See Exhibit C - *Conditions of Approval.*) All phases of the solar facility will be constructed on land utilized for dry farming crops and orchards. Native trees are not anticipated to be removed and existing ponds and Crow Creek will be avoided as a part of this project.

Finally, there is no indication that operation of the solar facility will conflict with existing on-site agricultural use or the remaining acreage or agricultural uses in the area. As such, staff believes that all of the aforementioned findings can be made by the Planning Commission.

In addition, the following finding is required for approval of any Use Permit in the A-2 zoning district:

• The establishment, maintenance, and operation of the proposed use or building applied for is consistent with the General Plan designation of "Agriculture" and will not, under the circumstances of the particular case, be detrimental to the health, safety, and general welfare of persons residing or working in the neighborhood of the use and that it will not be

detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.

As discussed earlier, this project is consistent with the General Plan. There is no indication that the proposed project will be detrimental to the health, safety, and general welfare of the citizens of this County or detrimental to property and improvements in the area, as each impact associated with the project was identified in the Initial Study and mitigated to a level of less than significant. (See Exhibit J - *Initial Study* and Exhibit L - *Mitigation Monitoring Plan (Revised)*.)

ISSUES AND CORRESPONDENCE

No issues have been identified as a part of this project. Staff was contacted by Mr. Steve Sharp, a neighboring land owner, who was interested in general information regarding the project.

ENVIRONMENTAL REVIEW

Pursuant to the California Environmental Quality Act (CEQA), the proposed project was circulated to all interested parties and responsible agencies for review. (See Exhibit J - *Environmental Review Referrals.*) The project incorporates mitigation measures to address air quality, biological resources, cultural resources, geology and soils, hazardous materials, and hydrology and water quality as a means of limiting any potential project impacts to a level of less than significant. A Mitigated Negative Declaration is being proposed. (See Exhibit K - *Mitigated Negative Declaration.*) Mitigation measures are reflected as conditions of approval placed on the project. (See Exhibit C - *Conditions of Approval.*)

Early Consultation referral responses from Modesto Regional Fire Authority, West Stanislaus Fire Protection District, and CalFire indicated that the project is located in a Fire Hazard Zone and that the project, if unmitigated, would have a potentially significant effect on the environment. Consequently, mitigation measures, as recommended by the Fire Authorities were incorporated into the Initial Study and Mitigation Monitoring Plan to reduce impacts to a level of less than significant. The Stanislaus County Environmental Review Committee revised three (3) of the Hazardous Materials (HM) mitigation measures, circulated with the Initial Study, to clarify the language and specify the need for a second point of emergency vehicle access. (See Exhibit E – *Referral response from the Stanislaus County Environmental Review Committee dated April 10, 2013.*) The mitigation measures have been modified as follows (new wording is in **bold**, and deleted wording will have a line through it.):

- HM-2: A Vegetation Management Plan shall be prepared to the satisfaction of Stanislaus County and the Fire Protection District. This project is in the State Responsibility Area – Modesto Fire Hazard Severity Zone and therefore must have a Vegetation Management Plan and defensible space of 100 feet. (California Public Resources Code.)
- HM-3: A defensible space of 100' shall be incorporated into the project design prior to construction. No development shall occur without approved fire department (emergency vehicle) access and water supply.
- HM-4: Adequate access and Fire Protection Water supply shall be provided prior to construction. A second point of emergency vehicle access from either the north of the project (Fink Road) or from the south of Davis Road shall be built to California Standards.

Staff received a letter from the California Department of Fish and Wildlife (DFW) dated April 9, 2013, requesting that the existing Biological Resources (BIO) mitigation measures be modified, replaced, and/or that additional mitigation measures be added to insure that project impacts to biological resources were reduced to a less than significant impact. According to DFW's letter, revised standards for detecting, relocating, and avoiding protected species were not included in the Biological Resource Assessment. (See Exhibit F – *Referral Response from the California Department of Fish and Wildlife dated April 9, 2013,* and Exhibit I – *Biological Resource Assessment.*) The DFW letter, DFW website links to the new standards for species detection, and the revised Mitigation Monitoring Plan were forwarded to the applicant for review. The revised Mitigation measures have been modified as follows (new wording is in **bold**, and deleted wording will have a line through it.):

- **BIO-1:** Preconstruction, pre-activity, **and pre-decommissioning** surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the SJKF. The survey area shall include all areas subject to disturbance, and a 250 buffer area extending beyond areas subject to disturbance. In the event that an active San Joaquin kit fox den is detected during preconstruction surveys, DFG and USFWS shall be contacted immediately and no project activity shall begin until appropriate avoidance measure have been implemented, and DFG and USFWS have provided written authorization that project construction may proceed.
- BIO-3: To prevent inadvertent entrapment of SJKF or other animals during the construction phase, all excavated, steep-walled holes or trenches more than two (2) feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Each excavation shall be inspected for animals at the beginning of each day. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
- BIO-8: An employee education program shall be conducted containing a brief presentation
 on all special-status wildlife species having the potential to occur on or surrounding
 the Project site. This program shall also include education and a brief presentation by
 persons knowledgeable in SJKF biology and legislative protection to explain endangered
 species concerns to contractors and their employees. The program shall include the
 following: a description of the SJKF and its habitat needs; a report of the occurrence of
 SJKF in the project area; an explanation of the status of the species and its protection under
 state and federal Endangered Species Acts; and a list of measures being taken to avoid
 impacts to the species during construction and implementation. A fact sheet conveying this
 information shall be prepared for distribution to attendees of the training and anyone else
 who may enter the project site.
- BIO-11: For Swainson's hawk, the pre-construction survey shall be extended to within ½ mile of the project area. In the event that Swainson's Hawk is detected, a determination shall be made by a qualified biologist experienced in Swainson's Hawk biology as to the measures to be undertaken to minimize adverse impacts to this species including provision of construction buffers and any further monitoring of the nesting site that maybe required during construction activities. If an active SWHA nest is found within 0.5 mile of the Project site, the Project proponent shall implement a 0.5 mile no-disturbance buffer around the nest until consultation with DFW occurs and appropriate avoidance

measures are approved by DFW in writing and are implemented to prevent take of the species or to determine if issuance of an ITP is warranted.

BIO-12: For burrowing owl, pre-construction surveys shall be undertaken no more than 30 days before the onset of any ground-disturbing activities at any time of the year. During the breeding season (February 1 – August 15), any burrows occupied by burrowing owls can be assumed to possess young and a minimum 250-foot no construction buffer zone, unless a biologist verifies through non-invasive methods that either:

(1) the birds have not begun egg laying and incubation; or-

(2) That juveniles from the occupied burrows are foraging independently and are capable of independent survival. If burrowing owls occupy the site during the non-breeding season, a passive relocation effort may be instituted by a qualified biologist.

If construction occurs during the non-breeding season (September 1 to February 15, ground disturbance and tree removal may occur without pre-construction breeding bird surveys (with the exception noted above for the burrowing owl). No restrictions shall apply after construction starts. Pre-construction and pre-decommissioning surveys, relocation, avoidance, and compensatory measures for Burrowing Owl shall utilize the recommendations listed in the DFW *Staff Report on Burrowing Owl Mitigation* (2012).

- BIO-13: An assessment of CTS and CRLF habitat will be completed as part of preconstruction and pre-decommissioning surveys to determine whether any avoidance is necessary. Habitat assessment shall follow the USFWS's Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander (2003) and the Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog (2005).
- BIO-14: A 250 foot no-disturbance buffer shall be clearly delineated around the stockponds and Crow Creek to protect water quality and wildlife that may depend on these water features. The no-disturbance buffer shall be maintained during construction, operations, and decommissioning activities.
- BIO-15: The developer shall apply DFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities" (DFG 2009) to determine presence or infer absence of special-status plants in and near the Project site, to evaluate potential impacts, and to design ways to mitigate Project impacts. If State-listed plants are detected during surveys, consultation with the Department is warranted to discuss the potential for "take" under CESA.

Staff believes that the revised/additional Mitigation Measures are equivalent to or more effective than the previous Mitigation Measures circulated with the Initial Study and that they, themselves, will not cause any potentially significant effect on the environment.

A referral response from the San Joaquin Valley Air Pollution Control District (SJVAPCD) dated March 28, 2013, indicated that although the District does not require full quantification of construction emissions, it does recommend that construction related impacts be evaluated including demolition, construction exhaust emission, on and off road mobile sources, fugitive dust emission, etc. (See Exhibit G - *Referral response from the San Joaquin Valley Air Pollution Control District dated March 28, 2013.*) Project emissions were not quantified but emission sources were identified and addressed in compliance with CEQA. Staff has determined that the incorporation of mitigation measures and conditions of approval as discussed in the Initial Study and recommended by the

SJVAPCD will reduce air quality impacts to a level of less than significant.

Note: Pursuant to California Fish and Game Code Section 711.4, all project applicants subject to the California Environmental Quality Act (CEQA) shall pay a filing fee for each project; therefore, the applicant will further be required to pay <u>\$2,213.25</u> for the California Department of Fish and Wildlife (formerly the Department of Fish and Game) and the Clerk Recorder filing fees. Planning staff will ensure that this will occur.

Contact Person:

Rachel Wyse, Associate Planner, (209) 525-6330

Attachments:

- Exhibit A Findings and Actions Required for Project Approval
- Exhibit B Maps
- Exhibit C Conditions of Approval
- Exhibit D Applicant's Project Description
- Exhibit E Referral response from the Stanislaus County Environmental Review Committee dated April 10, 2013
- Exhibit F Referral response from the California Department of Fish and Wildlife dated April 9, 2013
- Exhibit G Referral response from the San Joaquin Valley Air Pollution Control District dated March 28, 2013
- Exhibit H Applicant's response to the San Joaquin Valley Air Pollution Control District letter
- Exhibit I Biological Resource Assessment
- Exhibit J Initial Study
- Exhibit K Mitigated Negative Declaration
- Exhibit L Mitigation Monitoring Plan (Revised)
- Exhibit M Environmental Review Referrals

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Exhibit A Findings and Actions Required for Project Approval

- 1. Adopt the Mitigated Negative Declaration pursuant to CEQA Guidelines Section 15074(b), by finding that on the basis of the whole record, including the Initial Study and any comments received, that there is no substantial evidence the project will have a significant effect on the environment and that the Mitigated Negative Declaration reflects Stanislaus County's independent judgment and analysis.
- 2. Find that the amended and new mitigation measures, as discussed in the staff report and revised Mitigation Monitoring Plan, are equivalent to or more effective than the previous Mitigation Measures circulated with the Initial Study and that they, themselves, will not cause any potentially significant effect on the environment pursuant to CEQA guidelines section 15074.1.
- 3. Order the filing of a Notice of Determination with the Stanislaus County Clerk-Recorder and State Clearinghouse pursuant to Public Resources Code Section 21152 and CEQA Guidelines Section 15075.
- 4. Find That:
 - A. The establishment, maintenance, and operation of the proposed use or building applied for is consistent with the General Plan designation of "Agriculture" and will not, under the circumstances of the particular case, be detrimental to the health, safety, and general welfare of persons residing or working in the neighborhood of the use and that it will not be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County;
 - B. The establishment as proposed will not be substantially detrimental to or in conflict with agricultural use of other property in the vicinity; and
 - C. The parcel on which such use is requested is not located in one of the County's "most productive agricultural areas," as that term is used in the Agricultural Element of the General Plan; or the character of the use that is requested is such that the land may reasonably be returned to agricultural use in the future.
- 5. Approve Use Permit Application No. 2011-11 Beltran Ranch Solar Facility subject to the attached Conditions of Approval and Mitigation Measures.



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EXHIBIT B

















As Approved by the Planning Commission April 18, 2013

NOTE: Approval of this application is valid only if the following conditions are met. This permit shall expire unless activated within 18 months of the date of approval. In order to activate the permit, it must be signed by the applicant and one of the following actions must occur: (a) a valid building permit must be obtained to construct the necessary structures and appurtenances; or, (b) the property must be used for the purpose for which the permit is granted. (Stanislaus County Ordinance 21.104.030)

CONDITIONS OF APPROVAL

USE PERMIT APPLICATION NO. 2011-11 BELTRAN RANCH SOLAR FACILITY (STATE CLEARINGHOUSE NO. 2011112013)

Department of Planning and Community Development

- 1. Use(s) shall be conducted as described in the application and supporting information (including the plot plan) as approved by the Planning Commission and/or Board of Supervisors and in accordance with other laws and ordinances. Construction of the initial phase of this project shall be allowed to begin within five (5) years of project approval provided it can be demonstrated that efforts to secure a Power Purchase Agreement and necessary building permits have been on-going.
- 2. Pursuant to Section 711.4 of the California Fish and Game Code (effective January 1, 2013), the applicant is required to pay a California Department of Fish and Wildlife (formerly the Department of Fish and Game) fee at the time of filing a "Notice of Determination." Within five (5) days of approval of this project by the Planning Commission or Board of Supervisors, the applicant shall submit to the Department of Planning and Community Development a check for <u>\$2,213.25</u>, made payable to <u>Stanislaus County</u>, for the payment of California Department of Fish and Wildlife and Clerk Recorder filing fees.

Pursuant to Section 711.4 (e)(3) of the California Fish and Game Code, no project shall be operative, vested, or final, nor shall local government permits for the project be valid, until the filing fees required pursuant to this section are paid.

- 3. Developer shall pay all Public Facilities Impact Fees and Fire Facilities Fees as adopted by Resolution of the Board of Supervisors. The fees shall be payable at the time of issuance of a building permit for any construction in the development project and shall be based on the rates in effect at the time of building permit issuance.
- 4. The applicant/owner is required to defend, indemnify, or hold harmless the County, its officers, and employees from any claim, action, or proceedings against the County to set aside the approval of the project which is brought within the applicable statute of limitations. The County shall promptly notify the applicant of any claim, action, or proceeding to set aside the approval and shall cooperate fully in the defense.
- 5. All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This shall include, but not be limited to, the use of shielded light fixtures to prevent skyglow (light spilling into the night sky) and the installation of shielded fixtures to prevent light trespass (glare and spill light that shines onto neighboring properties).

- 6. Pursuant to Section 404 of the Clean Water Act, prior to construction, the developer shall be responsible for contacting the US Army Corps of Engineers to determine if any "wetlands," "waters of the United States," or other areas under the jurisdiction of the Corps of Engineers are present on the project site, and shall be responsible for obtaining all appropriate permits or authorizations from the Corps, including all necessary water quality certifications, if necessary.
- 7. Any construction resulting from this project shall comply with standardized dust controls adopted by the San Joaquin Valley Air Pollution Control District (SJVAPCD).
- 8. A sign plan for all proposed on-site signs indicating the location, height, area of the sign(s), and message must be approved by the Planning Director or appointed designee(s) prior to installation.
- 9. Pursuant to Sections 1600 and 1603 of the California Fish and Game Code, prior to construction, the developer shall be responsible for contacting the California Department of Fish and Wildlife (formerly the Department of Fish and Game) and shall be responsible for obtaining all appropriate stream-bed alteration agreements, permits, or authorizations, if necessary.
- 10. The Department of Planning and Community Development shall record a Notice of Administrative Conditions and Restrictions with the County Recorder's Office within 30 days of project approval. The Notice includes: Conditions of Approval/Development Standards and Schedule; any adopted Mitigation Measures; and a project area map.
- 11. Pursuant to State Water Resources Control Board Order 99-08-DWQ and National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, prior to construction, the developer shall be responsible for contacting the California Regional Water Quality Control Board to determine if a "Notice of Intent" is necessary, and shall prepare all appropriate documentation, including a Storm Water Pollution Prevention Plan (SWPPP). Once complete, and prior to construction, a copy of the SWPPP shall be submitted to the Stanislaus County Department of Public Works.
- 12. Assessor Parcel No. 027-017-082 is currently enrolled in a Williamson Act Contract which, due to the filing of a Non-Renewal, will expire December 31, 2013. No development associated with this project shall take place on this parcel until January 1, 2014.
- 13. At the end of project life, all solar equipment, appurtenant structures, and concrete footings shall be removed from the property and recycled, if applicable. Solar sites shall be revegetated and reclaimed to agriculture. Soil remediation shall be incorporated if necessary.
- 14. Davis Road and all appurtenant structures, specifically the bridges over the California Aqueduct and Interstate 5, are not owned or maintained by the County. The applicant shall be responsible for maintaining and repairing the road and all appurtenant structures, including the bridges. Prior to issuance of any building or grading permit, the applicant shall provide adequate assurances from the Department of Water Resources (DWR) to the Planning Department that the applicant's right to use the DWR bridge remains intact for this project.
- 15. The access for the project takes place over several parcels to reach the project site. The applicant shall show that the listed easements are contiguous to the project site. The

applicant shall obtain recorded irrevocable access easements over private Davis Road and through the project site from the property owners who hold legal right to the parcels on which the private road and easements are or will be developed. The recorded document(s) shall be submitted to the Planning Department prior to issuance of a grading and/or building permit associated with this project.

- 16. The applicant is responsible for obtaining rights and a secondary irrevocable emergency and access ingress/egress agreement to the project site. This access agreement shall be approved by the Fire Authority and recorded on the property. A copy of the recorded document shall be submitted to the Planning Department prior to issuance of a grading and/or building permit associated with this project.
- 17. The project applicant/developer/operator shall obtain a street address within the unincorporated portion of Stanislaus County for acquisition, purchasing, and billing purposes; register this address with the State Board of Equalization (BOE) to file Use Tax Returns; and use this address for acquisition, purchasing, and billing purposes associated with the proposed project. A copy of the BOE registration, including the account number and subsequent Use Tax Returns, shall be provided to the Planning Department within 10 days of a written request.

Department of Public Works

- 18. Prior to any work being done in the Stanislaus County road right-of-way, the applicant will obtain an encroachment permit.
- 19. Public Works shall approve the location and width of any new driveway approaches on any County maintained roadway.
- 20. A grading and drainage plan for the project site shall be submitted before any building permit for the site is issued. Public Works will review and approve the drainage calculations. The grading and drainage plan shall include the following information:
 - A. Drainage calculations shall be prepared as per the Stanislaus County Standards and Specifications that are current at the time the permit is issued;
 - B. The plan shall contain enough information to verify that all runoff will be kept from going onto adjacent properties and Stanislaus County road right-of-way;
 - C. The grading and drainage plan shall comply with the current Stanislaus County National Pollutant Discharge Elimination System (NPDES) General Permit and the Quality Control standards for New Development and Redevelopment contained therein;
 - D. An Engineer's Estimate shall be submitted for the grading and drainage work; and
 - E. The grading, drainage, and associated work shall be accepted by Stanislaus County Public Works prior to a final inspection or occupancy, as required by the building permit.

The applicant of the building permit shall pay the current Stanislaus County Public Works weighted labor rate for the plan review of the building and/or grading plan.

21. The applicant of the building permit shall pay the current Stanislaus County Public Works weighted labor rate for all on-site inspections. A preliminary Engineer's Estimate for the grading and drainage work shall be submitted to determine the amount of deposit for the inspection of the grading. The deposit shall be made prior to the issuance of the building permit. The Public Works inspector shall be contacted 48 hours prior to the commencement of any grading or drainage work on-site. The Public Works inspector will not sign on the grading or building permit until such time that all inspection fees have been paid. Any fees left over from the deposit shall be returned to the applicant at the completion and acceptance of the grading and drainage construction by Stanislaus County Public Works.

Department of Environmental Resources (DER)

- 22. On-site wastewater disposal system (OSWDS) shall be by individual Primary and Secondary wastewater treatment units operated under conditions and guidelines established by Measure X.
- 23. On-site wastewater disposal system (OSWDS) shall be designed according to type and maximum occupancy of the proposed structure to estimated waste/sewage design flow rate and in accordance to number of plumbing fixture units proposed within the building. The dispersal field shall be designed and sized using field data collected from soil profile and percolation tests performed at the locations proposed for dispersal field(s) and the 100% future reserved expansion area.
- 24. The applicant shall determine, to the satisfaction of the Department of Environmental Resources (DER), that a site containing (or formerly containing) residences, farm buildings, or structures has been fully investigated (via Phase I study and Phase II study if necessary) prior to the issuance of a grading permit. DER recommends research be conducted to determine if pesticides were used on the proposed development site; if confirmed, suspect site areas should be tested for organic pesticides and metals. Any discovery of underground storage tanks, former underground storage tank locations, buried chemicals, buried refuse, or contaminated soil shall be brought to the immediate attention of DER.

Building Permits Division

25. Building permits are required and the project must conform with the California Code of Regulations, Title 24.

San Joaquin Valley Air Pollution Control District (SJVAPCD)

- 26. The proposed project is subject to District Rule 9510 (Indirect Source Review). The applicant shall submit an Air Impact Assessment (AIA) application to the SJVAPCD and pay any applicable off-site mitigation fees before issuance of the first building permit.
- 27. The proposed project may be subject to District Rules and Regulations, including but not limited to:
 - Regulation VIII (Fugitive PM10 Prohibitions)
 - Rule 4102 (Nuisance)
 - Rule 4601 (Architectural Coatings)
 - Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations)
 - Rule 4002 (National Emission Standards for Hazardous Air Pollutants)

Department of Water Resources (DWR)

- 28. The Beltran Ranch Solar Facility Project, et al shall not exceed H20 loading on DWR's Davis Road Bridge.
- 29. The proposed weight limits from the applicant indicate loads will approach the capacity of DWR's bridge. Therefore the Beltran Ranch Solar Facility Project, et al and DWR shall jointly inspect and perform a condition assessment for pre and post construction of the Davis Road Bridge and approach roads. The Beltran Ranch Solar Facility Project, et al shall acknowledge their responsibilities for any damage which may occur due to their use of the bridge and roadway and repair any damage identified at the end of construction or sooner if warranted by DWR. Loads shall not exceed legal limits for vehicles used based on California vehicle code weight limitations.
- 30. The Beltran Ranch Solar Facility Project, et al shall provide a seven (7) day advance notification prior to starting work within DWR's right of way. Please contact DWR's Division of Engineering EP Section. The San Luis Field Division shall be simultaneously notified. In addition, the Beltran Ranch Solar Facility Project, et al shall contact the Division of O&M for the pre and post assessment prior to construction.
- 31. DWR's ongoing operations and maintenance activities shall not be disrupted during construction. The primary or secondary operating road along open canals must be kept available for DWR use at all times. Access to Davis Road Bridge shall remain open for the duration of construction and traffic controls shall be placed to warn all cross traffic on DWR's primary and secondary roads.
- 32. Any additional development that affects DWR right of way requires an Encroachment Permit/Review from DWR prior to the start of construction.

MITIGATION MEASURES

(Pursuant to California Public Resources Code 15074.1: Prior to deleting and substituting for a mitigation measure, the lead agency shall do both of the following:

 Hold a public hearing to consider the project; and
 Adopt a written finding that the new measure is equivalent or more effective in mitigating or avoiding potential significant effects and that it in itself will not cause any potentially significant effect on the environment.)

- 33. **AQ-1:** Implement all feasible fugitive dust control requirements of the San Joaquin Valley Air Pollution Control District (SJVAPCD), Regulation VIII. The following measures shall be implemented to reduce PM 10 exhaust emissions and further reduce the already less-thansignificant impacts associated with ROG and NO x emissions:
 - Provide commercial electric power to the project site in adequate capacity to avoid or minimize the use of portable electric generators and any other equipment.
 - Where feasible, substitute electric-powered equipment for diesel engine driven equipment, or implement the use of diesel particulate traps.
 - When not in use, avoid idling of on-site equipment.

- Where feasible, avoid operation of multiple pieces of heavy duty equipment.
- Require contractors to use the best available emission reduction and economically feasible technology on an established percentage of the equipment fleet. It is anticipated that in the near future PM 10 control equipment will be available. The SJVAPCD shall be consulted with on this process. This requirement shall be included in construction bid specifications.
- 34. **AQ-2:** Comply with SJVAPCD's Regulation VIII-Fugitive Dust Prohibitions and implement the following applicable control measures, as required by law:
 - An owner/operator shall submit a Dust Control Plan to the Air Pollution Control Officer (APCO) prior to the start of any construction activity on any site that will include 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials. Construction activities shall not commence until the APCO has approved or conditionally approved the Dust Control Plan. An owner/operator shall provide written notification to the APCO within 10 days prior to the commencement of earthmoving activities via fax or mail. The requirement to submit a dust control plan shall apply to all construction related activities conducted at the project site.
 - The owner/operator shall submit a construction notification form to the APCO at least 48 hours prior to the start of any construction activity on the project site that includes greater than one acre of disturbed surface area.
- 35. **AQ-3:** Implement SJVAPCD-recommended enhanced and additional control measures to further reduce fugitive PMIO dust emissions from public roadways.
 - Install sandbags or other erosion control measures to prevent silt runoff to public roadways from adjacent project areas with a slope greater than 1% in accordance the project's Storm water Pollution Prevention Plan (SWPPP), which conforms with the required elements of the General Permit No. CAS000002 issued by the State of California, State Water Resources Control Board.
 - The area encompassing the San Joaquin Valley Air Basin (SJVAB) boundary is also classified as nonattainmentforPM2.S•TheSJVAPCD approach for achieving attainment of the PM2.Sstandard is has two components. The first component is that the existing PMIO reduction strategies will reduce the fugitive component of PM2.5 emissions within the SJVAPCD. The second component is to address the indirect formation of PM2.5' as with ozone Knox is a precursor of PM2.Sso the district reduction strategies for the reduction of NO x throughout the basin will also reduce the formation of PM2.S. In addition since the emissions estimate for PMIO was compared to PM2.5 thresholds; if PM10 emissions estimates are below the PM2.S thresholds then PM2.S must also be below the threshold. The proposed project shall be required to comply with the SJVAPCD's Regulation VIII (SJVAPCD 2009) control measures for construction emissions of PMI0. One of these control measures includes the use of water with all "land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities" for fugitive dust suppression. Compliance with SJVAPCD Regulation VIII will further reduce emissions.
- 36. **BIO-1:** Preconstruction, pre-activity, and pre-decommissioning surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance

and/or construction activities or any project activity likely to impact the SJKF. The survey area shall include all areas subject to disturbance, and a 250 buffer area extending beyond areas subject to disturbance. In the event that an active San Joaquin kit fox den is detected during preconstruction surveys, DFG and USFWS shall be contacted immediately and no project activity shall begin until appropriate avoidance measure have been implemented, and DFG and USFWS have provided written authorization that project construction may proceed.

- 37. **BIO-2:** Project- related vehicles shall observe a 20-mph speed limit in all project areas; this is particularly important at night when SJKF are most active. To the extent possible, night-time construction should be minimized. Off-road traffic outside of designated project areas should be prohibited.
- 38. **BIO-3:** To prevent inadvertent entrapment of SJKF or other animals during the construction phase, all excavated, steep-walled holes or trenches more than two (2) feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Each excavation shall be inspected for animals at the beginning of each day. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
- 39. **BIO-4:** SJKF are attracted to den-like structures such as pipes and may enter stored pipe. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for SJKF before the pipe is subsequently buried, capped, or otherwise used or moved in any way. IF a SJKF is discovered inside a pipe, all work in the area shall stop until the animal leaves the area on its own.
- 40. **BIO-5:** All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from a construction site.
- 41. **BIO-6:** No firearms shall be allowed on the project site except for police and security personnel.
- 42. **BIO-7:** To prevent harassment, mortality of SJKF or destruction of dens by dogs or cares, no pets shall be permitted on the project site during construction.
- 43. **BIO-8:** An employee education program shall be conducted containing a brief presentation on all special-status wildlife species having the potential to occur on or surrounding the Project site. This program shall also include education and a brief presentation by persons knowledgeable in SJKF biology and legislative protection to explain endangered species concerns to contractors and their employees. The program shall include the following: a description of the SJKF and its habitat needs; a report of the occurrence of SJKF in the project area; an explanation of the status of the species and its protection under state and federal Endangered Species Acts; and a list of measures being taken to avoid impacts to the species during construction and implementation. A fact sheet conveying this information shall be prepared for distribution to attendees of the training and anyone else who may enter the project site.
- 44. **BIO-9:** Design perimeter fencing to be wildlife friendly by raising the bottom of the fence six inches above the ground to allow SJKF to move into and out of the project site.

- 45. **BIO-10:** If ground disturbance or tree removal occurs during the bird breeding season (Feb 15- September 1), breeding bird surveys for both tree and ground dwelling species shall be conducted within 20 days of proposed ground disturbance to avoid disturbance to active nests, eggs, and/or young of these and other bird species. A minimum no-disturbance buffer of 250 feet shall be delineated around active nests of non-listed species and ½ mile from listed species until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the best or parental care for survival.
- 46. **BIO-11:** For Swainson's hawk, the pre-construction survey shall be extended to within ½ mile of the project area. If an active SWHA nest is found within 0.5 mile of the Project site, the Project proponent shall implement a 0.5 mile no-disturbance buffer around the nest until consultation with DFW occurs and appropriate avoidance measures are approved by DFW in writing and are implemented to prevent take of the species or to determine if issuance of an ITP is warranted.
- 47. **BIO-12:** Pre-construction and pre-decommissioning surveys, relocation, avoidance, and compensatory measures for Burrowing Owl shall utilize the recommendations listed in the DFW *Staff Report on Burrowing Owl Mitigation* (2012).
- 48. **BIO-13:** An assessment of CTS and CRLF habitat will be completed as part of preconstruction and pre-decommissioning surveys to determine whether any avoidance is necessary. Habitat assessment shall follow the USFWS's *Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander* (2003) and the *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog* (2005).
- 49. **BIO-14:** A 250 foot no-disturbance buffer shall be clearly delineated around the stockponds and Crow Creek to protect water quality and wildlife that may depend on these water features. The no-disturbance buffer shall be maintained during construction, operations, and decommissioning activities.
- 50. **BIO-15:** The developer shall apply DFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities" (DFG 2009) to determine presence or infer absence of special-status plants in and near the Project site, to evaluate potential impacts, and to design ways to mitigate Project impacts. If State-listed plants are detected during surveys, consultation with the Department is warranted to discuss the potential for "take" under CESA.
- 51. **CR-1:** Stop Work if Previously Unknown Archaeological Resources Are Uncovered during Project Construction, Assess the Significance of the Find, and Pursue Appropriate Management.
 - If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) is made during project-related construction activities, ground disturbances in the area of the find shall be halted and a qualified professional archaeologist shall be notified regarding the discovery. The archaeologist shall determine whether the resource is potentially significant as per the California Register of Historic Resources (CRHR) and develop appropriate treatment measures.

- 52. **CR-2:** Stop Work if Human Remains Are Uncovered during Project Construction, Assess the Significance of the Find, and Pursue Appropriate Management.
 - If human remains are uncovered during ground-disturbing activities, the contractor and/or the project applicant shall immediately halt potentially damaging excavation in the area of the find and notify the County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[bD. If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, the property owner, contractor or project proponent, an archaeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California PRC 5097.9.
 - Upon the discovery of Native American remains, the project applicant, in consultation
 with the County shall ensure that the immediate vicinity (according to generally
 accepted cultural or archaeological standards and practices) is not damaged or
 disturbed by further development activity until consultation with the MLD has taken
 place. The MLD shall have 48 hours to complete a site inspection and make
 recommendations after being granted access to the site. A range of possible
 treatments for the remains, including nondestructive removal and analysis,
 preservation in place, relinquishment of the remains and associated items to the
 descendents, or other culturally appropriate treatment may be discussed. California
 PRC 5097.9 suggests that the concerned parties may extend discussions beyond
 the initial 48 hours to allow for the discovery of additional remains. The following is a
 list of site protection measures that the project applicant shall employ:
 - record the site with the NAHC or the appropriate Information Center,
 - use an open space or conservation zoning designation or easement,
 - and record a document with Stanislaus County.
 - The project applicant or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also re-inter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the County.
- 53. **GEO-1:** Implement a Storm Water Pollution Prevention Plan (SWPPP) and associated Best Management Practices (BMPs) for disturbance of more than one acre.
- 54. **GEO-2:** Prepare and submit for County review and approval, and implement a grading and erosion control plan.

- 55. **HM-1:** Keep hazardous materials in an Identified Staging Area and Prepare and Implement an Accidental Spill Prevention Plan during Construction
 - Before construction begins, the project applicant shall require the construction contractor to identify a staging area where hazardous materials will be stored during construction. The staging area shall not be located in an undisturbed area. The contractor shall also be required to prepare an accidental spill prevention and response plan, which shall be reviewed and approved by the project applicant and the County, that identifies measures to prevent accidental spills from leaving the site and methods for responding to and cleaning up spills before neighboring properties are exposed to hazardous materials.
- 56. **HM-2:** This project is in the State Responsibility Area Modesto Fire Hazard Severity Zone and therefore must have a Vegetation Management Plan and defensible space of 100 feet. (California Public Resources Code.)
- 57. **HM-3:** No development shall occur without approved fire department (emergency vehicle) access and water supply.
- 58. **HM-4:** A second point of emergency vehicle access from either the north of the project (Fink Road) or from the south of Davis Road shall be built to California Standards.
- 59. **HM-5:** Electrical Infrastructure shall be constructed to the latest California PUC Standards and AVIAN Protection Standards.
- 60. **WQ-I:** A Storm water Pollution Prevention Plan (SWPPP) for the proposed project will be prepared by the project applicant, approved by the Stanislaus County Public Works Department prior to commencing with any ground-disturbing construction related activities, and implemented by the project applicant.

Best Management Practices (BMPs) will be included in the SWPPP for runoff, erosion and water quality, and the BNIPs will be put in place and maintained during the duration of ground-disturbing activities during the rainy season or when rain is forecast.

61. **WQ-2:** A grading and drainage plan will be prepared, submitted to the Stanislaus County Public Works Department for approval prior to issuance of any new building permits, and implemented by the project applicant. Drainage calculations will be prepared as per the Stanislaus County Standards and Specifications that are current at the time a permit is issued. The plan will contain enough information to verify that all runoff will be kept from going onto adjacent properties, into Little Salado Creek or its tributaries, and into the Stanislaus County road right-of-way. All grading and drainage work for the site's access roads will keep runoff within the historic (natural) drainage shed for that area. The grading and drainage plan will comply with the current Stanislaus County National Pollutant Discharge Elimination System (NPDES) General Permit and the Quality Control standards for New Development.

Please note: If Conditions of Approval/Development Standards are amended by the Planning Commission or Board of Supervisors, such amendments will be noted in the upper right-hand corner of the Conditions of Approval/Development Standards; new wording is in **bold**, and deleted wording will have a line through it.

Alternative Energy Group Beltran Ranch Solar Facility Project Description

<u>Overview</u>

Alternative Energy Group, Inc. ("AEG"), the applicant, proposes to construct and operate a combined 140 Megawatt (MW) solar photovoltaic (PV) energy generating facility (Project) on approximately 606± acres in western Stanislaus County. The land is currently zoned and operated for agricultural purposes in the A-2-40 acre and A-2-160 acre zones. A Use Permit approved by the Stanislaus County Planning Commission is required.

While under construction, the Project will employ about 100 persons for a period of approximately three years. AEG has invited union engineering, procurement, and construction contractors to bid on the Project, including Rosedin Electric and Swearingen Electric.

This Project is in addition to a prior approved Use Permit No. 2010-09 for a 382 acre/50 MW Solar Energy Facility within the same property. The new Project site location was identified in the prior Use Permit as "Future Solar Site 1 - 580 acres" and "Future Solar Site 2 - 110 acres". No change is proposed to the approved Use Permit. It is understood that a separate Use Permit is required for this new Project.

Findings for approval of a Solar Energy Facility Use Permit

A Solar Energy Facility is a desirable use in Stanislaus County. The applicant has demonstrated positively that the use is consistent with the General Plan; is not detrimental in any way to persons, environment, or property; and, is beneficial to the welfare of the people of Stanislaus County.

Project Site and Location

The Project site is contained within several contiguous parcels totaling approximately 1162 +/- acres, generally referred to as the Beltran Ranch, located just west of Interstate 5 and the California Aqueduct, and one mile south of the Fink Road interchange. All of the property owners are participating with the applicant and have signed the application and pertinent forms. The Project site is accessed via Fink Road, and south on Davis Road, a private road which provides a grade separation overpass of both the California Aqueduct and Interstate 5.

Other land uses in the vicinity of the Project include:

• North: the Stanislaus Resource Recovery Facility (waste-to-energy facility) (operated by Covanta Stanislaus, Inc.), and the Fink Road Landfill (operated by the Stanislaus County Environmental Resources Department).

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• West: Agricultural lands which are not currently under production.

- **South**: Crow Creek. (Note: there are no wetlands or waterways present within the boundaries of the Project site which has been designed to fully avoid or mitigate any impacts to the adjacent Creek.)
- **East**: Interstate 5 and the California Aqueduct. (Note that the Beltran Ranch includes the land between the Highway and Aqueduct, however this area is not a part of this Project.)
- Within: 382 acres within the Beltran Ranch has been approved (UP 2010-09) for a Solar PV project of 50 MW. (Note that this site is not a part of the proposed Project.)

Historically, the Beltran Ranch has been used for nut farming operations (primarily almond and walnut) and other agricultural products. The property relies on the California Aqueduct for its annual water allocation, which has been restricted over the past several years to just 50% of normal. There is insufficient water available to cultivate a significant portion of the Project site and formerly productive land is now fallow. Much of the land consists of bare ground subject to frequent discing.

According to a letter dated June 25, 2010, Christine Almen, of the Stanislaus County Environmental Review Committee, stated that the Agriculture Commissioner and Sealer of Weights and Measures noted that "while this project (Scatec) may take agricultural land out of production in Stanislaus County, it is located in a preferred area for projects such as this."

Therefore, it is intended that the Project will utilize the least agriculturally productive portion of the Beltran Ranch. The proposed Project is not subject to a Williamson Act contract and is not expected to conflict with surrounding uses, including agriculture, and the continuance of surrounding uses will not adversely affect the Project.

Project Description

The Project parameters are based on the best available PV technology in today's market. Approximately 1 Megawatt of electrical energy can be produced on 4.25 acres of solar PV arrays. Based on the proposed Lot layout the Project will be constructed in three phases:

Total		606 acres	140 MW
Phase III	Lot 3	326 acres	74 MW
Phase II	Lot 2	167 acres	40 MW
Phase I	Lot 1	113 acres	26 MW

At completion, there will be approximately 300 arrays containing nearly 280,000 PV panels, 75 inverters, and one substation delivering about 140 MW to the PG&E grid at peak performance.

- Building of a substation (services all phases; within a fenced 248' x 188' area) that will transform system output voltage to grid connection voltage; and
- Connection to the Salado-Newman Pacific Gas & Electric (PG&E) transmission line which passes through the Project site.
- A 30' high overhead power line will be added to existing above ground power lines to connect the solar facility to the substation.
- Accessory structures such as an office trailer, storage sheds, and other Project related facilities.

Project Design

PV Panels, Inverters/Transformers, Substation

The basic solar array, or "Block", is approximately 1.65 acres in size and is comprised of 20 rows, each containing 48 panels mounted within a structural frame, and supported by 13 steel columns per row. Each Block of panels has a central driving motor which continuously moves the rows of panels following the sun east to west to capture maximum solar radiation. The energy of four Blocks is delivered to an inverter/transformer, and from the inverter to the sub-station, and then to the PG&E grid. Every block is easily accessible from a network of gravel roads for maintenance and Fire Department.

The solar panels are dark in color and non-reflective. The PV panels are low-profile and when horizontal they are approximately 4 feet from the ground. The highest end of the tilted panel stands less than 10 feet above the level ground. The rows of panels will be spaced based on a panel tilt angle to prevent them from shading one another.

Project Access

The Project site will be accessed from I-5 via Fink Road and Davis Road. Davis Road is a paved road that is privately owned and maintained by adjacent landowners, and a non-exclusive 20' ingress/egress easement is granted to Stanislaus County. The property owner has agreed to provide AEG an irrevocable access easement in recordable form for the shared use and maintenance of the road.

As a condition of the previously approved Solar Facility (UP 2010-09) the owners have obtained DWR approval of the existing Davis Road bridge crossing the California Aqueduct. Caltrans had previously indicated that the Davis Road bridge over I-5 was approved. These documents are attached as exhibits to this Project Description.

All areas of the Project are fully accessible to the Fire Department and its equipment as required. Within each Phase, unpaved, compressed, and crowned dirt type, or gravel, aisle ways will be created between the blocks of arrays for vehicle service access. The interior aisle ways will be a minimum of 20 feet wide per Fire Department requirements.

Fencing

The site will be secured by a 6' chain link fence around the perimeter. Emergency access will be provided through gates secured by a Knox Box. In accordance with the approved Mitigation Measures, the fence will be installed with a minimum 6" clearance at the base to allow the movement of the SJKF.

Construction

Each phase may involve minor tilling of the existing bare ground, shallow (approx. 1-2 feet deep) trenching for cables between inverter boxes, concrete bases to support the inverter boxes, and where orchards are present, there will be clearing and grubbing of the trees to allow for PV panel installation. No removal of native trees is anticipated. Construction of all-weather access and interior roads, in compliance with Fire Department standards, will require some minor grading and installation of gravel road base.

Each solar array row is supported by 13 steel columns. The columns will be driven 10 to 12 feet into the ground; about 78,000 columns will be installed. The use of supporting columns reduces the impact of the structures on the existing land (as compared to concrete foundation or piers supporting a structural frame).

Approximately 100 workers will be hired during the site improvement and installation work; typical work schedules are expected to be during daylight hours only. Several pile drivers, forklifts, excavators, water trucks and bulldozers will be required to install the system and create the all weather road network. Trucks delivering materials to the site will make an estimated 6 trips per day. All trucks will be under the maximum weight capacity of the access overpass of Davis Road.

During the construction period, water will be needed for uses such as dust control, initial panel washing, and concrete manufacturing. Water will be provided from the Beltran Ranch shares in the Aqueduct, existing irrigation system wells, and on site storage. Soil disturbance and earth moving will be kept to a minimum and will follow typical procedures to minimize impacts and enhance reclamation.

The installation of each increment of 25 MW will take approximately six to eight months. The entire project of 140 MW will take about 3 years to complete.

Operations and Maintenance

Once the PV panel installation process is completed, the system will be monitored on a daily basis by a designated maintenance operator and maintenance personnel.

The solar panels will be washed down (no chemical cleaners are used) by a water truck approximately two (2) times per year. No water needs to be stored on-site for this wash down process as water is drawn from existing irrigation wells. Cumulatively, about 16 acre-feet of water is necessary for the Project. Water is currently supplied to the Beltran Farms via an allocation from the California Aqueduct located parallel and just east of I-5. This allocation runs with the land and quantities sufficient to serve the Project will be granted to AEG.

Other Design Features

In addition to the general Project components described above, the Project incorporates several environmentally-sensitive design features.

Drainage and Erosion Control

Pre-construction and Design Features: The Project includes the implementation of measures to maintain the volume and quality of storm-water runoff at historic levels. The natural drainage pattern of the project site is generally toward the north-east/east with relative flat slopes. The project proposes no changes to the existing drainage pattern and no new road crossings of the existing natural drainage courses. The runoff from the PV panels will generally be redistributed directly into the slow growing vegetation beneath the structures which will allow for maximum percolation into the ground. Drainage swales or other buffer techniques will be incorporated into the project design to prevent any potential runoff. No existing storm drainage systems in the area would require further protection from runoff.

During Construction: Since construction operations will result in an area of disturbance of one acre or more, AEG is required to comply with the National Pollution Discharge Elimination System (NPDES) General Permit for Construction Activities. As part of the NPDES General Permit, AEG will file a Notice of Intent (NOI) and prepare a Storm Water Pollution Prevention Plan (SWPPP), which outlines Best Management Practices (BMP) that will be included in the Project to minimize and control construction runoff. BMP will be implemented for sediment control such as utilizing water trucks during earth work activities, installation of fiber rolls around temporary stockpiles, and implementing directional drainage swales as necessary to keep run-off within the project boundaries and away from Crow Creek. Implementation of BMP will minimize erosion, siltation and contaminated runoff from construction sites.

Post Construction. Once operational, the Project will result in minimal generation of stormwater runoff within the Project site. To prevent soil erosion and provide dust control after construction, a low vegetated ground cover will be planted under the panels to reduce potential for sheet flow and allow stormwater to percolate into the ground. Such re-vegetation will facilitate restoration of preconstruction overland flow and recharge patterns.
Industrial Waste and Toxic Substances

The Project will not generate industrial wastes or toxic substances during operation. The PV technology utilized by AEG contains no toxic metals, such as cadmium, that occur in other types of solar technology. There will be no hazardous substances stored on site.

Air Quality

The Project is providing an alternative, clean source of energy that would offset the need for older polluting power plants or new gas-fired GHG-emitting plants. During construction, the Project will minimize its impacts to air quality by implementing a dust control plan that meets the requirements of the San Joaquin Valley Air Pollution Control District (SJVAPCD).

Biological

The Project site is characterized and surrounded by agricultural and grazing lands, including orchards, field and row crops, and grazed fallow cropland; most of the land is subject to frequent discing. No sensitive plant communities are found in the Project area.

A report on the possible impacts to biological resources has been prepared by WRA. No significant impact on any Special Status Wildlife Species is reported. To avoid impacts that the project might have on wildlife species, the applicant will implement those conditions of approval and mitigation measures adopted in the prior approved Use Permit No. 2010-09 and incorporated within this project description.

Summary of Initial Study Comments Scatec Westside Solar Ranch Stanislaus County Use Permit 2010-09 Approved November 4, 2010

Background of the Scatec Westside Solar Ranch

In 2010, **Scatec Solar**, a solar energy development company, submitted an application for Use Permit 2010-09 review of a proposed solar energy facility called Scatec Westside Solar Ranch. Following a thorough review by multiple agencies, the 382 acre, 50MW, project was approved, with conditional environmental mitigation measures, by the Stanislaus County Board of County Commissioners in November 2010.

AEG and Scatec sited in the same locale

The new project proposed by **Alternative Energy Group**, **AEG**, comprises 606 acres in the Solar Farm area, and 1160 acres of land total within the Parcel Map. The approved 382 acre Scatec project is at the center of the lands now proposed for the new solar farm of about 140 MW. The Scatec project <u>is not a part of</u> the new AEG project.

While the new AEG project is larger at 1160 acres, the land it encompasses shares substantially the same characteristics and type as the 382 acre Scatec project. New studies by WRA have been completed to analyze and understand potential impacts of developing a solar farm on the additional new lands. The report finds no difference between the project analysis and impacts of the Scatec project, and the same analysis and impacts of the new AEG project. Therefore, the applicant presents the following synopsis of potential impacts, mitigation measures, implementation and monitoring Plan adopted for the Scatec project. Similarly, AEG proposes to adopt the same Mitigation Monitoring Plan.

Synopsis of Scatec Mitigation Measures Conditioned in UP 2010-09:

Biological

San Joaquin Kit Fox Mitigations

No. 1 Mitigation Measure: Preconstruction /pre-activity surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the SJKF.

No. 2 Mitigation Measure: Project related vehicles shall observe a 20-mph speed limit in all project areas; this is particularly important at night when SJKF are most active. To the extent possible, nighttime construction should be minimized. Off-road traffic outside of designated project areas should be prohibited.

No. 3 Mitigation Measure: To prevent inadvertent entrapment of SJKF or other animals during the construction phase, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.

No. 4 Mitigation Measure: SJKF are attracted to den-like structures such as pipes and may enter stored pipe. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for SJKF before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a SJKF is discovered inside a pipe, all work in the area shall stop until the animal leaves the area on its own.

No. 5 Mitigation Measure: All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from a construction site.

No. 6 Mitigation Measure: No firearms shall be allowed on the project site except for police and security personnel.

No. 7 Mitigation Measure: To prevent harassment, mortality of SJKF or destruction of dens by dogs or cares, no pets shall be permitted on the project site during construction.

No. 8 Mitigation Measure: An employee education program shall be conducted containing a brief presentation by persons knowledgeable in SJKF biology and legislative protection to explain endangered species concerns to contractors and their employees, The program shall include the following: a description of the SJKF and its habitat needs; a report of the occurrence of SJKF in the project areal an explanation of the status of the species and its protection under state and federal Endangered Species Acts; and a list of measures being taken to avoid impacts to the species during construction and implementation. A fact sheet conveying this information shall be prepared for distribution to attendees of the training and anyone else who may enter the project site.

No. 9 Mitigation Measure: Design perimeter fencing to be wildlife friendly by raising the bottom of the fence six inches above the ground to allow SJKF to move into and out of the project site.

Breeding Bird Mitigations (Including Raptors)

No. 10 Mitigation Measure: If ground disturbance or tree removal occurs during the bird breeding season (Feb 15- September 1), breeding bird surveys for both tree and ground dwelling species shall be conducted within 20 days of proposed ground disturbance to avoid disturbance to active nests, eggs, and/or young of these and other bird species. A minimum no-disturbance buffer of 250 feet shall be delineated around active nests of non-listed species and ½ mile from listed species until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the best or parental care for survival.

For Swainson's hawk, the pre-construction survey shall be extended to within ½ mile of the project area. In the event that Swainson's Hawk is detected, a determination shall be made by a qualified biologist experienced in Swainson's Hawk provision of construction buffers and any further monitoring of the nesting site that maybe required during construction activities.

For burrowing owl, pre-construction surveys shall be undertaken no more than 30 days before the onset of any ground-disturbing activities at any time of the year. During the breeding season (February 1 – August 15), any burrows occupied by burrowing owls can be assumed to possess young and a minimum 250-foot no construction buffer zone, unless a biologist verifies through non-invasive methods that either (1) the birds have not begun egg laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If burrowing owls occupy the site during the non-breeding season, a passive relocation effort may be instituted by a qualified biologist.

If construction occurs during the non-breeding season (September 1 to February 15, ground disturbance and tree removal may occur without pre-construction breeding bird surveys (with the exception noted above for the burrowing owl). No restrictions shall apply after construction starts.

V. Cultural Resources

No. 11 Mitigation Measure: During the construction phases of the project, if any human remains or significant or potentially unique archaeological, cultural, or historic resources are found, all construction activities in the area shall cease until a qualified archeologist can be consulted. Construction activities shall not resume in the area until an on-site archeological mitigation program has been approved by a qualified archeologist.

Other responsible agency comments:

1. West Stanislaus County Fire Protection District

AEG will observe all requirements for fire protection, access, water provision, and vegetation management plan.

2. Stanislaus County Public Works

AEG will comply with all access requirements, grading and drainage plan in accordance with NPDES.

3. US Army Corps of Engineers

The project does not impact any waterway, drainage is minimal and kept within the site.

4. Stanislaus County Environmental Resources

The project will comply with the requirements of the DER to include recycling, use of compost, and controlling waste from construction.

5. California Dept. of Fish and Game

The project will comply with the mitigation measures indicated above required as a condition of approval.

6. San Joaquin Valley Air Pollution Control District

The project will comply with the mitigation measures required as a condition of approval.

Exhibit B

Davis Road Bridge crossing I-5 Caltrans Communication No Encroachment Permit

Mike Randall

From: Sent: To: Cc: Subject: Nelson Magsayo [nelson_magsayo@dot.ca.gov] Thursday, August 25, 2011 3:53 PM Mark Taylor Toni Self; Hanna Kassis; Mike Randall; Sean Tobin RE: Route 5 P.M. 9.3

Attachments:

2011_06-28_NC10008tpm2.pdf



2011_06-28_NC100 08tpm2.pdf (49...

Hi All,

Looking at a Google aerial map of the Davis Rd OC bridge at the subject location it appears to not involve encroachment permit issues. My understanding is that trucks will be traveling from local road to local road over the highway and no access issues from I-5, other than from the nearest interchange, perfectly within the CA Vehicle Code. The only other possible issue I can think of is if the bridge can handle extra legal truck loads beyond what the bridge was designed for.

CHIEF EXECUTIVE OFFICE

Monica Nino Chief Executive Officer

Patricia Hill Thomas Chief Operations Officer/ Assistant Executive Officer

Stan Risen Assistant Executive Officer

Keith D. Boggs Assistant Executive Officer

1010 10th Street, Suite 6800, Modesto, CA 95354 Post Office Box 3404, Modesto, CA 95353-3404

STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE

April 10, 2013 - Amended

Rachel Wyse, Associate Planner Stanislaus County Planning & Community Development 1010 10th Street Suite 3400 Modesto, CA 95354

SUBJECT: ENVIRONMENTAL REFERRAL – USE PERMIT APPLICATION NO. 2011-11 – BELTRAN RANCH SOLAR FACILITY

Ms. Wyse:

The Stanislaus County Environmental Review Committee (ERC) has reviewed the subject project and has determined that it will have a significant effect on the environment.

The following comments/conditions are submitted by the West Stanislaus Fire Protection District (Deputy Fire Marshal):

The environmental impacts are:

- 1. The increased risk of wildland fires during construction and operation.
- 2. Inadequate access for firefighting and emergency medical incidents.
- 3. Increased risk of wildland and other fires from the electrical distribution equipment.

The following mitigation measures are required:

 A second point of emergency vehicle access from either the North of the project (Fink Road) or from the South of Davis Road shall be built to California Standards.



ENVIRONMENTAL REFERRAL – USE PERMIT APPLICATION NO. 2011-11 – BELTRAN RANCH SOLAR FACILITY Page 2

- No development shall occur without approved fire department (emergency vehicle) access and water supply.
- Project is in the State Responsibility Area Modesto Fire Hazard Severity Zone and therefore must have a vegetation management plan and defensible space of 100 feet. (California Public Resources Code)

In addition, the ERC attaches hereto and incorporates herein by reference comments / conditions from Department of Environmental Resources (Hazardous Materials).

The ERC appreciates the opportunity to comment on this project.

Sincerely,

Jul E. Loeser

Mark Loeser Management Consultant Environmental Review Committee

ML:ss

cc: ERC Members

Attachment



CALIFORNIA FISH & WILDLIFE

<u>State of California – Natural Resources Agency</u> DEPARTMENT OF FISH AND WILDLIFE Central Region 1234 East Shaw Avenue Fresno, California 93710 (559) 243-4005 www.wildlife.ca.gov

April 9, 2013

Rachel Wyse Stanislaus County Planning and Community Development 1010 10th Street, Suite 3400 Modesto, California 95354

Subject: Mitigated Negative Declaration Use Permit Application 2011-11 Beltran Ranch Solar Facility SCH No. 2011112013

Dear Ms. Wyse:

The California Department of Fish and Wildlife (Department) has reviewed the Mitigated Negative Declaration (MND) for the Beltran Ranch Solar Facility (Project) submitted by the Stanislaus County Department of Planning and Community Development (Lead Agency). Approval of the Project would allow the construction and operation of a 140-megawatt (MW) solar photovoltaic facility on a 606-acre portion of a 1,720-acre site. The Project will be constructed in three phases: Phase I (113 acres, 26 MW), Phase II (167 acres, 40 MW), and Phase III (326 acres, 74 MW). Additional site improvements will include all-weather fire access roads, a maintenance building, perimeter security fencing, an office trailer, sheds, and a substation. A 30-foot-high overhead power line will be added to the existing above ground power lines to connect the Project to the substation. A transmission interconnect to Pacific Gas and Electric Company's existing Salado-Newman transmission line will also be added. The Project site is located at Davis Road, west of Interstate 5, southwest of the Fink Road Landfill, west of the unincorporated community of Crows Landing, Stanislaus County, California.

According to the information provided in the Biological Resource Assessment (BRA) dated June 22, 2011 and prepared for the Project by WRA Environmental Consultants, the Project site is in newly planted orchard, grain crops, and grazed fallow cropland. Stock and irrigation ponds located in the northern portion of the Project site are identified as potential wetlands. The BRA concludes that the proposed Project would not affect special-status species or habitats.

In a letter dated February 22, 2012, the Department provided comments for the Lead Agency's Early Consultation request for this Project. In this letter, the Department indicated it did not concur with the conclusion in the 2011 Biological Resource Assessment that implementation of the Project would not impact special-status wildlife species. This non-concurrence was based on the Project site description, photographs provided in the 2011 Biological Resources Assessment, aerial photographs, topographic maps, and known species occurrences. Swainson's hawk (*Buteo swainsonii*, SWHA), which is listed as threatened under the California Endangered Species Act (CESA) is known to occur in the Project site vicinity. SWHA could

Conserving California's Wildlife Since 1870

EXHIBIT F

nest in nearby (up to 0.5 miles from the Project site) trees, including those associated with on-site structures and Crow Creek and could forage in newly planted orchard, grain crops, and grazing land identified on the Project site.

The Project site is within the range of the California tiger salamander (*Ambystoma californiense*, CTS), which is listed as threatened under CESA and the federal Endangered Species Act (ESA). CTS could potentially use the adjoining stock ponds for breeding and the on-site grazing land for upland refugia.

The San Joaquin kit fox (*Vulpes microtis mutica*, SJKF), which is listed as threatened under CESA and endangered under ESA is known to occur in the Project area vicinity and has the potential to traverse through and forage and reproduce within the Project site, especially within the on-site grazing lands.

The white-tailed kite (*Elanus leucurus*), which is a State fully protected species, and the burrowing owl (*Athene cunicularia*), the loggerhead shrike (*Lanius ludovicianus*), the ferruginous hawk (*Buteo regalis*), and the northern harrier (*Circus cyaneus*), all of which are State species of Special Concern could nest or forage on the Project site within on-site trees, within grazing land, and along edges of grain crops (depending on species). Because of the Project site's potential to provide habitat for the aforementioned species, the Department recommended that additional species-specific wildlife surveys be conducted to determine the potential Project-related impacts on special status biological resources.

A second BRA dated November 9, 2012 was prepared for the Project by WRA Environmental Consultants to gather information necessary to complete a review of biological resources under the California Environmental Quality Act (CEQA), to assess the potential for the Project site to support special-status wildlife species, and to identify other on-site sensitive biological resources. A site visit was conducted on May 28, 2011. At that time, the Project site was characterized as agricultural and grazing land, including orchards, field crops, row crops, and grazed fallow cropland, which was basically the same description given in the 2011 Biological Resource Assessment. The 2012 BRA provided recommendations for reducing potential Project-related impacts to SJKF, SWHA, BUOW, and other nesting birds. These recommendations were included in this MND.

The Department has the following comments regarding the proposed mitigation measures included in this MND.

There are no proposed mitigation measures for sensitive plant species. Both BRAs claim that native plant species do not exist on the Project site because of the intense agricultural use. However, dry grazed lands and uplands surrounding the adjacent stock ponds and along Crow Creek, and land within the stock ponds may contain sensitive plant species. It does not appear that any botanical survey efforts were made in these areas, which have the potential to be directly or indirectly impacted through Project implementation. No list of observed on-site plants was provided in either BRA.

Page 4 of the MND indicates that comments were received from the United States Fish and Wildlife Service (USFWS) during the Early Consultation for this Project. However, their letter and the Lead Agency's response to their comments are not provided in the MND documentation as stated. Therefore, the Department cannot determine what issues were brought up or how they were resolved through the MND process. Elderberry bushes, the host plant for valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*, VELB), which is listed as threatened under ESA were identified in a dry channel during the May 28, 2011 site visit for the preparation of the 2012 BRA. There was no assessment provided indicating the potential for VELB to be present in these bushes or impacted by the Project activities. There is also no assessment provided indicating whether or not federally listed invertebrates or CTS could occupy the adjoining stockponds. The Department recommends that the Project applicant consult with the USFWS, which implements the ESA, to avoid impacts to federally listed species.

Page 4 of the MND states that the BRAs identified water sources that may provide habitat for sensitive wildlife species including the two adjoining stock ponds and the adjoining Crow Creek which will be avoided by the Project. However, there is no avoidance distance provided; therefore, the Department cannot determine the appropriateness of this measure. The Department recommends the Lead Agency include an avoidance buffer to be clearly delineated on the ground during construction, operation, and decommissioning activities as a mitigation measure in the Final MND prepared for this Project.

Page 4 of the MND states that "...no drainage structures are necessary to collect, control or divert any storm water; additionally, no storage basins are proposed." However, page 39, item IX.c. states that, "The hydrologic design for the proposed project would result in all rainfall runoff being captured and detained by means of swales and temporary detention basins prior to releasing rainfall runoff off-site..." We recommend explaining or correcting this inconsistency.

Page 13, Item II a., b., and e., states that the Project site is designated Prime Farmland by the California State Department of Conservation Farmland Mapping and Monitoring Program. These items are identified as having less than significant impacts to agricultural lands. The Project site has been agriculturally productive for many years with an independent water supply from a private groundwater well and with water supplied from the California Aqueduct through the Oak Flat Water District (District). Recently reduced water supply from the District is the reason impacts to agriculture (converting prime farmland) was determined to be less than significant. However, there is no explanation as to why the decrease in District water supply cannot be made up through use of the private water well owned by the Project land owner to maintain productive agricultural crops, which may increase Project-related impacts to agricultural crops.

Mitigation Measure BIO-3 requires that all excavated, steep-walled holes or trenches more than two feet deep be covered at the close of each working day and inspected for trapped animals before they are filled. The Department recommends that the Lead Agency include additional mitigation language that each excavation be inspected for animals at the beginning of each day.

Mitigation Measure BIO-8 requires implementing an employee education program for SJKF. The Department recommends the Lead Agency expand this mitigation measure to include information about all special-status wildlife species having the potential to occur on or surrounding the Project site.

Mitigation Measure BIO-11 requires surveys for SHWA occur out to 0.5 mile of the Project site and if an active SWHA nest is found, the biologist shall determine appropriate buffers and monitoring. Because SWHA is a State-listed species, the Department recommends the Lead Agency change this mitigation measure language to, "If an active SWHA nest is found within 0.5-mile of the Project site, the Project proponent shall implement a 0.5-mile no-disturbance buffer around the nest until consultation with the Department occurs and appropriate avoidance measures are approved by the Department in writing and are implemented to prevent take of the species or to determine if issuance of an ITP is warranted."

Mitigation Measure BIO-12 requires pre-construction surveys for BUOW. BUOW survey protocol and guidelines for mitigation have been updated since the Early Consultation for this Project was requested at the end of 2011. The Department recommends that this measure be deleted and pre-construction surveys, relocation, avoidance, and compensatory mitigation found in the Department's *Staff Report on Burrowing Owl Mitigation* (2012) be added instead.

Because surveys for potential wildlife species were not conducted to determine if the on-site or immediately off-site stockponds or Crow Creek were occupied by special-status species, the Department recommends that the Lead Agency include an additional mitigation measure requiring a 250-foot no-disturbance buffer be clearly delineated around the stockponds and Crow Creek to protect water quality and wildlife that may depend on these water features. Maintain the no-disturbance buffer during construction, operations, and decommissioning activities.

The Department agrees with Mitigation Measure BIO-13 that the Project site be assessed for CTS and California red-legged frog (*Rana draytonii*). The Department recommends additional language be included in this measure requiring that habitat assessment follow the USFWS's *Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander* (2003) and the *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog* (2005).

The Department recommends that the Lead Agency include in the mitigation measures that require pre-construction surveys that additional pre-construction surveys occur prior to starting decommissioning activities.

Include the above additional mitigation measures or the modified language in the Mitigation Monitoring Plan.

All the mitigation measures provided for biological resources in the Mitigation Monitoring Plan indicate they are to be implemented and completed prior to construction. This makes sense for the pre-construction surveys. However, these surveys will also occur before starting

decommissioning activities and that is not reflected here. The Department recommends that the Lead Agency adjust the language requiring implementation of Mitigation Measures BIO-2 through BIO-8 before starting construction activities, ground-disturbing mainatenance activites, and decommissioning activities. We also recommend implementation of Mitigation Measures BIO-10 through BIO-13 before starting construction activities and before starting decommissioning activities.

Thank you for giving us the opportunity to provide comments on this renewable energy project. If you have any questions on these comments, please contact Lisa Gymer, Staff Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 243-4014, extension 238, or by electronic mail at lisa.gymer@wildlife.ca.gov.

Sincerely,

JeffrewR. Single, Ph.D.

Jeffreyk R. Single, Ph.D. Regional Manager

cc: Thomas Leeman United States Fish and Wildlife Service 2800 Cottage Way, W-2605 Sacramento, California 95825

> Kate Dadey San Joaquin Valley Office United States Army Corps of Engineers 1325 J Street Sacramento, California 95814-2922

Regional Water Quality Control Board Central Valley Region 11020 Sun Center Drive, #200 Rancho Cordova, California 95670

Alternative Energy Group, Inc. 1020 10th Street, Suite 310 Modesto, California 95354

State Clearinghouse Post Office Box 3044 Sacramento, California 95812-3044

ec: See Page Six

ec: California Department of Fish and Wildlife William Condon, Climate Science and Renewable Energy Branch Stuart Itoga, Climate Science and Renewable Energy Branch Julie Vance, Central Region Lisa Gymer, Central Region Dave Hacker, Central Region

Literature Cited:

California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. March 7, 2012.

California Department of Fish and Game. 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. November, 2009.

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Swainson's Hawk Technical Advisory Committee. 2000. Recommended timing and methodology for Swainson's hawk nesting surveys in California's Central Valley. May 31, 2000.

United States Fish and Wildlife Service. 2011. Standardized recommendations for protection of the endangered San Joaquin kit fox prior to or during ground disturbance. Sacramento USFWS. January 2011.

United States Fish and Wildlife Service. 2005. Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog. August 2005.

United States Fish and Wildlife Service. 2003. Interim guidance on site assessment and field surveys for determining presence or a negative finding of the California tiger salamander. Sacramento USFWS. October 2003.



March 28, 2013

HEALTHY AIR LIVING

RECEIVED

APR 0 1 2013

STANISLAUS CO. PLANNING &

COMMUNITY DEVELOPMENT DEPT.

Rachel Wyse County of Stanislaus Planning & Community Development 1010 10th Street, Suite 3400 Modesto, CA 95354

Project: Use Permit No. 2011-11 – Beltran Ranch Solar Facility

District CEQA Reference No: 20110494

Dear Ms. Wyse:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above consisting of Construction of a 140 MW solar facility, located at Davis Road, west of I-5, in the Newman/Crows Landing area, CA. The District offers the following comments:

1. Although the District doesn't require full quantification of construction emissions for all projects, the District recommends that construction related impacts, including demolition and construction exhaust emission in addition to fugitive dust emission, be characterized as this is a large proposed project. Therefore, the Initial Study/Mitigated Negative Declaration should be revised to include such analysis.

In assessing construction related impacts on air quality, both on-road mobile source (transportation of building materials, worker commute, etc), off-road mobile source (mobile and non-mobile construction equipment), and fugitive dust emissions should be assessed. Construction emissions also include area source emissions such as emissions from paving and architectural coatings. Construction exhaust emissions and fugitive dust emissions can be quantified separately, and summed when determining significance.

2. Based on information provided to the District, the proposed project would equal or exceed 9,000 square feet of space. Therefore, the District concludes that the proposed project is subject to District Rule 9510 (Indirect Source Review).

Northern Region 4800 Enterprise Way Modesto, CA 95356-8718 Tel: (209) 557-6400 FAX: (209) 557-6475 Seyed Sadredin Executive Director/Air Pollution Control Officer

Central Region (Main Office) 1990 E. Gettysburg Avenue Fresno, CA 93726-0244 Tel: (559) 230-609 **G**AX: (559) 230-6061 Southern Region 34946 Flyover Court Bakersfield, CA 93308-9725 Tel: 661-392-5500 FAX: 661-392-5585 EXHIBIT G

www.valleyair.org www.healthyairliving.com

District Rule 9510 is intended to mitigate a project's impact on air quality through project design elements or by payment of applicable off-site mitigation fees. Any applicant subject to District Rule 9510 is required to submit an Air Impact Assessment (AIA) application to the District no later than applying for final discretionary approval, and to pay any applicable off-site mitigation fees before issuance of the first building permit. If approval of the subject project constitutes the last discretionary approval by your agency, the District recommends that demonstration of compliance with District Rule 9510, including payment of all applicable fees before issuance of the first building about how to comply with District Rule 9510 can be found online at: http://www.valleyair.org/ISR/ISRHome.htm.

- 3. The proposed project may be subject to District Rules and Regulations, including: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants). The above list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance Office at (559) 230-5888. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm.
- 4. The District recommends that a copy of the District's comments be provided to the project proponent.

If you have any questions or require further information, please call David McDonough, at (559) 230-5920.

Sincerely,

David Warner Director of Permit Services

Arnaud Marjollet Permit Services Manager

DW: dm

Cc: File

RESPONSE TO SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT LETTER DATED MARCH 28, 2013

Response to Item 1: The Project will generate significant clean energy reducing demands from older polluting power plants gas-fired GHG-emitting plants. By adding to the supply of clean energy the Project more than offsets the minimal air pollution impacts caused by the project. Greater reliance on solar power is frequently identified as a mitigation measure to lessen the impact of air pollution and/or greenhouse gas emissions. Air pollutants by this project would be classified as being generated from "mobile" sources. Mobile sources would generally include dust from roads, farming and automobile exhausts. Mobile sources are generally regulated by the Air Resources Board of California EPA which sets emissions for vehicles and acts on issues regarding cleaner burning fuels and alternative fuel technologies. As such, the district has addressed most criteria air pollutants through basin wide programs and policies to prevent cumulative deterioration of air quality within the basin. The primary source of air pollutants generated by this project will occur during the construction phase. The air pollutants will be a result of equipment and materials being delivered to the site and the grading operations throughout the site. Trucks make an average of 6 trips per day to deliver materials. This project will be required to implement fugitive dust control measures to reduce emissions of particulate matter during construction and operations. These measures may include watering, application of dust suppressants, handling of bulk materials and reduction of track out / carryout onto paved public roads. Likewise for other pollutants, reduction of emissions can be accomplished by reducing the number of pieces of equipment operating on site at any one time, limiting truck trips, and restricting idling times on construction equipment and trucks on site. Compliance with the SJVAPCD Rules and Regulations during construction will reduce construction-related air guality impacts from fugitive dust emissions and construction equipment emission to less than significant. Once the project has been built, the operations will have a limited amount of activity, traffic or otherwise. Employees will be dispatched to the site on an as needed, for example, there could be up to six employees maintaining the facility washing panels or inspecting/repairing facilities; or, on some occasions none on site; or, more depending on need.

With Implementation of mitigation measures AQ-1, AQ-2 and AQ-3, air quality impacts would be reduced to a less than significant level.

Response to Item 2:	A condition of approval will be added stating that the project is subject to District Rule 9510.	
Response to Item 3:	Noted	
Response to Item 4:	The County has provided a copy of the district's comments to the project proponent.	

Biological Resource Assessment

BELTRAN RANCH SOLAR FARM PROJECT STANISLAUS COUNTY, CALIFORNIA

Prepared For:

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1.0 INTRODUCTION

On May 28, 2011, WRA, Inc. performed an assessment of biological resources at the approximately 606-acre Beltran Ranch Solar Farm project site (Project Area) in Stanislaus County, California (Figure 1). The purpose of the assessment was to gather information necessary to complete a review of biological resources under the California Environmental Quality Act (CEQA). This report describes the results of the site visit, which assessed the Project Area for the (1) potential to support special-status species; and (2) presence of other sensitive biological resources protected by local, state, and federal laws and regulations. If special-status species were observed during the site visit, they were recorded.

A biological assessment provides general information on the potential presence of sensitive species and habitats. The biological assessment is not an official protocol level survey for listed species that may be required for project approval by local, state, or federal agencies. This assessment is based on information available at the time of the study and on site conditions that were observed on the date of the site visit.

2.0 REGULATORY BACKGROUND

The following sections explain the regulatory context of the biological assessment, including applicable laws and regulations that were applied to the field investigations and analysis of potential project impacts.

2.1 Special-Status Species

Special-status species include those plants and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed and proposed species. In addition, California Department of Fish and Game (CDFG) Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue, U.S. Fish and Wildlife Service (USFWS) Birds of Conservation Concern, sensitive species included in USFWS Recovery Plans, and CDFG special-status invertebrates are all considered special-status species. Although CDFG Species of Special Concern generally have no special legal status, they are given special consideration under the California Environmental Quality Act (CEQA). In addition to regulations for special-status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act of 1918. Under this legislation, destroying active nests, eggs, and young is illegal. Plant species on California Native Plant Society (CNPS) Lists 1 and 2 are also considered special-status plant species and must be considered under CEQA. CNPS List 3 and 4 plants have little or no protection under CEQA, depending on the local rarity of the species, but are included in this analysis for completeness.



Critical Habitat

Critical habitat is a term defined and used in the Federal Endangered Species Act as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. The FESA requires federal agencies to consult with the USFWS to conserve listed species on their lands and to ensure that any activities or projects they fund, authorize, or carry out will not jeopardize the survival of a threatened or endangered species. In consultation for those species with critical habitat, federal agencies must also ensure that their activities or projects do not adversely modify critical habitat to the point that it will no longer aid in the species' recovery. In many cases, this level of protection is similar to that already provided to species by the FESA "jeopardy standard." However, areas that are currently unoccupied by the species but which are needed for the species' recovery, are protected by the prohibition against adverse modification of critical habitat.

2.2 Sensitive Biological Communities

Sensitive biological communities include habitats that fulfill special functions or have special values, such as wetlands, streams, and riparian habitat. These habitats are protected under federal regulations (such as the Clean Water Act), state regulations (such as the Porter-Cologne Act, the CDFG Streambed Alteration Program, and CEQA), or local ordinances or policies (City or County Tree Ordinances, Special Habitat Management Areas, and General Plan Elements).

Waters of the United States

The U.S. Army Corps of Engineers (Corps) regulates "Waters of the United States" under Section 404 of the Clean Water Act. "Waters of the U.S." are defined broadly as waters susceptible to use in commerce, including interstate waters and wetlands, all other waters (intrastate waterbodies, including wetlands), and their tributaries (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands stated in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Areas that are inundated for sufficient duration and depth to exclude growth of hydrophytic vegetation are subject to Section 404 jurisdiction as "other waters" and are often characterized by an ordinary high water mark (OHWM). Other waters, for example, generally include lakes, rivers, and streams. The placement of fill material into "Waters of the U.S." (including wetlands) generally requires an individual or nationwide permit from the Corps under Section 404 of the Clean Water Act.

Waters of the State

The term "Waters of the State" is defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The Regional Water Quality Control Board (RWQCB) protects all waters in its regulatory scope, but has special responsibility for wetlands, riparian areas, and headwaters. These waterbodies have high resource value, are vulnerable to filling, and are not systematically protected by other programs. RWQCB jurisdiction includes "isolated" wetlands and waters that may not be regulated by the

Corps under Section 404. "Waters of the State" are regulated by the RWQCB under the State Water Quality Certification Program which regulates discharges of fill and dredged material under Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. Projects that require a Corps permit, or fall under other federal jurisdiction, and have the potential to impact "Waters of the State," are required to comply with the terms of the Water Quality Certification determination. If a proposed project does not require a federal permit, but does involve dredge or fill activities that may result in a discharge to "Waters of the State," the RWQCB has the option to regulate the dredge and fill activities under its state authority in the form of Waste Discharge Requirements.

Streams, Lakes, and Riparian Habitat

Streams and lakes, as habitat for fish and wildlife species, are subject to jurisdiction by CDFG under Sections 1600-1616 of California Fish and Game Code. Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term stream, which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG ESD 1994). Riparian is defined as, "on, or pertaining to, the banks of a stream;" therefore, riparian vegetation is defined as, "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFG ESD 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFG.

Other Sensitive Biological Communities

Other sensitive biological communities not discussed above include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFG. CDFG ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in its Natural Diversity Database. Sensitive plant communities are also identified by CDFG on their *List of California Natural Communities Recognized by the CNDDB*. Impacts to sensitive natural communities identified in local or regional plans, policies, regulations or by the CDFG or USFWS must be considered and evaluated under CEQA (California Code of Regulations: Title 14, Div. 6, Chap. 3, Appendix G). Specific habitats may also be identified as sensitive in City or County General Plans or ordinances.

3.0 METHODS

On May 28, 2011, the Project Area was traversed on foot and vehicle to determine (1) plant communities present within the Project Area, (2) if existing conditions provided suitable habitat for any special-status plant or wildlife species, and (3) if sensitive habitats are present. All wildlife species encountered were recorded, and are summarized in Section 4.2.

3.1 Biological Communities

Biological communities present in the Project Area were classified based on existing plant community descriptions described in the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). However, in some cases it is necessary to identify variants of community types or to describe non-vegetated areas that are not described in the literature. Biological communities were classified as sensitive or non-sensitive as defined by CEQA and other applicable laws and regulations.

3.1.1 Non-sensitive Biological Communities

Non-sensitive biological communities are those communities that are not afforded special protection under CEQA, and other state, federal, and local laws, regulations and ordinances. These communities may, however, provide suitable habitat for some special-status plant or wildlife species and are identified or described in Section 4.1.1 below.

3.1.2 Sensitive Biological Communities

Sensitive biological communities are defined as those communities that are given special protection under CEQA and other applicable federal, state, and local laws, regulations and ordinances. Applicable laws and ordinances are discussed above in Section 2.0. Special methods used to identify sensitive biological communities are discussed below.

Wetlands and Waters

The Project Area was surveyed to determine if any wetlands and waters potentially subject to jurisdiction by the Corps, RWQCB, or CDFG were present. The assessment was based primarily on the presence of unvegetated, ponded areas or flowing water, or evidence indicating their presence such as a high water mark or a defined drainage course; and wetland plant indicators, but may also include any observed indicators of wetland hydrology or wetland soils. Any potential wetland areas were identified as areas dominated by plant species with a wetland indicator status¹ of OBL, FACW, or FAC as given on the U.S. Fish and Wildlife Service List of Plant Species that Occur in Wetlands (Reed 1988). Evidence of wetland hydrology can include direct evidence (primary indicators), such as visible inundation or saturation, surface sediment deposits, algal mats and drift lines, or indirect indicators (secondary indicators), such as

¹ OBL = Obligate, always found in wetlands (> 99% frequency of occurrence); FACW = Facultative wetland, usually found in wetlands (67-99% frequency of occurrence); FAC = Facultative, equal occurrence in wetland or non-wetlands (34-66% frequency of occurrence).

oxidized root channels. Some indicators of wetland soils include dark colored soils, soils with a sulfidic odor, and soils that contain redoximorphic features as defined by the Corps Manual (Environmental Laboratory, 1987) and Field Indicators of Hydric Soils in the United States (NRCS, 2002).

Other Sensitive Biological Communities

The Project Area was evaluated for the presence of other sensitive biological communities, including riparian areas, sensitive plant communities recognized by CDFG. If present in the Project Area, these sensitive biological communities were mapped and are described in Section 4.1.2 below.

3.2 Special-status Species

3.2.1 Literature Review

Potential occurrence of special-status species in the Project Area was evaluated by first determining which special-status species occur in the vicinity of the Project Area through a literature and database search. Database searches for known occurrences of special-status species focused on Stanislaus County. The following sources were reviewed to determine which special-status plant and wildlife species have been documented to occur in the vicinity of the Project Area:

- California Natural Diversity Database records (CNDDB) (CDFG 2011)
- USFWS quadrangle species lists (USFWS 2011)
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990)
- CDFG publication "Amphibians and Reptile Species of Special Concern in California" (Jennings and Hayes 1994)
- Fairy Shrimps of California's Puddles, Pools and Playas (Eriksen and Belk 1999)
- CDFG publication "Bird Species of Special Concern in California" (Shuford and Gardali 2008)
- Recovery Plan for Upland Species of the San Joaquin Valley, California (USFWS 1998)

3.2.2 Site Assessment

A site visit was made to the Project Area to search for suitable habitats for species identified in the literature review as occurring in the vicinity. The potential for each special-status species to occur in the Project Area was then evaluated according to the following criteria:

1) <u>No Potential</u>. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

2) <u>Unlikely</u>. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

3) <u>Moderate Potential</u>. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

4) <u>High Potential</u>. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

5) <u>Present</u>. Species is observed on the site or has been recorded (i.e. CNDDB, other reports) on the site recently.

The site assessment is intended to identify the presence or absence of suitable habitat for each special-status species known to occur in the vicinity in order to determine its potential to occur in the Project Area. The site visit does not constitute a protocol-level survey and is not intended to determine the actual presence or absence of a species; however, if a special-status species is observed during the site visit, its presence will be recorded and discussed. Appendix A presents the evaluation of potential for occurrence of each special-status plant and wildlife species known to occur in the vicinity of the Project Area with their habitat requirements, potential for occurrence, and rationale for the classification based on criteria listed above.

4.0 **RESULTS**

The proposed 606-acre Beltran Ranch Solar Farm is located approximately seven miles southwest of the town of Patterson, and 8 miles northwest of Newman. Overall, the Project Area extends from Interstate 5 in the east, to approximately two miles west of the Davis Road crossing of Interstate 5 in western Stanislaus County. The site is characterized and surrounded by agricultural and grazing lands including orchards, and field and row crops that are seasonally rotated. Regionally, grazed, non-native annual grassland dominates to the north, west, and south, while extensive agricultural lands are present in the San Joaquin Valley to the east. The Project Area includes Solar Area Site 1 which is dominated by orchards, Site 2 dominated by grain production, and Site 3 which is characterized as grazed fallow cropland and active grain production. Historic aerial photographs indicate that Site 2 and the current grazed area of Site 3 have been actively managed for grain or hay production since at least 1997. The southern portion of Site 3 is dominated by a wheat crop; aerial photographs of the southern portion indicate that various irrigated row crops and grain have been grown in this area. The following sections present the results and discussion of the biological assessment within the Project Area. In addition, comments related to initial consultation with the CDFG on the project are included as Attachment D.

4.1 Biological Communities

Non-sensitive biological communities in the Project Area include grazing lands, and the wheat fields that predominate in the southern portion of the site. No sensitive biological communities are found in the Project Area. Descriptions for each biological community are contained in the following sections.

4.1.1 Non-sensitive biological communities

The proposed Project Area and immediately surrounding areas are characterized by intensive agriculture including orchards and seasonally-rotated field/row crops. Agricultural land such as that within the Project Area is not recognized as a natural biological community.

4.1.2 Sensitive Biological Communities

No sensitive biological communities, including waters and wetlands, swales, drainages, or ponds, were observed within the proposed Project Area; as such, this assessment concludes that there is no high-quality area of land within the Project Area that would require mitigation and replacement.

Waters, wetlands, and fragments of riparian habitat are present along Crow Creek immediately south of the proposed Project Area; however, these features will be avoided by the project. Potential wetlands associated with stock ponds and irrigation ponds located near the northern portion of the Project Area will also be completely avoided by the proposed solar project. A formal wetland delineation will be completed should the proposed project change so as to likely impact any waters features, including swales, drainages, ponds, etc. As stated above, during our surveys, no such features were observed within the proposed project impact area. Therefore, it is our understanding that no Streambed Alteration Agreement, Section 404, or Section 401 waters permit will be required for the project. However, ultimate regulatory authority lies with the regulatory agency.

4.2 Special-status Species

4.2.1 Plants

Based upon a review of the resources and databases given in Section 3.2.1, thirteen specialstatus plant species have been documented in Stanislaus County (Appendix A) and were reviewed for the potential to occur within the Project Area and the proposed project site. The Project Area does not have suitable conditions for any of these species due to decades of intensive agricultural activities that have converted natural vegetation communities into a mosaic of grain fields and row crops. The Project Area is not located within any designated USFWS-listed plant critical habitat units. All of the special-status plant species considered for the potential to occur on-site were rejected for occurrence at the proposed project site based on one or more of the following reasons:

- 1. The species has a very limited range of endemism and has never been observed in the vicinity of the Project site.
- 2. Common plants which are nearly always associated with the special-status species, and which indicate the presence of suitable, intact habitat, are absent from the Project site.
- 3. Specific, edaphic soil characteristics, such as serpentine soils or adobe clays, are absent from the Project site.

In addition to these factors, the Project site is predominantly in active agricultural use or is dominated by ruderal, invasive plant species. The plant species that occur in this habitat are tolerant of, or favored by, frequent disturbance, which tends to favor robust, fast-growing annuals which out-compete native plants which are then unlikely to occur.

Based on this analysis, no suitable habitat that could support special-status species occurs within the proposed project site and no further surveys are recommended for special-status plant species. However, should areas revert from active agricultural use, pre-construction surveys should be conducted for special-status plant species, although they are unlikely to occur in this area due to the site history (as described further, above). Therefore, at this time, no further action is recommended relative to sensitive plant species within the proposed Project Area.

4.2.2 Wildlife

Fifty special-status species of wildlife have been recorded or may be generally distributed in the vicinity of the Project Area. No special-status wildlife species were observed during the site reconnaissance conducted on May 28, 2011. Appendix A summarizes the potential for each of these species to occur in the Project Area. All of the observed wildlife in the Project Area are commonly-found species, and many are adapted to occupying disturbed or agricultural areas. Six special-status wildlife species have a moderate to high potential to occur in the Project Area, while the remaining species are not likely to occur based on unsuitable habitat conditions.

The Project Area is not located within any designated USFWS-listed wildlife critical habitat units. Special-status wildlife species that have a moderate or high potential to occur in the Project Area are discussed below. Common wildlife species observed during the reconnaissance visit are listed in Table 1. Though not likely to be found within the Project Area, the Burrowing Owl is discussed in Appendix A and in Section 5.1.4 as it may occur adjacent to proposed Project Area.

Table 1. Wildlife species observed within or adjacent to the Project Area on May 28, 2011.		
Common Name	Species	
Red-tailed Hawk	Buteo jamaicensis	
Mourning Dove	Zenaida macroura	
Western Kingbird	Tyrannus verticalis	
Yellow-billed Magpie	Pica nuttallii	
American Crow	Corvus brachyrhynchos	
Common Raven	Corvus corax	
Bullock's Oriole	Icterus bullockii	
Red-winged Blackbird	Agelaius phoeniceus	
Brown-headed Cowbird	Molothrus ater	
House Finch	Carpodacus mexicanus	

San Joaquin Kit Fox (*Vulpes macrotis mutica***). USFWS Endangered, State Threatened**. The San Joaquin Kit Fox (SJKF) is a small, slim canid with large ears and bushy tail, buffy- or tan-colored in summer, silver-gray in winter. This species is found in the San Joaquin Valley and in surrounding foothills. It occurs in mainly flat grasslands, scrublands, oak savannahs, alkali meadows, and agricultural areas, with loose-textured soils suitable for constructing dens. SJKF prey consists primarily of rabbits and small rodents.

According to the California Department of Fish and Game (CDFG) Natural Diversity Database (2011), a total of nine SJKF occurrences have been documented within a 10-mile radius of the Project Area. Of these, six were reported in the 1970s, with the remaining three occurrences reported since 1989. The nearest sighting was made 1.4 miles north of the Project Area in 1989. Although the Project Area does not provide denning habitat and may provide only limited foraging habitat in fallow fields in the northern portion of Solar Area Site 3, the species may occur as a transient as it moves north or south through the area. As a result, there is a moderate potential for this species to occur in the Project Area. However, the use of the measures recommended by the US Fish and Wildlife Service (2011) as further described in Section 5.1.1 of this report will avoid any "take" of this species and we do not believe that any incidental take permit (ITP) will be required for the project. However, ultimate regulatory authority lies with the regulatory agency.

Northern Harrier (*Circus cyaneus***), CDFG Species of Special Concern.** Harriers are residents of grassland and open wetlands, including marshy meadows; wet, lightly grazed pastures; old fields; and freshwater and brackish marshes. They also frequent dry uplands, including upland prairies, mesic grasslands, drained marshlands, croplands, cold desert shrubsteppe, and riparian woodland throughout California (MacWhirter and Bildstein 1996). Harriers typically nest on ground in open (treeless) habitats in dense, often tall, vegetation. The Project

Area does not contain suitable nesting habitat, but occasional individuals may forage over or adjacent to the site; therefore, there is a moderate potential for occurrence in the Project Area.

White-tailed Kite (*Elanus leucurus*), CDFG Fully Protected Species. Kites occur in low elevation grassland, agricultural, wetland, oak woodland, and savannah habitats. Riparian zones adjacent to open areas are also used. Vegetative structure and prey availability seem to be more important than specific associations with plant species or vegetative communities. Lightly grazed or ungrazed fields generally support large prey populations and are often preferred to other habitats. Kites primarily feed on small mammals, although, birds, reptiles, amphibians, and insects are also taken. Nest trees range from single isolated trees to trees within large contiguous forests. Preferred nest trees are extremely variable, ranging from small shrubs (less than 10 ft. tall), to large trees (greater than 150 ft. tall). (Dunk 1995).

Kites may use trees or shrubs located along Crow Creek and nearby stock ponds for nesting. In addition, nearby grasslands may provide suitable foraging habitat, and occasional individuals may forage over or adjacent to open portions of the site. As a result, there is a moderate potential for the White-tailed Kite to occur in the Project Area.

Swainson's Hawk (*Buteo swainsoni***), State Threatened.** Swainson's Hawk is an uncommon breeding resident and migrant in the Central Valley. In the Central Valley, Swainson's Hawks typically nest at the edge of narrow bands of riparian vegetation, in isolated oak woodland, in lone trees, and in trees associated with roads, farmyards, as well as in adjacent urban residential areas. Where this species overlaps with Red-tailed Hawks, Swainson's will nest in smaller trees in smaller stands than do Red-tails (England et al. 1997).

Swainson's Hawks forage in open stands of grass-dominated vegetation, sparse shrublands, and small, open woodlands. In many parts of their range, including the Central Valley, hawks have adapted well to foraging in agricultural areas, such as row, grain, and hay crop agriculture (England et al. 1997).

No nesting habitat is present for Swainson's Hawk in the Project Area; however, this species may use trees located along Crow Creek and nearby stock ponds for nesting. In addition, nearby grasslands may provide suitable foraging habitat, and occasional individuals may forage over or adjacent to the site. Potential foraging habitat is of poor quality in most of the Project Area due to intensive agriculture including dense vegetative cover and crop rotations; prey species, including rodents, are expected to occur in very low numbers and be less accessible compared to nearby grasslands. Foraging habitat is present in the northern portion of Solar Area Site 3, where grazed fallow fields provide a suitable prey base.

This species has a moderate potential to occur in the Project Area due to the proximity of the site to documented nest occurrences and the higher quality foraging habitat surrounding the Project Area. However, much of the Project Area does not provide suitable foraging habitat due to crop types and the effects of intensive agricultural activities on prey species. Surveys were conducted in accordance with the Swainson's Hawk Technical Advisory Committee recommendations (SHTAC 2000).

Further protection measures for this species are provided in Section 5.1.3.

Ferruginous Hawk (*Buteo regalis*), CDFG Species of Special Concern; USFWS Bird of Conservation Concern. The Ferruginous Hawk is a winter visitor to open terrain from grasslands to deserts. Grassland and arid areas of California, Arizona, and New Mexico are used heavily where prairie dogs, lagomorphs, or pocket gophers (*Thomomys* spp.) are abundant (Bechard and Schmutz 1995).

There is a moderate potential for this hawk to forage in grasslands adjacent to the Project Area in winter; however, Ferruginous Hawks do not nest in the region.

Loggerhead Shrike (*Lanius Iudovicianus*), CDFG Species of Special Concern, USFWS Bird of Conservation Concern. The Loggerhead Shrike is a common resident and winter visitor in lowlands and foothills throughout California. It prefers open habitats with scattered trees, shrubs, posts, fences, utility lines or other perches. Nests are usually built on a stable branch in a densely-foliaged shrub or small tree and are usually well-concealed. The highest densities occur in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian pinyon-juniper, juniper, and desert riparian habitats. While this species eats mostly arthropods, they also take amphibians, small to medium-sized reptiles, small mammals and birds, and is also known to scavenge on carrion.

Shrikes may use trees or shrubs located along Crow Creek for nesting. In addition, nearby grasslands and field edges may provide suitable foraging habitat. As a result, there is a moderate potential for the Loggerhead Shrike to occur in the Project Area.

Federally Listed Species Documented Within the Vicinity and Unlikely to Occur

California Red-legged Frog (*Rana draytonii***). Federal Threatened Species, CDFG Species of Special Concern.** There are four primary constituent elements (PCEs) that are considered to be essential for conservation or survival of the California Red-legged Frog (CRLF): 1) aquatic breeding habitat, 2) non-breeding aquatic habitat, 3) upland habitat, and 4) dispersal habitat (USFWS 2006). Dependent upon local conditions, CRLF may complete the entire life cycle in a particular patch of habitat (e.g., a pond suitable for all life stages), or utilize multiple habitat types. Typical aquatic breeding habitat is characterized by deep (> 1.5 feet) and still or slow-moving water associated with emergent marsh and/or riparian vegetation (Jennings and Hayes 1994). Suitable breeding habitats include ponds (ephemeral and permanent), streams/creeks (ephemeral and permanent), seasonal wetlands, springs, seeps, man-made features (e.g. stock ponds, roadside ditches), marshes, dune ponds, and lagoons. Non-breeding aquatic habitat may or may not constitute suitable breeding habitat, but it provides shelter, foraging, predator avoidance, and aquatic dispersal for juvenile and adult CRLF.

If aquatic habitat is seasonally limited or absent, CRLF often undergo a period of inactivity (estivation) during the dry months, over-summering in suitable upland refugia including mammal burrows. Upland habitats include areas within 200 feet of aquatic and riparian habitat and include grasslands, woodlands, and/or vegetation. In addition, during dispersals to and from breeding habitat, CRLF can travel up to one mile over a variety of topographic and habitat types (Bulger et al. 2003). Upland dispersal habitats include riparian corridors, grasslands, and oak

savannas that allow for movement between occupied sites, typically within 0.7 mile of each other.

There is no aquatic habitat within the Project Area, but there are aquatic habitats adjacent in Crow Creek, stock ponds, and drainage ditches. These water features likely do not hold water for a long enough period (Crow Creek and several ponds were dry during the May 28, 2011 assessment) and some lack vegetation for egg deposition, making these habitats only marginal breeding sites. However, they could provide seasonal non-breeding aquatic habitat. Within the Project Area, the active grain production over most of the site does not offer appropriate upland habitat because regular ground disturbance from harvesting and tilling removes burrows, and there is dense vegetation during the growing season. The nearest documented occurrences are 7.2 miles south and 16 miles southwest of the Project Area (CNDDB 2011). There are no riparian corridors or series of ponds between these occurrences and the Project Area to create a logical dispersal pathway over this distance. The absence of nearby breeding habitat and distance from known occurrence make it unlikely that CRLF will occur within the Project Area.

California Tiger Salamander (CTS; Ambystoma californiense). Federal Threatened Species, State Threatened Species. The CTS is restricted to grasslands and low-elevation foothill regions in California (generally under 1500 feet) where it uses seasonal aquatic habitats for breeding. The salamanders breed in natural ephemeral pools, or ponds that mimic ephemeral pools (stock ponds that go dry), and occupy substantial areas surrounding the breeding pool as adults. CTS spend most of their time in the grasslands surrounding breeding pools. They survive hot, dry summers by estivating (going through a dormant period) in refugia (such as burrows created by ground squirrels and other mammals and deep cracks or holes in the ground) where the soil atmosphere remains near the water saturation point. During wet periods, the salamanders may emerge from refugia and feed in the surrounding grasslands.

An assessment of potential CTS habitat in the Project Area was conducted and based on the Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander produced by CDFG and USFWS in 2003. As requested in Element 1 of the guidance, it was determined that the Project Area occurs within the general range of CTS (CDFG 2003). Element 2 requests the known localities of CTS within 3.1 miles of the Project Area, and none have been documented to occur within the Project Area or the surrounding areas; the nearest occurrence is approximately 15 miles southeast (CDFG 2011). There are no known occurrences in this region of Stanislaus County (CDFG 2011, USGS 2010), and the nearest occurrence is separated from the Project Area by Interstate 5 (I-5), which poses a significant barrier to dispersal for CTS. The nearest occurrence west of I-5 is approximately 16 miles northwest of the site (CDFG 2011). Element 3 addresses habitats within the Project Area and within 1.24 miles (2 km) of the Project boundaries. Habitats within the Project Area are dominated by agricultural land and fallow fields, and habitat surrounding the site is largely grazed, non-native grassland and agricultural land. Outside of the Project Area, two aquatic habitats exist: stock ponds and Crows Creek. Upland habitat within the Project Area and the surrounding 1.24 mile radius generally lacks burrows and therefore refugia for the species. Burrows are absent because of regular ground disturbance resulting from tilling and harvesting the grains on site. Based on the lack of documented occurrences in the area, and the poor quality of upland habitat within the Project Area, it is unlikely CTS will occur within the Project Area. However, a complete assessment of CTS habitat based on the
Interim Guidance was not completed as part of this study. We do not believe that any ITP will be required for the project. However, ultimate regulatory authority lies with the regulatory agency.

5.0 SUMMARY

No sensitive plant communities or special-status plant species were identified within the Project Area and no habitat capable of supporting special-status plant species was observed. Therefore, no additional surveys for special-status plant species are recommended if the proposed project location does not change. Six special-status wildlife species have a moderate or high potential to occur within the Project Area. With the measures identified, we do not believe that any ITP or Statement of Overriding Consideration (SOC) will be required for the project. However, ultimate regulatory authority lies with the regulatory agency.

5.1 Special-status Wildlife Species

Of the 50 special-status wildlife species potentially occurring or known to occur in the vicinity of the Project Area, six were determined to have the potential to occur in the Project Area. Most of the species found in the review of background literature occur in habitats not found in the Project Area. Habitat suitability for grassland-associated species in most of the Project Area is reduced due to regular discing of the site.

5.1.1 San Joaquin Kit Fox

Based on CDFG occurrence data (2011), SJKF may occasionally transit through the Project Area as individuals disperse north and south of the site. However, a lack of prey, burrow habitat, and cover indicates that suitable foraging and denning habitat is limited in the Project Area. The spacing and elevation of solar panels associated with the proposed project will allow unimpeded movement of SJKF and other species through the Project Area. In addition, any perimeter fencing around the project should be designed to be wildlife friendly by raising the bottom of the fence six inches above the ground to allow SJKF to move into and out of the project site. Therefore, no impacts to kit fox dispersal are anticipated.

The USFWS released the *Recovery Plan for Upland Species of the San Joaquin Valley* in 1998 that includes a recovery strategy for the SJKF. The conservation strategy includes recommendations for the protection and management of three geographically distinct core populations, which include:

- 1. Carrizo Plain Natural Area in San Luis Obispo County,
- 2. Natural lands of western Kern County, and
- 3. Ciervo-Panoche Natural Area of western Fresno and eastern San Benito counties.

The wide north-south corridor west of Interstate 5 in western Stanislaus County (within which the Project Area is included) does not appear to support a core population of SJKF, based on its

omission from the "Habitat Protection and Population Interchange" section of the "Recovery Actions" in the Recovery Plan. However, the corridor in which the Project Area is located is identified as a Priority 2 recovery task (Recovery Task #5.3.2) in the Recovery Plan for the Upland Species of the San Joaquin Valley, California (USFWS 1998). This corridor is described in the recovery task as the migration corridor between SJKF satellite populations in the northern range and the core populations listed in the Recovery Plan. Based on this information and on the habitat observed within the Project Area, it is unlikely that SJKF would den in the Project Area but transient individuals may pass through and occasionally forage in the fallow fields that occur in a portion of the Project Area. To continue to allow SJKF to pass under, and the design of structures to be installed will also allow SJKF to pass.

CDFG recommends that the USFWS's "Standardized recommendations for protection of the endangered San Joaquin kit fox prior to or during ground disturbance" (2011) be followed prior to any ground-disturbing activities occurring within the Project Area. These surveys should be conducted a maximum of 30 days prior to initiating ground-disturbing activities. If SJKF or evidence of SJKF is found, specific measures should be developed with CDFG and incorporated into the Project design to avoid "take" of SJKF. If "take" cannot be avoided, acquisition of a State Incidental Take Permit (ITP) before Project implementation would be appropriate. Specific avoidance measures from the USFWS (2011) standard recommendations which are applicable to the Beltran Ranch Solar Farm project are as follows:

- Preconstruction/preactivity surveys shall be conducted no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the SJKF.
- Project-related vehicles should observe a 20-mph speed limit in all project areas; this is particularly important at night when SJKF are most active. To the extent possible, night-time construction should be minimized. Off-road traffic outside of designated project areas should be prohibited.
- To prevent inadvertent entrapment of SJKF or other animals during the construction phase, all excavated, steep-walled holes or trenches more than 2 feet deep should be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
- SJKF are attracted to den-like structures such as pipes and may enter stored pipe. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for SJKF before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a SJKF is discovered inside a pipe, all work in the area will be stopped until the animal leaves the area on its own.

- All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in closed containers and removed at least once a week from a construction site.
- No firearms shall be allowed on the project site except for police and security personnel.
- To prevent harassment, mortality of SJKF or destruction of dens by dogs or cats, no pets should be permitted on the project site during construction.
- An employee education program should be conducted containing a brief presentation by persons knowledgeable in SJKF biology and legislative protection to explain endangered species concerns to contractors and their employees. The program should include the following: a description of the SJKF and its habitat needs; a report of the occurrence of SJKF in the Project Area; an explanation of the status of the species and its protection under state and federal Endangered Species Acts; and a list of measures being taken to avoid impacts to the species during construction and implementation. A fact sheet conveying this information should be prepared for distribution to attendees of the traing and anyone else who may enter the project site.

5.1.1 CRLF and CTS

This assessment determined that neither CRLF nor CTS are likely present on the project site. However, because of the absence of nearby breeding habitat for CRLF and distance from known occurrence make it unlikely that CRLF will occur within the Project Area, and because a complete assessment of CTS habitat based on the Interim Guidance was not completed as part of this study, the following measure is recommended:

• An assessment of CTS and CRLF habitat will be completed as part of a pre-construction survey to determine whether any avoidance is necessary.

5.1.2 Northern Harrier, Ferruginous Hawk, White-tailed Kite and Loggerhead Shrike

This assessment determined that two bird species (Northern Harrier and Ferruginous Hawk) may use the Project Area for foraging only; therefore, no significant project-related impacts to these species are anticipated. Three other bird species (White-tailed Kite, Swainsons Hawk, and Loggerhead Shrike) potentially nest and/or forage within and adjacent to the Project Area. It is recommended that pre-construction breeding bird surveys be conducted within 14days of ground disturbance to avoid disturbance to active nests, eggs, and/or young of these and other bird species. It is also recommended that any trees and shrubs in or adjacent to the Project Area that are proposed for removal and that could be used as nesting sites by Loggerhead Shrike and White-tailed Kite be removed during the non-breeding season (September through February).

5.1.3 Swainson's Hawk

Although Swainson's Hawks have been documented to nest approximately four miles south of the Project Area, they are not expected to be regular visitors to the Project Area. Potential nest trees are present along Crow Creek; however, no Swainson's Hawks or active nests were observed. Foraging habitat is unsuitable or of poor quality throughout much of the Project Area, but the grazed fallow fields in the northern portion of Solar Area Site 3 do provide potential foraging habitat between grain and other crop rotations.

Some of the preferred foraging habitats for Swainson's hawks include: (1) alfalfa - low prey abundance but steady prey accessibility, (2) fallow fields - high prey abundance and prey accessibility if not dominated by thistle, (3) beet and tomato fields - largest prey populations but dense cover reduces prey accessibility, except during harvesting operations when Swainson's hawks have been observed foraging almost exclusively in these fields from late July to early September, (4) dry-land pasture provided the primary forage area for one radioed pair, and appears to be an important foraging area, (5) irrigated pasture provides some forage habitat, especially during flooding, and (6) rice land appears to provide valuable early season (prior to flooding) and late season (fall and winter migration periods) foraging habitat (CDFG 1992). Unsuitable foraging habitat types include any crop where prey are not available due to the high density of vegetation, or have low abundance of prey such as vineyards, mature orchards, and cotton fields (CDFG 1992).

The only potential habitat area that meets the description of Swainson's Hawk habitat described above is "fallow field" which is located in the northern portion of Solar Area Site 3. Disced conditions, crop rotations, high vegetation density, and regular irrigation result in low prey abundance or availability within the overall Project Area. Therefore, the site provides limited Swainson's Hawk foraging habitat compared to nearby grazed grasslands.

It is recommended, if construction is initiated between March 1 and September 15, that nesting activity surveys be undertaken not later than 20 days prior to construction within ½ mile of the Project Area to determine if any Swainson's hawks or their nests are observed. Surveys will be conducted in accordance with the Swainson's Hawk Scientific Advisory Committee recommendations (SHSAC 2000). If active nests are observed, a determination should be made by a qualified biologist experienced in Swainson's hawk biology as to the measures to be undertaken to minimize adverse impacts on this species including provision of construction buffers and any further monitoring of the nesting site that may be required during construction activities. No work window restrictions shall apply if construction starts between September 16 to February 28th or after construction activities are initiated. If CDFG determines that the marginal potential foraging habitat in the northern end of Solar Area Site 3 is suitable and potentially utilized by Swainson's Hawk, the agency may require compensation for loss of habitat due to the obstacle that the Project is likely to pose to the hawk's foraging abilities in this area. Mitigation ratios are based on distance from the Project Area to the nearest active (within the last 5 years) nest site and range from 0.5:1 to 1:1 (CDFG 1994).

5.1.4 Burrowing Owl

Burrowing Owl (Athene cunicularia) is a small, long-legged owl found throughout open grasslands, rangelands, agricultural areas, deserts, or any other dry, open area with low vegetation. They nest and roost in burrows, such as those excavated by ground squirrels. If California ground squirrels occupy a project site, suitable nesting habitat may exist. However, during the site inspection, no suitable burrow habitat was observed due to the ongoing agricultural activities. Therefore, the Burrowing Owl is not expected to nest within the Project Area. Although no records of Burrowing Owl are reported in the vicinity, suitable habitat may be present off-site in non-agricultural areas. Therefore, it is recommended that a gualified biologist conduct a survey no more than 14 days before the onset of any ground-disturbing activities (CDFG 2012). If Burrowing Owls occupy the site during the non-breeding season, the burrow should be avoided, flagged, and buffered an appropriate distance. If necessary, a passive relocation effort may be instituted in some areas. During the breeding season (February 1-August 31), any burrows occupied by owls can be assumed to possess young and a minimum 200-foot no-construction buffer zone be established around the burrow (CDFG 2012) unless a qualified biologist with experience with Burrowing Owls verifies through noninvasive methods that either (1) the birds have not begun egg laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

5.1.5 Migratory Nesting Birds

To avoid impacts to birds that potentially nest in or immediately adjacent to the Project Area, it is recommended to remove trees (if necessary) during the non-breeding season (mid-September through January). Development activities near the riparian area of Crow Creek should also occur during the non-breeding season. If development activities or tree removal must occur during the breeding season (February 1 through September 15), surveys for active nests should be conducted by a qualified biologist no more than 20 days prior to the start of construction. If an active nest is observed, a no-disturbance buffer should be delineated around the active nest until the breeding season is ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. CDFG has generally recommended buffers of at least 0.5 mile for listed species, 500 feet for raptors, 250 feet for non-raptor migratory birds, and 100 feet for resident song birds to avoid "take".

5.2 Wetlands and Riparian Habitat

Although the proposed project will not impact wetlands or riparian habitats, some of these features are located in areas near the project boundaries. To avoid indirect impacts to wetlands and riparian vegetation, orange construction exclusion fencing should be installed no less than 50 feet from the stock ponds and wetlands located near the northwestern portion of the Project Area. This does not apply to the existing agricultural access road along Crow Creek, or the existing Crow Creek crossing north of Solar Area Site 2. In addition, ground disturbance activities should be restricted to the dry season, if feasible, to minimize the transportation of sediment into Crow Creek and the nearby wetlands.

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APPENDIX A

POTENTIAL FOR SPECIAL-STATUS PLANT AND WILDLIFE SPECIES TO OCCUR IN THE PROJECT AREA

Appendix A. This list was compiled from a county search of the California Department of Fish and Game (CDFG) Natural Diversity Data Base (CNDDB) (2011), the USFWS special-status species lists (2011) and other CDFG lists and publications (Shuford and Gardali 2008; Jennings and Hayes 1994; Moyle et. al. 1995).

SPECIES	STATUS*	НАВІТАТ	POTENTIAL FOR OCCURRENCE
Mammals			
Pallid Bat Antrozous pallidus	SSC, WBWG High Priority	Occupies a variety of habitats at low elevations including grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	Unlikely . No rocky areas or other suitable areas for roosting. May occasionally forage over the site.
Townsend's Western Big- eared Bat Corynorhinus townsendii townsendii	SSC, WBWG High Priority	Primarily found in rural settings in a wide variety of habitats including oak woodlands and mixed coniferous-deciduous forest. Day roosts highly associated with caves and mines. Building roost sites must be cave like. Very sensitive to human disturbance.	Not Present . Cavern-like roost habitat is not present in the Project Area. May occasionally forage over the site.
Western Red Bat <i>Lasiurus blossevillii</i>	SSC, WBWG High Priority	Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging. Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests.	Unlikely . Project Area does not contain mature orchards for roosting; existing recently-planted orchards do not provide suitable roost habitat; may occasionally forage over the site.
Small-footed Myotis <i>Myotis cilolabrum</i>	WBWG Medium Priority	Commonly found in arid uplands of California. Feeds on a variety of small flying insects. Seeks cover in caves, buildings, mines, crevices, and occasionally under bridges.	Unlikely. Cavern-like and/or building roost habitat are not present in the Project Area. May occasionally forage over the site.
Long-eared Myotis <i>Myotis evotis</i>	WBWG Medium Priority	Primarily a forest associated species. Day roosts in hollow trees, under exfoliating bark, rock outcrop crevices and buildings. Other roosts include caves, mines and under bridges.	Unlikely . Study Area is not in the vicinity of typical, forested habitat.

SPECIES	STATUS*	ΗΑΒΙΤΑΤ	POTENTIAL FOR OCCURRENCE
Fringed Myotis Myotis thysanodes	WBWG High Priority	Associated with a wide variety of habitats including mixed coniferous-deciduous forest and redwood/sequoia groves. Buildings, mines and large snags are important day and night roosts.	Unlikely. Caverns, buildings, and snag roost habitat are not present in the Project Area. May occasionally forage over the site.
Long-legged Myotis <i>Myotis volans</i>	WBWG High Priority	Generally associated with woodlands and forested habitats. Large hollow trees, rock crevices and buildings are important day roosts. Other roosts include caves, mines and buildings.	Unlikely . Project Area is not in the vicinity of typical, wooded or forested habitat.
Greater Western Mastiff Bat Eumops perotis californicus	SSC, WBWG High Priority	Found in a wide variety of habitat. Distribution appears to be tied to large rock structures which provide suitable roosting sites, including cliff crevices and cracks in boulders.	Not Present . Project Area does not contain cliff crevices or boulders for roosting, though this species may forage high above the site.
Riparian Brush Rabbit Sylvilagus bachmani riparius	FE, SE	Found in dense, brushy areas of valley riparian forests marked by extensive thickets of <i>Rosa</i> spp., <i>Rubus</i> spp., and <i>Salix</i> spp.	Not Present . Appropriate riparian communities are not present within or adjacent to the Project Area. No documented occurrences west of I-5 (USFWS 1998).
San Joaquin Valley Riparian Woodrat <i>Neotoma fuscipes riparia</i>	FE, SSC	Occurs in riparian communities along lower portions of San Joaquin and Stanislaus rivers in northern San Joaquin valley.	Not Present . Appropriate riparian communities are not present within or adjacent to the Project Area. No documented occurrences west of I-5 (USFWS 1998).
San Joaquin Kit Fox <i>Vulpes macrotis mutica</i>	FE, ST	Found in open, level areas with loose-textured soils supporting scattered, shrubby vegetation with little human disturbance.	Moderate Potential . Project Area may be used for dispersal, but foraging and denning habitat absent. Nearest occurrence is 1.4 miles north of the site (CDEG 2011)

SPECIES	STATUS*	НАВІТАТ	POTENTIAL FOR OCCURRENCE
American Badger <i>Taxidea taxus</i>	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Need sufficient food, friable soils and open, uncultivated ground. Prey on burrowing rodents. Dig burrows.	Unlikely . Little evidence of small (prey) or large mammal burrows in the Project Area. Intensive agricultural activities likely preclude presence of this species. Nearest occurrence is 2.5 miles northwest of the site (CDFG 2011).
Birds			
Northern Harrier <i>Circus cyaneus</i>	SSC	Nests and forages in grassland habitats, usually in association with coastal salt and freshwater marshes. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas. May also occur in alkali desert sinks.	Moderate Potential . May forage over Project Area's grain and row crops; however, intensive agricultural activities preclude nesting attempts.
White-tailed Kite <i>Elanus leucurus</i>	CFP	Year-long resident of coastal and valley lowlands; often found near agricultural areas. Preys on small diurnal mammals and occasional birds, insects, reptiles, and amphibians.	Moderate Potential . May forage over Project Area's grain and row crops; suitable nesting habitat present in vegetation associated with Crow Creek; however, not observed during May 28, 2011 biological reconnaissance.
Bald Eagle Haliaeetus leucocephalus	SE, CFP	Requires large bodies of water, or free-flowing rivers with abundant fish, and adjacent snags or other perches.	Not Present . Large trees and snags near large water bodies are not present in or near Project Area.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Swainson's Hawk Buteo swainsoni	ST, BCC	Found in open desert, grassland, or cropland containing scattered large trees or small groves. Roosts in large trees.	Moderate Potential. Project Area contains marginally suitable foraging habitat as described by CDFG. Orchards in the northern portion of the Project Area do not provide suitable foraging habitat. Nearest nesting occurrence is approximately 4 miles south of Project Area (CDFG 2011). No breeding or foraging activity observed during May 28, 2011 biological reconnaissance.
Ferruginous Hawk <i>Buteo regalis</i>	BCC	Winter resident of open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats.	Moderate Potential. Within wintering range for this species, the site is adjacent to and contains open areas potentially suitable for foraging. This species does not nest in the vicinity of the Project Area.
American Peregrine Falcon Falco peregrinus anatum	SE, CFP, BCC	Winters throughout Central Valley. Requires protected cliffs and ledges for cover. Feeds on a variety of birds, and some mammals, insects, and fish.	Unlikely . No protective cliffs or ledges in the vicinity for cover or nesting. May occasionally occur in winter or during migration.
Greater Sandhill Crane Grus canadensis tabida	ST, CFP	Frequents annual and perennial grassland habitats, moist croplands with rice or corn stubble, and open emergent wetlands. Winters primarily in the Sacramento and San Joaquin valleys.	Unlikely . Project Area does not contain typical wintering habitat for this species.
Mountain Plover Charadrius montanus	SSC, BCC	Winter resident in short grasslands and plowed fields of the Central Valley and foothill valleys west of San Joaquin Valley.	Unlikely . The intensive perennial agricultural activities likely preclude presence of this species.
Long-billed Curlew Numenius americanus	BCC	Winters in large coastal estuaries, upland herbaceous areas, and croplands. Breeds in northeastern California in wet meadow habitat.	Unlikely. Although Project Area occurs within wintering range for this species, typical grassland foraging habitat is absent.

SPECIES	STATUS*	НАВІТАТ	POTENTIAL FOR OCCURRENCE
Western Yellow-billed Cuckoo Coccyzus americanus occidentalis	FC, SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Not Present . Typical dense, mature riparian habitat is not present in the Project Area.
Burrowing Owl <i>Athene cunicularia</i>	SSC, BCC	Frequents open grasslands and shrublands with perches and burrows. Preys upon insects, small mammals, reptiles, birds, and carrion. Nests and roosts in old burrows of small mammals.	Unlikely . No suitable burrow habitat was observed in the Project Area. Potential habitat may be present in non-agricultural areas to the north and south.
Vaux's Swift Chaetura vauxi	SSC	Common migrant. Nests in coniferous forests with large, hollow trees. Forages in lowlands and forests openings.	Not Present . Project Area is outside known summer range and does not contain suitable forest habitat.
Rufous Hummingbird Selasphorus rufus	BCC	Found in riparian areas, open woodlands, chaparral, mountain meadows, and other habitats rich in nectar-producing flowers.	Unlikely . May rarely migrate through Project Area in spring.
Lewis' Woodpecker <i>Melanerpes lewis</i>	BCC	Winter resident occurring in open oak savannahs, broken deciduous, and coniferous habitats.	Not Present . Project Area does not contain typical wooded habitat.
Olive-sided Flycatcher Contopus cooperi	SSC, BCC	Most often found in montane conifer forests where tall trees overlook canyons, meadows, lakes or other open terrain	Unlikely . No suitable forested habitat within or adjacent to Project Area. May occur briefly during migration.
Loggerhead Shrike <i>Lanius ludovicianus</i>	SSC, BCC	Prefers open habitats with scattered shrubs, posts, or other perches. Open-canopied valley foothill hardwood and valley foothill riparian.	Moderate Potential. Nearby grassland habitat provides suitable foraging habitat. Vegetation along Crow Creek may provide suitable nesting habitat.
Least Bell's Vireo Vireo bellii pusillus	FE, SE, BCC	Summer resident below about 600 meters (2000 feet) in willows and other low, dense valley foothill riparian habitat and lower portions of canyons.	Not Present . Dense riparian willow habitat appropriate for nesting and foraging is not present in Project Area.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Bank Swallow Riparia riparia	ST	In summer, restricted to riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with fine-textured or sandy soils, into which it digs nesting holes. Feeds predominantly over open riparian areas, but also over brushland, grassland, wetlands, water, and cropland.	Unlikely . Vertical bank habitat is not present in Project Area. May occasionally forage over site.
Yellow Warbler Dendroica coronata	SSC	Breeds from ponderosa pine to subalpine conifer, and in pinyon-juniper, habitats. Widespread as a winter resident, occupying woodlands, chaparral, residential areas, even grasslands and agricultural areas where bordered by trees or shrubs.	Unlikely . Riparian willow habitat appropriate for nesting and foraging is not present in Project Area. May briefly occur during migration.
Yellow-breasted Chat <i>Icteria virens</i>	SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10ft of ground.	Not Present . Dense riparian habitat appropriate for nesting and foraging is not present in Project Area.
Grasshopper Sparrow Ammodramus savannarum	SSC	Frequents dense, tall, dry or well-drained grasslands, especially native grasslands with mixed grasses and forbs for foraging and nesting. Nests on ground at base of overhanging clumps of vegetation.	Unlikely. Project Area does not provide tall grassland habitat. May occur in grasslands to north and south.
Bell's Sage Sparrow Amphispiza belli	BCC	Prefers dense chaparral and scrub habitats in breeding season. Found in more open habitats in winter.	Not Present . Scrub habitat is not present in or adjacent to the Project Area.
Tricolored Blackbird Agelaius tricolor	SSC, BCC	Usually nests over or near freshwater in dense cattails, tules, or thickets of willow, blackberry, wild rose or other tall herbs. Nesting area must be large enough to support about 50 pairs.	Unlikely . Nesting habitat is not present in or adjacent to the Project Area. Post-breeding and winter nomadic flocks may occasionally forage on the site. Nearest occurrence is 6 miles east of the site (CDFG 2011).

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Lawrence's Goldfinch Carduelis lawrencei	BCC	Inhabits oak woodlands, chaparral, riparian woodlands, pinyon-juniper associations, and weedy areas near water during the breeding season.	Unlikely . Typical natural plant communities associated with this species are not present in the Project Area.
Reptiles and Amphibians			
Western Pond Turtle Actinemys marmorata	SSC	Occurs in perennial ponds, lakes, rivers and streams with suitable basking habitat (mud banks, mats of floating vegetation, partially submerged logs) and submerged shelter.	Not Present . Perennial aquatic habitat is not present in the Project Area. Crow Creek, south of the Project Area, is not a perennial feature. The nearest occurrence is approximately 4 miles south of the Study Area (CDFG 2011).
California Horned Lizard Phrynosoma coronatum frontale	SSC	Inhabits sandy areas, washes, flood plains and wind-blown deposits in a wide variety of habitats.	Unlikely . Intensive agricultural area lacks a prey base (ants) and is considered low-quality habitat for this species.
Silvery Legless Lizard Anniella pulchra pulchra	SSC	Found primarily in areas with moist sandy or loose organic soils or where there is plenty of leaf litter.	Unlikely . Ground disturbance associated with agricultural activities precludes presence.
San Joaquin Coachwhip Masticophis flagellum ruddocki	SSC	Found in open, dry habitats with little or no tree cover. Found in valley grassland and saltbush scrub in the San Joaquin Valley. Needs mammal burrows for refuge and egg-laying.	Unlikely . Few mammal burrows available for refuge; natural plant communities not present in Project Area.
Giant Garter Snake Thamnophis gigas	FT, ST	Occurs in dense, emergent vegetation near deep and shallow pools. Needs open areas for basking and upland habitat with subterranian refuge for hibernating.	Not Present . Project Area lacks suitable perennial aquatic habitat.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
California Tiger Salamander Ambystoma californiense	FT, SSC	Occurs primarily in annual grass habitat, also in grassy understory of valley-foothill hardwood habitats.	Unlikely . Potential aquatic breeding habitat is present in stock ponds adjacent to the northwestern portion of the Project Area; however, it does not provide suitable upland habitat due to regular agricultural ground disturbance and the subsequent absence of burrows.
Western Spadefoot Scaphiopus hammondi	SSC	Found in the Central Valley and adjacent foothills. Occurs primarily in grassland habitats with shallow, temporary pools.	Unlikely . Potential aquatic breeding habitat is present in stock ponds adjacent to the northwestern area (Site 3); however, the Project Area does not provide suitable upland habitat due to regular agricultural ground disturbance and the subsequent absence of burrows. Nearest occurrence is 4 miles northwest of site (CDFG 2011).
California Red-legged Frog <i>Rana draytonii</i>	FT, SSC	Associated with quiet perennial to intermittent ponds, stream pools and wetlands. Prefers shorelines with extensive vegetation. Documented to disperse through upland habitats after rains.	Unlikely. Potential breeding and seasonal non-breeding aquatic habitats are present adjacent to the northern area; however, historic aerial photos suggest they do not provide perennial aquatic habitat. Crow Creek and some ponds were dry during the May 28, 2011 biological reconnaissance. Typically, the species cannot maintain a population where all water disappears every year (Jennings and Hayes 1994).
Foothill Yellow-legged Frog Rana boylii	SSC	Found in or near rocky streams in a variety of habitats. Feed on both aquatic and terrestrial invertebrates	Not Present . Suitable stream habitat is not present in the Project Area.

invertebrates.

SPECIES	STATUS*	ΗΑΒΙΤΑΤ	POTENTIAL FOR OCCURRENCE
Invertebrates			
Conservancy fairy shrimp Branchinecta conservatio	FE	Occurs in cool water vernal pools and seasonal depressions.	Not Present . No vernal pool habitat present onsite.
longhorn fairy shrimp Branchinecta longiantenna	FE	Endemic to the eastern margin of the central coast mountains in seasonally astatic grassland vernal pools. Inhabit small, clear-water depressions in sandstone and clear-to-turbid clay/grass-bottomed pools in shallow swales.	Not Present . No vernal pool habitat present onsite.
vernal pool fairy shrimp Branchinecta lynchi	FT	Occurs in vernal pools and seasonal depressions. Prefers clear water areas.	Not Present . No vernal pool habitat present onsite.
vernal pool tadpole shrimp Lepidurus packardi	FE	Inhabits vernal pools containing clear to highly turbid water.	Not Present . No vernal pool habitat present onsite.
valley elderberry longhorn beetle Desmocerus californicus dimorphus	FT	Associated with blue elderberry shrubs. Lay eggs in elderberries 2-8 inches in diameter.	Not present . No elderberry shrubs observed onsite. A few scattered shrubs are located along portions of Crow Creek; however, the proposed project will avoid these areas.
Plants			
alkali milk-vetch Astragalus tener var. tener	List 1B	Valley and foothill grassland, low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 1-170 meters. Blooms March-June.	Not Present. The Project Area contains no native plant communities due to decades of intensive agriculture.
heartscale Atriplex cordulata	List 1B	Chenopod scrub, valley and foothill grasslands, meadows; alkali flats and scalds in the central valley, sandy soils. 1-375 meters. Blooms April- October.	Not Present. The Project Area contains no native plant communities due to decades of intensive agriculture.
brittlescale Atriplex depressa	List 1B	Saline, alkaline flats and chenopod scrub, meadows, playas, and vernal pools. 1-320 meters. Blooms May - October.	Not Present. The Project Area contains no native plant communities due to decades of intensive agriculture.

SPECIES	STATUS*	ΗΑΒΙΤΑΤ	POTENTIAL FOR OCCURRENCE
San Joaquin spearscale <i>Atriplex joaquiniana</i>	List 1B	Chenopod scrub, alkali meadow, valley and foothill grassland. In seasonal alkali wetlands or alkali sink scrub. 1-835 meters. Blooms May- October.	Not Present. The Project Area contains no native plant communities due to decades of intensive agriculture.
lesser saltscale Atriplex minuscula	List 1B	Chenopod scrub, playas, valley and foothill grassland. In alkali sink and grassland in sandy, alkaline soils. 15-200 meters. Blooms May - October.	Not Present. The Project Area contains no native plant communities due to decades of intensive agriculture. No occurrences in Stanislaus County (USFWS 1998).
vernal pool smallscale Atriplex persistens	List 1B	Alkaline vernal pools. 10-115 meters. Blooms June - October.	Not Present. The Project Area contains no native plant communities due to decades of intensive agriculture.
hispid bird's-beak Cordylanthus mollis ssp. hispidus	List 1B	Meadows, playas, valley and foothill grassland. In damp alkaline soils, especially in alkaline meadows and alkali sinks. 1-155 meters. Blooms June - September.	Not Present. The Project Area contains no native plant communities due to decades of intensive agriculture.
Delta button celery Eryngium racemosum	SE, List 1B	Riparian scrub (vernally mesic clay depressions). 3- 30 feet. Blooms June - September.	Not Present. The Project Area contains no native plant communities due to decades of intensive agriculture.
Merced monardella <i>Monardella leucocephala</i>	List 1A	Valley and foothill grassland. Known from riverbeds, moist sandy depressions; requires moist subalkaline sands associated with low elevation grassland. 35-100 meters. Blooms May - August	Not Present. The Project Area contains no native plant communities due to decades of intensive agriculture. In the County, historically occurred along the Tuolumne River near La Grange (USFWS 1998).
little mousetail Myosurus minimus ssp. apus	List 3	Valley and foothill grasslands, alkaline vernal pools. 20-640 meters. Blooms March - June.	Not Present. The Project Area contains no native plant communities due to decades of intensive agriculture.

SPECIES		STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
prostrate na Navarretia p	varretia prostrata	List 1B	Coastal scrub, alkaline soils in valley and foothill grassland, or in vernal pools. Mesic, alkaline sites. 15-700 meters. Blooms April - July.	Not Present. The Project Area contains no native plant communities due to decades of intensive agriculture.
San Joaquir grass Orcuttia inae	n Valley orcutt equalis	FT, SE, List 1B	Vernal pools. 10-755 meters. Blooms April - September.	Not Present. The Project Area contains no native plant communities due to decades of intensive agriculture.
Sanford's ar Sagittaria sa	rrowhead anfordii	List 1B	Marshes and swamps (assorted shallow freshwater). 0-650 meters. Blooms May - October.	Not Present. The Project Area contains no native plant communities due to decades of intensive agriculture.
* Key to sta	atus codes:			
SSC CFP SE ST FE FT	CDFG Species of S CDFG Fully Protec State Endangered State Threatened Federal Endangere Federal Threatene	Special Concern sted Animal ed d		

FC

BCC

List 1A List 1B

List 2

Federal Candidate

USFWS: Birds of Conservation Concern

CNPS 1A List, Endangered, Threatened, or Rare in California

CNPS 1B List, Endangered, Threatened, or Rare in California

CNPS 2 List, Endangered, Threatened, or Rare in California, more common elsewhere

APPENDIX B

REPRESENTATIVE PROJECT AREA PHOTOGRAPHS











APPENDIX C

PROJECT PLOT PLAN AND AREA MAP



AEG Beltran Solar Ranch



APPENDIX D

CDFG INITIAL CONSULTATION COMMENTS AND RESPONSE

State of California – The Natron Resources Agency



DEPARTMENT OF FISH AND GAME Central Region 1234 East Shaw Avenue Fresno, California 93710 (559) 243-4005 http://www.dfg.ca.gov E^r 'JND G. BROWN JR., Governor ...ARLTON H. BONHAM, Director





February 22, 2012

Rachel Wyse Stanislaus County Planning and Community Development 1010 10th Street, Suite 3400 Modesto, California 95354

Subject: Early Consultation Use Permit Application 2011-11 Beltran Ranch Solar Facility SCH No. 2011112013

Dear Ms. Wyse:

The Department of Fish and Game (Department) has reviewed the Early Consultation request for comments for the Beltran Ranch Solar Facility (Project) submitted by the Stanislaus County Department of Planning and Community Development (County). Approval of the Project would allow the construction and operation of a 140-megawatt (MW) solar photovoltaic facility on a 606-acre portion of a 1,720-acre site. Additional site improvements will include all-weather fire access roads, a maintenance building, perimeter security fencing, an office trailer, sheds, and a substation. A 30-foot-high overhead power line will be added to the existing above ground power lines to connect the Project to the substation. A transmission interconnect to Pacific Gas and Electric Company's existing Salado-Newman transmission line will also be added. The Project site is located at Davis Road, west of Interstate 5, southwest of the Fink Road Landfill, west of the unincorporated community of Crows Landing, Stanislaus County, California.

Based on information provided in the June 22, 2011, Biological Resource Assessment prepared for the Project by WRA Environmental Consultants, the Project site is in newly planted orchard, grain crops, and grazed fallow cropland. Stock and irrigation ponds are mentioned as potential wetlands in the northern portion of the Project site, but they are not clearly depicted on any of the maps provided even though associated avoidance measures are proposed. Without the location details for these resources, the Department is unable to evaluate the feasibility of using a 50-foot buffer around the ponds as a means to protect water quality and existing hydrology during construction and operation of the Project. This information should be provided in the California Environmental Quality Act (CEQA) document prepared for this Project.

The Biological Resource Assessment states that there is no appropriate habitat that will be impacted through Project implementation that may affect special-status species. The Department does not concur with this determination. Based on the Project site description, photographs provided in the Biological Resources Assessment, aerial photographs, and topographic maps, the Project site may support special-status species. Project implementation has the potential to impact the State threatened Swainson's hawk (*Buteo swainsonii*), the State and federally threatened California tiger salamander (*Ambystoma californiense*) (CTS), the

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State threatened and federally endangered San Joaquin kit fox (*Vulpes microtis mutica*) (SJKF), the State fully-protected white-tailed kite (*Elanus leucurus*), and the State Species of Special Concern burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), ferruginous hawk (*Buteo regalis*), and northern harrier (*Circus cyaneus*). In addition to our recommendations provided below, the Department also recommends that the Project proponent consult with the United States Fish and Wildlife Service (USFWS), which administers the Federal Endangered Species Act, well in advance of Project implementation regarding potential impacts to SJKF and CTS.

The Department concurs with section 5.0 of the Biological Resource Assessment in recommending that additional biological surveys be completed. The Department would add that the pre-construction surveys should be conducted by qualified biologists at appropriate times of the year following acceptable protocols that were development for maximum detectability of the species. Depending on the results of the protocol-level surveys, the Project proponent may need to modify the Project and/or implement additional avoidance and minimization measures to avoid "take" of State-listed species or alternatively, acquire a State Incidental Take Permit (ITP).

Trustee Agency Authority

The Department is a Trustee Agency with the responsibility under CEQA for commenting on projects that could impact plant and wildlife resources. Pursuant to Fish and Game Code Section 1802, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. As a Trustee Agency for fish and wildlife resources, the Department is responsible for providing, as available, biological expertise to review and comment on environmental documents and impacts arising from project activities, as those terms are used under CEQA.

Responsible Agency Authority

California Endangered Species Act (CESA): The Department has regulatory authority over activities that could result in the "take" of any species listed or that are candidates for listing by the State as threatened or endangered, pursuant to Fish and Game Code Section 2081. If the Project could result in the "take" of any species listed as threatened or endangered under CESA, an ITP may be warranted. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (CEQA sections 21001{c} and 21083; Guidelines sections 15380, 15064, and 15065). Impacts must be avoided or mitigated to less than significant levels unless the CEQA Lead Agency makes and supports a Statement of Overriding Consideration (SOC). A CEQA Lead Agency's SOC does not eliminate the Project proponent's obligation to comply with CESA.

California Tiger Salamander: This State and federally threatened species has the potential to occur in the Project site vicinity. The Project site contains stock ponds and grazed grasslands with the potential to provide breeding and aestivation/refugia habitat for this species; therefore, the Department recommends that the Interim Guidance on Site Assessment and Field Surveys

for Determining Presence or a Negative Finding of the California Tiger Salamander (USFWS 2003) be followed. Project-related impacts to CTS should be fully assessed and appropriate avoidance measures developed that would reduce potential Project-related impacts to less than significant levels. The CEQA document should also discuss the Project's potential need for a State ITP before Project implementation in the event complete avoidance is infeasible.

Swainson's Hawk: The State threatened Swainson's hawk is known to nest in the general Project site vicinity; therefore, the Department recommends that qualified biologists conduct surveys according to the recommendations of the Swainson's Hawk Technical Advisory Committee (SWHAC 2000) prior to commencing Project-related activities within ½ mile of potential nest trees. The Department recommends known nest trees be protected with a no-disturbance buffer of at least ½ mile during the breeding season (February 1 through September 15). Even if no trees are being proposed for removal, functional foraging habitat is present and compensation for loss of foraging habitat is warranted. According to the Biological Resources Assessment, the entire Project site (606 acres) is planted in grain crops, new orchard, or grazed grasslands, all of which can provide foraging opportunities for Swainson's hawk. We suggest using the Department's Staff Report regarding Mitigation for Impacts to Swainson's Hawks (DFG, 1994) as a guide for determining appropriate mitigation. Mitigation lands should be permanently protected with a conservation easement and managed for the benefit of the species in perpetuity through endowment funding.

San Joaquin Kit Fox: The Department recommends that the USFWS's "Standardized recommendations for protection of the endangered San Joaquin kit fox prior to or during ground disturbance" (2011) be followed prior to any ground-disturbing activities occurring within the Project site. These surveys should be conducted a maximum of 30 days prior to initiating ground-disturbing activities. If this or evidence of this federally and State-listed species is found, consultation with the Department is warranted to discuss how to implement the Project and avoid "take" of SJKF. If "take" cannot be avoided, acquisition of a State ITP before Project implementation would be appropriate.

The Biological Resource Assessment (page 12) states, "The wide north-south corridor west of Interstate 5 in western Stanislaus County (within which the Project area is included) is apparently secure, based on its omission from the 'Habitat Protection and Population Interchange' section of the 'Recovery Actions' in the Recovery Plan." The Department disagrees with this conclusion. The Recovery Plan for the Upland Species of the San Joaquin Valley, California (USFWS 1998) lists the Northwest Valley edge to Santa Nella as a Priority 2 recovery task (page 223, Table 12, Recovery Task #5.3.2). Large blocks of natural land in the northwestern kit fox range of Alameda and Contra Costa counties are targeted for protection in the Recovery Plan and listed as Priority 2 recovery task (page 200, Table 7, Recovery Task #2.1.19). The Project area is located within the only known corridor between SJKF satellite populations in the northern range and the core populations listed in the Recovery Plan. In addition, the fallow agricultural fields may provide foraging habitat for SJKF in the area.

Perimeter fence has the potential to impact SJKF movement in the Project vicinity. The Department concurs with the recommendation that any perimeter fencing installed be wildlife friendly by raising the bottom of the fence six inches above the ground to allow SJKF to move

into and out of the Project site. This recommendation should be included as a mitigation measure in the Final CEQA document prepared for this Project.

Listed Plant Species: The Biological Resource Assessment states that there is no potential for State-, federally, and California Rare Plant Rank-listed plant species to occur within the Project site due to current and past agricultural activities. The Department disagrees. Several sensitive plant species are known to occur in the Project site vicinity and could potentially occur within the Project site especially in areas around the stock ponds and within the grazing lands. The Department recommends the Lead Agency require the developer to apply the Department's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities" (DFG 2009) to determine presence or infer absence of special-status plants in and near the Project site, to evaluate potential impacts and to design ways to mitigate Project impacts. Focused, repeated surveys of the Project site should be conducted by a qualified botanist during the appropriate floristic period(s) to adequately assess the potential Project-related impacts to special status plant species. If State-listed plants are detected during surveys, consultation with the Department is warranted to discuss the potential for "take" under CESA. "Take" of listed plants under CESA would need to be addressed under sections 2080.1 or 2081 of the Fish and Game Code. These recommendations should be included as mitigation measures in the Final CEQA document.

Fully Protected Species: The Department has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. "Take" of any fully protected species is prohibited and the Department cannot authorize their "take" for development. The white-tailed kite is a fully protected species that has the potential to occur within or in the vicinity of the Project site. This species should be addressed and avoidance measures included in the Final CEQA document prepared for this Project.

Stream Alteration Agreement (SAA): The Department has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource. Projects that have the potential to impact streams or lakes (including ponds) and associated fish or wildlife requires submittal on an SAA Notification to the Department, which may lead to issuance of an SAA, pursuant to Section 1600 et seq. of the Fish and Game Code. The Early Consultation documents include a description of Crow Creek flowing along the southern portion of Site 3 and an access road traversing Crow Creek near Site 2. The Biological Resource Assessment indicates that Crow Creek will be protected, but it does not specify how. If a no-disturbance buffer will be implemented during construction and operation of the Project, that buffer needs to be large enough to protect the stream's bed, bank, and channel, its water quality and hydrology, and the associated riparian vegetation. The Department recommends that all surface waters be delineated on a map and all Project-related impacts to surface waters be described and avoidance, minimization, and mitigation measures provided in the Final CEQA document prepared for this Project. If the Project has the potential to impact surface waters, through installation of the solar panels, construction of the substation and other structures, new road construction, improvements to existing roads, and other Project activities, the Project proponent should submit to the Department an SAA Notification before commencing Project activities that may impact surface waters or associated riparian vegetation.

The Department would then determine whether or not an SAA would be warranted after reviewing the Notification.

Other Sensitive Species: As specified in the CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 15380), if a species can be shown to meet the criteria for listing as endangered, rare, or threatened, it should be fully considered in the environmental analysis for the Project. The Project appears to have the potential to reduce the number or restrict the range of the State Species of Special Concern burrowing owl, loggerhead shrike, ferruginous hawk, and northern harrier. An assessment of Project-related effects on the above species should be included in the CEQA document prepared for this Project.

Burrowing Owl: This State Species of Special Concern is provided protection through the Migratory Bird Treaty Act and the California Fish and Game Code sections 3503, 3503.5, and 3513. The Department recommends that a qualified biologist conduct surveys for burrowing owls on the Project site following the protocol of the California Burrowing Owl Consortium (1993) prior to initiating Project-related activities. If owls or their burrows are found on the Project site, then the avoidance, minimization, and mitigation measures provided in the protocol should be followed and included as mitigation measures in the Final CEQA document.

Nesting Birds: All bird species, their nests, and their eggs are afforded protection through the California Fish and Game Code Section 3503. Project-related activities should occur outside the normal bird breeding season (February 1 through September 15). If this is not feasible, then prior to commencing Project-related activities occurring from February 1 through September 15, a qualified biologist should complete surveys for active bird nests. If active nests are found, they should be protected with appropriate buffers depending on species and listing status in coordination with the Department. The Department has generally recommended buffers of at least ½ mile for listed species, 500 feet for raptors, 250 feet for non-raptor migratory birds, and 100 feet for resident song birds to avoid "take". These recommendations should be included as mitigation measures in the Final CEQA prepared for this Project.

Water Pollution: Pursuant to Fish and Game Code Section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into the "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species.

The Regional Water Quality Control Board (RWQCB) also has jurisdiction regarding discharge of pollution to "Waters of the State" including wastewater disposal to land and water, storm water runoff from irrigated lands into surface waters, and storm water runoff from construction activities into surface waters. The Project proponent should consult with the Central Valley RWQCB (Sacramento office) to determine what permits or requirements are necessary prior to commencing Project-related activities on-site.

Wetlands: Wetlands are of extreme importance to a wide variety of plant and wildlife species. According to the Biological Resource Assessment, on-site stock ponds and irrigation ponds are potential wetlands that need protection. Crow Creek is also a wetland that adjoins Site 3 to the south and flows between Site 1 and Site 2 and Site 3 and Site 2. The Department considers projects that impact these resources as significant if they result in a net loss of acreage or

habitat value. The Department follows the Fish and Game Commission's no-net-loss policy regarding impacts to wetlands. Wetlands that have been inadvertently created by leaks, dams or other structures, or failures in man-made water systems are not exempt from this policy. An adequate buffer should be implemented to protect wetlands, riparian vegetation, and associated wildlife, including State- and federally listed species. The Department recommends delineating wetlands with a 250-foot no-disturbance buffer that will be protected in perpetuity. If avoidance is not feasible, then mitigation for the replacement of wetland acreage and value through the creation or restoration/enhancement of wetlands, ideally on-site or otherwise in-kind should be determined through consultation with the Department and included as a mitigation measure in the Final CEQA document.

Depending upon the results of the previously mentioned biological surveys, we may have additional comments and recommendations regarding avoidance, minimization, and mitigation of Project impacts to habitat and special status species. If you have any questions on these issues, please contact Lisa Gymer, Staff Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 243-4014, extension 238 or by electronic mail at lgymer@dfg.ca.gov.

Sincerely Jeffrey R. Single, Ph.D. **Regional Manager**

cc: Thomas Leeman United States Fish and Wildlife Service 2800 Cottage Way, W-2605 Sacramento, California 95825

> Kate Dadey San Joaquin Valley Office United States Army Corps of Engineers 1325 J Street Sacramento, California 95814-2922

Regional Water Quality Control Board Central Valley Region 11020 Sun Center Drive, #200 Rancho Cordova, California 95670

ec: Department of Fish and Game William Condon, Climate Science and Renewable Energy Branch Julie Vance, Central Region Craig Bailey, Central Region Lisa Gymer, Central Region Dave Hacker, Central Region

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То	:	Sean Tobin
From	:	Mike Randall, Senior Land Planner
Date	:	May 1, 2012
Subject	t:	Response to the CA Department of Fish and Game (Department) Early Consultation remarks of February 22, 2012

Summary: The Department has made numerous additional demands for study and mitigation of perceived impacts to wildlife and plant species. The WRA report did address most of these remarks; however, the Department is seeking more detail and greater certainty as to possible impacts. The WRA report concludes that there are no significant impacts to any species and that the recommended mitigation measures are there for any possible (but not likely) impact to species known to be in the proximity of the Project. The Department further recommends land conservation easements and perpetual endowment for its care.

Timeline:

- A. WRA prepared a Biological Resource Assessment (BRA) dated June 22, 2011.
- B. The BRA was sent by the County, with other documentation, for "Early Consultation" to interested agencies in November 2011.
- C. The Department of Fish and Game sent an email on November 4, 2011, to Rachel Wyse, Stanislaus County Assistant Planner, in response to the Early Consultation request. The Department indicated some concern over particular species and indicated that an additional memo would be forthcoming.
- D. In April 2012, MVE requested that WRA make minor modifications to the BRA of 2011 based on the contents of the Department email of 2011, having not received any other communication from Wyse. Modifications were made (no impact on species found) to the BRA report which was then dated April 20, 2012.
- E. MVE met with Wyse on April 26, 2012, to determine whether the contents of the AEG Beltran Ranch Solar Facility Use Permit Application (No. 2011-11) were complete for resubmittal. Ms. Wyse produced a copy of the CA Department of Fish and Game more recent letter dated February 22, 2012. This letter contains far greater detail and numerous demands for further study and mitigation.
- F. Ms. Wyse will not accept any new submittals of the project until the issues in the Department's letter are considered and responded to appropriately.

Fish and Game Early Consultation Remarks:

Using the Fish and Game memo of February 22, 2012 as an outline, with notations from the WRA report of April 20, 2012 as appropriate, the following are my observations:
- 1. Page 1, paragraph 2: Stock ponds and irrigation ponds are mentioned (in the 2011 WRA report) as potential wetlands, but the location and details as to mitigation are not shown.
 - a. Numerous mentions are made of stock ponds and other incidental wetland areas but no map is available and no specific effort to identify sensitive species.
 - b. WRA: no wetland map was provided because the project (impacts) footprint does not overlap with any wetlands or waters, and the project is not anticipated to directly or indirectly impact wetlands or waters. A large-scale habitat map prepared using an aerial photograph (not field-checked) is provided in the revised BRA to clarify the locations of potential waters relative to the Project Area location. No formal wetland delineation was conducted for the BRA.
- 2. Page 1, paragraph 3: The Department disagrees with the generalization that the site contains NO appropriate habitat, and further states that the site MAY support special-status species.
 - a. Section 4.1 (page 7-8) The WRA report does state that "no sensitive biological communities are found in the Project Area." Also, that waters and wetlands are present along Crow Creek and potential near stock ponds.
 - b. WRA: The assessment concluded that there was not a substantial area (in terms of acreage) or high-quality area of land within the Project Area that would require mitigation and replacement. The assessment also stated that the area may support special-status species, but that the project was not likely to affect special-status species. If, despite the habitat observations described in the WRA report, CDFG determines that suitable habitat for some listed species will be lost due to implementation of the project, mitigation may be required. To be clear, CEQA findings are not always consistent with mitigation requirements of the regulatory agencies. In addition, no waters, wetlands, or other sensitive habitats are present within the Project Area, and no wetlands, waters, or other sensitive habitats are anticipated to be impacted by the project.
- 3. Page 2, paragraph 1: The Department mentions several species, and all but one, the white tailed kite, are described within the WRA report.
 - a. Appendix A Birds. The White tailed kite is indicated as a species with moderate potential within the Project Area.
 - b. WRA: In addition, the species is described in Sections 4.2.2 and 5.1.2 of the BRA.
- 4. Page 2, paragraph 2: The Department advises that a State Incidental Take Permit may be necessary.
 - a. No mention in the WRA report as regards the ITP, although the conclusions of the report support that no 'Take' will occur.
 - b. WRA: The ITP would only be necessary if listed species were presumed present, or if protocol-level surveys demonstrated presence of a sensitive species that could be harmed, harassed, or killed due to project activities. With the implementation of acceptable avoidance and minimization measures described in the BRA, an ITP would not be necessary. Again, ultimate regulatory authority lies with the regulatory agency. This would depend on DFG – if they determined that the project will result in "take" of species, which would be most likely if CTS or BUOW were present on-site, an ITP would be required. Our biologists'

opinion is that neither species is present on-site and that neither species would be affected by the proposed project.

- Page 2, paragraph 4: The Department indicates that "impacts must be avoided or mitigated ... unless the lead agency ... supports a Statement of Overriding Consideration (SOC)."
 - a. NO mention made in the WRA report as regards if or when a SOC would be requested.
 - b. As there is no found significant impact and mitigation measures are adopted for any inadvertent impact, it would seem that a SOC is not at all necessary.
 - c. WRA: With the avoidance, minimization, and mitigation measures proposed in the BRA, no SOC would be required. Again, ultimate regulatory authority lies with the regulatory agency.
- 6. Page 2, paragraph 5: The Department states: "California Tiger Salamander ... has the potential to occur in the Project site vicinity."
 - a. The WRA report (2012) concurs; however, the CTS needs large, undisturbed areas for burrows that do not exist in the Project area, and the species is not identified closer than 7 miles to the site.
 - b. WRA: It is highly unlikely that CTS would occur within the project area based on the distances to known occurrences and the lack of small mammal burrows, though additional site photos and/or a more detailed assessment based on CDFG's "Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander" may be necessary to fully document site conditions to satisfy DFG on the potential for CTS to occur on-site.
- 7. Page 2, paragraph 5: The Department 'recommends' a report following the "Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative finding of the California Tiger Salamander."
 - a. The WRA report makes no mention of such a report, or what would lead to its necessity.
 - b. WRA: a summary of what would be included in this assessment is now included in the report, although a complete assessment of this nature was not included in the WRA BRA. This report would require additional survey time, additional maps, and possibly additional photos.
- 8. Page 3, paragraph 1: The Department advises that the report should discuss a take ITP (take) of the Salamander.
 - a. The WRA report does not make any assertion of any take of any species.
 - b. WRA: An ITP is not necessary where the species is not likely to occur. However, if CDFG does not agree with WRA that CTS is unlikely to occur, they may require an "Interim Guidance" assessment to demonstrate absence, or an ITP if they are not satisfied with the assessment, should it be conducted.
- 9. Page 3, paragraph 2: Swainson's hawk. The Department needs to know the location of any 'nest tree' within ½ mile of the Project site to be protected during the breeding season. Additionally, the Department wants "functional foraging habitat" identified and "compensation for loss of foraging habitat is warranted." This includes "conservation"

easement and managed for the benefit of the species in perpetuity through endowment funding."

- a. The WRA report makes no mention of the foraging habitat loss or of any requirement for conservation easements and perpetual funding.
- b. WRA: This information has now been included in the report and should be included in any CEQA document. If compensation is required, it should be limited to mitigating impacts to fallow fields no other habitat on-site qualifies as Swainson's habitat according to the CDFG 1994 staff report mentioned in the comments. Again, ultimate regulatory authority lies with the regulatory agency. In addition, the regulatory permitting process may require additional mitigation not required to satisfy CEQA.
- 10. Page 3, paragraph 4: San Joaquin Kit Fox. The Department disagrees with the WRA conclusion that the Project area is "apparently secure" from impacting the SFKF. This is due to the fact that the site lies between the northern and southern habitat locations of the SJKF and therefore is a migratory "corridor."
 - a. The WRA report does not mention the necessity of protecting the corridor, but does agree that the SJKF is "a transient as it moves north or south."
 - b. WRA: The report states that the proposed project is designed with structures placed at a high enough elevation and with enough spacing between structures that SKJF movement through the area is not anticipated to be impeded. In addition, it is recommended in the report that all fences be placed 6 inches above the ground to allow movement of SKJF through the area; this has been an effective strategy elsewhere and has been approved by the CDFG in the past.
- 11. Page 4, paragraph 2: Listed Plant Species. The Department disagrees with WRA's conclusion that there is no potential for impact. A "focused, repeated survey of the Project site should be conducted by a qualified botanist."
 - a. The WRA report on page 8, Section 4.2.1 makes no mention of any report by a botanist and further states that "no further action is required."
 - b. WRA: A qualified botanist visited the site as a part of the BRA to conduct an assessment of habitat that may be suitable to support special-status plant species. The botanist focused on the proposed project location and determined that the habitat was under active agricultural use or was severely degraded/disturbed and was not suitable to support any special-status plant species, including those tolerant of disturbance. We have clarified this information in the BRA.
- 12. Page 4, paragraph 3: The Department states that the "white tailed kite" should be addressed.
 - a. The WRA report Appendix A Birds. The White tailed kite is indicated as a species with moderate potential within the Project Area.
 - b. WRA: the white tailed kite is also addressed in Sections 4.2.2 and 5.1.2.
- 13. Page 4, paragraph 4: The Department states it may require a Stream Alteration Agreement (SAA) because of potential impacts to ponds and Crow Creek. There are insufficient details as to how these areas are to be protected.
 - a. The WRA report simply states that these areas will be avoided.

- b. Other MVE documents (Initial Study, Section IX, Hydrology and Water Quality) indicate that all water quality measures will be taken with appropriate permits (NPDES, SWPPP, etc.)
- c. WRA: No SAA would be necessary if no impacts to the stream channel, bed, banks, or surrounding riparian habitat are impacted. The proposed project will not impact the stream channel, bed, banks, or surrounding riparian habitat; therefore, no SAA from the CDFG will be required for the project.
- 14. Page 5, paragraph 2: The Department notes "the Project appears to have the potential to reduce the number or restrict the range of State Species of Special Concern." The comments further require "An assessment of Project-related effects on the above species should be included in the CEQA document."
 - a. The WRA recommends "pre-construction" breeding bird surveys.
 - b. WRA: With the measures described in the BRA, our assessment concluded that there would not be project-related effects to any other species.
- 15. Page 5, paragraph 3: Nesting Birds. The Department recommends significant buffers around nests of up to ¹/₂ mile.
 - a. The WRA report mentions 50' and 300'.
 - b. WRA: In our experience, buffers this large have not been recommended for similar projects; however, we have revised the BRA to include these buffers.
- 16. Page 5, paragraph 6: The Department again mentions water pollution and required permits.
 - a. Other MVE documents (Initial Study, Section IX, Hydrology and Water Quality) indicate that all water quality measures will be taken with appropriate permits (NPDES, SWPPP, etc.)
- 17. Page 5, paragraph 7: Wetlands. The Department states that "on-site stock ponds and irrigation ponds ... Crow Creek" are potential wetlands and may "result in a net loss of acreage or habitat value."
 - a. The WRA report makes no assertion of any net loss.
 - b. WRA: It is our understanding that the proposed project will result in no net loss of wetlands or waters as there will be no temporary or permanent impact to any of these features. We have included a habitat figure not included with the original BRA to clarify this information
- 18. Page 6, paragraph 1: The Department recommends "delineating wetlands with a 250' nodisturbance buffer that will be protected in perpetuity."
 - a. The WRA report on page 16, Section 5.2, merely recommends 50' during construction.
 - b. WRA: A formal wetland delineation was not conducted for the BRA. A formal wetland delineation will be completed should the proposed project be likely to impact any waters features, including swales, drainages, ponds, etc. During our surveys, no such features were observed within proposed project impact area. In our experience, variable buffer widths are more appropriate to use, should features exist, that are dependent on the quality of wetland or riparian habitat and its subsequent function and value to native plant and wildlife species. A standard buffer of 250 feet has not been instituted in the past and is not relevant

for CEQA. In addition, a review of the Stanislaus County General Plan did not reveal a standard buffer for such features in the County. However, ultimate regulatory authority lies with the regulatory agency. Should the proposed project location be moved, a formal delineation of waters would be conducted and, through the waters permitting process, the CDFG could request such a buffer for mitigation for potential impacts to waters.

CEQA INITIAL STUDY

Adapted from CEQA Guidelines Appendix G Environmental Checklist Form, Association of Environmental Professionals 2010

1.	Project title:	Use Permit Application No. 2011-11 Beltran Ranch Solar Facility SCH NO: 2011112013
2.	Lead agency name and address:	Stanislaus County 1010 10 th Street, Suite 3400 Modesto, CA 95354
3.	Contact person and phone number:	Rachel Wyse, Assistant Planner (209) 525-6330
4.	Project Location:	22601 Davis Road, Newman CA, West of I-5, Southwest of the Fink Road Landfill, in the Crows Landing area. (APN: 027-017-063, 027-017-077, 027-017-080, 027-017-082, 025-017-019, 026-012-003)
5.	Project sponsor's name and address:	Alternative Energy Group, Inc. 1020 10 th Street, Ste. 310 Modesto, CA 95354
6.	General Plan Designation:	Agriculture
7.	Zoning:	A-2-40 and A-2-160 (General Agriculture)

8. Description of project:

Alternative Energy Group, Inc. ("AEG"), proposes to construct and operate a 140 Megawatt solar photovoltaic electrical generating facility on approximately 606 acres in western Stanislaus County (the "Project").

The Project Site will occupy part of a larger, approximately 1,720 acre site, property owned by Beltran Farms. The site is accessed from the east side of I-5 via Fink Road (public) and Davis Road (private), and is located just west of Interstate 5 and the California Aqueduct.

Historically, the Beltran Farm property has produced nuts and field crops, but today extreme variations in water availability have made such operations very marginal on much of the land. Other current land uses surrounding the project site include:

North	Covanta – Stanislaus Resource Recovery Facility
	Fink Road County Landfill
East	Interstate Hwy 5
South	Crow Creek, which the Project has been designed to fully avoid
	Nature Conservancy lands
West	Dry open land

The Project is proposed to be constructed in three phases:

Phase I	113 ac	26 MW
Phase II	167 ac	40 MW
Phase III	326 ac	74 MW
Total	606 ac	140 MW

At completion, there will be approximately 300 arrays containing nearly 280,000 PV panels, 75 inverters, delivering about 140 MW to the PG&E grid at peak performance. The Project will also include:

- Building of a substation (services all phases; within a fenced 248' x 188' area) that will transform system output voltage to grid connection voltage; and
- Connection to the Salado-Newman Pacific Gas & Electric (PG&E) transmission line which passes through the Project site.
- A 30' high overhead power line will be added to existing above ground power lines to connect the solar facility to the substation.
- Accessory structures such as an office trailer, storage sheds, and other Project related facilities.

Project Design

PV Panels, Inverters/Transformers, Substation

The basic solar array, or "Block", is approximately 1.65 acres in size and is comprised of 20 rows, each containing 48 panels mounted within a structural frame, and supported by 13 steel columns per row (about 78,000 columns total). Each Block of panels has a central driving motor which continuously moves the rows of panels following the sun east to west to capture maximum solar radiation. The energy of four Blocks is delivered to an inverter/transformer, and from the inverter to the sub-station, and then to the PG&E grid. Every Block is easily accessible from a network of gravel roads for maintenance and Fire Department.

The solar panels are dark in color and non-reflective. The PV panels are low-profile and when horizontal they are approximately 4 feet from the ground. The highest end of the tilted panel stands a maximum height of 15 feet from ground level. The rows of panels will be spaced based on a panel tilt angle to prevent them from shading one another.

Project Access

The Project site will be accessed from I-5 via Fink Road and Davis Road. Davis Road is a paved road that is privately owned and maintained by adjacent landowners, and a non-exclusive 20' ingress/egress easement is granted to Stanislaus County. The property owner has agreed to provide AEG an irrevocable access easement in recordable form for the shared use and maintenance of the road. A condition of approval will be added to the project requiring the project developer to enter into a maintenance agreement and irrevocable access easement prior to issuance of a building permit.

Based on As-Built plans from Caltrans and discussions with the Department of Water Resources (DWR), both bridge crossings were constructed with H2O-44 loading and a rating of 80,000 lbs. Caltrans had previously indicated that the Davis Road bridge over I-5 is an approved access. The applicant will be responsible for updating agreements with DWR prior to project development.

Primary access for the Fire District and Emergency vehicles will be from Davis Road. The applicant is working with the Department of Environmental Resources to secure secondary emergency access from Fink Road through the County Landfill property. Conditions of Approval will be added to the project ensuring access agreements are in place prior to construction. Planning All points of access will meet the minimum roadway requirements of the Fire District.

All areas within the Project are fully accessible to the Fire Department and its equipment as required. Within each Phase, unpaved, compressed, and crowned dirt type, or gravel, aisle ways will be created between the blocks of arrays for vehicle service access. The interior aisle ways will be a minimum of 20 feet wide per Fire Department requirements.

Fencing

The site will be secured by a 6' chain link fence around the perimeter. Emergency access will be provided through gates secured by a Knox Box as directed by the Fire District. In accordance with the approved Mitigation Measures, the fence will be installed with a minimum 6" clearance at the base to allow the movement of the San Joaquin Kit Fox (SJKF).

Construction

Each phase may involve minor tilling of the existing bare ground, shallow (approx. 1-2 feet deep) trenching for cables between inverter boxes, concrete bases to support the inverter boxes. Where orchards are present, there will be clearing and grubbing of the trees to allow for PV panel installation. No removal of native trees is anticipated. Construction of all-weather access and interior roads, in compliance with Fire Department standards, will require some minor grading and installation of gravel road base.

There will be 300 Blocks containing 20 rows of solar panels, with each row supported by 13 steel columns. The columns will be driven 10 to 12 feet into the ground; about 78,000 columns will be installed. The use of supporting columns reduces the impact of the structures on the existing land (as compared to concrete foundation or piers supporting a structural frame).

Approximately 100 workers will be hired during the site improvement and installation work; typical work schedules are expected to be during daylight hours only. Because of the remoteness of the site all workers will be commuters of an indefinite distance. Several pile drivers, forklifts, excavators, water trucks and bulldozers will be required to install the system and create the all weather road network. Trucks delivering materials to the site will make an estimated average 6 trips per day. All trucks will be under the maximum weight capacity (75,000 lbs.) of the access overpass of Davis Road.

The entire vicinity of the project is sparsely inhabited and there are no known residents adjacent to the construction site. Therefore, there is no impact by the construction activities to any person living in the area.

During the construction period, water will be needed for uses such as dust control, initial panel washing, and concrete manufacturing. Water will be provided from the land owner's (Beltran Farm) shares in the Aqueduct, existing irrigation system wells, and on site storage. Soil disturbance and earth moving will be kept to a minimum and will follow typical procedures to minimize impacts and enhance reclamation.

The installation of each increment of 25 MW will take approximately six to eight months. The entire project of 140 MW will take about 3-4 years to complete.

Operations and Maintenance

Once the PV panel installation process is complete, connected to the electrical grid, and operational, the system will be monitored and maintenance personnel dispatched to the site as needed. After full build out of the project it is expected that a maximum of six operational employees will be at the site to address maintenance and operations when necessary. Maintenance personnel dispatched to the site will be permitted to use the existing restroom facilities in the Beltran Farm office located at the entry to the project site on Davis Road.

The solar panels will be washed down (no chemical cleaners are used) by a water truck approximately two (2) times per year. No water needs to be delivered to the site since it will be drawn from existing sources on-site. Cumulatively, about 16 acre-feet of water is necessary for the Project. Water is currently supplied to the Beltran Farms via an allocation from the California

Aqueduct located parallel and just east of I-5. This allocation runs with the land and quantities sufficient to serve the Project will be granted to AEG.

Biological Resource Assessment

The historic tilling of the soil and the intensive agricultural activities on the Beltran Farm substantially reduces the site's potential as habitat for special status plant and wildlife species. A Biological Resource Assessment (BRA) dated November 9, 2012 and prepared by WRA, Inc., reviews information gathered about the Project area and available literature in accordance with CEQA. The report concludes that there is only marginal habitat for protected species and recommends specific mitigation measures.

The findings of the BRA are summarized on page 16, Section 5.0 SUMMARY, as follows:

"No sensitive plant communities or special-status plant species were identified within the Project Area and no habitat capable of supporting special-status plant species was observed. Six special-status wildlife species have a moderate or high potential to occur within the Project Area. With the measures identified, we do not believe that any ITP or Statement of Overriding Consideration (SOC) will be required for the project. However, ultimate regulatory authority lies with the regulatory agency.

These mitigation measures are fully described in the BRA and Initial Study. The applicant has adopted all the recommendations within the construction and operational standards for the site.

CA Department of Fish and Wildlife/U.S. Fish and Wildlife Service

The California Department of Fish and Wildlife and the U.S. Fish and Wildlife service responded to an Early Consultation referral of this Project Initial Study. Generally, the concerns were similar and focused on the probability of the presence of sensitive species. In response to the early consultation remarks, included within the Biological Resource Assessment and included as an attachment to this Initial Study, is a memorandum addressing and commenting on each remark from the Agencies. Issues raised regarding stock ponds and irrigation ponds, special status species, and sensitive biological communities are addressed and mitigation measures and/or additional information is provided.

Further study will occur prior to construction to ascertain the presence of and the methods of protecting any sensitive biological community on or near the project site. Consultants for the applicant, MVE and WRA, identified existing sources of water on or near the project, which may support certain sensitive species, including Crow Creek and stock ponds. These areas will be avoided and are not a part of the project site. Surveys of these areas will be accomplished prior to any construction activity and any sensitive species which may be identified will be avoided by all practical means including: setbacks, fencing, employee training, and restrictions on construction activity near the sites.

Drainage and Erosion Control

Generally, there are no wetlands or significant waterways within the boundaries of the Beltran Ranch Solar Facility. The seasonal Crow Creek traverses the Beltran Farm (through parcels APN 027-017-063 and APN 027-017-077); however, this portion of the Beltran property is not a part of the Solar Facility but will remain in agricultural use as it is today. No runoff beyond the historic flow will leave the site and no drainage structures are necessary to collect, control or divert any storm water; additionally, no storage basins are proposed.

Pre-construction and Design Features: The Project includes the implementation of measures to maintain the volume and quality of storm-water runoff at historic levels. The natural drainage pattern of the project site is generally toward the north-east/east with relative flat slopes. The project proposes no changes to the existing drainage pattern. Because the panels are supported on columns and the access roads are unpaved, there is virtually no non-porous surface within the

project area. The rain runoff from each PV panel will fall directly into the low vegetated understory beneath the panels allowing for maximum percolation into the ground. Where necessary, minor drainage swales or other buffer techniques will be incorporated into the project and designed to prevent any potential runoff into Crow Creek or on to other adjacent parcels. No existing storm drainage systems in the area would require further protection from runoff.

During Construction: Since construction operations will result in an area of disturbance of more than one acre, the applicant is required to comply with the National Pollution Discharge Elimination System (NPDES) General Permit for Construction Activities. As part of the NPDES General Permit, the applicant will file a Notice of Intent (NOI) and prepare a Storm Water Pollution Prevention Plan (SWPPP), which outlines Best Management Practices (BMPs) that will be included in the Project to minimize and control construction runoff. BMPs will be implemented for sediment control such as utilizing water trucks during earth work activities, installation of fiber rolls around temporary stockpiles, and implementing directional drainage swales as necessary to keep run-off within the project boundaries and away from Crow Creek. Implementation of BMPs will minimize erosion, siltation and contaminated runoff from construction sites.

Post Construction. Once operational, the Project will result in minimal generation of storm water runoff within the Project site as the site is relatively flat. The surface of the solar array is (compared to commercial roof tops and parking lots) very small with a width of only 6'. Even under the most adverse conditions the amount of runoff from any part of the solar array is not worse than the storm falling directly on the undergrowth, there is no accumulation, there is no concentration (as in a gutter). Furthermore, to prevent soil erosion and provide dust control after construction, a low vegetated understory will be planted beneath the panels to reduce potential for sheet flow and allow storm water to percolate into the ground. The vegetated understory would be composed of indigenous flora species consistent with existing vegetation that would integrate annual grassland vegetation. The vegetation would be kept a height of approximately 18 inches by planting slow growing grass native to the region. Such re-vegetation will facilitate restoration of preconstruction overland flow and recharge patterns.

Industrial Waste and Toxic Substances

The Project will not generate industrial wastes or toxic substances during construction nor when operating. The PV technology utilized by the applicant contains no toxic metals, such as cadmium, that occur in other types of solar technology. There will be no hazardous substances stored on site.

Air Quality

The Project will not impact any Air Quality standard once operational. Minimal emissions are to be expected during construction but the mitigation measures (such as dust control) reduce the impacts to less than significant. There are no emissions of any kind associated with the solar structures.

The Project will be subject to the San Joaquin Valley Air Pollution Control District (District) regulatory authority. As proposed, the Project meets the applicability threshold within District Rule 9510:

• The Project is required to submit an Air Impact Assessment (AIA) application to the District no later than applying for final discretionary approval, and to pay any applicable off-site mitigation fees before issuance of the first grading/building permit. If approval of the subject project constitutes the last discretionary approval by the agency, the District recommends that demonstration of compliance with District Rule 9510, including payment of all applicable fees before issuance of the first grading/building permit, be made a condition of project approval.

• The Project may be subject to Regulation VIII (fugitive PM10) among others. Permits from the District and an Authority to Construct may be required.

The Project will generate significant clean energy thereby reducing energy demands from older polluting power plants or newer gas-fired GHG-emitting plants. By adding to the supply of clean energy the Project more than offsets the minimal air pollution impacts caused by the Project. Greater reliance on solar power is frequently identified as a mitigation measure to lessen the impact of air pollution and/or greenhouse gas emissions.

Decommissioning of Project

The Solar Panels have a life time of approximately 25 years, more or less, incrementally losing efficiency each year. Other factors that may affect the lifetime use of the project such as:

- 1. The contractual obligations changing, extending, or expiring;
- 2. Technology advances that result in changing the equipment, and therefore the increasing lifetime of the project;
- 3. Technology advances or regulatory changes that result in the elimination the project;
- 4. Disaster, such as fire.

In any event the equipment on the site would eventually have to be removed and the ground surface returned to a condition which can support agricultural uses. Over a period of several months the site would be decommissioned as follows:

- 1. Removal and recycling, in accordance with law, 280,000 solar panels and electrical equipment.
- 2. Removal of supporting posts and structures.
- 3. Removal of service roadways, gravel and related material.
- 4. Removal of fencing.
- 5. Removal of all concrete work.
- 6. Soil remediation and revegetation or crop planting.

The Mitigation Measures employed at the pre-construction and construction phases would remain the same. Primarily, biological surveys of the property to determine the presence of sensitive species and employee training to identify and avoid species which may be present.

Cumulative Impact of Multiple Solar Projects

The subject Project will contain 606 acres of solar panels and related roads and equipment. Similarly, two previously approved solar projects are within close proximity to the Project: Stanislaus County approved the Scatec Solar Farm in 2011 containing 383 acres of panels; and, in 2012, the County approved the Fink Road Solar Farm containing about 800 acres. Each development shares substantially the same characteristics as to individual environmental impacts which were found to be Mitigated to Less than Significant with conditions and a MMP.

Scatec Solar	383 acres	50 MW
Fink Road Solar	800 acres	80-100 MW
AEG Solar Ranch	606 acres	140 MW
Total	1800+/- acres	290+/- MW

Additionally, it should be noted that the County Landfill and Stanislaus Resource Recovery Facility (waste to energy plant), which together cover several hundred acres immediately adjacent to the I-5 corridor, are situated at the virtual center of the three solar projects. Taken together it can be seen that substantial impacts to the environment are possible except that:

1. Each project has adopted Mitigation Measures reducing impacts to Less than Significant.

- 2. The common characteristics of the projects such as: remoteness (from urban areas) of the projects; the predominately dry landscape; and the poor habitat, lend this area to uses such as solar, waste to energy and landfill activities, provided that all Mitigation Measures are fully employed.
- <u>Pre-construction</u>: Initial surveys of each solar project do not indicate evidence of the presence of any sensitive biological community; however, such species may exist. Therefore, each project will undertake pre-construction surveys. If the pre-construction survey identifies any species on or in the proximity of the sites, Mitigation Measures will be employed to protect them.
- 4. <u>During construction</u>: While the cumulative impacts of these Solar projects, particularly during construction, might impact biological resources (as described in each BRA) such sensitive areas once identified will be avoided and those steps necessary for their protection will be taken. Training of employees will effectively enable them to identify any possible impact during the period of construction and to take appropriate action to protect the area and report. Each project will be responsible for ensuring adherence to Air Quality and Water Quality regulations. In either case the potential impacts are minimal and mitigated to less than significant with no accumulation of impact to the air or water.
- 5. <u>Post-construction</u>: The purpose and ultimate goal of the three Solar projects is the production of clean energy with less impact on the environment than other methods of production such as coal, gas and nuclear. The long term cumulative effect of Solar energy is that it will not produce any GHG's, will not affect Air Quality, and will not impact sensitive biological communities that have been identified and protected. The projects will cover a large area and will have some intermittent visibility from the I-5 corridor by passing motorists but will not impact any protected scenic vista.

9.	Surrounding land uses and setting:	Agricultural uses, Interstate 5, California Aqueduct, Fink Road Landfill, Covanta.
10.	Other public agencies whose approval is required (e.g. permits, financing approval or participation agreement):	Stanislaus County: Environmental Resources Building Dept. Public Works West Stanislaus Fire Protection District Modesto Regional Fire Authority CA Dept. of Water Resources CA Dept. of Fish and Wildlife Caltrans Department of Water Resources US Army Corp of Engineers US Division of Fish and Wildlife Central Valley Regional Water Quality Control Board San Joaquin Valley Air Pollution Control District Cal Fire

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

Aesthetics	Agriculture & Forestry Resources	🛛 Air Quality
Biological Resources	Cultural Resources	Geology/Soils
Greenhouse Gas Emissions	Hazards & Hazardous Materials	Hydrology/Water Quality
Land Use/Planning	Mineral Resources	□ Noise
Population/Housing	Public Resources	Recreation
Transportation/Traffic	Utilities/Service Systems	Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

Date: March 8, 2013

Prepared By: Steve Herum- Herum/Crabtree Inc

EVALUATION OF ENVIRONMENTAL MPACTS:

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

however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; andb) the mitigation measure identified, if any, to reduce the impact to less than
 - significance

ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form, contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 18 environmental topic areas.

I. AESTHETICS – Would the project:					
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Have a substantial adverse effect on a scenic vista				X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			х		
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			Х		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X		

RESPONSE TO CHECKLIST QUESTIONS:

Response to a): No Impact. The project site is a rural area located in the Western portion of Stanislaus County. The project site is not identified as, or within, a scenic vista in the Stanislaus County General Plan, Land Use and Circulation element. Current views of the project are fairly consistent with the general character and feeling of the area. Construction activities associated with the solar energy facility would be temporary and short term and would affect views for motorists for a finite amount of time. However, only Solar area site 2 is positioned in close proximity to I-5. The highest elevation of the project site, at the extreme west end, is approximately 360' based on USGS Data; the average grade between I-5 and the project is approximately 320 feet. Because the average grade of I-5 is within a significant cut along the frontage it has an average elevation of approximately 240 feet. There may be a broad view of portions of the project which are adjacent to I-5; however, this view is intermittent and fleeting. Therefore the project has no impact.

Response to b): Less Than Significant Impact. There are no scenic resources, native trees (other than trees related to agricultural production), rock outcroppings or historic buildings within the project site. However, Interstate 5, located east of the project site, is designated a State Scenic Highway. The project lies approximately 0.5 miles west of I-5 at the northern end and is immediately adjacent to I-5 at the southern end. The Project extends westward for about 2 ½ miles. The Project will occupy over 600 acres, and, taken together with the adjacent Scatec Westside Solar Ranch (approved November 2010) of 320 acres, nearly 1000 acres of land will be covered with rows of PV panels. The highest elevation of the project site, at the extreme west end, is approximately 360' based on USGS Data; the average grade between I-5 and the project is approximately 320 feet. Because the average grade of I-5 is within a significant cut along the project frontage it has an average elevation of approximately 240 feet. There may be a broad view of portions of the project which are adjacent to I-5; however, this view is intermittent and fleeting, therefore its impact is less than significant.

Response to c): Less Than Significant Impact. The PV panels are low profile and when horizontal are approximately 4 feet from the ground. No dominant features are proposed (no buildings or towers) to be added to the overall area view shed. The proposed project will not substantially degrade the existing visual character or quality of the site and its surroundings and is therefore considered less than significant. On the north side of the project is the Stanislaus County Fink Road Landfill and the Stanislaus Resource Recovery Facility which are highly visible and far more prominent than the proposed Solar PV project.

Response to d): Less Than Significant Impact. Photovoltaic solar panels are designed to absorb sunlight in order to convert it to electricity. The more sunlight that is absorbed, the more energy that can be produced. The solar panels to be installed with this project are dark in color and non-reflective. Current site surface materials such as are soil and vegetation have a 30% and 25% reflectivity rating respectively. The solar panels therefore do not alter the site's current amount of reflected, indirect sunlight. Therefore the panels are not a source of substantial glare and are less than significant impact.

The proposed project includes minimal perimeter nighttime security lighting. The security lighting will be motion activated and directed downward and shielded to avoid light spillage. Light fixtures 25 feet in height will be spaced at intervals of approximately one quarter mile. The proposed project will not impact adjacent land uses, as the existing land uses consist of agriculture and open land, and therefore are not sensitive to nighttime lighting. Implementation of the proposed project will not increase ambient nighttime or daytime lighting conditions. Thus, the new source of light is a less than significant impact.

Mitigations: None.

Sources: Stanislaus County General Plan and Support Documentation; USGS; Stanislaus County Zoning Ordinance; Project Application and Site Plans; US Department of Energy; Solar Panel Glare and Reflectivity Information in the Public Domain.

II. AGRICULTURE AND FORESTRY RESOURCES – Would the project:					
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			x		
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X		
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				x	
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X	
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?` RESPONSE TO CHECKLIST QUESTIONS:			x		

Response to a, b & e): Less Than Significant Impact. The project site is designated Prime Farmland by the California State Department of Conservation Farmland Mapping and Monitoring Program. Historically, the Beltran Farm has been used for nut farming operations (primarily almond and walnut). Beltran Farm is currently within the Oak Flat Water District (District). The District has a contract with the California State Department of Water Resources (DWR) to purchase water from the California Aqueduct. The District's water supplies are subject to the imposition of annual shortages. For the year 2010 allocation the District is only receiving 50% of

their full contractual supplies from DWR. Water restrictions have been imposed over the last several years thus there has been insufficient water supply to farm approximately 50% of Beltran Farm. The current agricultural use within Phase I of the Project consists of walnut and almond trees. The majority of the land within Phases II and III of Project area consists of bare ground subject to frequent discing and has not been in production for several years.

The following items are considered as it relates to the project impacts to Prime Farmlands:

- The proposed project will not be substantially detrimental to or conflict with use of other property in the vicinity.
- The character of the use, a solar electric utility, is such that the land may be reasonably returned to an agricultural use in the future.
- The imposition of annual water shortages from the DWR has diminished the agricultural uses and production on the property by 50%.
- The Beltran Ranch Solar Facility generates electricity directly from the sun requiring no fuel, emitting no noise and producing zero carbon emissions. There is no impact on agricultural uses which will continue on the remainder site and in the vicinity of the Project.
- Most of the project is not under a Williamson Act Contract, noting that the Notice of Nonrenewal Notice of parcel APN 027-017-082 is in effect and the contract will expire December 2013 (before the scheduled start of construction of the Project). A Condition of Approval will be added to the project prohibiting construction and ground disturbance, associated with this project, before expiration of the subject Williamson Act Contract.
- The Beltran Ranch Solar Facility, is a facility for public utilities, is allowed subject to Use Permit review under the General Agriculture Zoning District (A-2).

In addition to the above, reference is made to a referral response letter received from the Stanislaus County Environmental Review Committee dated December 12, 2011, which states:

"The ERC further recognizes that while this project may take agricultural land out of production in Stanislaus County, it is located in a preferred area for projects such as this. Furthermore, the ERC supports the applicant's intent to utilize the least agriculturally productive portion of the Beltran Farm for the subject project and the statement that the project is not expected to conflict with surrounding uses, including agriculture, and the continuance of surrounding uses will not be adversely affected. Solar farms in general have environmental value and produce an important renewable resource."

Based on the above analysis, the impacts to Prime Farmlands are considered less than significant.

Response to c & d): No Impact: The project site is not considered forestland or timberland, therefore there is no impact.

In December of 2007, Stanislaus County adopted an updated Agricultural Element which incorporated guidelines for the implementation of agricultural buffers applicable to new and expanding non-agricultural uses within or adjacent to the A-2 zoning district. The purpose of these guidelines is to protect the long-term health of agriculture by minimizing conflicts resulting from the interaction of agricultural and non-agricultural uses.

On August 2, 2010 an alternative to the Buffer and Setback Guidelines was presented to the Agricultural Advisory Board (AAB). The alternative includes 150-foot setbacks on the northern

and eastern property lines adjacent to the active orchards and a 20-foot buffer along the remaining portions of the project site. The AAB supported the proposed alternative buffer.							
Mitigations:	None.						
Sources:	Stanislaus County General Plan and Support Documentation - Stanislaus County Agricultural Element; Stanislaus County Zoning Ordinance ; California State Department of Conservation Farmland Monitoring Program- Stanislaus County Farmland 2006; Department of Water Resources California State Water Project Notice to State Water Project Contractors dated June 22, 2010; Referral Response Letter from Environmental Review Committee dated June 25, 2010.						

III. AIR QUALITY – Would the project:				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?		X		
 b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? 		x		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?		x		
d) Expose sensitive receptors to substantial pollutant concentrations?		x		
e) Create objectionable odors affecting a substantial number of people?			X	

RESPONSE TO CHECKLIST QUESTIONS:

The project site is within the San Joaquin Valley Air Basin, which has been classified as "severe non-attainment" for ozone and respirable particulate matter (PM-10) as defined by the Federal Clean Air Act. The San Joaquin Valley Air Pollution Control District (SJVAPDC) has been established by the State in an effort to control and minimize air pollution. As such, the District maintains permit authority over stationary sources of pollutants.

The primary source of air pollutants generated by this project would be classified as being generated from "mobile" sources. Mobile sources would generally include dust from roads, farming and automobile exhausts. Mobile sources are generally regulated by the Air Resources Board of the California EPA which sets emissions for vehicles and acts on issues regarding cleaner burning fuels and alternative fuel technologies. As such, the District has addressed most criteria air pollutants through basin wide programs and policies to prevent cumulative deterioration of air quality within the basin.

The project has minimal or no cumulative impacts to air quality as it is providing an alternative, clean source of energy that would off-set the need for older polluting power plants or new gas fired GHG emitting plants. Solar power generates electricity directly from the sun using crystal silicon photovoltaic technology requiring no fuel, emitting no noise and producing zero carbon emissions.

The primary source of air pollutants generated by this project will occur during the construction phase. The air pollutants will be a result of equipment and materials being delivered to the site and the grading operations throughout the site. Trucks make an average of 6 trips per day to deliver materials. This project will be required to implement fugitive dust control measures to

reduce emissions of particulate matter during construction and operations. These measures may include watering, application of dust suppressants, handling of bulk materials and reduction of track out / carryout onto paved public roads. Likewise for other pollutants, reduction of emissions can be accomplished by reducing the number of pieces of equipment operating on site at any one time, limiting truck trips, and restricting idling times on construction equipment and trucks on site. Compliance with the SJVAPCD Rules and Regulations during construction will reduce construction-related air quality impacts from fugitive dust emissions and construction equipment emission to less than significant. These items will be reflected as project conditions.

Once the project has been built, the operations will have a limited amount of activity, traffic or otherwise. Employees will be dispatched to the site on an as needed, for example, there could be up to six employees maintaining the facility washing panels or inspecting/repairing facilities; or, on some occasions none on site; or, more depending on need. Based on the Institute of Transportation Engineers (ITE) Trip Generation Manual for a general light industrial uses, approximately 18 trips per day would be generated by the project at full build out (3.02/trips per employee x 6 employees).

The Project will generate significant clean energy thereby reducing energy demands from older polluting power plants or newer gas-fired GHG-emitting plants. By adding to the supply of clean energy the Project more than offsets the minimal air pollution impacts caused by the Project. Greater reliance on solar power is frequently identified as a mitigation measure to lessen the impact of air pollution and/or greenhouse gas emissions.

An Early Consultation referral response from the SJVAPCD was received on November 23, 2011. The response indicated the project will be subject to district rule 9510 (indirect source review) and other rules which will be reflected in the project's conditions of approval. The applicant will be required to submit an Air Impact Assessment (AIA) application and to pay any applicable off-site mitigation fees before issuance of the first building permit.

Response to a): Less Than Significant with Mitigation Incorporated. The proposed project would result in construction of a solar energy facility to serve existing and proposed new users. The proposed project would have minimal construction consisting of a. ground mounted switch gear equipment, a network of access roads, installation of the solar tracking arrays mounted on steel I-beam posts, security fencing, and utility (electrical line) trenching. The proposed project would use dust-inhibiting recycled surface material for all the access roads. The operational activities associated with the proposed project would mostly be handled remotely except the cleaning of the solar photovoltaic panels. The solar photovoltaic panels would be cleaned biannually using a water truck fitted with a boom. It is proposed that the truck and water for the cleaning would come from on-site sources. The proposed project has been evaluated for consistency with SIVAPCD significance thresholds. With implementation of Mitigation Measures AQ-I, AQ-2, and AQ-3, this impact would be reduced to a less than significant level. No further mitigation is required.

Response to b): Less Than Significant with Mitigation Incorporated. See the discussion in item a), above. The proposed project would result in temporary and short-term construction emissions and inconsequential operational emissions. The GAMAQI, which specifies methodologies for air quality analysis as part of the program to ultimately achieve attainment with the AQAP and air quality standards, includes thresholds of significance for criteria pollutants.

CO concentration is a direct function of motor vehicle activity, particularly during peak commute hours, and meteorological conditions. Under specific meteorological conditions, CO concentrations may reach unhealthy levels with respect to local sensitive land-uses such as residential areas, schools, and hospitals. As a result, SIVAPCD recommends analysis of CO emissions at a local rather than a regional level. SIVAPCD has established preliminary screening criteria to determine with fair certainty that if not violated project-generated long-term operational

local mobile-source emissions of CO would not result in or substantially contribute to emissions concentrations that exceed the I-hour ambient air quality standard of 20 parts per million (ppm) or the 8-hour standard of 9 ppm, respectively. There are not any anticipated changes to the local traffic from the implementation of the proposed project. As a result, this impact would be less than significant.

Fugitive dust emissions, including PM 10, are associated primarily with ground disturbance during site preparation and vary as a function of such parameters as soil silt content, soil moisture, wind speed, acreage of disturbance area, and vehicle miles traveled (VMT) on-and off-site. Exhaust emissions from employee commute trips and diesel mobile construction equipment also contribute to temporary and short-term increases in PMIQ emissions but to a much lesser extent.

Construction of the proposed project would primarily result in the temporary and short-term generation of fugitive PMIO dust emissions from site preparation (e.g., excavation, grading, and clearing). SIVAPCD's approach to CEQA analyses of construction-generated fugitive PMIO dust emissions is to require implementation of effective and comprehensive control measures rather than a detailed quantification of construction emissions. SIVAPCD's required control measures are incorporated in the proposed project as Mitigation Measures AQ-I, AQ-2 and AQ 3. Temporary and short-term construction-generated PMIO emissions would not result in or substantially contribute to emissions concentrations that exceed the California Ambient Air Quality Standards (CAAQS), especially considering the current nonattainment status of the air basin.

Upon expiration of the solar energy equipment life, the project would be decommissioned. The decommissioning process would include removal of all solar tracking arrays and facilities. It can be assumed that less heavy equipment would be needed to decommission the solar tracking arrays and facilities than was used to perform the construction. It can also be assumed that the construction equipment for the decommissioning would be required to meet all current and any future emissions regulations. The current diesel emissions target set by the ARB is that all off road diesel equipment will meet imposed limits on idling, buying older off-road diesel vehicles, and selling vehicles beginning in 2008; requires all vehicles to be reported to ARB and labeled in 2009; and then in 2010 begins gradual requirements for fleets to clean up their fleet by getting rid of older engines, using newer engines, and installing exhaust retrofits. The overall purpose of the regulation is to reduce emissions of oxides of nitrogen (NOx) and particulate matter (PM) from off-road diesel vehicles. It is also anticipated that future heavy equipment would meet these and even more stringent emissions regulations, and therefore the decommissioning of the proposed project's facilities would have lower associated emissions than the construction fleet outlined in the above analysis.

Implementation of Mitigation Measures AQ-I, AQ-2, and AQ-3 would reduce temporary and shortterm air quality construction impacts to less-than-significant levels. No further mitigation is required.

Response to c): Less-than-Significant with Mitigation. Implementation of the proposed project would result in temporary and short-term construction emissions that could contribute to an existing or projected air quality violation, especially considering the Slab's nonattainment status for ozone and PM2.5. Thus, construction-generated PM10 emissions could result in a cumulatively considerable net increase of a criteria pollutant for which the project region is nonattainment under applicable federal or state ambient air quality standards. Implementation of Mitigation Measures AQ-I, AQ-2, and AQ-3 would reduce temporary and short-term construction-generated emissions to a less-than-significant level.

The proposed project would emit substantially lower greenhouse gas emissions (GHG) per

megawatt-hour than Fossil-fueled generation resources in California. The proposed project, as a renewable energy generation facility, is determined by rule to comply with the Greenhouse Gas Emission Performance Standard requirements of SB 1368 (Chapter 11, Greenhouse Gases Emission Performance Standard, Article 1, Section 2903 [b][I]). (Refer to "Greenhouse Gas Emissions" for further discussion associated with the proposed project's generation of GHG emissions.). No further mitigation is required.

Response to d): Less-than Significant with Mitigation. Temporary and short-term construction emissions could violate or contribute substantially to an existing or projected air quality violation. Thus, construction-generated PMIO emissions could expose sensitive receptors to substantial pollutant concentrations. Implementation of Mitigation Measures AQ-I, AQ-2, and AQ-3 would reduce temporary and short-term construction-generated emissions to a less-than-significant level. Therefore, this impact would be less than significant.

Toxic Air Contaminant Emissions

There would be no long-term mobile or stationary sources of construction emissions associated with the proposed project. The only potential for TAC emissions would be temporary and short-term in nature, and are discussed below.

Temporary and Short-Term Construction Sources

Less-than Significant with Mitigation. Construction of the proposed project would result in temporary and short-term diesel exhaust emissions from on-site heavy duty equipment. Particulate exhaust emissions from diesel-fueled engines (diesel PM) were identified as attic by the ARB in 1998.Construction of the proposed project would result in the generation of diesel PM emissions from the use of off-road diesel equipment required for site grading and excavation, and other construction activities. According to the ARB, the potential cancer risk from the inhalation of diesel PM, as discussed below, outweighs the potential non-cancer health impacts (ARB 2003).

The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, because the use of mobilized equipment would be temporary in combination with the dispersive properties of diesel PM (Zhu and Hinds 2002) and that project construction activities would not be atypical in comparison to similar development-type projects (i.e., no excessive material transport or associated truck travel), temporary and short-term construction activities would not expose sensitive receptors to substantial TAC concentrations. This is especially true because there are no sensitive receptors near the project site. Therefore, there is no potential for construction-related TAC emissions to affect sensitive receptors and his impact would be lessthan-significant. No mitigation is required.

Response to e): Less-than Significant. The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause any

physical harm, they can be unpleasant and a nuisance, leading to citizen complaints. Project implementation would not result in any major sources of odor and the project type is not one of the common types of facilities that are known to produce odors (e.g., landfill, food processing facility, wastewater treatment plant). In addition, the diesel exhaust from the use of on-site construction equipment would be intermittent and temporary, and would dissipate rapidly from the source with an increase in distance. Finally, as previously noted, there are few off-site sensitive receptors in the project site and vicinity. The existing on-site Office would not be occupied during construction and operation of the proposed project. No sensitive receptors would be subjected to offensive odors since the project would not generate odors. Thus, project implementation would not create objectionable odors affecting a substantial number of people. As a result, this impact is considered less than significant. No mitigation is required.

Air Quality Mitigations:

Mitigation Measure AQ-1:

Implement all feasible fugitive dust control requirements of the San Joaquin Valley Air Pollution Control District (SJVAPCD), Regulation VIII. The following measures shall be implemented to reduce PM 10 exhaust emissions and further reduce the already less-than-significant impacts associated with ROG and NO x emissions:

- Provide commercial electric power to the project site in adequate capacity to avoid or minimize the use of portable electric generators and any other equipment.
- Where feasible, substitute electric-powered equipment for diesel engine driven equipment, or implement the use of diesel particulate traps.
- When not in use, avoid idling of on-site equipment.
- Where feasible, avoid operation of multiple pieces of heavy duty equipment.
- Require contractors to use the best available emission reduction and economically feasible technology on an established percentage of the equipment fleet. It is anticipated that in the near future PM 10 control equipment will be available. The SJVAPCD shall be consulted with on this process. This requirement shall be included in construction bid specifications.

Mitigation Measure AQ-2:

Comply with SJVAPCD's Regulation VIII-Fugitive Dust Prohibitions and implement the following applicable control measures, as required by law:

- An owner/operator shall submit a Dust Control Plan to the Air Pollution Control Officer (APCO) prior to the start of any construction activity on any site that will include 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials. Construction activities shall not commence until the APCO has approved or conditionally approved the Dust Control Plan. An owner/operator shall provide written notification to the APCO within 10 days prior to the commencement of earthmoving activities via fax or mail. The requirement to submit a dust control plan shall apply to all construction related activities conducted at the project site.
- The owner/operator shall submit a construction notification form to the APCO at least 48 hours prior to the start of any construction activity on the project site that includes greater than one acre of disturbed surface area.

Mitigation Measure AQ-2:

Implement SJVAPCD-recommended enhanced and additional control measures to further reduce fugitive PMIO dust emissions from public roadways.

Install sandbags or other erosion control measures to prevent silt runoff to public roadways from adjacent project areas with a slope greater than 1% in accordance the project's Storm water Pollution Prevention Plan (SWPPP), which conforms with the required elements of the General

Permit No. CAS000002 issued by the State of California, State Water Resources Control Board.

The area encompassing the San Joaquin Valley Air Basin (SJVAB) boundary is also • classified as nonattainmentforPM2.S•TheSJVAPCD approach for achieving attainment of the PM2.Sstandard is has two components. The first component is that the existing PMIO reduction strategies will reduce the fugitive component of PM2.5 emissions within the SJVAPCD. The second component is to address the indirect formation of PM2.5' as with ozone Knox is a precursor of PM2. Sso the district reduction strategies for the reduction of NO x throughout the basin will also reduce the formation of PM2.S. In addition since the emissions estimate for PMIO was compared to PM2.5 thresholds; if PM10 emissions estimates are below the PM2.S thresholds then PM2.S must also be below the threshold. The proposed project shall be required to comply with the SJVAPCD's Regulation VIII (SJVAPCD 2009) control measures for construction emissions of PMI0. One of these control measures includes the use of water with all "land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities" for fugitive dust suppression. Compliance with SJVAPCD Regulation VIII will further reduce emissions.

Sources:	Referral response dated June 24th, 2010, from the San Joaquin Air Pollution
	Control District: Staniclaus County Conoral Plan and Support Documentation
	Control District, Statislaus County General Flan and Support Documentation,
	ITE Trip Generation Manual, 8 th Edition, Land Use: 110 General Light Industrial.

IV. BIOLOGICAL RESOURCES – Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		x		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			x	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			x	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		x		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				x
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				x

RESPONSE TO CHECKLIST QUESTIONS:

Response to a) and d): Less Than Significant with Mitigation Incorporated. A Biological Resource Assessment (BRA) was prepared based on a Biological Survey performed on the project site (see appendices). On November 9 2012, WRA, environmental consultants, performed a site visit and conducted a biological assessment. The following is a summary of the potential impacts:

No sensitive plant communities or special plant species were identified within the project area, and the project area is not located within any designated USFWS-listed plant critical habitat units.

Special Status Wildlife Species – Of the 50 special status wildlife species potentially occurring or know to occur in the vicinity of the project area, 6 were determined to have the potential to occur in the area. Most of the species found in the review of background literature occur in habitats not found in the project area. Habitat suitability for grassland-associated species in the project area is reduced due to regular tilling of the ground and intensive agricultural use.

San Joaquin Kit Fox (SJKF): Based on CDFG occurrence data (2010), SJKF may occasionally transit through the project area as individuals disperse north and south of the site. However, a lack of prey, burrow habitat, and cover indicates that suitable foraging and denning habitat is absent from the project area. The spacing and elevation of solar panels associated with the proposed project will allow unimpeded movement of SJKF and other species through the project area. In addition, any perimeter fencing around the project should be designed to be wildlife friendly by raising the bottom of the fence six inches above the ground to allow SJKF to move into and out of the project site. Therefore no impacts to the kit fox dispersal are anticipated. The USFWS has developed "Standard Recommendations for the Protection of SJKF Prior to and during Ground Disturbance" (USFWS 1999). The use of measures recommended by the US Fish and Wildlife Service (1999) will avoid any "take" of this species. Specific mitigation measures will be implemented to reduce this impact to less than significant.

Northern Harrier and Ferruginous Hawk: This assessment determined that two species (Northern Harrier and Ferruginous Hawk) may use the project area for foraging only; no significant project-related impacts to these species are anticipated. Three other bird species (White-Tailed Kite, Swainson's Hawk and Loggerhead Shrike) potentially nest and/or forage within and adjacent to the project area. Mitigation measures will reduce this impact to less than significant.

Swainson's Hawk: Although Swainson's Hawks have been documented to nest approximately 4 miles south of the project area; they are not expected to be regular visitors to the project area. No nesting habitat is present in the project area as the orchard trees are too small and the few trees located in the riparian area adjacent to the project site are small and unsuitable for Swainson's Hawk nesting. Disced conditions, crop rotations, and regular irrigation result in low prey abundance or availability in the Project area. Therefore, the site provides poor Swainson's Hawk foraging habitat compared to nearby grazed grasslands.

It is recommended, if construction is initiated between March 1 and September 15, that nesting activity surveys are undertaken no later than 20 days prior to construction within ½ mile of the project area to determine if any Swainson's Hawks or their nests are observed. If active nests are observed, a determination should be made by a qualified biologist experienced in Swainson's Hawk biology as to the measures to be undertaken to minimize adverse impacts on this species including provision of construction buffers and any further monitoring of the nesting site that may be required during construction activities. No restrictions shall apply if construction starts between September 16 to February 28th or after construction activities are initiated. Mitigation measures will reduce this impact to less than significant.

Migratory Nesting Birds: To avoid impacts to birds that potentially nest in or immediately adjacent to the Project Area, it is recommended to remove orchard trees during the non-breeding season (mid-September through January). Development activities near the riparian area of Crow Creek should also occur during the non-breeding season. If development activities or tree removal must occur during the breeding season (February through mid-September), surveys for active nests should be conducted by a qualified biologist no more than 20 days prior to the start of construction. A minimum no-disturbance buffer of 250 feet should be delineated around active nests of non-listed species and ½ mile from listed species until the breeding season is ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. Mitigation measures will be incorporated into the project resulting in a less than significant impact.

Burrowing Owl (BUOW): Burrowing owl (Athene cunicularia) is a small, long-legged owl found

throughout open grasslands, rangelands, agricultural areas, deserts, or any other dry, open area with low vegetation. They nest and roost in burrows, such as those excavated by ground squirrels. If California ground squirrels occupy a project site, suitable nesting habitat may exist. However, during the site inspection, no suitable burrow habitat was observed due to the ongoing agricultural activities. Therefore, use by burrowing owl is not expected to nest within the Project Area. Although no records of burrowing owl are reported in the vicinity, suitable habitat may be present off-site in non-agricultural areas.

Therefore, it is recommended that a qualified biologist conduct a survey no more than 30 days before the onset of any ground-disturbing activities. If burrowing owls occupy the site during the non-breeding season, a passive relocation effort may be instituted. During the breeding season (February 1-August 15), any burrows occupied by burrowing owls can be assumed to possess young and a minimum 250 foot no-construction buffer zone be established around the burrow unless a qualified biologist with experience with burrowing owls verifies through non-invasive methods that either (1) the birds have not begun egg laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. This is a less than significant impact.

<u>Federally Listed Species Documented Within the Vicinity and Unlikely to Occur.</u> (Referring to the Biological Resource Assessment 5-16-2012)

California Red-legged Frog (CRLF). Federal Threatened Species, CDFG Species of Special Concern. The absence of nearby breeding habitat and distance from known occurrence make it unlikely that CRLF will occur within the Project Area.

California Tiger Salamande (CTS)r. Federal Threatened Species, State Threatened Species. Based on the lack of documented occurrences in the area, and the poor quality of upland habitat within the Project Area, it is unlikely California Tiger Salamander will occur within the Project Area.

An assessment of CTS and CRLF habitat will be completed as part of a pre-construction survey to determine whether any avoidance is necessary.

Biological Resources - Mitigation Measures:

San Joaquin Kit Fox Mitigations:

MITIGATION MEASURE BIO- 1: Preconstruction /pre-activity surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the SJKF. The survey area shall include all areas subject to disturbance, and a 250 buffer area extending beyond areas subject to disturbance. In the event that an active San Joaquin kit fox den is detected during preconstruction surveys, DFG and USFWS shall be contacted immediately and no project activity shall begin until appropriate avoidance measure have been implemented, and DFG and USFWS have provided written authorization that project construction may proceed.

MITIGATION MEASURE BIO- 2: Project- related vehicles shall observe posted 20-mph speed limit in all project areas; this is particularly important at night when SJKF are most active. To the extent possible, night-time construction should be minimized. Off-road traffic outside of designated project areas should be prohibited.

MITIGATION MEASURE BIO- 3: To prevent inadvertent entrapment of SJKF or other animals during the construction phase, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such

holes or trenches are filled, they should be thoroughly inspected for trapped animals.

MITIGATION MEASURE BIO- 4: SJKF are attracted to den-like structures such as pipes and may enter stored pipe. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for SJKF before the pipe is subsequently buried, capped, or otherwise used or moved in any way. IF a SJKF is discovered inside a pipe, all work in the area shall stop until the animal leaves the area on its own.

MITIGATION MEASURE BIO- 5: All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from a construction site.

MITIGATION MEASURE BIO- 6: No firearms shall be allowed on the project site except for police and security personnel.

MITIGATION MEASURE BIO- 7: To prevent harassment, mortality of SJKF or destruction of dens by dogs or cares, no pets shall be permitted on the project site during construction.

MITIGATION MEASURE BIO- 8: An employee education program shall be conducted containing a brief presentation by persons knowledgeable in SJKF biology and legislative protection to explain endangered species concerns to contractors and their employees, The program shall include the following: a description of the SJKF and its habitat needs; a report of the occurrence of SJKF in the project areal an explanation of the status of the species and its protection under state and federal Endangered Species Acts; and a list of measures being taken to avoid impacts to the species during construction and implementation. A fact sheet conveying this information shall be prepared for distribution to attendees of the training and anyone else who may enter the project site.

MITIGATION MEASURE BIO- 9: Design perimeter fencing to be wildlife friendly by raising the bottom of the fence six inches above the ground to allow SJKF to move into and out of the project site.

Breeding Bird Mitigations (including raptors):

MITIGATION MEASURE BIO- 10: If ground disturbance or tree removal occurs during the bird breeding season (Feb 15- September 1), breeding bird surveys for both tree and ground dwelling species shall be conducted within 20 days of proposed ground disturbance to avoid disturbance to active nests, eggs, and/or young of these and other bird species. A minimum no-disturbance buffer of 250 feet shall be delineated around active nests of non-listed species and ½ mile from listed species until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

MITIGATION MEASURE BIO- 11 For Swainson's hawk, the pre-construction survey shall be extended to within ½ mile of the project area. In the event that Swainson's Hawk is detected, a determination shall be made by a qualified biologist experienced in Swainson's Hawk biology as to the measures to be undertaken to minimize adverse impacts to this species including provision of construction buffers and any further monitoring of the nesting site that maybe required during construction activities.

MITIGATED MEASURED BIO- 12 For burrowing owl, pre-construction surveys shall be undertaken no more than 30 days before the onset of any ground-disturbing activities at any time of the year. During the breeding season (February 1 – August 15), any burrows occupied by burrowing owls can be assumed to possess young and a minimum 250-foot no construction buffer zone, unless a biologist verifies through non-invasive methods that either:

- (1) the birds have not begun egg laying and incubation; or
- (2) That juveniles from the occupied burrows are foraging independently and are capable of

independent survival. If burrowing owls occupy the site during the non-breeding season, a passive relocation effort may be instituted by a qualified biologist.

If construction occurs during the non-breeding season (September 1 to February 15, ground disturbance and tree removal may occur without pre-construction breeding bird surveys (with the exception noted above for the burrowing owl). No restrictions shall apply after construction starts.

California Red-legged Frog (CRLF) and California Tiger Salamander (CTS).

MITIGATION MEASURE BIO- 13. An assessment of CTS and CRLF habitat will be completed as part of a pre-construction survey to determine whether any avoidance is necessary.

Response to b) – c): Less Than Significant. There is no fill or removal of any wetlands or other waters proposed in the Project.

Response to e) and f): No Impact. The Project does not conflict with any adopted Plan or Policy as regards the preservation of trees or conservation of natural resources.

Sources: Early Consultation Response dated February 22, 2012 from the Department of Fish and Game; Biological Resource Assessment prepared by WRA Environmental Consultants, dated November 2, 2012; US Fish and Wildlife Service dated February 22, 2012. Stanislaus County General Plan and Support Documentation.

V. CULTURAL RESOURCES – Would the project:						
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact		
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?			X			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		x				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X				
d) Disturb any human remains, including those interred outside of formal cemeteries?		x				
RESPONSE TO CHECKLIST QUESTIONS:						

Response to a) and b): Less Than Significant with Mitigation Incorporated. A Historical and Cultural Records Search was conducted by the Central California Information Center on the project area. The search included review of their maps for the specific project area and the immediate vicinity of the project area, and review of the National Register of Historic Places, the California Register of Historical Resources, the California Inventory of Historic Resources (1976), the California Historical Landmarks (1990), and the California Pointes of Historical Interest listing (May 1992 and updates), the Directory of Properties in the Historic Property Data File (HPDF) and the Archaeological Determinations of Eligibility (ADOE) (Office of Historical Preservation current computer lists dated 02-09-2010 and 02-08-2010, respectively), the CALTRANS State and Local Bridge Survey (1989 and updates), the Survey of Surveys (1989), GLO Plats, and other pertinent historic data available at the CCIC for each specific county.

A historical resource is defined as a building, structure, object, prehistoric or historic archaeological site, or district possessing physical evidence of human activities over 45 years old. No structures exist on the site and none are proposed to be removed.

Implementation of Mitigation Measure CR-1 would ensure that if inadvertent discovery of previously unknown cultural resources is made, the appropriate actions will be taken to determine its significant and develop appropriate treatment measures. Therefore, this impact would be reduced to a less than significant level, No further mitigation is required.

Response to c) – d): Less Than Significant with Mitigation Incorporated. No prehistoric or historic archaeological resources or historic properties have been reported to the Information Center. There have not been any formal reports to the Information Center for any resources known to have value to local cultural groups. Based on the existing data in their files, the project phases have a moderate to high sensitivity for prehistoric resources due to the proximity to natural watercourses formerly and currently present in and adjacent to the area; and, the project shows a low-to-moderate sensitivity for historic features associated with farming or ranching. However, due to proximity to natural watercourses formerly and currently present in and adjacent to the area, a mitigation measure has been placed on the project requiring that construction activities be halted within 50 feet of any resources that are found until appropriate agencies are contacted and an archeological survey is conducted.

Implementation of Mitigation Measure CR-2 would ensure that if inadvertent discovery of previously unknown cultural resources is made, the appropriate actions will be taken to determine its significant and develop appropriate treatment measures. Therefore, this impact would be reduced to a less than significant level, No further mitigation is required.

Cultural Resource Mitigation:

MITIGATION MEASURE CR-1: Stop Work if Previously Unknown Archaeological Resources Are Uncovered during Project Construction, Assess the Significance of the Find, and Pursue Appropriate Management.

If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) is made during project-related construction activities, ground disturbances in the area of the find shall be halted and a qualified professional archaeologist shall be notified regarding the discovery. The archaeologist shall determine whether the resource is potentially significant as per the California Register of Historic Resources (CRHR) and develop appropriate treatment measures.

MITIGATION MEASURE CR-2: Stop Work if Human Remains Are Uncovered during Project Construction, Assess the Significance of the Find, and Pursue Appropriate Management.

- If human remains are uncovered during ground-disturbing activities, the contractor and/or the project applicant shall immediately halt potentially damaging excavation in the area of the find and notify the County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[bD. If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, the property owner, contractor or project proponent, an archaeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California PRC 5097.9.
- Upon the discovery of Native American remains, the project applicant, in consultation with the County shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendents, or other culturally appropriate treatment may be discussed. California PRC 5097.9 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that the project applicant shall employ:
- record the site with the NAHC or the appropriate Information Center,
- use an open space or conservation zoning designation or easement,
- and record a document with Stanislaus County.
- The project applicant or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also re-inter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the

County.

Sources: Records Search, dated May 21st, 2010; from the Central California Information Center; Stanislaus County General Plan and Support Documentation.

VI. GEOLOGY AND SOILS – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
 i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 				x
ii) Strong seismic ground shaking?			Х	
iii) Seismic-related ground failure, including liquefaction?			x	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?		x		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			х	
d) Be located on expansive soil, as defined in Table 1804.2 of the California Building Code (2007), creating substantial risks to life or property?			x	

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?		x
water?		

RESPONSE TO CHECKLIST QUESTIONS:

The following is based on a Geotechnical Report Prepared by Engeo, Inc. dated May 26, 2011 (Revised July 1, 2011) (see appendices)

Response to a)i): No Impact. No known active faults cross the property and the site is not located within an Alquist-Priolo Earthquake Fault Zone. An active fault is defined by the State Mining and Geology Board as one that has had surface displacement within Holocene time (about the last 11,000 years). The State of California has prepared maps designating zones for special studies that contain these active earthquake faults. Because no known active Holocene faults are mapped on the site and the site is not located within an Earthquake Fault Special Study Zone, the likelihood of fault/ground rupture is unlikely.

Response to a)ii) and a)iii): Less Than Significant Impact.

The site is located in an area of moderate seismicity. The Great Valley fault is considered capable of causing significant ground shaking at the site, but the recurrence interval is believed longer than for more distant, strike-slip faults. Further seismic activity can be expected to continue along the western margin of the Central Valley. The project site is mapped within the historic blind thrust zone around the Great Valley fault and, as with all projects in the area; the project should be designed to accommodate strong earthquake ground shaking.

As contained in Chapter 5 of the General Plan Support Documentation, the areas of the County subject to significant geologic hazard are located in the Diablo Range, west of Interstate 5. However, as per the 2007 California Building Code, all of Stanislaus County is located within a geologic hazard zone (Seismic Design Category D, E, or F) and a soils test may be required at building permit application. Results from the soils test will determine if unstable or expansive soils are present. If such soils are present, special engineering of the structure will be required to compensate for the soil deficiency. Any structures resulting from this project will be designed and built according to building standards appropriate to withstand shaking for the area in which they are constructed. Any earth moving is subject to Public Works Standards and Specifications which considers the potential for erosion and run-off prior to permit approval.

Compliance with the project Geotechnical Report will be included as a project condition.

Response to a a)iv): No Impact. Although the site is surrounded by hills to the north, west, and south, and Crow Creek to the south-east, the site is relatively flat and slopes gently downward from southwest to the northeast. The project site is not subject to landslides therefore the project has no impact.

Response to b): Less Than Significant with Mitigation Incorporated. Since construction operations will result in an area of disturbance of one acre or more, the applicant is required to comply with the National Pollution Discharge Elimination System (NPDES) General Permit for Construction Activities. As part of the NPDES General Permit. Applicant will be required to file a Notice of Intent (NOI) and prepare a Storm Water Pollution Prevention Plan (SWPPP), which outlines Best Management Practices (BMPs) that will be included in the Project to minimize and control post-construction runoff. BMPs will be implemented for sediment control such as utilizing water trucks during earth work activities, installation of fiber rolls around temporary stockpiles, and implementing directional drainage swales as necessary to keep run-off within the project boundaries and away from Crow Creek. Implementation of BMPs will minimize erosion, siltation

and contaminated runoff from construction sites.

Post Construction. Once operational, the Project will result in minimal generation of storm water runoff within the Project site as the site is relatively flat. To prevent soil erosion and provide dust control after construction, a low vegetated understory will be planted under the panels to reduce potential for sheet flow and allow storm water to percolate into the ground. The vegetated understory would be composed of indigenous flora species consistent with existing vegetation that would integrate annual grassland vegetation. The vegetation would be kept a height of approximately 18 inches by planting slow growing grass native to the region. Such re-vegetation will facilitate restoration of preconstruction overland flow and recharge patterns, Implementation of Mitigation measures GEO-1 and GEO-2 would reduce these impacts to less than significant.

Response to c): Less Than Significant. The project is not located on an unstable geologic unit, nor do the geologic unit(s) over which the project is to be constructed will become unstable as a result of the project. No on- or off-site landside will be triggered as a result of this project. The potential for lateral spreading, subsidence, and/or collapse is low. The sands encountered in the underground exploration borings were generally medium to very dense and contained a significant amount of fine-grained material. In addition, ground water was not encountered to the terminal depth of the borings. For these reasons the potential for liquefaction at the site is low.

Response to d): Less Than Significant. Expansive clays were observed throughout the site's near surface soils. Recommendations made in the Geotechnical Report will serve as a condition to the project. By following the proper design and construction recommendations provided in the Geotechnical Report, there is a low potential for the on-site soils to create a substantial risk to life or property. Therefore the project impact is less than significant.

Response to e): No Impact. No septic or alternative waste water disposal system is proposed. The addition of any system would require the approval of the Department of Environmental Resources through the Building Permit process, which takes soil types into consideration within the specific design requirements. Therefore the project has no impact.

Mitigation:

Mitigation Measure GEO-1. Implement a Storm Water Pollution Prevention Plan (SWPPP) and associated Best Management Practices (BMPs) for disturbance of more than one acre.

Mitigation Measure GEO-2. Prepare and submit for Stanislaus County Public Works review and approval, and implement a grading and erosion control plan.

Sources: Geologic and geotechnical review, dated July 1, 2011, prepared by ENGEO INC; RWQCB letter dated Nov. 18, 2011; Stanislaus County General Plan and Support Documentation - Safety Element; California Building Code (2007),
VII. GREENHOUSE GAS EMISSIONS. Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			x	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

RESPONSE TO CHECKLIST QUESTIONS:

Response to a & b): Less Than Significant. The principal Greenhouse Gasses (GHGs) are carbon dioxide (C02), methane (CH4), nitrous oxide (N20), sulfur hexafluoride (SF6), per fluorocarbons (PFCs), hydro fluorocarbons (HFCs), and water vapor (H20). C02 is the reference gas for climate change because it is the predominant greenhouse gas emitted. To account for the varying warming potential of different GHGs, GHG emissions are often quantified and reported as C02 equivalents (C02e). In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] No. 32), which requires the California Air Resources Board (ARB) to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020. As a requirement of AB 32, the ARB was assigned the task of developing a Climate Change Scoping Plan that outlines the state's strategy to achieve the 2020 GHG emissions limits. This Scoping Plan includes a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce the state's dependence on oil, diversify the state's energy sources, save energy, create new jobs, and enhance public health. The Climate Change Scoping Plan was approved by the ARB on December 22, 2008. According to the September 23, 2010, AB 32 Climate Change Scoping Plan Progress Report, 40 percent of the reductions identified in the Scoping Plan have been secured through ARB actions and California is on track to its 2020 goal.

Although not originally intended to reduce GHGs, California Code of Regulations (CCR) Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislativemandate to reduce California's energy consumption. Since then, Title 24 has been amended with recognition that energy efficient buildings require less electricity and reduce fuel consumption, which in turn decreased GHG emissions. The current Title 24 standards were adopted to respond to the requirements of AB 32. Specifically, new development projects within California after January 1, 2011, are subject to the mandatory planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental quality measures of the California Green Building Standards (CAL Green) Code (California Code of Regulations, Title 24, Part 11). The proposed project would result in short-term emissions of GHGs during construction. These emissions, primarily C02, CH4, and N20, are the result of fuel combustion by construction equipment and motor vehicles. The other primary GHGs (HFCs, PFCs, and SF6) are typically associated with specific industrial sources and are not expected to be emitted by the proposed project. As described in the air quality section, the use of heavy-duty construction equipment would be less than significant with mitigation.

Renewable energy such as solar reduces greenhouse gas emissions and other harmful air pollutants. Solar power generates electricity directly from the sun using crystal silicon photovoltaic technology requiring no fuel, emitting no noise, and producing zero carbon emissions. At full build out the project will produce 140 MW of electricity per day. The Project will generate significant clean energy thereby reducing energy demands from older polluting power plants or newer gas-fired GHG-emitting plants. By adding to the supply of clean energy the Project more than offsets the minimal air pollution impacts caused by the Project. Greater reliance on solar power is frequently identified as a mitigation measure to lessen the impact of air pollution and/or greenhouse gas emissions.

Mitigations: None.

Sources: SJVAPCD referral response dated November 23, 2011. Stanislaus County General Plan and Support Documentation

VIII. HAZARDS AND HAZARDOUS MAT	ERIALS –	Would the p	project:	
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?				x
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		x		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				x
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		x		
e) For a project located within an airport land use plans, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				x
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?			x	
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				x
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?		x		

RESPONSE TO CHECKLIST QUESTIONS:

Response to a), and c): No Impact. The proposed project consists of access/fire roadway improvements and installation of piers/piles for the photovoltaic panels as well as concrete foundations for the inverter pads and ultimately the construction of a substation. None of the proposed improvements involve the use or transport of hazardous materials. The project will not generate industrial wastes or toxic substances. The technology utilized with the project contains no toxic metals and there will be no hazardous substances stored on site. Pesticide exposure is a risk in agricultural areas. Sources of exposure include contaminated groundwater which is consumed and drift from spray applications. Application of sprays is strictly controlled by the Agricultural Commissioner and can only be accomplished after first obtaining permits. The County Department of Environmental Resources (DER) is responsible for overseeing hazardous materials in this area.

Response to b): Less-than-Significant with Mitigation Incorporated. Construction of the proposed project would involve the use of heavy construction equipment, which uses small amounts of hazardous materials such as oils, fuels, and other potentially flammable substances that are typically associated with construction would be reduced to a less than significant level with mitigation measures in place.

Response to d): No Impact. Review of the Department of Toxic Substances Control Envirostar Hazardous Waste and substances site list reveals that the project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to government code section 65962.5.

Response to e): No Impact. The closest public or public-use airport to the proposed project is located approximately 19 miles away in the City of Modesto. The project site is not located within an airport land use plan. Further, the proposed project does not consist of any facilities that would conflict with airport uses, and there would be no people residing or living in the project site. Therefore, no impact would occur. No mitigation is required.

Response to f): Less-than-Significant. The proposed project is located approximately 2.5 miles from the western boundary of Crows Landing Naval Air Station, which is a private airstrip that formerly served as a U.S. Navy facility. Patterson Airport is a private airport located about 5 miles north of the project site. Further away lies Westley Airport which is used for crop dusters. Although the project is located within 2.5 miles of a private airstrip, there would be no people located on-site associated with the operations of the proposed solar energy farm. Therefore this impact is less than significant. No mitigation is required.

Response to g): No Impact. The proposed construction or operational activities do not interfere with an adopted emergency response plan.

Response to h): Less Than Significant Impact with Mitigation. The project is within the State Responsibility Area Moderate Fire Hazard Severity Zone. Primary access for the Fire District and Emergency vehicles will be from Davis Road. Secondary emergency access will be requested from Stanislaus County via Fink Road through the County Landfill property. All points of access will meet the minimum roadway requirements of the Fire District. With Mitigations applied, impacts due to wild land fires are less than significant.

Mitigation:

Mitigation Measure HM-1. Keep hazardous materials in an Identified Staging Area and Prepare and Implement an Accidental Spill Prevention Plan during Construction

• Before construction begins, the project applicant shall require the construction contractor to identify a staging area where hazardous materials will be stored during construction. The staging area shall not be located in an undisturbed area. The contractor shall also be required to prepare an accidental spill prevention and response plan, which shall be

reviewed and approved by the project applicant and the Stanislaus County HazMat Division, that identifies measures to prevent accidental spills from leaving the site and methods for responding to and cleaning up spills before neighboring properties are exposed to hazardous materials.

Mitigation Measure HM -2- A Vegetation Management Plan shall be prepared to the satisfaction of Cal-Fire and the Fire Protection District.

Mitigation Measure HM -3- A defensible space of 100' shall be incorporated into the project design prior to construction.

Mitigation Measure HM -4- Adequate access and Fire Protection Water supply shall be provided prior to construction.

Mitigation Measure HM - 5- Electrical Infrastructure shall be constructed to the latest California PUC Standards and AVIAN Protection Standards.

Sources:	Stanislaus County General Plan and Support Documentation; Department of
	Toxic Substances Control Envirostar Hazardous Waste and Substances Site List;
	Crows Landing Airport Land Use Compatibility Plan, Draft dated January 2009,
	prepared by Mead & Hunt ; Referral response, dated December 1, 2011, from
	the West Stanislaus Fire Prevention District, Referral response, dated December
	1, 2011, from the Modesto Regional Fire Authority; Referral response, dated
	November 28, 2011, from Cal Fire

IX. HYDROLOGY AND WATER QUALIT	Y – Would	the project:		
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?		x		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		x		
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?		x		
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?		x		
f) Otherwise substantially degrade water quality?		x		
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				x
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				x

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?		x
j) Inundation by seiche, tsunami, or mudflow?		X

RESPONSE TO CHECKLIST QUESTIONS:

Response to a): Less Than Significant with Mitigation Incorporated. The proposed project would involve construction of photovoltaic panels mounted on steel I-beams, access roads, utility building, and direct burial of electric cable extending to each individual solar tracker from the utility buildings. The depth of excavation would be no more than four to six feet deep on the project site, including direct burial of the steel I-beams. Ground-disturbing activities would have the potential to allow soil or runoff to enter adjacent Crow Creek, resulting in potential temporary, and short-term construction-related water quality impacts from storm water runoff, erosion, or spills. Construction could coincide with part of the rainy season. Construction-related activities have the potential to temporarily impair water quality of disturbed and eroded soil, petroleum products, or construction-related wastes (e.g., solvents) could be discharged into receiving waters or onto the ground where they can be carried into receiving waters. Soil and associated contaminants that enter receiving waters through storm water runoff and erosion can increase turbidity, stimulate algae growth, increase sedimentation of aquatic habitat, and introduce compounds that are toxic to aquatic organisms. Accidental spills of construction-related substances such as oils and fuels can contaminate both surface water and groundwater. The extent of potential impacts on water quality would depend on the following factors; tendency for erosion of soil types encountered, types of construction practices, extent of disturbed area, duration of construction activities, timing of particular construction activities relative to the rainy season, proximity to receiving water bodies, and sensitivity to those water bodies to constructionrelated contaminants. With implementation of Mitigation Measure WQ-I, potential temporary and short-term impacts associated with violation of any water guality standards or waste discharge requirements would be reduced to a less-than- significant level. Therefore, this impact is reduced to a less than significant level. No further mitigation is required.

Response to b): Less Than Significant Impact. Implementation of the proposed project would not violate any waste discharge requirements, substantially deplete ground water supplies or interfere with ground water recharge such that there would be a net deficit in an aquifer volume.

During the construction period, water will be needed for uses such as dust control and concrete manufacturing. Once complete the Solar Panels will be washed about twice per year. Such washing will use approximately 16 ac. ft. per year, considerably less than the available allocation.

The existing Beltran Farm has two water sources that will provide water to the project. The first source is a private well owned and maintained by Beltran Farms located adjacent to the project site. The second source of water for the project is supplied from the Oak Flat Water District, within which the property is located. The District holds a contract with the State of California for State Water Project water delivered from the California Aqueduct located parallel and just east of I-5. The District has confirmed through an e-mail (see attachments) that this allocation runs with the land and the property on which the project will be constructed are currently allocated 1,492 acre feet of water annually, (100% contractual supply) subject to shortages imposed by the State Water Project. This allocation, even with historical shortages is sufficient to serve the project, as the project only requires approximately 16 acre feet of water for panel washing. The proposed use is a lawful use of State project water.

Response to c): Less than Significant with Mitigation Incorporated. The proposed project would not alter existing drainage patterns or the course of any streams or rivers. A small portion

of Crow Creek has a defined alignment south of the project site. Ground-disturbing activities would have the potential to allow soil or runoff to enter adjacent streams or rivers. The hydrologic design for the proposed project would result in all rainfall runoff being captured and detained by means of swales and temporary detention basins prior to releasing rainfall runoff off-site at a rate equal to or less than preconstruction conditions. Reducing project runoff to a rate equal to or less than preconstruction sthrough design of the proposed project's on-site drainage system would not alter the existing drainage patterns in a manner which would result in substantial on-or off-site erosion or siltation impacts.

With implementation of Mitigation Measure WQ-2, on-or off-site erosion or siltation impacts would be reduced to a less-than-significant level. No further mitigation is required.

Response to d): Less than Significant with Mitigation Incorporated. The proposed project would not alter existing drainage patterns or the course of any streams or rivers as described above under section c). In addition, the hydrologic design for the proposed project would result in all rainfall runoff being captured and detained by means of swales and temporary detention basins prior to releasing rainfall runoff off-site at a rate equal to or less than preconstruction conditions. Reducing project runoff to a rate equal to or less than preconstruction conditions through design of the proposed project's on-site drainage system would not substantially increase the rate or amount of surface runoff in a manner which would result in on-or off-site flooding.

With implementation of Mitigation Measure WQ-3, on-or off-site flooding impacts would be reduced to a less than-significant level because the project applicant would be required to prepare and implement a grading and drainage plan to accommodate the proposed project's site drainage. Therefore, this impact would be reduced to a less than significant level. No further mitigation is required.

Response to e): Less than Significant with Mitigation Incorporated. Ground-disturbing activities would have the potential to allow soil or runoff to enter adjacent streams or rivers. Refer to section c) above regarding hydrologic design of the proposed project's drainage system. With implementation of Mitigation Measure WQ-2, this impact would be reduced to a less than significant level. No further mitigation is required.

Response to f): Less than Significant with Mitigation Incorporated. Refer to section a) above regarding the proposed project's potential to degrade water quality. In addition, refer to section c) above regarding hydrologic design of the proposed project's drainage system. With implementation of Mitigation Measure WQ-2, this impact would be reduced to a less than significant level. No further mitigation is required.

Response to g, h, i & j): No Impact. Implementation of the proposed project would not place housing within a 100-year flood hazard area, place structures which would impede or redirect flood flows within a 100-year flood hazard area, nor would it expose people or structures to a significant risk of loss, injury or death involving flooding (including flooding as a result of failure of a levee or dam, or inundation by seiche, tsunami or mudflow).

Based on review of the flood insurance rate maps for the project site (map numbers 06099C0925E Panel 0925E and map number 06099C0745E panel 0745E) the site lies in Zone X, areas determined to be outside the 0.2% annual chance floodplain and the project is not within a 100-year floodplain.

The nearest body of water to the project site is Crow Creek, which is located approximately 100' south of the project site. The Creek does not contain enough water to have the potential for a seiche or tsunami event. Additionally, the immediate area surrounding the project site is relatively flat, and would not be subject to landslides or mudflow. Therefore, implementation of the proposed project would have a less than significant impact on these environmental issues.

Mitigation:

Mitigation Measure WQ-I. A Storm water Pollution Prevention Plan (SWPPP) for the proposed project will be prepared by the project applicant, approved by the Stanislaus County Public Works Department prior to commencing with any ground-disturbing construction related activities, and implemented by the project applicant.

Best Management Practices (BMPs) will be included in the SWPPP for runoff, erosion and water quality, and the BNIPs will be put in place and maintained during the duration of ground-disturbing activities during the rainy season or when rain is forecast.

Mitigation Measure WQ-2. A grading and drainage plan will be prepared, submitted to the Stanislaus County Public Works Department for approval prior to issuance of any new building permits, and implemented by the project applicant. Drainage calculations will be prepared as per the Stanislaus County Standards and Specifications that are current at the time a permit is issued. The plan will contain enough information to verify that all runoff will be kept from going onto adjacent properties, into Little Salado Creek or its tributaries, and into the Stanislaus County road right-of-way. All grading and drainage work for the site's access roads will keep runoff within the historic (natural) drainage shed for that area. The grading and drainage plan will comply with the current Stanislaus County National Pollutant Discharge Elimination System (NPDES) General Pemit and the Quality Control standards for New Development.

Sources: Stanislaus County General Plan and Supporting Documentation; Email correspondence from Oak Flat Water District dated July 8, 2010; Department of Water Resources Notice to State Water Project Contractors dated June 22, 2010; National Flooding Insurance Rate Program Flood Insurance Rate Map Panels 0745E and 0925E.

X. LAND US	E AND PLANNING – Would	the project	:		
		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically di	vide an established community?				Х
b) Conflict with policy, or regula jurisdiction ove limited to the ge coastal program for the purpose environmental	any applicable land use plan, ation of an agency with r the project (including, but not eneral plan, specific plan, local n, or zoning ordinance) adopted e of avoiding or mitigating an effect?				x
c) Conflict with conservation pl conservation pl	any applicable habitat lan or natural community lan?				x
RESPONSE TO CHECKLIST QUESTIONS: Response to a–c): No Impact. The project is designated agriculture and zoned General Agriculture, 40-acre and 160-acre minimum (A-2-40 and A-2-160) respectively. The solar project, a "facility for public utilities" is an allowed use with an approved Tier Three Use Permit. Tier Three Uses are defined as not directly related to agriculture, but may be difficult to locate in an urban area and may be allowed with approval of a use permit. This project will not conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan and will not physically divide an established community.					
Mitigation:	None				
Sources:	Stanislaus County General Plan, Ordinance.	Land Use El	ement ¹ ; Stanis	slaus County 2	Zoning

Y LAND USE AND PLANNING - Would the p

XI. MINERAL RESOURCES – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				x
b) Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				x
RESPONSE TO CHECKLIST QUESTIONS:				

Response to a) and b): No Impact. The locations of all commercially viable mineral resources in Stanislaus County are mapped by the State Division of Mines and Geology in Special Report 173. There are no known significant resources on the site, therefore there are no impacts.

Mitigation:	None
Sources:	Stanislaus County General Plan Safety and Land Use Element ¹ , State Division of Mines and Geology Special Report 173.

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

RESPONSE TO CHECKLIST QUESTIONS:

Response to a): Less than Significant Impact.

Construction Noise

The Stanislaus County Noise Ordinance, Section 10.46.060(E) specifically regulates construction noise and limits construction activities. Construction noise, from a single piece of equipment or a combination of equipment, shall not exceed an average sound level greater than 75 dBA Leq at the nearest sensitive receptor. The project site is remote. The nearest receptor is the Beltran Ranch office located east north east of the project site.

During construction of the proposed project, noise levels in the project site and vicinity would increase due to the use of construction equipment and vehicles. Typical construction vehicles and equipment can generate temporary and short-term maximum noise levels when the equipment is under maximum load.

There are no noise-sensitive receptors in close proximity to the site that would not exceed Stanislaus County's most stringent allowable construction noise level limit for daytime construction activities. This impact would be less than significant. No mitigation is required.

Operational Noise

According to the Stanislaus County Noise Element, new development of industrial, commercial, or other stationary-noise generating land uses are not permitted if resulting noise levels would exceed 60 dBA Ldn in noise-sensitive areas. The proposed solar panel facilities would produce noise intermittently during maintenance activities from personnel, equipment, and vehicles on the project site. In addition, the solar panels themselves are anticipated to emit negligible noise levels from their slow rotation to stay in alignment with the sun. Overall operation of the proposed solar energy farm is not anticipated to generate any substantial noise and any noise generated is anticipated to be less than the ambient noise level due to existing area noise sources (e.g., traffic on 1-5, operations at Fink Road Landfill). Thus, the proposed project would not result in the generation of new noise levels that would result in exceeding 60 dBA Ldn at the closest noise-sensitive receptor (i.e., caretaker residence). This impact would be less than significant. No mitigation is required.

Response to b): Less than Significant Impact. Vibration or ground borne noise may be generated from operation of heavy vehicles and construction equipment during site preparation and solar panel installation activities. Specifically, pile driving is anticipated to occur. Operation of the constructed facilities would not include any substantial new vibration sources. Construction vibration is dependent upon the amount and type of construction and the distance between construction activities and the nearest vibration-sensitive receptor. With the exception of pile driving, construction equipment vibration levels from construction activities are below the threshold of annoyance at distances greater than 50 feet.

Because the temporary construction vibration associated with on-site equipment would not be anticipated to expose sensitive receptors to or generate excessive ground borne vibration or ground borne noise levels, this impact would be less than significant. No mitigation is required.

Response to c); No Impact. The proposed project would not result in a substantial permanent increase in ambient noise levels in the project site and vicinity. The constructed facilities would produce some temporary and short-term noise during maintenance activities from personnel, equipment, and vehicles on the project site and is anticipated to emit negligible noise levels from the solar panel operations which are anticipated to be less than the ambient noise level due to existing area noise sources (e.g., traffic on 1-5, operations at Fink Road Landfill). Therefore, the proposed project would not result in the exposure of persons to or generation of noise levels in excess of applicable standards or create a substantial permanent increase in ambient noise levels in the project vicinity. As a result, implementation of the proposed project would result in no impact. No mitigation is required.

Response to d): Less than Significant Impact. As discussed in the answer to question a) above, construction activities would result in temporary and short-term increased noise levels on the project site. Construction equipment could generate noise. However, construction noise levels would attenuate with distance and are not anticipated to exceed the allowable noise level limits at the nearest noise-sensitive receptor during daytime activities under the Stanislaus County Noise Element and County Code. Although there would be a temporary and short-term increase in ambient noise levels during construction activities, noise levels would be less than the noise level limits established by Stanislaus County. Therefore, this impact would be less than significant. No mitigation is required.

Response to e & f): No Impact. The project does not lie within an adopted airport land use plan, within two miles of a public airport or within the vicinity of a private airstrip.

Mitigation: None.

Sources:

Stanislaus County General Plan and Support Documentation

XIII. POPULATION AND HOUSING – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				x
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				x
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				x
RESPONSE TO CHECKLIST QUESTIONS: Response to a), b) and c): No Impact. The proposed use will not create service extensions or new infrastructure which would be considered growth inducing. No housing or persons will be displaced by the project.				
Mitigation: None				
Sources: Stanislaus County General F	Plan and Suppo	ort Documentatior	1	

XIV. PUBLIC SERVICES				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?			X	
ii) Police protection?			X	
iii) Schools?				Х
iv) Parks?				X
v) Other public facilities?				X

RESPONSE TO CHECKLIST QUESTIONS:

Response to ai) Less Than Significant Impact. The County has adopted Public Facilities Fees (PFF), as well as Fire Facility Fees on behalf of the appropriate fire district, to address impacts to public services. Applicable fees are required to be paid at the time of building permit issuance. Conditions of approval will be added to this project to ensure the proposed development complies with all applicable fire department standards with respect to primary and secondary access and provision of sufficient water for fire protection. There is no population within or near the project boundaries. The Modesto Regional Fire Authority and West Stanislaus Fire Protection District provided referral responses with conditions of approval to be incorporated into the project approvals. Cal Fire provided Mitigation Measures to address and mitigate impacts/threat of wildfire associated with this request. These Mitigation Measures are incorporated into the Hazards and Hazardous Materials section of this document.

Response to aii): Less than Significant Impact. The proposed project is the development of a solar energy farm and it is not anticipated that it would produce an appreciable increase of service calls for the Stanislaus County Sherriff's Department. The proposed project would have no major effect on existing local law enforcement service providers or result in the need for new law enforcement services. This impact is less than significant. No mitigation is required.

Response to a)-ii-iii-a) v) No Impact. The project site is uninhabited and remote from populated areas and there is No Impact to other governmental agencies or facilities.

Mitigation:	None.
Sources:	Stanislaus County General Plan and Support Documentation; Referral responses from Modesto Regional Fire Authority and West Stanislaus Fire District date December 1, 2011, referral response dated December 11, 2011 from CalFire.

XV. RECREATION				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantia physical deterioration of the facility would occu or be accelerated?	ll r			x
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				x
RESPONSE TO CHECKLIST QUESTIONS: Response to a) and b): No Impact. The proposed project will not result in the construction of new residential dwellings. The use of existing parks and other recreational facilities will not be increased and no new or expanded facilities will be required. Implementation of the proposed project would not result in impacts to recreation.				
Mitigation: None				
Sources: Stanislaus County General Pla Conservation / Open Space El	in and Support ement	Documentatio	n, Land Use a	and

XVI. TRANSPORTATION / TRAFFIC – Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?				x
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				x
e) Result in inadequate emergency access?			Х	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				x

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RESPONSE TO CHECKLIST QUESTIONS:

Response to a and b): Less Than Significant Impact. The Project site will be accessed via Fink Road (public) and Davis Road (private) over the California Aqueduct and I-5. Davis Road is a paved road that is privately owned and maintained by adjacent landowners. Recorded access and maintenance agreements for primary and secondary access shall be submitted to the Stanislaus County Planning Division prior to development. Conditions of approval will be added to insure consistency with County requirements in respect to access.

Based on As-Built plans from Caltrans and discussions with DWR, both bridge crossings were constructed with H2O-44 loading and a rating of 80,000 lbs. The rating and loading designs of both bridges are acceptable for any project related traffic and is acceptable to the local fire authority for emergency access.

Traffic During Construction: The installation of PV panels, inverter / transformer stations and a substation for all 3 proposed phases will take approximately three years. Trucks will make an

average total of an estimated 6 trips per day to deliver materials. The preferred route for trucks is most likely I-5 and then Fink Road. Some improvements will be made to the Fink Road at Davis Road intersection to accommodate the additional truck traffic. An encroachment permit, if applicable, will be obtained from Stanislaus County.

Traffic During Operation: Once the project has been built the operations will have a limited amount of activity, traffic or otherwise. No permanent employees will be located on site. Up to six operational employees maintain the facility on a daily basis. Based on the Institute of Transportation Engineers (ITE) Trip Generation Manual for a general light industrial uses, approximately 18 trips per day would be generated by the project at full build out (3.02/trips per employee x 6 employees).

The addition of up to 6 trips per day during construction and 18 trips per day at full build out is not a substantial increase above the existing traffic volumes for the adjacent roadway systems, including Fink Rd and I-5. Therefore construction and operation of the proposed project would not cause a substantial increase to existing traffic loads or result in changes to current levels of service, resulting in a less than significant impact. No mitigation is required.

Response to c): No Impact. The nearest airports include the Crows Landing Naval Air Station, approximately 2.5 miles north and east; and Patterson Airport, approximately 4.5 miles north of the project site. Further away lies the Westley Airport which is used for crop dusters. Depending on time of day and the position of the solar panels, the maximum height of these tracking arrays would be approximately 15 feet high. These tracking arrays at a maximum height of 15 feet would not interfere with air traffic patterns. As a result, there would be no impact on air safety. No mitigation is required.

Response to d): No Impact. The proposed project would include new internal all-weather maintenance and emergency access roads (access roads). The access road system would serve as a means for emergency, construction, and maintenance vehicles to access the site. The access roads would be 20-feet-wide and be set back 10 feet from the edge of each tracking array. The design of these access roads would meet all applicable regulations and requirements for such access, which include the California Fire Code and the Stanislaus County Code (Chapter 16.15). The proposed project does not include any design features that would create a hazard, such as sharp turns in the access roads. The proposed project would not contain any uses that would be incompatible with surrounding uses, so it would not create a substantial hazard. Therefore, the project would have no impact. No mitigation is required.

Response to e): Less than Significant Impact. Primary access for the Fire District and Emergency vehicles will be from Davis Road. Secondary emergency access will be requested from Stanislaus County from Fink Road through the County Landfill property. All points of access will meet the minimum roadway requirements of the Fire District. The Use Permit for the project will be conditioned subject to the normal regulatory requirements of the County.

Response to f): No Impact. Alternative transportation modes within the project vicinity would not be adversely affected by project construction and maintenance. The project site primarily consists of agricultural lands and rural residences. Access to the project site would be provided via existing roads. Construction traffic on local roads would cease following completion of each phase of the proposed project. There are not adopted alternative transportation plans covering the project site and vicinity. Therefore, the proposed project would not conflict with any adopted policies, plans, or programs that support alternative transportation facilities. There would be no impact. No mitigation is required.

Mitigation:	None
Sources:	Stanislaus County General Plan and Support Documentation; ITE Trip Generation Manual, 8 th Edition, Land Use 110 General Light Industrial.

XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			x	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			x	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		x		
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			x	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			x	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			x	

Response to a): Less than Significant Impact. The proposed project would not expect to generate new significant wastewater at the project site. Any increase in the generation of wastewater associated with temporary construction personnel would be accommodated by temporary portable restrooms, which would be removed after project construction. Any employees visiting the site, would utilize the existing farm office that is served by an existing septic system or if a new office trailer is installed, a septic system meeting Stanislaus County Measure X requirements would be installed and conditioned on the project. Therefore, the impacts would be less than significant. No mitigation is required.

Response to b): Less than Significant Impact. Implementation of the proposed project would not violate any waste discharge requirements, substantially deplete ground water supplies or interfere with ground water recharge such that there would be a net deficit in an aquifer volume.

The primary source of water for the project is supplied from the Oak Flat Water District, within which the property is located. The district holds a contract with the State of California for State Water Project water delivered from the California Aqueduct located parallel and just east of 1-5. The district has confirmed that this allocation runs with the land and the property on which the project will be constructed are currently allocated 1,492 acre feet of water annually (100% contractual supply), subject to shortages imposed by the State Water Project. The proposed use is a lawful use of State project water. The amount of water utilized for periodic panel washing is significantly less than that required for a full year of crop production, thus the Oak Flat Water District allocation and water shortage intensifies or is greatly diminished, there are two other options to provide adequate water for panel washing: 1) Existing irrigation wells within the Beltran Farm. 2) Water being brought in through the use of water trucks.

For a normal 100% service year, irrigation users would receive 2.64 acre/feet of water per acre or 1492 acre/feet for the entire property. This year, 2010, district lands are only receiving 50% of their full contractual supplies. The Beltran Farm has 565 acres of land with supply (APN 025-017-019 -274 acres; APN 026-12-03 -33 acre and APN 027-017-077 -258 acres). After construction of the facility water will be used on-site to rinse off the solar modules by a water truck approximately two (2) times per year. No water needs to be stored on-site for this wash down process. There will be no cleaning products, chemicals or biodegradable soaps added to the water. Approximately 2.5 acre/feet of water will be required for each washing, per Phase, for a total of 7.5 acre/feet/year per Phase and cumulatively 15/acre/feet at build out of all 3 Phases. During the construction period, water will be needed for uses such as dust control, initial panel washing and concrete manufacturing. The required 10/acre/feet at project build out is considerably less than the 1492 acre/feet total allocation. Since the water from the Aqueduct is surface water supply, impacts to ground water supplies are less than significant. Therefore this impact would be less than significant. No further mitigation required.

Response to c): Less than Significant with Mitigation Incorporated. Please refer to item d) and e) in "Hydrology and Water Quality" section of this checklist for a discussion of storm water drainage and associated facilities. With implementation of Mitigation Measures WQ-2 and WQ-3, the construction of new storm water drainage facilities or expansion of existing facilities would not be required as grading and drainage would direct runoff associated with the proposed project to flow within the historic (natural) drainage shed for the project area. Therefore, this impact would be less than significant. No further mitigation is required.

Response to d): Less than Significant Impact. As discussed above, water is currently supplied to the project site for agricultural uses and the existing farm office. With development of the proposed project, water supplied to the project site for irrigation would be

reduced by significantly, The proposed project would not require anyone-site water infrastructure. Overall, water demand at the project site would be reduced. Therefore, the proposed project would have a less-than-significant impact on water supply. No mitigation is required.

Response to e): Less than Significant Impact. The proposed project would not generate significant additional wastewater. Any new septic facilities shall be installed to meet Stanislaus County Measure X requirements and will be a condition of approval. Consequently, the proposed project would result in a less-than-significant impact on wastewater treatment. No mitigation is required.

Response to f): Less than Significant Impact. During project construction, the only potential solid waste that would be generated is the packaging from the solar panels. The packaging would be sent to an off-site recycling facility. Additionally, decommissioning of the facility back to agricultural use would take place at the end of the facility's useful economic life. Because no new solid waste would be generated and because the project applicant would recycle packaging from the solar panels, implementation of the proposed project would have a less-than-significant impact on the solid waste disposal. No further mitigation is required.

Response to g): Less than Significant Impact. The proposed project would be required to divert (recycle) 50% of solid waste generated by both construction and operation to comply with the 500/0 solid waste diversion rate mandated by the California Integrated Waste Management Act of 1989 (AB 939) and the Stanislaus County Source Reduction and Recycling Element. As discussed in item f) above, packaging waste generated during project construction would be recycled. Thus, the proposed project would have a less-than-significant impact because the project would comply with regulations related to solid waste and because the project applicant would recycle the packaging from the solar panels No mitigation is required.

Mitigation:	None.
Sources:	Stanislaus County General Plan and Support Documentation; E-Mail correspondence from Oak flat Water District dated, July 8, 2010; Referral response, dated June 15, 2010 from Stanislaus County Department of Environmental Resources – Solid Waste Management Division.

XVIII. MANDATORY FINDINGS OF SIG	NIFICANCE	Ξ		
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		x		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			x	
RESPONSE TO CHECKLIST QUESTIONS: Response to a): Less Than Significant with Mitigation Incorporated.				
As described in the Biological Resource Assessment, Section V Summary, "Six special-status wildlife species have a moderate or high potential to occur within the Project Area. With the measures identified, we do not believe that any ITP or Statement of Overriding Consideration				

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(SOC) will be required for the project." The project has adopted Mitigation Measures which reduce the potential impact of the project to Less Than Significant. Pre-construction surveys and employee training will be instituted to identify any present sensitive species. Protective conditions are incorporated to assure that if any biological resource is found to occur on the site or possibly close to the site that steps will be taken to protect that resource.

Similarly, the same Mitigation Measures will be employed at the time of decommissioning of the project, primarily pre-construction surveys and employee training.

Response to b): Less Than Significant Impact with Mitigation Incorporated.

Taken cumulatively, the incremental effects of the proposed AEG Solar Project, of itself, do not impact the environment. There is no indication of any potential impact that has not been fully mitigated or conditioned so as not to occur.

Multiple Project Cumulative Impacts

The subject AEG Solar Project will contain 606 acres of solar panels and related roads and equipment. Similarly, two previously approved solar projects are within close proximity to the Project: Stanislaus County approved the Scatec Solar Farm in 2011 containing 383 acres of panels; and, in 2012, the County approved the Fink Road Solar Farm containing about 800 acres. Each development shares substantially the same characteristics as to potential environmental impacts which were found in each case to be Mitigated to Less than Significant with conditions and a Mitigation Monitoring Plan:

Scatec Solar	383 acres	50 MW
Fink Road Solar	800 acres	80-100 MW
AEG Solar Ranch	606 acres	140 MW
Total	1800+/- acres	290+/- MW

Taking the three Solar projects together it can be seen that substantial impacts to the environment are possible <u>except</u> that:

- 1. Each project has adopted Mitigation Measures reducing impacts to Less than Significant.
- 2. The common characteristics of the projects such as remoteness (from urban areas) of the projects, the predominately dry landscape, and the poor habitat, lend this area to uses such as solar, waste to energy and landfill activities, provided that all Mitigation Measures are fully employed.
- 3. <u>Pre-construction</u>: Initial surveys of each solar project do not indicate evidence of the presence of any sensitive biological community; however, such species may exist. Therefore, each project will undertake pre-construction surveys. If the pre-construction survey identifies any species on or in the proximity of the sites, Mitigation Measures will be employed to protect them.
- 4. <u>During construction</u>: While the cumulative impacts of these Solar projects, particularly during construction, might impact biological resources (as described in each BRA) such sensitive areas once identified will be avoided and those steps necessary for their protection will be taken. Training of employees will effectively enable them to identify any possible impact during the period of construction and to take appropriate action to protect the area and report.
- 5. <u>Post-construction</u>: The purpose and ultimate goal of the three Solar projects is the production of clean energy with less impact on the environment than other methods of production such as coal, gas and nuclear. The long term cumulative effect of Solar energy is that it will not produce any GHG's, will not affect Air Quality, and will not impact sensitive biological communities that have been identified and protected. The projects will cover a large area and will have some intermittent visibility from the I-5 corridor by passing motorists but will not impact any protected scenic vista.

Cumulatively, the three solar projects do not produce any combined impact which has not been reduced to Less Than Significant With Mitigation Measures already in place; therefore, no additional Mitigation Measures are necessary.

Response to c): Less Than Significant Impact. The Benefits of a Solar Energy Project producing 140 MW of electrical power, with no discernible negative effect on the environment, are: 1) furthering the goals of the State of California; 2) achieving the mandates of the Public Utilities Commission; and, 3) meeting the obligations of Pacific Gas and Electric.

The AEG –Beltran Ranch Solar Facility benefits the people and communities of Stanislaus County.

¹<u>Stanislaus County General Plan and Support Documentation</u> adopted in October 1994, as amended. Optional and updated elements of the General Plan and Support Documentation: *Agricultural Element* adopted on December 18, 2007; *Housing Element* adopted on April 20, 2010 and pending certification by the California Department of Housing and Community Development; *Circulation Element* and *Noise Element* adopted on April 18, 2006.

MITIGATED NEGATIVE DECLARATION

NAME OF PROJECT:	Use Permit Application No. 2011-11 – Beltran Ranch Solar Facility
LOCATION OF PROJECT:	Davis Road, west of I-5, southwest of the Fink Road Landfill, in the Newman / Crows Landing area. APN: 025-017-019; 026-012-003; and 027-017-063, 077, 080, 082
PROJECT DEVELOPER:	Alternative Energy Group, Inc 1020 10 th Street, Ste. 310 Modesto, CA 95354 (209) 529-1010

DESCRIPTION OF PROJECT: Request to establish a 140 megawatt (MW) solar photovoltaic facility on 606± acres of a 1,720± acre site. Additional site improvements include: all weather fire access roads; maintenance building; security fencing; construction staging area; office trailer; sheds; substation. A 30 foot high overhead power line will be added to the existing above ground power lines to connect the solar facility to the substation. A transmission interconnect to PG&E's existing Salado-Newman transmission line will also be added. Use Permit 2010-09 was approved on November 4, 2010, to occupy 382 acres of this site. (See attached maps.)

Based upon the Initial Study, dated March 6, 2013, the Environmental Coordinator finds as follows:

- 1. This project does not have the potential to degrade the quality of the environment, nor to curtail the diversity of the environment.
- 2. This project will not have a detrimental effect upon either short-term or long-term environmental goals.
- 3. This project will not have impacts which are individually limited but cumulatively considerable.
- 4. This project will not have environmental impacts which will cause substantial adverse effects upon human beings, either directly or indirectly.

The aforementioned findings are contingent upon the following mitigation measures (if indicated) which shall be incorporated into this project:

Mitigation Measure BIO-1: Preconstruction /pre-activity surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the SJKF. The survey area shall include all areas subject to disturbance, and a 250 buffer area extending beyond areas subject to disturbance. In the event that an active San Joaquin kit fox den is detected during preconstruction surveys, DFG and USFWS shall be contacted immediately and no project activity shall begin until appropriate avoidance measure have been implemented, and DFG and USFWS have provided written authorization that project construction may proceed.

Mitigation Measure BIO-2: Project- related vehicles shall observe a 20-mph speed limit in all project areas; this is particularly important at night when SJKF are most active. To the extent possible, night-time construction should be minimized. Off-road traffic outside of designated project areas should be prohibited.

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Mitigation Measure BIO-3: To prevent inadvertent entrapment of SJKF or other animals during the construction phase, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.

Mitigation Measure BIO-4: SJKF are attracted to den-like structures such as pipes and may enter stored pipe. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for SJKF before the pipe is subsequently buried, capped, or otherwise used or moved in any way. IF a SJKF is discovered inside a pipe, all work in the area shall stop until the animal leaves the area on its own.

Mitigation Measure BIO-5: All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from a construction site.

Mitigation Measure BIO-6: No firearms shall be allowed on the project site except for police and security personnel.

Mitigation Measure BIO-7: To prevent harassment, mortality of SJKF or destruction of dens by dogs or cares, no pets shall be permitted on the project site during construction.

Mitigation Measure BIO-8: An employee education program shall be conducted containing a brief presentation by persons knowledgeable in SJKF biology and legislative protection to explain endangered species concerns to contractors and their employees, The program shall include the following: a description of the SJKF and its habitat needs; a report of the occurrence of SJKF in the project areal an explanation of the status of the species and its protection under state and federal Endangered Species Acts; and a list of measures being taken to avoid impacts to the species during construction and implementation. A fact sheet conveying this information shall be prepared for distribution to attendees of the training and anyone else who may enter the project site.

Mitigation Measure BIO-9: Design perimeter fencing to be wildlife friendly by raising the bottom of the fence six inches above the ground to allow SJKF to move into and out of the project site.

Mitigation Measure BIO-10: If ground disturbance or tree removal occurs during the bird breeding season (Feb 15- September 1), breeding bird surveys for both tree and ground dwelling species shall be conducted within 20 days of proposed ground disturbance to avoid disturbance to active nests, eggs, and/or young of these and other bird species. A minimum no-disturbance buffer of 250 feet shall be delineated around active nests of non-listed species and ½ mile from listed species until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the best or parental care for survival.

MITIGATION MEASURE BIO- 11 For Swainson's hawk, the pre-construction survey shall be extended to within ½ mile of the project area. In the event that Swainson's Hawk is detected, a determination shall be made by a qualified biologist experienced in Swainson's Hawk biology as to the measures to be undertaken to minimize adverse impacts to this species including provision of construction buffers and any further monitoring of the nesting site that maybe required during construction activities.

MITIGATED MEASURED BIO- 12 For burrowing owl, pre-construction surveys shall be undertaken no more than 30 days before the onset of any ground-disturbing activities at any time of the year. During the breeding season (February 1 – August 15), any burrows occupied by burrowing owls can be assumed to possess young and a minimum 250-foot no construction buffer zone, unless a biologist verifies through non-invasive methods that either:

(1) the birds have not begun egg laying and incubation; or

(2) That juveniles from the occupied burrows are foraging independently and are capable of independent survival. If burrowing owls occupy the site during the non-breeding season, a passive relocation effort may be instituted by a qualified biologist.

If construction occurs during the non-breeding season (September 1 to February 15, ground disturbance and tree removal may occur without pre-construction breeding bird surveys (with the exception noted above for the burrowing owl). No restrictions shall apply after construction starts.

MITIGATION MEASURE CR-1: Stop Work if Previously Unknown Archaeological Resources Are Uncovered during Project Construction, Assess the Significance of the Find, and Pursue Appropriate Management.

 If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) is made during project-related construction activities, ground disturbances in the area of the find shall be halted and a qualified professional archaeologist shall be notified regarding the discovery. The archaeologist shall determine whether the resource is potentially significant as per the California Register of Historic Resources (CRHR) and develop appropriate treatment measures.

MITIGATION MEASURE CR-2: Stop Work if Human Remains Are Uncovered during Project Construction, Assess the Significance of the Find, and Pursue Appropriate Management.

- If human remains are uncovered during ground-disturbing activities, the contractor and/or the project applicant shall immediately halt potentially damaging excavation in the area of the find and notify the County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[bD. If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, the property owner, contractor or project proponent, an archaeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California PRC 5097.9.
- Upon the discovery of Native American remains, the project applicant, in consultation with the County shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendents, or other culturally appropriate treatment may be discussed. California PRC 5097.9 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that the project applicant shall employ:
 - record the site with the NAHC or the appropriate Information Center,
 - use an open space or conservation zoning designation or easement,
 - and record a document with Stanislaus County.

• The project applicant or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also re-inter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the County.

Mitigation Measure GEO-1. Implement a Storm Water Pollution Prevention Plan (SWPPP) and associated Best Management Practices (BMPs) for disturbance of more than one acre.

Mitigation Measure GEO-2. Prepare and submit for County review and approval, and implement a grading and erosion control plan.

Mitigation Measure HM-1. Keep hazardous materials in an Identified Staging Area and Prepare and Implement an Accidental Spill Prevention Plan during Construction

 Before construction begins, the project applicant shall require the construction contractor to identify a staging area where hazardous materials will be stored during construction. The staging area shall not be located in an undisturbed area. The contractor shall also be required to prepare an accidental spill prevention and response plan, which shall be reviewed and approved by the project applicant and the County, that identifies measures to prevent accidental spills from leaving the site and methods for responding to and cleaning up spills before neighboring properties are exposed to hazardous materials.

Mitigation Measure HM-2- A Vegetation Management Plan shall be prepared to the satisfaction of Stanislaus County and the Fire Protection District.

Mitigation Measure HM-3- A defensible space of 100' shall be incorporated into the project design prior to construction.

Mitigation Measure HM-4- Adequate access and Fire Protection Water supply shall be provided prior to construction.

HM-5- Electrical Infrastructure shall be constructed to the latest California PUC Standards and AVIAN Protection Standards.

Mitigation Measure WQ-I. A Storm water Pollution Prevention Plan (SWPPP) for the proposed project will be prepared by the project applicant, approved by the Stanislaus County Public Works Department prior to commencing with any ground-disturbing construction related activities, and implemented by the project applicant.

Best Management Practices (BMPs) will be included in the SWPPP for runoff, erosion and water quality, and the BNIPs will be put in place and maintained during the duration of ground-disturbing activities during the rainy season or when rain is forecast.

Mitigation Measure WQ-2. A grading and drainage plan will be prepared, submitted to the Stanislaus County Public Works Department for approval prior to issuance of any new building permits, and implemented by the project applicant. Drainage calculations will be prepared as per the Stanislaus County Standards and Specifications that are current at the time a permit is issued. The plan will contain enough information to verify that all runoff will be kept from going onto adjacent properties, into Little Salado Creek or its tributaries, and into the Stanislaus County road right-of-way. All grading and drainage work for the

site's access roads will keep runoff within the historic (natural) drainage shed for that area. The grading and drainage plan will comply with the current Stanislaus County National Pollutant Discharge Elimination System (NPDES) General Permit and the Quality Control standards for New Development.

The Initial Study and other environmental documents are available for public review at the Department of Planning and Community Development, 1010 10th Street, Suite 3400, Modesto, California.

Initial Study prepared by:	Steve Herum, Attorney Herum/Crabtree Attorneys
Submit comments to:	Stanislaus County Planning and Community Development Department 1010 10th Street, Suite 3400 Modesto, California 95354

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Stanislaus County Planning and Community Development 1010 10th Street, Suite 3400 Modesto, CA 95354

Phone: (209) 525-6330 Fax: (209) 525-5911

Mitigation Monitoring Plan Adapted from CEQA Guidelines sec 15097 Final Text, October 26, 1998 March 6, 2013

1.	Project title and location:	Use Permit Application No. 2011-11 Beltran Ranch Solar Facility
		22601 Davis Road, west of I-5, Southwest of the Fink Road Landfill, in the Newman/Crows Landing area. (APN: 027-017-063, 027-017-077, 027-017-080, 027-017-082, 025-017-019, 026-012-003)
2.	Project Applicant name and address:	Alternative Energy Group, Inc. 1020 10 th Street, Ste. 310 Modesto, CA 95354
3.	Person Responsible for Implementing Mitigation Program (Applicant Representative):	Sean Tobin, MVE, Inc. 1117 L Street Modesto, CA 95354
4.	Contact Person at County:	Rachel Wyse, Associate Planner (209) 525-6330

MITIGATION MEASURES AND MONITORIING PROGRAM:

III. AIR QUALITY

Mitigation Measure AQ-1: Implement all feasible fugitive dust control requirements of the San Joaquin Valley Air Pollution Control District (SJVAPCD), Regulation VIII. The following measures shall be implemented to reduce PM 10 exhaust emissions and further reduce the already less-than-significant impacts associated with ROG and NO x emissions:

- Provide commercial electric power to the project site in adequate capacity to avoid or minimize the use of portable electric generators and any other equipment.
- Where feasible, substitute electric-powered equipment for diesel engine driven equipment, or implement the use of diesel particulate traps.
- When not in use, avoid idling of on-site equipment.
- Where feasible, avoid operation of multiple pieces of heavy duty equipment.
- Require contractors to use the best available emission reduction and economically feasible technology on an established percentage of the equipment fleet. It is anticipated that in the near future PM 10 control equipment will be available. The SJVAPCD shall be consulted with on this process. This requirement shall be included in construction bid specifications.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction
When should it be completed:	Prior to Construction
Who verifies compliance:	San Joaquin Valley Air Pollution Control District (SJVAPCD)
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure AQ-2: Comply with SJVAPCD's Regulation VIII-Fugitive Dust Prohibitions and implement the following applicable control measures, as required by law:

- An owner/operator shall submit a Dust Control Plan to the Air Pollution Control Officer (APCO) prior to the start of any construction activity on any site that will include 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials. Construction activities shall not commence until the APCO has approved or conditionally approved the Dust Control Plan. An owner/operator shall provide written notification to the APCO within 10 days prior to the commencement of earthmoving activities via fax or mail. The requirement to submit a dust control plan shall apply to all construction related activities conducted at the project site.
- The owner/operator shall submit a construction notification form to the APCO at least 48 hours prior to the start of any construction activity on the project site that includes greater than one acre of disturbed surface area.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction
When should it be completed:	Prior to Construction
Who verifies compliance:	San Joaquin Valley Air Pollution Control District (SJVAPCD)
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure AQ-3:

Implement SJVAPCD-recommended enhanced and additional control measures to further reduce fugitive PMIO dust emissions from public roadways.

- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from adjacent project areas with a slope greater than 1% in accordance the project's Storm water Pollution Prevention Plan (SWPPP), which conforms with the required elements of the General Permit No. CAS000002 issued by the State of California, State Water Resources Control Board.
- The area encompassing the San Joaquin Valley Air Basin (SJVAB) boundary is also classified as nonattainmentforPM2.S•TheSJVAPCD approach for achieving attainment of the PM2.Sstandard is has two components. The first component is that the existing PMIO reduction strategies will reduce the fugitive component of PM2.5 emissions within the SJVAPCD. The second component is to address the indirect formation ofPM2.5' as with ozone Knox is a precursor ofPM2.Sso the district reduction strategies for the reduction of NO x throughout the basin will also reduce the formation ofPM2.S. In addition since the emissions estimate for PMIO was compared to PM2.5 thresholds; if PM10 emissions estimates are below the PM2.S thresholds then PM2.S must also be below the threshold. The proposed project shall be required to comply with the SJVAPCD's Regulation VIII (SJVAPCD 2009) control measures for construction emissions of PMIO. One of these control measures includes the use of water with all "land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities" for fugitive dust suppression. Compliance with SJVAPCD Regulation VIII will further reduce emissions.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction
When should it be completed:	Prior to Construction
Who verifies compliance:	San Joaquin Valley Air Pollution Control District (SJVAPCD)
Other Responsible Agencies:	Stanislaus County Planning Department

IV. BIOLOGICAL

San Joaquin Kit Fox Mitigations

Mitigation Measure BIO-1: Preconstruction, pre-activity, and pre-decommissioning surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the SJKF. The survey area shall include all areas subject to disturbance, and a 250 buffer area extending beyond areas subject to disturbance. In the event that an active San Joaquin kit fox den is detected during preconstruction surveys, DFG and USFWS shall be contacted immediately and no project activity shall begin until appropriate avoidance measure have been implemented, and DFG and USFWS have provided written authorization that project construction may proceed.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning
Who verifies compliance:	California Department of Fish and Wildlife U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure BIO-2: Project- related vehicles shall observe a 20-mph speed limit in all project areas; this is particularly important at night when SJKF are most active. To the extent possible, night-time construction should be minimized. Off-road traffic outside of designated project areas should be prohibited.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning
Who verifies compliance:	California Department of Fish and Wildlife U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure BIO-3: To prevent inadvertent entrapment of SJKF or other animals during the construction phase, all excavated, steep-walled holes or trenches more than two (2) feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Each excavation shall be inspected for animals at the beginning of each day. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.

Who Implements the Measure:

Applicant

When should the measure be implemented:	Prior/During Construction/Decommissioning
When should it be completed:	Prior/During Construction/Decommissioning
Who verifies compliance:	California Department of Fish and Wildlife, U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure BIO-4: SJKF are attracted to den-like structures such as pipes and may enter stored pipe. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for SJKF before the pipe is subsequently buried, capped, or otherwise used or moved in any way. IF a SJKF is discovered inside a pipe, all work in the area shall stop until the animal leaves the area on its own.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning
Who verifies compliance:	California Department of Fish and Wildlife U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure BIO-5: All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from a construction site.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning
Who verifies compliance:	California Department of Fish and game U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure BIO-6: No firearms shall be allowed on the project site except for police and security personnel.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning

Who verifies compliance:	California Department of Fish and Wildlife U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure BIO-7: To prevent harassment, mortality of SJKF or destruction of dens by dogs or cares, no pets shall be permitted on the project site during construction.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning
Who verifies compliance:	California Department of Fish and Wildlife U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure BIO-8: An employee education program shall be conducted containing a brief presentation on all special-status wildlife species having the potential to occur on or surrounding the Project site. This program shall also include education and a brief presentation by persons knowledgeable in SJKF biology and legislative protection to explain endangered species concerns to contractors and their employees. The program shall include the following: a description of the SJKF and its habitat needs; a report of the occurrence of SJKF in the project area; an explanation of the status of the species and its protection under state and federal Endangered Species Acts; and a list of measures being taken to avoid impacts to the species during construction and implementation. A fact sheet conveying this information shall be prepared for distribution to attendees of the training and anyone else who may enter the project site.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning
Who verifies compliance:	California Department of Fish and Wildlife U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure BIO-9: Design perimeter fencing to be wildlife friendly by raising the bottom of the fence six inches above the ground to allow SJKF to move into and out of the project site.

Who Implements the Measure:	Applicant
When should the measure be	Prior to Construction

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When should it be completed:	Prior to Construction
Who verifies compliance:	California Department of Fish and Wildlife U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

Breeding Bird Mitigations (Including Raptors)

Mitigation Measure BIO-10: If ground disturbance or tree removal occurs during the bird breeding season (Feb 15- September 1), breeding bird surveys for both tree and ground dwelling species shall be conducted within 20 days of proposed ground disturbance to avoid disturbance to active nests, eggs, and/or young of these and other bird species. A minimum no-disturbance buffer of 250 feet shall be delineated around active nests of non-listed species and ½ mile from listed species until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the best or parental care for survival.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Ground Disturbance/Grading/Tree Removal/Decommissioning
When should it be completed:	Prior to Ground Disturbance/Grading/Tree Removal/Decommissioning
Who verifies compliance:	California Department of Fish and Wildlife U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

MITIGATION MEASURE BIO- 11 For Swainson's hawk, the pre-construction survey shall be extended to within ½ mile of the project area. In the event that Swainson's Hawk is detected, a determination shall be made by a qualified biologist experienced in Swainson's Hawk biology as to the measures to be undertaken to minimize adverse impacts to this species including provision of construction buffers and any further monitoring of the nesting site that maybe required during construction activities. If an active SWHA nest is found within 0.5 mile of the Project site, the Project proponent shall implement a 0.5 mile no-disturbance buffer around the nest until consultation with DFW occurs and appropriate avoidance measures are approved by DFW in writing and are implemented to prevent take of the species or to determine if issuance of an ITP is warranted.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning
Who verifies compliance:	California Department of Fish and Wildlife U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

MITIGATED MEASURE BIO- 12. For burrowing owl, pre-construction surveys shall be undertaken no more than 30 days before the onset of any ground-disturbing activities at any time of the year. During the breeding season (February 1 - August 15), any burrows occupied by burrowing owls can be assumed to possess young and a minimum 250-foot no construction buffer zone, unless a biologist verifies through non-invasive methods that either:

(1) the birds have not begun egg laying and incubation; or

(2) That juveniles from the occupied burrows are foraging independently and are capable of independent survival. If burrowing owls occupy the site during the non-breeding season, a passive relocation effort may be instituted by a qualified biologist.

If construction occurs during the non-breeding season (September 1 to February 15, ground disturbance and tree removal may occur without pre-construction breeding bird surveys (with the exception noted above for the burrowing owl). No restrictions shall apply after construction starts. Pre-construction and pre-decommissioning surveys, relocation, avoidance, and compensatory measures for Burrowing Owl shall utilize the recommendations listed in the DFW Staff Report on Burrowing Owl Mitigation (2012).

Who Implements the Measure:	Applicant
When should the measure be	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning
Who verifies compliance:	California Department of Fish and Wildlife U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

MITIGATION MEASURE BIO- 13. An assessment of CTS and CRLF habitat will be completed as part of pre-construction and pre-decommissioning surveys to determine whether any avoidance is necessary. Habitat assessment shall follow the USFWS's Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander (2003) and the Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog (2005).

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning
Who verifies compliance:	California Department of Fish and Wildlife U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

MITIGATION MEASURE BIO- 14. A 250 foot no-disturbance buffer shall be clearly delineated around the stockponds and Crow Creek to protect water quality and wildlife that may depend on these water features. The no-disturbance buffer shall be maintained during construction, operations, and decommissioning activities.

Who Implements the Measure:

Applicant
When should the measure be implemented:	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning
Who verifies compliance:	California Department of Fish and Wildlife U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

MITIGATION MEASURE BIO- 15. The developer shall apply DFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities" (DFG 2009) to determine presence or infer absence of special-status plants in and near the Project site, to evaluate potential impacts, and to design ways to mitigate Project impacts. If State-listed plants are detected during surveys, consultation with the Department is warranted to discuss the potential for "take" under CESA.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning
Who verifies compliance:	California Department of Fish and Wildlife U.S. Fish and Wildlife Service
Other Responsible Agencies:	Stanislaus County Planning Department

V. Cultural Resources

MITIGATION MEASURE CR-1: Stop Work if Previously Unknown Archaeological Resources Are Uncovered during Project Construction, Assess the Significance of the Find, and Pursue Appropriate Management.

 If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) is made during project-related construction activities, ground disturbances in the area of the find shall be halted and a qualified professional archaeologist shall be notified regarding the discovery. The archaeologist shall determine whether the resource is potentially significant as per the California Register of Historic Resources (CRHR) and develop appropriate treatment measures.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning
Who verifies compliance:	Stanislaus County Planning Department
Other Responsible Agencies:	Central California Information Center

MITIGATION MEASURE CR-2: Stop Work if Human Remains Are Uncovered during Project Construction, Assess the Significance of the Find, and Pursue Appropriate Management.

- If human remains are uncovered during ground-disturbing activities, the contractor and/or the project applicant shall immediately halt potentially damaging excavation in the area of the find and notify the County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[bD. If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, the property owner, contractor or project proponent, an archaeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California PRC 5097.9.
 - Upon the discovery of Native American remains, the project applicant, in consultation with the County shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendents, or other culturally appropriate treatment may be discussed. California PRC 5097.9 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that the project applicant shall employ:
 - record the site with the NAHC or the appropriate Information Center,
 - use an open space or conservation zoning designation or easement,
 - and record a document with Stanislaus County.
 - The project applicant or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also re-inter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the County.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction/Decommissioning
When should it be completed:	Prior to Construction/Decommissioning
Who verifies compliance:	Stanislaus County Planning Department
Other Responsible Agencies:	Central California Information Center

VI. Geology and Soils

Mitigation Measure GEO-1. Implement a Storm Water Pollution Prevention Plan (SWPPP) and associated Best Management Practices (BMPs) for disturbance of more than one acre.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction
When should it be completed:	Prior to Construction
Who verifies compliance:	Stanislaus County Public Works Department Regional Water Quality Control Board
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure GEO-2. Prepare and submit for County review and approval, and implement a grading and erosion control plan.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction
When should it be completed:	Prior to Construction
Who verifies compliance:	Stanislaus County Public Works Department Regional Water Quality Control Board
Other Responsible Agencies:	Stanislaus County Planning Department

VIII. Hazards and Hazardous Materials

Mitigation Measure HM-1. Keep hazardous materials in an Identified Staging Area and Prepare and Implement an Accidental Spill Prevention Plan during Construction

 Before construction begins, the project applicant shall require the construction contractor to identify a staging area where hazardous materials will be stored during construction. The staging area shall not be located in an undisturbed area. The contractor shall also be required to prepare an accidental spill prevention and response plan, which shall be reviewed and approved by the project applicant and the County, that identifies measures to prevent accidental spills from leaving the site and methods for responding to and cleaning up spills before neighboring properties are exposed to hazardous materials.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction
When should it be completed:	Prior to Construction
Who verifies compliance:	West Stanislaus Fire Protection District/Modesto Regional Fire Authority

Mitigation Measure HM-2- A Vegetation Management Plan shall be prepared to the satisfaction of Stanislaus County and the Fire Protection District. This project is in the State Responsibility Area – Modesto Fire Hazard Severity Zone and therefore must have a Vegetation Management Plan and defensible space of 100 feet. (California Public Resources Code.)

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction
When should it be completed:	Prior to Construction
Who verifies compliance:	West Stanislaus Fire Protection District/Modesto Regional Fire Authority
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure HM-3- A defensible space of 100' shall be incorporated into the project design prior to construction. No development shall occur without approved fire department (emergency vehicle) access and water supply.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction
When should it be completed:	Prior to Construction
Who verifies compliance:	West Stanislaus Fire Protection District/Modesto Regional Fire Authority
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure HM-4- Adequate access and Fire Protection Water supply shall be provided prior to construction. A second point of emergency vehicle access from either the north of the project (Fink Road) or from the south of Davis Road shall be built to California Standards.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction
When should it be completed:	Prior to Construction
Who verifies compliance:	West Stanislaus Fire Protection District/Modesto Regional Fire Authority
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure HM-5- Electrical Infrastructure shall be constructed to the latest California PUC Standards and AVIAN Protection Standards.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction
When should it be completed:	Prior to Construction
Who verifies compliance:	West Stanislaus Fire Protection District/Modesto Regional Fire Authority
Other Responsible Agencies:	Stanislaus County Planning Department

IX. Hydrology and Water Quality

Mitigation Measure WQ-I. A Storm water Pollution Prevention Plan (SWPPP) for the proposed project will be prepared by the project applicant, approved by the Stanislaus County Public Works Department prior to commencing with any ground-disturbing construction related activities, and implemented by the project applicant.

Best Management Practices (BMPs) will be included in the SWPPP for runoff, erosion and water quality, and the BNIPs will be put in place and maintained during the duration of ground-disturbing activities during the rainy season or when rain is forecast.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction
When should it be completed:	Prior to Construction
Who verifies compliance:	Stanislaus County Public Works Department Regional Water Quality Control Board
Other Responsible Agencies:	Stanislaus County Planning Department

Mitigation Measure WQ-2. A grading and drainage plan will be prepared, submitted to the Stanislaus County Public Works Department for approval prior to issuance of any new building permits, and implemented by the project applicant. Drainage calculations will be prepared as per the Stanislaus County Standards and Specifications that are current at the time a permit is issued. The plan will contain enough information to verify that all runoff will be kept from going onto adjacent properties, into Little Salado Creek or its tributaries, and into the Stanislaus County road right-of-way. All grading and drainage work for the site's access roads will keep runoff within the historic (natural) drainage shed for that area. The grading and drainage plan will comply with the current Stanislaus County National Pollutant Discharge Elimination System (NPDES) General Pemit and the Quality Control standards for New Development.

Who Implements the Measure:	Applicant
When should the measure be implemented:	Prior to Construction
When should it be completed:	Prior to Construction
Who verifies compliance:	Stanislaus County Public Works Department
Other Responsible Agencies:	Stanislaus County Planning Department

I, the undersigned, do hereby certify that I understand and agree to be responsible for implementing the Mitigation Program for the above listed project.

Signature on file Person Responsible for Implementing Mitigation Program <u>April 11, 2013</u> Date

SUMMARY OF RESPONSES FOR ENVIRONMENTAL REVIEW REFERRALS

PROJECT: USE PERMIT APPLICATION NO. 2011-11 - BELTRAN RANCH SOLAR FACILITY

					DESDONSE			MITIGATION				
REFERRED TO:			RESPONDED		RESPONSE			MEASURES		GUIDITIUNS		
	2 WK	70 DAY	PUBLIC HEARING NOTICE	S∃Y	ON	WILL NOT HAVE SIGNIFICANT IMPACT	MAY HAVE SIGNIFICANT IMPACT	NO COMMENT NON CEQA	ХЕS	ON	YES	0 N
CA DEPT OF CONSERVATION: Land Resources / Mine Reclamation	x	х	х		x							
CA DEPT OF FISH & WILDLIFE	Х	Х	Х	Х			х		Х			х
CA DEPT OF FORESTRY (CAL FIRE)	Х	Х	Х	Х			х		Х			х
CA DEPT OF TRANSPORTATION DIST 10	Х	Х		Х		Х				Х		х
CA DEPT OF WATER RESOURCES	Х	Х	Х	Х		Х				Х	Х	
CA OPR STATE CLEARINGHOUSE	Х	Х	Х		Х							
CA RWQCB CENTRAL VALLEY REGION	Х	Х	Х	Х		Х				Х	Х	
CA STATE LANDS COMMISSION	Х	Х	Х		Х							
CEMETERY DISTRICT: HILLS FERRY	Х	Х	Х		Х							
CITY OF: PATTERSON & NEWMAN	Х	Х	Х		Х							
COOPERATIVE EXTENSION	Х	Х			Х							
FIRE PROTECTION DIST: W STANISLAUS	Х	Х	Х	Х			х		Х			Х
HOSPITAL DISTRICT: DEL PUERTO	Х	Х	Х		Х							
MODESTO REGIONAL FIRE AUTHORITY	Х	Х		Х			х		Х			х
MOSQUITO DISTRICT: TURLOCK	Х	Х	Х		Х							
MT VALLEY EMERGENCY MEDICAL	Х	Х	Х		Х							
PACIFIC GAS & ELECTRIC	Х	Х	Х		Х							
PIPELINES	Х	Х			Х							
SAN JOAQUIN VALLEY APCD	Х	Х	Х	Х			х		Х		Х	
SCHOOL DISTRICT 1:NEWMAN-CROWS												
LANDING/MARSHALL B KRUPP	Х	Х	Х		X							
STAN ALLIANCE	Х	Х	Х		X							
STAN CO AG COMMISSIONER	Х	Х			X							
STAN CO ALUC	Х	Х			Х							
STAN CO BUILDING PERMITS DIVISION	Х	Х		Х				x		Х	X	
STAN CO CEO	Х	Х			X							
STAN CO DER	Х	Х		Х		X				Х	X	
STAN CO ERC	Х	Х		Х			X		Х			Х
STAN CO FARM BUREAU	Х	Х	Х		X							
STAN CO HAZARDOUS MATERIALS	Х	Х			X							
STAN CO PARKS & RECREATION	Х	Х			X							
STAN CO PUBLIC WORKS	Х	Х		Х		X				Х	Х	
STAN CO SHERIFF	Х	Х			X							
STAN CO SUPERVISOR DIST 5: DeMARTINI	Х	Х			X							
STAN COUNTY COUNSEL	Х	Х			X							
STANISLAUS LAFCO			Х									
SURROUNDING LAND OWNERS			Х									
TELEPHONE COMPANY: AT&T	Х	Х	Х		X							
TRIBAL CONTACTS												
(CA Government Code §65352.3)	X	X	X		X							
US ARMY CORPS OF ENGINEERS	X	X	X		X							
	X	X	X	X			X		Х			Х
	x	Y	Y		Y							
	x x	Y	x x		Ŷ		L					
WATER DISTRICT: OAK FLAT & DEL	~	~										
PUERTO	X	х	Х		x							

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B. USE PERMIT APPLICATION NO. 2011-11 – BELTRAN RANCH SOLAR FACILITY - Request to establish a 140 megawatt (MW) solar photovoltaic facility on 606± acres of a 1,720± acre site in the A-2-40/A-2-160 (General Agriculture) zoning district. The project site is located on Davis Road, west of I-5, in the Newman/Crows Landing area. The Planning Commission will consider a CEQA Mitigated Negative Declaration for this project. APN: 025-017-019; 026-012-003; and 027-017-063, 077, 080, 082 Staff Report: Rachel Wyse Recommends APPROVAL. Public hearing opened. OPPOSITION: No one spoke. FAVOR: Steve Herum; Sean Tobin, Mid Valley Engineering. Public hearing closed. Pires/Boyd, 5-0 (Unanimous), APPROVED THE STAFF RECOMMENDATIONS AS OUTLINED IN THE STAFF REPORT

EXCERPT

PLANNING COMMISSION

MINUTES

Signature on file.

Angela Freitas Planning Commission Secretary

February 5, 2018

Date