



# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING  
STEVEN E. WHITE, DIRECTOR

## Planning Commission Staff Report Consent Agenda Item No. 2 September 15, 2016

**SUBJECT:** Environmental Impact Report No. 6730 and Unclassified  
Conditional Use Permits (UCUP) Application Nos. 3452-3458

Grant a first one-year time extension to exercise Unclassified Conditional Use Permits (UCUP) 3452-3458 which authorize the construction of photovoltaic (PV) electricity generating facilities and associated infrastructure including up to eight power blocks of solar arrays in different configurations, up to eight electrical substations, and other necessary infrastructure including up to eight permanent operation and maintenance buildings, a supervisory control and data acquisition (SCADA) system, up to 400 megawatts (MW) of on-site energy storage (either battery or flywheel system), meteorological data system, buried conduit for electrical wires, overhead collection lines strung on 300 to 500 wood power line poles (each up to 70 feet tall), on-site access roads, and security fencing. The Project site is located approximately seven miles southwest of the community of Tranquillity, 5.5 miles east of Interstate 5, and five miles north of the community of Three Rocks.

**LOCATION:** The Project site is comprised of approximately 3,732 acres in western unincorporated Fresno County and would encompass 39 parcels located south of West Manning, north of West Nebraska Avenue, east of South San Bernardino Avenue, and west of South San Benito Avenue. All of the parcels are within the jurisdictional boundaries of Fresno County.

**OWNERS:** Westlands Water District  
David and Sharon Wakefield

**APPLICANTS:** RE Tranquillity 2 LLC, RE Tranquillity 3 LLC, RE Tranquillity 4 LLC, RE Tranquillity 5 LLC, RE Tranquillity 6 LLC, RE Tranquillity 7 LLC, RE Tranquillity 8 LLC

**STAFF CONTACT:** Christina Monfette, Planner  
(559) 600-4245

Chris Motta, Principal Planner  
(559) 600-4227

**RECOMMENDATION:**

- Approve the first one-year Time Extension for Unclassified Conditional Use Permit Application Nos. 3452-3458, and;
- Direct the Secretary to prepare a Resolution documenting the Commission’s action.

**EXHIBITS:**

1. Location Map
2. Existing Zoning Map
3. Existing Land Use Map
4. Planning Commission Resolution and Staff Report dated October 9, 2014
5. Applicant’s letter requesting the first one-year time extension
6. Boundaries of UCUP Nos. 3452-3458

**ENVIRONMENTAL ANALYSIS:**

At its hearing of October 9, 2014, the Commission certified the Environmental Impact Report prepared for the project; and adopted the Findings of Overriding Consideration and the Mitigation Monitoring and Reporting Program and Condition Compliance Matrix (MMRP) pursuant to the CEQA Resolution with modification to require an Irrevocable Letter of Credit as part of the Financial Assurances component for each of the Reclamation Plans associated with the eight individual projects.

Section 15162(b) of the CEQA Guidelines states that once an EIR has been certified for a project, no subsequent EIR shall be prepared unless: 1) substantial changes are proposed to the project; 2) substantial changes occur with respect to the circumstances under which the project is undertaken; or 3) new information of substantial importance is presented which was not known and could not have been known at the time the previous EIR was certified.

This project was routed to all those agencies who reviewed the original project and no agency provided comments or information that the circumstances noted in the above Conditions are present. No changes are proposed to the approved project, nor is there evidence of the circumstances noted in Conditions 2 or 3 above. Therefore, a subsequent/supplemental environmental document is not required.

**PUBLIC NOTICE:**

Notices were sent to 11 property owners within 1,320 feet of the subject parcel, exceeding the minimum notification requirements prescribed by the California Government Code and County Zoning Ordinance.

**PROCEDURAL CONSIDERATIONS:**

The Fresno County Zoning Ordinance requires that a Conditional Use Permit (CUP) shall become void when substantial development has not occurred within two years after approval of



the permit, provided the application is submitted prior to the date of expiration of the permit. In this case, the Tranquillity project's Conditional Use Permits would expire on October 9, 2016; the application was accepted on August 2, 2016.

### **BACKGROUND INFORMATION:**

Unclassified Conditional Use Permits Nos. 3451-3458 were approved by the Planning Commission on October 9, 2014. Those eight permits approved the construction, operation and maintenance, and decommissioning of a solar power generation facility with the capacity to generate up to 400 MW by converting sunlight into electrical energy and a switching station to be owned and operated by Pacific Gas and Electric Company (PG&E). The Solar Facility was approved to operate year-round to generate electricity during daylight hours when electricity demand is at its peak. The new Switching Station is necessary to interconnect the Solar Facility to the statewide high-voltage electrical grid. The total impervious surface that would be constructed for the project would comprise approximately 20 acres and seven acres, for the Solar Facility and the Switching Station, respectively.

The complete project is located on 39 parcels totaling approximately 3,732 acres in western unincorporated Fresno County. The site is zoned AE-20 (Exclusive Agricultural, 20-acre minimum parcel size). Access to the site would be provided from two points along West Manning Avenue, via Ohio Avenue for the portion of the site west of State Route 33 (SR 33, or "Derrick Avenue") and via Monterey Avenue for the portion east of SR 33. The project site does not currently receive water from Westlands Water District and has not been irrigated in the last ten years. Irrigation is not allowed on any of the land within the project site aside from ten acres within a single 80-acre parcel.

This application proposes to allow a one-year time extension to achieve substantial development on seven of the eight approved Conditional Use Permits described above. At the time that the applicant submitted this application, Phase I of the overall project had been completed with the construction of a 200 MW facility as described by CUP 3451. The applicant is working to get the project online. The current time request application applies to the remaining applications which cover approximately 1,756 acres and 25 unique parcels.

### **ANALYSIS/DISCUSSION:**

Unclassified Conditional Use Permit Nos. 3451-3458 were originally approved on October 9, 2014 concurrently with the certification of Environmental Impact Report No. 6730 and the adoption of the Findings of Overriding Consideration and the Mitigation Monitoring and Reporting Program and Condition Compliance Matrix (MMRP). Attached is a copy of the Planning Commission's Resolution and Staff report (Exhibit 4). The Applicant's letter requesting a time extension is attached as Exhibit 5 and a map detailing the boundaries of the affected parcels is attached as Exhibit 6.

It should be noted that the Planning Commission's jurisdiction in evaluating this request is limited to determining whether or not the Applicant should be granted an additional year to exercise the CUPs as originally approved. In a letter submitted on July 29, 2016 (Exhibit 5), the Applicant states that physical construction has not commenced due to several factors: first that the power marketing process is cyclical in nature and that the contracting of Phase 1 took two years; second that the California Independent System Operator ("CAISO") studied the two 200 MW project phases separately, resulting in an interconnection agreement for the first phase significantly in advance of the second phase, and; lastly, raising sufficient debt and equity financing to cover the high costs of constructing a major power plant is best done incrementally.

The subject Time Extension will allow the Applicant until October 9, 2017 to begin substantial development of the project.

This Time Extension was routed to the same agencies that reviewed the project in May of 2014. None of those agencies identified any change in circumstances or the need for additional conditions, and did not express any concerns with the proposed extension of time. However, the comments received from the Fresno County Librarian suggest a requirement that if any archeological findings are discovered, they should not be disturbed. Mitigation Measure 4.6-2 from the adopted Mitigation Monitoring and Reporting Program for the subject application requires that in the event that archaeological materials are encountered during the course of grading or construction, the Project contractor shall cease any ground-disturbing activities within 50 feet of the find. Staff believes that this Mitigation Measure adequately addresses the concerns raised by the County Librarian. Comments from the Fresno County Fire Protection District (FCFPD) indicate that if the project is developed, it may be subject to joining Community Facilities District 2010-01. Condition of Approval No. 5 requires that, prior to the issuance of building permits, each application will be subject to Site Plan Review, which will address fire protection among other design elements. Staff believes that this existing condition adequately addresses the comments received from FCFPD.

**PUBLIC COMMENT:**

*None*

**CONCLUSION:**

Based on the factors cited in the analysis, staff believes the first one-year Time Extension for CUP Nos . 3452-3458 should be approved. The approval will extend the expiration date to October 9, 2017.

**PLANNING COMMISSION MOTIONS:**

**Recommended Motion** (Approval Action)

- Move to approve the first one-year Time Extension for Unclassified Conditional Use Permits 3452-3458; and
- Direct the Secretary to prepare a Resolution documenting the Commission's action.

**Alternative Motion** (Denial Action)

- Move to deny the first one-year Time Extension request for Unclassified Conditional Use Permit Nos. 3452-3458 (state reasons for denial); and
- Direct the Secretary to prepare a Resolution documenting the Commission's action.

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# LOCATION MAP

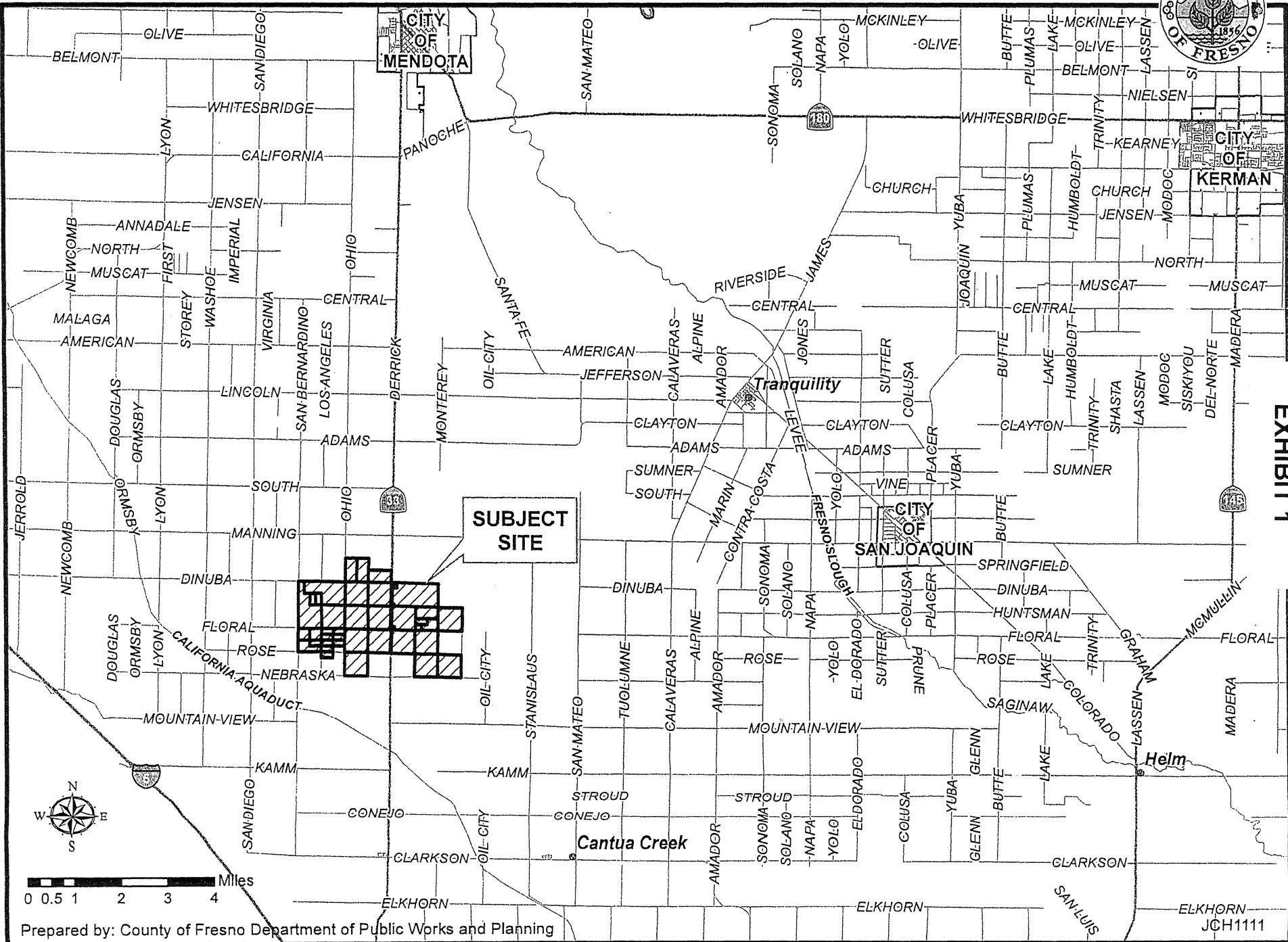


EXHIBIT 1

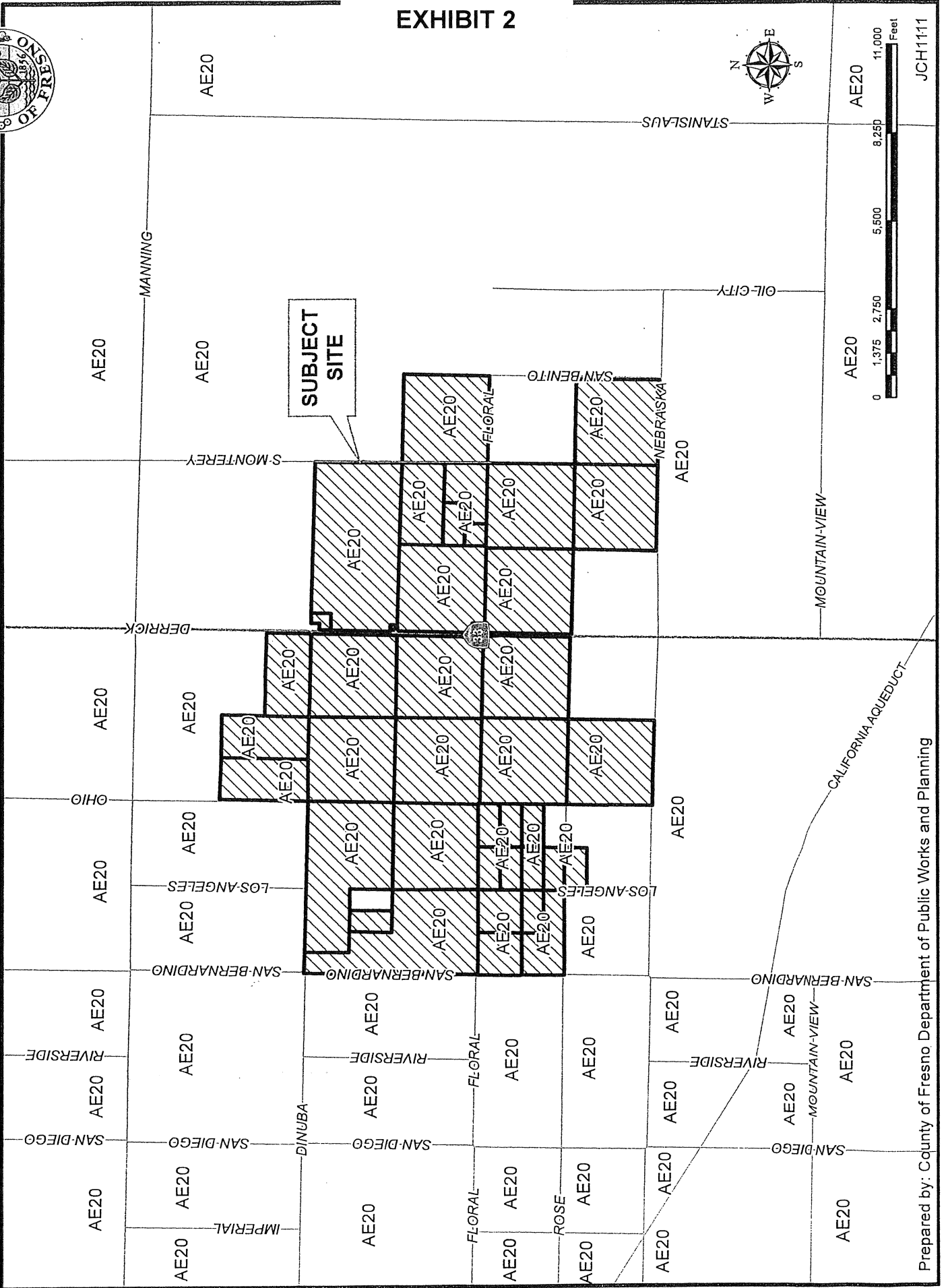




# EXISTING ZONING MAP

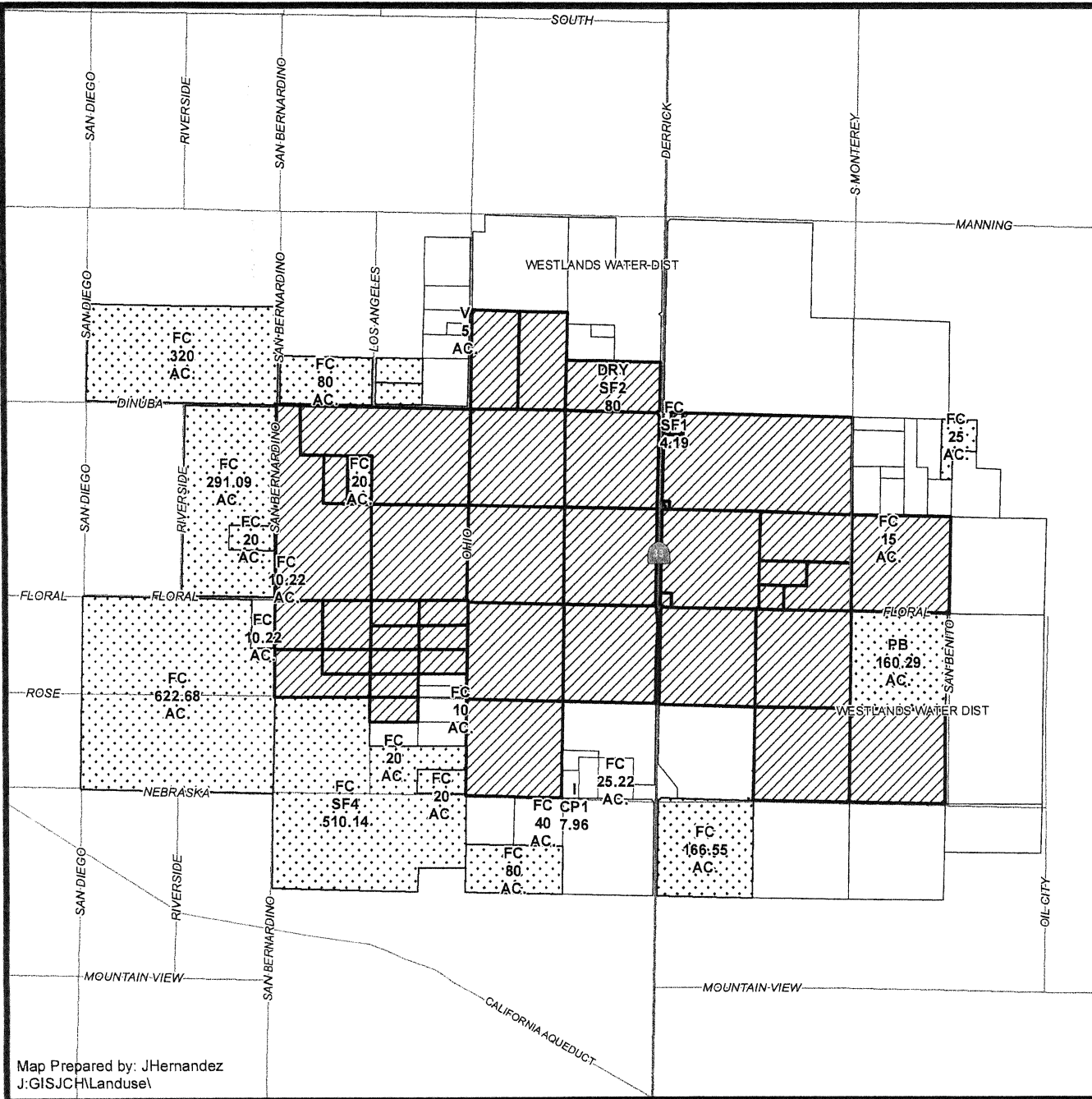
Tranquillity CUP

## EXHIBIT 2





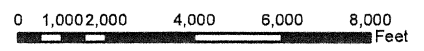
# EXISTING LAND USE MAP



- LEGEND**
- CP# - OFFICE COMM./PROF
  - DRY - DRY FARMING
  - FC - FIELD CROP
  - I - INDUSTRIAL
  - PONDING BASIN
  - SF#- SINGLE FAMILY RESIDENCE
  - V - VACANT

- LEGEND:**
- Subject Property
  - Ag Contract Land

EXHIBIT 3



Department of Public Works and Planning  
Development Services Division

Map Prepared by: JHernandez  
J:GISJCHLanduse1





## EXHIBIT 4



## Inter Office Memo

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**DATE:** October 9, 2014

**TO:** Board of Supervisors

**FROM:** Planning Commission

**SUBJECT:** RESOLUTION NO. 12466 - UNCLASSIFIED CONDITIONAL USE PERMIT APPLICATION NOS. 3451 THROUGH 3458 AND ASSOCIATED ENVIRONMENTAL IMPACT REPORT NO. 6730 (STATE CLEARINGHOUSE NO. 2013111056)

**APPLICANTS:** RE Tranquillity LLC, RE Tranquillity 2 LLC, RE Tranquillity 3 LLC, RE Tranquillity 4 LLC, RE Tranquillity 5 LLC, RE Tranquillity 6 LLC, RE Tranquillity 7 LLC, RE Tranquillity 8 LLC

**OWNER:** Westlands Water District  
David and Sharon Wakefield

**REQUEST:** Allow photovoltaic (PV) electricity generating facilities (400 megawatts total) and associated infrastructure including up to eight power blocks of solar arrays in different configurations, up to eight electrical substations, and other necessary infrastructure including up to eight permanent operation and maintenance buildings, a supervisory control and data acquisition (SCADA) system, up to 200 megawatts (MW) of on-site energy storage (either battery or flywheel system), meteorological data system, buried conduit for electrical wires, overhead collection lines strung on 300 to 500 wood power line poles (each up to 70 feet tall), on-site access roads, and security fencing.

**LOCATION:** The Project site is located approximately seven miles southwest of the community of Tranquillity, 5.5 miles east of Interstate 5, and five miles north of the community of Three Rocks. The Project site is comprised of approximately 3,732 acres in western unincorporated Fresno County and would encompass 39 parcels located south of West Manning, north of West Nebraska Avenue, east of South San Bernardino Avenue, and west of South San Benito Avenue. All of

the parcels are within the jurisdictional boundaries of Fresno County.

PLANNING COMMISSION ACTION:

At its hearing of October 9, 2014, the Commission reviewed and considered the Environmental Impact Report prepared for the project by ESA and considered the Staff Report and testimony (summarized in Exhibit "A").

A motion was made by Commissioner Yates and seconded by Commissioner Ferguson to certify and adopt the Environmental Impact Report prepared for the project, adopt Findings of Overriding Consideration and the Mitigation Monitoring and Reporting Program and Condition Compliance Matrix (MMRP) pursuant to the CEQA Resolution with modification to require an Irrevocable Letter of Credit as part of the Financial Assurances component for each of the Reclamation Plans associated with the eight individual projects; adopt the recommended Findings of Fact in the Staff Report; and approve Unclassified Conditional Use Permit Application Nos. 3451, 3452, 3453, 3454, 3455, 3456, 3457, and 3458, subject to the mitigation measures, conditions of approval, and mandatory project notes attached as Exhibit "B" (Mitigation Monitoring and Reporting Plan) and attached as Exhibit "B" to Resolution No. 12466 (a).

This motion passed on the following vote:

VOTING:      Yes:            Commissioners Yates, Ferguson, Mendes, Rocca  
                  No:            Commissioner Zadourian  
                  Absent:       Commissioner Lawson  
                  Abstain:      None  
                  Recused:     Commissioners Batth, Borba, Woolf

ALAN WEAVER, DIRECTOR  
Department of Public Works and Planning  
Secretary-Fresno County Planning Commission

By:   
William M. Kettler, Manager  
Development Services Division

NOTE:

The approval of each of the project's individual conditional use permits will expire two years from the date of approval unless a determination is made that substantial development has occurred. When circumstances beyond the control of the Applicant do not permit compliance with this time limit, the Commission may grant an extension not to exceed one additional year with a maximum of four (4) discretionary one-year time extensions available for each conditional use permit. Application for such extension must be filed with the Department of Public Works and Planning before the expiration of the Unclassified Conditional Use Permit.

Attachments

EXHIBIT "A"

Unclassified Conditional Use Permit  
Application Nos. 3451, 3452, 3453, 3454, 3455, 3456, 3457, and 3458

Staff: The Fresno County Planning Commission considered the Staff Report dated October 9, 2014, and heard a summary presentation by staff and the consultant team, ESA, that prepared the EIR.

Applicant: The Applicant's representative concurred with the Staff Report and the recommended Conditions. She described the project and offered the following information:

- Recurrent Energy has been a good neighbor to Fresno County and its communities and believes our projects are a component in stimulating the local economy with local economic benefits by bringing responsible solar development to the County.
- We are a leading solar photovoltaic developer, owner and operator with several projects totaling 515 Megawatts (MW) in operation and a significant project pipeline.
- We are proud of our 19 MW Adams East project that is currently under construction.
- We used the principals of "Smart from the Start" to site this photovoltaic project on non-productive agricultural lands that are also not considered high-value biological habitat; the site is not designated as Prime Farmland and is not subject to Williamson Act Contracts.
- The site is subject to a non-irrigation covenant that was part of the Westlands settlement; this covenant is effective on the subject properties in perpetuity with no surface water allocation and very low biological resource value.
- As we will be actively managing the site during operations, we do not believe there will be a concern that the site will invite the establishment of protected species; as there are no trees on site, there will be no opportunities for Swainson's Hawk to nest; any San Joaquin Kit Foxes would likely only use the site for

1 RESOLUTION NO. 12466 (a)

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BEFORE THE PLANNING COMMISSION  
OF THE COUNTY OF FRESNO  
STATE OF CALIFORNIA

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IN THE MATTER OF THE	)	RESOLUTION CERTIFYING THE FINAL	)
RE TRANQUILLITY SOLAR	)	ENVIRONMENTAL IMPACT REPORT FOR	)
GENERATING PROJECT	)	THE RE TRANQUILLITY SOLAR	)
UNCLASSIFIED CONDITIONAL USE	)	GENERATING PROJECT	)
PERMIT NOS. 3451 THROUGH 3458	)	[SCH NO. 2013111056] ADOPTION OF	)
		CEQA FINDINGS; ADOPTION OF	)
		MITIGATION MEASURES, THE MITIGATION	)
		MONITORING PROGRAM AND THE	)
		STATEMENT OF OVERRIDING	)
		CONSIDERATIONS	)

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WHEREAS, Fresno County ("County") prepared an Environmental Impact Report ("EIR")

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for the Tranquillity Solar Generating Facility Project ("Project"); and

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WHEREAS, on October 16, 2013, the County distributed the Notice of Preparation

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("NOP") for the EIR for the Project for a 30-day review period, commencing on October 16, 2013

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and ending on November 14, 2013; and

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WHEREAS, on May 21, 2014, a Notice of Availability ("NOA") of the Draft Environmental

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Impact Report ("DEIR") and the requisite number of copies of the DEIR were delivered to the

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State Clearinghouse and mailed to affected public agencies, organizations, and interested

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parties; and

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WHEREAS, the DEIR was duly circulated for a 45-day public review period,

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commencing on May 21, 2014 and ending on July 7, 2014; and

23

WHEREAS, on May 21, 2014, a NOA of the DEIR was published in the San Joaquin-

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Tranquillity Westside Advance, a newspaper of general circulation in western Fresno County,

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covering Kerman, Biola, Mendota, Firebaugh, San Joaquin and Tranquillity; and

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WHEREAS, the County accepted comments on the DEIR until July 7, 2014; and

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WHEREAS, on June 25, 2014, a public meeting was held at the Tranquillity Elementary

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School to receive comments on the document; and

1           WHEREAS, written comments were submitted during the public comment period by  
2 public agencies and members of the public, and after consideration thereof, written responses  
3 were prepared for said comments by the Consultant and were reviewed by County staff; and

4           WHEREAS, on September 10, 2014, a notice was mailed and published announcing  
5 that the Final EIR, which included written responses to the public comments, was available.  
6 Upon request, this document was duly sent by mail to commenting public agencies and  
7 member(s) of the public in a manner such that public agencies and members of the public  
8 received it at least ten (10) days before the action was taken on this date with respect to the  
9 Final EIR and the Project; and

10           WHEREAS, the Final EIR for this Project consists of the DEIR, the Technical  
11 Appendices thereto, the Comments to the DEIR and the written Responses to said Comments,  
12 and certain errata to the DEIR, of which all documents constitute and shall be collectively  
13 referred to herein as the "Final EIR"; and

14           WHEREAS, the Final EIR identifies potential impacts relating to Aesthetics, Air Quality  
15 and Hydrology and Water Quality that, even with implementation of the Mitigation Measures  
16 proposed in the EIR, cannot be reduced to a level of insignificance, or there are no known  
17 Mitigation Measures to reduce the impacts to a level of insignificance; and

18           WHEREAS, Mitigation Measures, a Mitigation Monitoring Program, and a Statement of  
19 Findings and Overriding Considerations is proposed for adoption; and

20           WHEREAS, on October 9, 2014, the Planning Commission ("Commission") held its  
21 public hearing to consider the Project, including the Planning Commission Staff Report related  
22 to the Final EIR, and said documents were independently reviewed and considered by the  
23 Commission; and

24           WHEREAS, the Commission reviewed and considered the information presented in the  
25 Final EIR and other relevant evidence to determine compliance with the California  
26 Environmental Quality Act (CEQA), State CEQA Guidelines and the County's procedures for  
27 implementing CEQA; and

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1           WHEREAS, the Commission, after considering all of the evidence presented and based  
2 on substantial evidence, finds and declares that the foregoing recitals (made a part hereof) are  
3 true, and makes further Findings concerning the environmental impacts relating to the Project,  
4 as described in the Final EIR. These Findings are set forth more specifically in attached Exhibit  
5 "A", which is incorporated herein by reference. These Findings, which are based on substantial  
6 evidence, were reviewed by the Commission. The Findings reflect that except for certain  
7 significant effects relating to Aesthetics, Air Quality and Hydrology and Water Quality, all  
8 potentially significant environmental effects will be substantially lessened and reduced to a level  
9 of insignificance through the adoption and implementation of feasible Mitigation Measures  
10 proposed in the Final EIR. These Findings further reflect that with respect to certain significant  
11 effects relating to Aesthetics, Air Quality and Hydrology and Water Quality, specific economic,  
12 legal, social, technological, or other considerations, including considerations for assisting  
13 California's utilities in meeting their obligations under the State's Renewable Portfolio Standard  
14 Program, assisting California's utilities in meeting their obligations under the California Public  
15 Utility Commission's (CPUC) Energy Storage Framework and Design Program, assisting in  
16 California meeting Green House Gas (GHG) emissions reduction goals, and the provision of  
17 employment opportunities for trained workers, make infeasible the Mitigation Measures or  
18 Alternatives identified in the Final EIR. These Findings reflect that specific overriding economic,  
19 legal, social, technological, or other benefits of the Project outweigh the significant effects on the  
20 environment relating to Aesthetics, Air Quality and Hydrology and Water Quality.

21           NOW, THEREFORE IT IS HEREBY RESOLVED that the Fresno County Planning  
22 Commission hereby finds as follows:

- 23           1. The Final EIR has been completed and processed in compliance with CEQA.
- 24           2. The Planning Commission has been presented the Final EIR and has reviewed and  
25 considered the information contained in the Final EIR.
- 26           3. The Final EIR reflects the independent judgment of the Commission.
- 27           4. The Final EIR is thus certified.

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1           5. The Commission finds that the Mitigation Measures and the Mitigation Monitoring  
2 Program attached as Exhibit "B" and incorporated herein by reference is adequate with respect  
3 to those Mitigation Measures imposed on the Project.

4           6. The Commission further finds that certain significant environmental effects relating to  
5 Aesthetics, Air Quality and Hydrology and Water Quality would remain following implementation  
6 of Project design elements and the Mitigation Measures adopted by the County and set forth in  
7 the Findings (Exhibit "A"), the Mitigation Monitoring and Reporting Plan (Exhibit "B") and any  
8 other Conditions of Approval imposed by the County.

9           7. The Commission further finds that the Mitigation Measures the County has required  
10 mitigate and/or substantially lessens all other significant effects on the environment to the extent  
11 feasible, as noted in the Final EIR. However, despite these Mitigation Measures, there are still  
12 significant and unavoidable environmental impacts from this Project. Accordingly, after  
13 considering such impacts and balancing specific economic, legal, social, technological and  
14 other factors, the Commission adopts the Statement of Overriding Considerations, which is  
15 based on substantial evidence, as set forth in attached Exhibit "A".

16           8. The Commission makes the CEQA related Findings and Statement of Overriding  
17 Considerations as attached in Exhibit "A".

18           9. The Clerk of the Fresno County Planning Commission, located at 2220 Tulare Street,  
19 is custodian of the document and other materials which constitute the record of the proceedings  
20 upon which the Commission's decision is based.

21           THE FOREGOING was passed and adopted by the following vote of the Planning  
22 Commission of the County of Fresno the 9<sup>th</sup> day of October 2014, to-wit:

23           AYES:           Commissioners Yates, Ferguson, Mendes, Rocca

24           NOES:           Commissioner Zadourian

25           ABSENT:       Commissioner Lawson

26           ABSTAIN:       None

27           RECUSED:       Commissioners Batth, Borba, Woolf

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Alan Weaver, Clerk  
Department of Public Works and Planning  
Secretary – Fresno County Planning Commission

By:   
\_\_\_\_\_  
William M. Kettler, Manager  
Development Services Division

Date: October 9, 2014

Resolution No. 12466

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**EXHIBIT "A"**

**CEQA Findings of Fact and  
Statement of Overriding Considerations**

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# **CEQA FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS**

## **1.0 Statement of Findings**

The findings and determinations contained herein are based on competent and substantial evidence, both oral and written, contained in the record relating to the Tranquillity Solar Generating Facility Project (Project) and the Environmental Impact Report (EIR). These findings and determinations constitute the independent findings and determinations by the County of Fresno (County) in all respects and are fully and completely supported by substantial evidence in the record as a whole.

Although the findings below identify specific pages within the Draft and Final EIRs in support of various conclusions reached below, the County incorporates by reference and adopts as its own, the reasoning set forth in both environmental documents, and thus relies on that reasoning, even where not specifically mentioned or cited below, in reaching the conclusions set forth below, except where additional evidence is specifically mentioned. The County further intends that if these findings fail to cross reference or incorporate by reference any other part of these findings, any finding required or permitted to be made by the County with respect to any particular subject matter of the Project must be deemed made if it appears in any portion of these findings or findings elsewhere in the record.

## **1.1 Introduction**

The County proposes to approve the RE Tranquillity Solar Generation Facility (Solar Facility) proposed by RE Tranquillity LLC, RE Tranquillity 2 LLC, RE Tranquillity 3 LLC, RE Tranquillity 4 LLC, RE Tranquillity 5 LLC, RE Tranquillity 6 LLC, RE Tranquillity 7 LLC, and RE Tranquillity 8 LLC (Applicants<sup>1</sup>). The Applicants have applied to the Fresno County Department of Public Works and Planning for eight Unclassified Conditional Use Permits (UCUPs) to construct, operate, maintain, and decommission solar photovoltaic (PV) electricity generating facilities and associated infrastructure (the “Solar Facility”). Construction of a new utility switching station (the “Switching Station”) is necessary to interconnect the Solar Facility to the statewide high-voltage electrical grid. While the County does not have approval authority over Switching Station, which would be owned and operated by Pacific Gas and Electric Company (PG&E) and be subject to the jurisdiction of the California Public Utilities Commission (CPUC), the environmental impacts of the Switching Station are reviewed as part of the Project.

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<sup>1</sup> The Applicants are wholly-owned subsidiaries of Recurrent Energy Development Holdings, LLC.

In accordance with the California Environmental Quality Act (CEQA) and its implementing guidelines (the “CEQA Guidelines”),<sup>2</sup> the County published the Draft Environmental Impact Report (DEIR) for the Project (EIR No. 2013111056) in May 2014. The DEIR assessed the potential environmental impacts of implementing the Project. The DEIR was circulated for public review and comment for a period of 45 days that ended July 7, 2014. In addition, a duly noticed public meeting to present the DEIR's conclusions and to receive comments on the DEIR was held on June 25, 2014. During and following the end of the review period, comments were received on the DEIR.

The County reviewed those comments to identify specific environmental concerns and to determine whether any additional environmental analysis would be required to respond to issues raised in the comments. The County determined that the comments raised no new significant issues, and responses to all substantive comments received on the DEIR were prepared and included in the Final EIR (FEIR), which was made available to the public on September 11, 2014.

Section 15132 of the CEQA Guidelines requires an FEIR to include:

- The DEIR or a revision of the draft;
- Comments and recommendations received on the DEIR either verbatim or in summary;
- A list of persons, organizations, and public agencies commenting on the DEIR;
- The responses of the lead agency to significant environmental points raised in the review and consultation process; and
- Any other information added by the lead agency.

The County has reviewed the FEIR prepared for this Project and has determined that it contains each of the items required by CEQA Guidelines Section 15132. Therefore, the County certifies that the FEIR has been completed in compliance with CEQA. Following certification of the FEIR, the County will evaluate the action it will take with regard to the Project, which could include approving the Project as proposed by the Applicants, approving the Project with modifications, approving an alternative to reflect changes or concerns identified as a result of this CEQA review, or denying the Project.

On October 9, 2014, the Fresno County Planning Commission considered and heard testimony on the Project from the Project proponents, the general public, and County staff. The Commission on October 9, 2014 voted to certify the EIR and approve the Project by a vote of four to one (4 – 1) with one Commissioner absent and three Commissioners recused.

The documents and other materials that constitute the record of the proceedings on which the County's decision is based are located at the County of Fresno, Public Works & Planning Department, 2220 Tulare Street, 6th Floor, Fresno, California. The custodian for these documents and materials is Briza Sholars, Planner III; Fresno County Public Works and Planning Department;

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<sup>2</sup> Pub. Res. Code §21000 et seq.; 14 Cal. Code Regs. §15000 et seq.

Planning & Environmental Analysis. This information is provided in compliance with Public Resources Code Section 21081.6(a)(2) and CEQA Guidelines Section 15091(e).

## 1.2 Description of the Approved Project

### 1.2.1 Project Location

The Project site is located approximately 7 miles southwest of the community of Tranquillity, 5.5 miles east of Interstate 5, and 5 miles north of the community of Three Rocks. The Project site is comprised of approximately 3,732 acres in western unincorporated Fresno County and would encompass 39 parcels located south of West Manning, north of West Nebraska Avenue, east of South San Bernardino Avenue, and west of South San Benito Avenue. All of the parcels are within the County's jurisdictional boundaries (FEIR, p. 1-2):

### 1.2.2 Project Objectives

The Applicants have identified the following objectives for the Project (DEIR p. 2-6):

- Establish a solar PV power-generating facility of a sufficient size and configuration to produce up to 400 MW of electricity in a cost competitive manner.
- Develop previously disturbed sites in close proximity to transmission infrastructure in order to minimize environmental impacts.
- Interconnect directly to the California Independent System Operator (CAISO) high-voltage electrical transmission system (grid).
- Use proven and established PV technology that is efficient, low maintenance, and recyclable.
- Assist California utilities in meeting their obligations under California's Renewable Portfolio Standard (RPS) Program, including 25 percent of retail sales from renewable sources by the end of 2016 and 33 percent by the end of 2020.
- Assist California utilities in meeting their obligations under the CPUC's Energy Storage Framework and Design Program, including procurement targets of 470 MWs by 2016 and 1,325 MWs by 2020, by providing up to 200 MW of storage capacity.
- Facilitate grid interconnection of intermittent and variable PV generation and minimize line losses associated with off-site storage by collocating battery storage at the PV facility site.
- Assist California in meeting the greenhouse gas (GHG) emissions reduction goal by 2020 as required by the California Global Warming Solutions Act (AB 32).

### 1.2.3 Project Description

The Project as proposed and evaluated in the EIR consists of the following key components (FEIR pp. 1-2, 2-80, 2-81):

1. The Solar Facility, including:
  - a. Eight power blocks of solar arrays in different configurations (arrays include PV panels and steel support structures, electrical inverters, transformers, cabling, and other infrastructure);

- b. Eight electrical substations (one for each power block); and
  - c. Other necessary infrastructure, including up to eight permanent operation and maintenance buildings, supervisory control and data acquisition (SCADA) system, up to 200 MW of on-site energy storage, meteorological data system, buried conduit for electrical wires, overhead collection lines, a 140-foot radio tower for telecommunications, on-site access roads, and security fencing.
2. The Switching Station, including: one high-voltage 230 kV utility switching station and grid interconnection, which would interconnect the eight proposed substations to two existing 230 kV transmission lines owned and operated by PG&E; either one 100-foot radio tower or approximately 2.5 miles of buried fiber optic cable for telecommunications; and other necessary infrastructure such as a pre-fabricated control building, capacitor banks, and monopole structures. The Switching Station would be constructed within the Solar Facility, but would have separate access and security fencing. Upon completion, the Switching Station would be owned and operated by PG&E.

Fresno County, as lead agency for the Project, has discretionary authority over the primary Project proposal. To implement this Project, the Applicants would need to obtain, at a minimum, the following discretionary permits/approvals:

- Eight UCUPs.
- Approval of a parcel map application. This would be submitted to the Fresno County Public Works and Planning Department.
- Vacation of public roadway easements and offers for dedication.
- CPUC has discretionary authority over PG&E's construction and operation of the Switching Station. To construct and operate the Switching Station, PG&E would file a Notice of Construction with the CPUC.

### 1.3 Record of Proceedings

In addition to this Statement of Findings, in accordance with Public Resources Code Section 21167.6(e), the record of proceedings for the Project includes, but is not limited to, the following elements:

- The Notice of Preparation (NOP) and all other public notices issued by the County in conjunction with the Project;
- The May 2014 DEIR for the Project (State Clearinghouse No. No. 2013111056);
- The September 2014 FEIR for the Project (State Clearinghouse No. 2013111056);
- The Mitigation Monitoring and Reporting Program for the Project (Staff Report Exhibit 1);
- All reports, studies, memoranda, staff reports, or other documents related to the Project prepared by the County, or consultants to the County with respect to the County's compliance with the requirements of CEQA and with respect to the County's action on the Project;
- All documents submitted to the County by other public agencies, the Applicants or the Applicants' consultants, or members of the public in connection with the Project, up through the close of the public hearing;

- Any minutes and/or verbatim transcripts of all information sessions, public meetings, and public hearings held by the County in connection with the Project; and
- Any other materials required for the record of proceedings by Public Resources Code Section 21167.6(e).

## 1.4 Findings Required Under CEQA

These findings have been prepared in accordance with CEQA and the CEQA Guidelines. Public Resources Code Section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" Section 21002 goes on to state, "in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof."

The principles in Public Resources Code Section 21002 are implemented, in part, through the requirement that agencies must adopt findings before approving projects for which EIRs are required. Pursuant to CEQA Guidelines Section 15091, the approving agency must issue a written finding reaching one or more of three permissible conclusions for each significant environmental effect identified in an EIR for a project:

- Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.
- Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
- Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

The County's findings with respect to the Project's significant effects and mitigation measures are set forth below. The discussion below does not attempt to describe the full analysis of each environmental impact contained in the EIR. Instead, the discussion summarizes each potentially significant impact, describes the applicable mitigation measures identified in the FEIR and adopted by the County, and states the County's findings on the significance of each impact after imposition of the adopted mitigation measures. In making these findings, the County ratifies, adopts, and incorporates into these findings the analysis and explanation in the FEIR and the determinations and conclusions of the FEIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

CEQA does not require a lead agency to make individual findings for impacts that are determined to be less than significant without mitigation (CEQA Guidelines §15091(a)). Impacts associated with the Solar Facility deemed to be less than significant prior to mitigation are discussed in detail in the EIR (see, e.g., DEIR p. ES-6). For the following resources areas there either would be no impact or impacts would be less than significant:



- Agriculture and Forest Resources (including cumulative impacts)
- Geology and Soils (including cumulative impacts)
- Land Use and Planning (including cumulative impacts)
- Mineral Resources (including cumulative impacts)
- Public Services (including cumulative impacts)
- Population and Housing (including cumulative impacts)
- Recreation (including cumulative impacts)
- Transportation/Traffic (including cumulative impacts)
- Utilities and Service Systems (including cumulative impacts)

In addition, certain impacts on other resources were deemed to be less than significant without mitigation or no impact, despite the need for mitigation or a finding of significant and unavoidable impacts on other impacts with respect to that same resource area, as listed below:

- Aesthetics – The Solar Facility would not have a substantial adverse effect on a scenic vista (No Impact)
- Aesthetics – The Solar Facility would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (No Impact)
- Air Quality – The Solar Facility would not conflict with or obstruct implementation of the applicable air quality plan (No Impact)
- Air Quality – Construction and operation of the Solar Facility would not create objectionable odors (Impact 4.4-5)
- Biology – The Solar Facility would not have a substantial adverse impact, 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 CDFW or USFWS (No Impact)
- Biology – Solar Facility lighting could have a substantial adverse direct or indirect impact on special-status wildlife (Impact 4.5-2)
- Biology – The Solar Facility would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS (No Impact)
- Biology – The Solar Facility would not 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 (No Impact)
- Biology – The Solar Facility could interfere substantially with native resident or migratory wildlife corridors (Impact 4.5-6)

- Biology – The Solar Facility would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (No Impact)
- Greenhouse Gas Emissions – The Solar Facility would generate direct and indirect GHG emissions (Impact 4.9-1)
- Hazards and Hazardous Materials – The Solar Facility would not create a significant hazard to the public or the environment through reasonably foreseeably upset and accident conditions involving the release of hazardous materials into the environment (Impact 4.10-2)
- Hazards and Hazardous Materials – The project would not emit hazardous emissions or handle hazardous substances or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school (No Impact)
- Hazards and Hazardous Materials – The project would not 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 not create a significant hazard to the public or the environment (No Impact)
- Hazards and Hazardous Materials – The project is not located within an airport land use plan or within two miles of a public use airport, and so would not result in a safety hazard for people residing or working in the project area (No Impact)
- Hazards and Hazardous Materials – The project is not within the vicinity of a private airstrip, and so would not result in a safety hazard for people residing or working in the project area (No Impact)
- Hazards and Hazardous Materials – The Solar Facility could physically interfere with emergency response or evacuation routes (Impact 4.10-3)
- Hazards and Hazardous Materials – The Solar Facility would not expose structures to significant risk of loss involving wildland fires (Impact 4.10-4)
- Hydrology and Water Quality – Construction and maintenance of the Solar Facility could result in increased erosion and sedimentation and/or pollutant (e.g., fuels and lubricants) loading to surface waterways, which could increase turbidity, suspended solids, settleable solids, or otherwise decrease water quality in surface waterways (Impact 4.11-1)
- Hydrology and Water Quality - Construction and operation and maintenance of the Solar Facility could 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 (Impact 4.11-4)
- Hydrology and Water Quality – Construction and operation and maintenance of the Solar Facility could substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface run-off in a manner that could result in flooding on- or off-site (Impact 4.11-5)
- Hydrology and Water Quality – The project would not create or contribute runoff water which could exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff (No Impact)

- Hydrology and Water Quality – The project would not otherwise substantially degrade water quality (No Impact)
- Hydrology and Water Quality – The project would not 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 (No Impact)
- Hydrology and Water Quality – The project would not place within a 100-year flood hazard area structures which would impede or redirect flood flows (No Impact)
- Hydrology and Water Quality – The project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (No Impact)
- Hydrology and Water Quality – The project would not expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow (No Impact)
- Noise – Solar Facility activities could expose people and/or structures to vibration levels (Impact 4.14-2)
- Noise – Solar Facility construction and decommissioning activities would temporarily increase local ambient noise levels (Impact 4.14-4)
- Noise – The Solar Facility would not be located within an airport land use plan or, within two miles of a public airport or public use airport, exposing people residing or working in the project area to excessive noise levels (No Impact)
- Noise – The Solar Facility would not be located within the vicinity of a private airstrip, exposing people residing or working in the project area to excessive noise levels (No Impact)
- Cumulative impacts to cultural and paleontological resources
- Cumulative impacts to hazards and hazardous materials
- Cumulative impacts to greenhouse gas emissions
- Cumulative impacts to noise

The Switching Station would have less than significant impacts on all environmental resources and no mitigation would be required (DEIR p. ES-6; FEIR p. 2-74).

## Findings of Fact

The County has reviewed the FEIR, which contains responses to comments on the DEIR, any text changes to the DEIR, and additional information. The County also has considered the entire record for this Project (see Section 1.3 of these Findings of Fact). On the basis of this review, and because Findings of Fact are not required to be made for the Switching Station, the County hereby makes the following Findings of Fact regarding the significant effects of the Solar Facility pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15091.

## 1.4.1 Aesthetics Impacts:

### **Impact 4.2-1: The Solar Facility would substantially degrade the existing visual character and quality of the site and its surroundings.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081 (a)(1); 14 Cal. Code Regs §15091(a)(1)).

However, specific economic, legal, social, technological, or other considerations as specified in Section 2 below of these findings make infeasible the mitigation measures or alternatives identified in the EIR (Pub. Res. Code §21081(a)(3); 14 Cal. Code Regs. §15091(a)(3)).

**Facts in Support of Finding:** The County adopts the following mitigation measures, but finds that no feasible mitigation can reduce the adverse impact of the Solar Facility to a less-than-significant level. Project components, including the Solar Facility's fencing and solar panels, would be visible and visually obtrusive from the viewpoint of motorists looking northeast from State Route 33, a primary area of visibility (described at DEIR p. 4.2-26). The height of the solar panels could create an enclosed feeling in an expansive landscape with low-lying vegetation. Due to the introduction of solar panels, collector line poles and conductors, and a chain link security fence, which are geometric forms that are more vertical and obstructive to the surrounding rural scenery in comparison to existing agricultural activities, the County finds that, even when combined with the mitigation measures below, the Solar Facility's impact on the visual character of the site and its surroundings is significant and unavoidable. Impacts that would result from proposed power lines and poles would be reduced with the implementation of **Mitigation Measures 4.2-1 to 4.2-4** but would remain significant and unavoidable. The use of additional landscaping for screening would not be entirely effective in reducing impacts due to the height of structures and would not be feasible due to the non-irrigation covenant<sup>3</sup> on the Project site. The following mitigation measures are required in order to minimize views of the solar panels, collector line poles and conductors, and a chain link security fence, which were identified as the primary source of potential aesthetic impacts (DEIR p. 4.2-28).

Beyond the mitigation identified below, no feasible mitigation measures were identified that reduce the potential impact to a less-than-significant level. To the extent that this impact will not be substantially lessened or avoided, the County finds that specific economic, social and other considerations identified in the Statement of Overriding Considerations (Section 2) support certification of the EIR and approval of the Project.

#### **Mitigation Measure 4.2-1:**

*The Solar Facility operator, to the extent commercially feasible, shall underground electrical collection systems to reduce the random tall vertical lines created by electrical poles.*

<sup>3</sup> See DEIR pages 2-2 and 4.2-28 and DEIR Appendix J regarding the prohibition on irrigation.

**Mitigation Measure 4.2-2:**

*The Solar Facility operator shall clear debris from the Project area at least four times per year; this can be in conjunction with regular panel washing and site maintenance activities.*

**Mitigation Measure 4.2-3:**

*The Solar Facility operator shall apply appropriate treatments to structures, as approved by the Fresno County Public Works and Planning Department. Solar Facility structures include buildings, electrical enclosures, and inverters. Paints having little or no reflectivity shall be used whenever possible. Grouped structures shall be painted the same color to reduce visual complexity and color contrast. The choice of color treatments shall be based on the appearance at typical viewing distances and consider the entire landscape around the proposed development as it would be viewed from publically accessible locations. Appropriate colors for smooth surfaces often need to be two to three shades darker than the background color to compensate for shadows that darken most textured natural surfaces. Examples of the color contrast created by exposed metal and untreated inverters are shown on Figure 4.2-20.*

**Mitigation Measure 4.2-4:**

*Prior to the commencement of operations, the Solar Facility operator shall submit a landscape revegetation plan for the Solar Facility site. The plan shall include the requirement that a native seed mix shall be spread under the solar panels as needed to establish ground cover. The seed mix shall be determined through consultation with local experts and shall be approved by the Fresno County Public Works and Planning Department prior to planting. The plan must include a timeline for seeding the Project site, and limitations on guarantee of revegetation success should be considered due to the lack of irrigation available on the Project site.*

**Impact 4.2-2: The Solar Facility could create a new source of light and glare that could adversely affect day and nighttime views in the area.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects of the impact to less than significant. Light and glare, in the form of an environmental impact, typically is associated with bright light emanating from a project site and illuminating adjacent properties during nighttime hours. In this case, construction of the Solar Facility generally would be undertaken during daylight hours; night work is not proposed other than electrical connection of PV panels; therefore construction lighting would not illuminate nighttime view. Minimal glare from reflection off construction equipment, representing a small surface area, would be temporary. During operation, the Solar Facility would include illumination for normal working conditions and security lighting. Motion sensor sight would be designed to provide the minimum illumination needed to achieve safety and security objectives. All lighting would be designed in accordance with applicable County requirements. (DEIR p. 4.2-32; FEIR pp. 2-44, 2-48). Potential impacts resulting from lighting would be minimized through compliance with all development standards and the implementation of the following mitigation measure will

further minimize the potential for spillover lighting to adversely affect residents and motorists to less than significant. During operation, the reflection of sunlight off the surfaces of the solar panels would be the primary source of potential glare from the Project (DEIR p. 4.2-33; FEIR pp. 2-44, 2-80, 2-123, 2-135). Potential design features including a fixed-tilt system or single axis tracking system would ensure the reflection would be toward the light source or back into the atmosphere away from receptors on the ground.

**Mitigation Measure 4.2-5:**

*Project facility lighting shall be designed to provide the minimum illumination needed to achieve safety and security objectives. All lighting shall be directed downward and shielded to focus illumination on the desired areas only and avoid light trespass into adjacent areas. Lenses and bulbs shall not extend below the shields.*

**1.4.2 Air Quality Impacts:**

**Impact 4.4-1: The Solar Facility would violate an air quality standard or contribute substantially to an existing or projected air quality violation.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

However, specific economic, legal, social, technological, or other considerations as specified in Section 2 below of these findings make infeasible the mitigation measures or alternatives identified in the EIR (Pub. Res. Code §21081(a)(3); 14 Cal. Code Regs. §15091(a)(3)).

**Facts in Support of Finding:** The County adopts the following mitigation measures, but finds that no feasible mitigation can reduce the Solar Facility construction and decommissioning generated criteria pollutant emissions to less than significant. Estimated construction emissions associated with the Solar Facility in Year 1 would exceed the annual San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds of significance for PM10, ROG, NOx, CO, and PM2.5. Solar Facility construction in Year 2 would result in exceedances of the NOx and PM10 thresholds (DEIR p. 4.4-12; FEIR pp. 2-124, 2-315, 2-319, 2-320). The SJVAPCD has identified PM10 as the pollutant of greatest concern for construction-related emissions. Mitigation would reduce these impacts but would not prevent an exceedance of the SJVAPCD thresholds and impacts of Solar Facility construction would remain significant and unavoidable.

The following mitigation addresses fugitive dust emissions by implementing measures such as watering, limiting vehicle speed, creating and implementing a Dust Control Plan, and limiting construction in windy conditions (Regulation VIII), and reducing exhaust emissions from construction equipment greater than 50 horsepower by 20 percent below statewide average NOx emissions and 45 percent below statewide average PM10 emissions (Rule 9510). Implementation of these mitigation measures would reduce emissions but would not prevent an exceedance of the SJVAPCD threshold and construction impacts under this criterion would remain significant and unavoidable for the Solar Facility. Beyond the mitigation measures identified below, no feasible mitigation measures have been identified that reduce the impact to a less-than-significant level. To the extent that this impact will not be substantially lessened or avoided, the County finds that specific

economic, social and other considerations identified in the Statement of Overriding Considerations (Section 2) support certification of the EIR and approval of the Project.

**Mitigation Measure 4.4-1a: Solar Facility Fugitive Dust Control Measures.**

*Prior to grading on site, the Applicants shall submit a Solar Facility Fugitive Dust Control Plan to the SJVAPCD for review and approval. The Fugitive Dust Control Plan shall be applicable to only the construction and decommissioning phases and shall meet the requirements in Table 8021-1 and incorporate the Regulation VIII recommended fugitive dust control measures to reduce PM<sub>10</sub> emissions to the extent practical, including but not limited to:*

- *All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.*
- *Stockpiles of excavated soils on the Solar Facility site shall be wetted during daily construction activities and shall be covered at the end of each workday, during weekends, and periods of extended storage.*
- *All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.*
- *All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water, dust palliatives, or by presoaking.*
- *When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.*
- *All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.*
- *Use of blower devices is expressly forbidden.*
- *Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.*
- *Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.*
- *Limit traffic speeds on unpaved roads to 15 mph.*
- *Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope toward the road of greater than one percent.*
- *Install wind screens (fabric incorporated into fencing) at the windward side of active construction areas.*
- *Suspend excavation and grading activity if dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or off-site property.*

- *After active clearing, grading, and earth moving is completed within any portion of the site, the following dust control practices shall be implemented:*
  - *Once initial leveling and vegetation removal has been completed within a given area, that portion of the site shall be immediately treated with a dust suppressant (water or palliative).*
  - *Dependent on specific site conditions (season and wind conditions), revegetation shall occur in those areas where planned as soon as practical.*
  - *All unpaved road areas shall be treated with a dust suppressant or graveled as soon as possible to prevent excessive dust.*

**Mitigation Measure 4.4-1b: Solar Facility Construction/Decommissioning Equipment Exhaust Control Measures.**

- *During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications. Equipment maintenance records and equipment design specification data sheets shall be kept onsite during construction.*
- *Electricity from power poles shall be used whenever practicable instead of temporary diesel or gasoline powered generators to reduce the associated emissions.*
- *To reduce construction vehicle (truck) idling while waiting to enter/exit the site, the contractor shall submit a traffic control plan that will describe in detail safe detours to prevent traffic congestion to the best of the Solar Facility's ability, and provide temporary traffic control measures during construction activities that will allow both construction and on-street traffic to move with less than 5-minute idling times.*
- *Construction equipment will use only California certified diesel or gasoline fuels.*
- *The Applicant will utilize construction equipment that is at the Tier 3 emission level (Appendix E).*

**Mitigation Measure 4.4-1c: Valley Fever Training.**

*Prior to ground disturbance activities, the project operator shall provide evidence to the Fresno County Public Works and Planning Department that the project operator and/or construction manager has developed a "Valley Fever Training Handout," training, and schedule of sessions for education to be provided to all construction personnel. All evidence of the training session materials, handout(s), and schedule shall be submitted to the Fresno County Public Works and Planning Department within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews will come to the site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Fresno County Public Works and Planning Department regarding the "Valley Fever Training Handout," and Session(s) shall include the following:*

- a) *A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session.*
- b) *Distribution of a written flier or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever.*



- c) *Training on methods that may help prevent Valley Fever infection.*
- d) *A demonstration to employees on how to use personal protective equipment, such as respiratory equipment (masks), to reduce exposure to pollutants and facilitate recognition of symptoms and earlier treatment of Valley Fever. Though use of the equipment is not mandatory during work, the equipment shall be readily available and shall be provided to employees for use during work, if requested by an employee. Proof that the demonstration is included in the training shall be submitted to the County. This proof can be via printed training materials/agenda, DVD, digital media files, or photographs.*

*Prior to the Notice to Proceed for decommissioning, the project operator will follow the above process for all decommissioning work.*

**Impact 4.4-2: The Solar Facility would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is in non-attainment under applicable federal and state ambient air quality standards (including releasing emissions which exceed quantitative thresholds for ozone precursors).**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

However, specific economic, legal, social, technological, or other considerations as specified in Section 2 below of these findings make infeasible the mitigation measures or alternatives identified in the EIR (Pub. Res. Code §21081(a)(3); 14 Cal. Code Regs. §15091(a)(3)).

**Facts in Support of Finding:** The County adopts the following mitigation measures, but finds that no feasible mitigation can reduce the adverse impact to less than significant. The San Joaquin Valley Air Basin is currently classified as non-attainment for the 1-hour state ozone standard as well as for the federal and state 8-hour standards. Additionally, the Air Basin is classified as non-attainment for the state 24-hour and annual arithmetic mean PM10 standards as well as the state annual arithmetic mean and the national 24-hour PM2.5 standards. The Air Basin is unclassified or classified as attainment for all other pollutants standards (DEIR p. 4.4-5). Solar Facility construction and decommissioning emissions would exceed applicable significance thresholds for ROG, NOx, PM10, and PM2.5 criteria pollutants and ozone precursors (ROG and NOx); therefore the impacts of the Solar Facility would be cumulatively considerable.

The following mitigation measures address fugitive dust emissions by requiring watering, limiting vehicle speed, creating and implementing a Dust Control Plan, and limiting construction in windy conditions (Regulation VIII), and the reduction of exhaust emissions from construction equipment greater than 50 horsepower by 20 percent below statewide average NOx emissions and 45 percent below statewide average PM10 emissions (Rule 9510). Implementation of these mitigation measures would reduce emissions but would not prevent an exceedance of the SJVAPCD threshold and the Solar Facility's construction impacts would remain significant and unavoidable. Beyond the mitigation identified below, no feasible mitigation measures have been identified that reduce the impact to a less-than-significant level. To the extent that this impact will not be substantially lessened or avoided, the County finds that specific economic, social and other

considerations identified in the Statement of Overriding Considerations (Section 2) support certification of the EIR and approval of the Project.

**Mitigation Measures:**

- Mitigation Measure 4.4-1a: Solar Facility Fugitive Dust Control Measures.
- Mitigation Measure 4.4-1b: Solar Facility Construction/Decommissioning Equipment Exhaust Control Measures.
- Mitigation Measure 4.4-1c: Valley Fever Training

**Impact 4.4-3: The Solar Facility would expose sensitive receptors to substantial pollutant concentrations.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects of the impact to a less-than-significant level. The Solar Facility is not anticipated to result in a significant exposure risk to Diesel Particulate Matter (DPM), in part because of the large area within which project construction would occur relative to the fixed location of sensitive receptors. The Project would use construction equipment that is at the Tier 3 emission level. The following mitigation addresses fugitive dust emissions by implementing measures such as watering, limiting vehicle speed, creating and implementing a Dust Control Plan, and limiting construction in windy conditions (Regulation VIII), and reducing exhaust emissions from construction equipment greater than 50 horsepower by 20 percent below statewide average NOx emissions and 45 percent below statewide average PM10 emissions (Rule 9510).

**Mitigation Measures:**

- Mitigation Measure 4.4-1a: Solar Facility Fugitive Dust Control Measures.
- Mitigation Measure 4.4-1b: Solar Facility Construction/Decommissioning Equipment Exhaust Control Measures.
- Mitigation Measure 4.4-1c: Valley Fever Training.

**Impact 4.4-4: Solar Facility construction and decommissioning activities could potentially expose local sensitive receptors and San Joaquin kit fox, a federally- and state-listed species, to *Coccidioides immitis* spores.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Construction activities that include ground disturbance can result in fugitive dust, which can cause fungus *Coccidioides* spores to become airborne if they are present in the soil. Because ground disturbance in the County

is ongoing and the number of cases of Valley Fever reported in the County is low each year, and as independently enforceable protections of worker safety and healthy are in place, the risk is low that fugitive dust caused by the Project would cause substantial adverse effects on human beings. However, because the potential consequences of contracting Valley Fever are high (potentially including death), the County conservatively concludes that Solar Facility-related fugitive dust could cause a significant impact (DEIR p. 4.4-20; FEIR pp. 2-11, 2-306, 2-321). The following mitigation measure addresses fugitive dust emissions by implementing measures such as watering, limiting vehicle speed, creating and implementing a Dust Control Plan, and limiting construction in windy conditions (Regulation VIII), and would ensure that fugitive dust that could contain *coccidioides immitis* spores would be controlled to the maximum extent feasible. With the implementation of this mitigation, Valley Fever-related impacts to humans and wildlife would be less than significant.

**Mitigation Measures:**

- Mitigation Measure 4.4-1a: Solar Facility Fugitive Dust Control Measures.
- Mitigation Measure 4.4-1c: Valley Fever Training

### 1.4.3 Biological Resources Impacts:

**Impact 4.5-1: The Project could have a substantial adverse direct or indirect impact on San Joaquin kit fox.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects of the impact to a less-than-significant level. Surveys for San Joaquin kit fox did not detect this species or sign thereof on the Project site or immediate vicinity and the Project site is considered low quality foraging habitat due to agricultural uses and the low density of prey species. Therefore, San Joaquin kit fox is not expected to occur on the Project site or immediate vicinity on a regular basis. However, as the Project site is within potentially suitable habitat that this species could occasionally cross, the potential exists for San Joaquin kit foxes to occur sporadically within the Project site or immediate vicinity prior to or during construction. If present during construction activities, the Solar Facility would have the potential to directly (e.g., through mortality or injury) or indirectly (e.g., by altering prey abundance) impact the species. (DEIR p. 4.5-16; FEIR pp. 2-44, 2-46, 2-47). The following mitigation measures will be implemented to ensure that construction-related impacts to resident or transient San Joaquin kit foxes are less than significant.

**Mitigation Measure 4.5-1a: Preconstruction San Joaquin kit fox Surveys.**

*Preconstruction surveys shall be conducted by a qualified biologist for the presence of San Joaquin kit fox dens within 14 days prior to commencement of construction activities. The surveys shall be conducted in areas of suitable habitat for San Joaquin kit fox. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur within 14 days prior to that portion of the Solar Facility site is*

*disturbed. Surveys shall utilize the U.S. Fish and Wildlife Service (1999a) San Joaquin Kit Fox Survey Protocol for the Northern Range. If no potential San Joaquin kit fox dens are present, no further mitigation is required under this measure. If potential dens are observed and avoidance is determined to be feasible by a qualified biologist in consultation with the Project Owner and the County (as defined in CEQA Guidelines §15364 consistent with the USFWS (1999) Standardized Recommendations for Protection of the San Joaquin Kit Fox), the following minimum buffer distances shall be established prior to construction activities:*

- *San Joaquin kit fox potential den: 50 feet.*
- *San Joaquin kit fox active den: 100 feet.*
- *San Joaquin kit fox natal den: 500 feet.*

*If avoidance of the potential dens is not feasible, the following measures are required to avoid potential adverse effects to the San Joaquin kit fox:*

- *If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers or foxes from re-using them during construction.*
- *If the qualified biologist determines that potential a non-natal den may be active, an on-site passive relocation program may be implemented with prior concurrence from the USFWS. This program shall consist of excluding San Joaquin kit foxes from occupied burrows by installation of one way doors at burrow entrances, monitoring of the burrow for one week to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the San Joaquin kit foxes have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction.*

**Mitigation Measure 4.5-1b: Solar Facility Construction Worker Environmental Awareness Program.**

*Prior to the issuance of grading or building permits and for the duration of construction activities, within one week of employment all new construction workers at the Project site shall attend a Construction Worker Environmental Awareness Program, developed and presented by the Lead Biologist (a pre-recorded video presentation will suffice). Any employee responsible for the operation and maintenance or decommissioning of the completed facilities shall also attend/watch the Construction Worker Environmental Awareness Program. The program shall include information on the life history of the San Joaquin kit fox and shall also describe other special-status wildlife species that may occur on-site, including burrowing owl and Swainson's hawk.*

*The program shall also discuss each species' legal protection status, the definition of "take" under the federal and state Endangered Species Acts, measures the Solar Facility operator is implementing to protect the species, reporting requirements, specific measures that each worker shall employ to avoid take of wildlife species, and penalties for violation of the federal or state Endangered Species Act. An acknowledgement form signed by each worker indicating that environmental training has been completed would be kept on record. A sticker shall be placed on hard hats indicating that the worker has completed the environmental training. Construction workers shall not be permitted to operate equipment*

*within the construction areas unless they have attended the training and are wearing hard hats with the required sticker. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms shall be submitted to Fresno County Public Works and Planning Department. The construction crews and contractor(s) shall be responsible for unauthorized impacts from construction activities to sensitive biological resources that are outside the areas defined as subject to impacts by Solar Facility permits.*

**Mitigation Measure 4.5-1c: Avoidance and Protection of Biological Resources.**

*During construction, operation and maintenance, decommissioning of the Solar Facility, the Solar Facility operator and/or contractor shall implement the following general avoidance and protective measures to protect San Joaquin kit fox and other special-status wildlife species:*

- *All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid special status species where possible. Construction-related activities outside of the impact zone shall be avoided.*
- *The Solar Facility operator shall limit the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. These areas shall be flagged and disturbance activities, vehicles, and equipment shall be confined to these flagged areas.*
- *Spoils shall be stockpiled in disturbed areas that lack native vegetation. Best Management Practices shall be employed to prevent erosion in accordance with the Project's approved Stormwater Pollution Prevention Plan. All detected erosion shall be remedied within two days of discovery or as described in the Stormwater Pollution Prevention Plan.*
- *To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches with a 2-foot or greater depth shall be covered with plywood or similar materials at the close of each working day, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected by the Lead Biologist or approved biological monitor for trapped animals. Open trenches, holes, or excavations that could trap wildlife shall be inspected daily by the environmental compliance monitor. If trapped animals are observed, the Lead Biologist shall be notified and escape ramps or structures shall be installed immediately to allow escape. If a listed species is trapped, the USFWS and/or CDFW shall be contacted immediately.*
- *All construction pipes, culverts, or similar structures with a 4-inch or greater diameter that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until the Lead Biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated by the Lead Biologist. The Lead Biologist shall have the appropriate state or federal permits necessary to capture and/or relocate non-listed special-status species*

*potentially occurring on the Project site. Capture and/or relocation of a state or federally listed species shall not occur without prior consultation with, and approval from, the applicable resource agencies.*

- *No vehicle or equipment parked on the Solar Facility sites shall be moved prior to inspecting the ground beneath the vehicle or equipment for the presence of wildlife. If present, the animal shall be left to move on its own.*
- *Vehicular traffic to and from the Solar Facility sites shall use existing routes of travel. Cross country vehicle and equipment use outside of the Project properties shall be prohibited.*
- *A speed limit of 20 miles per hour shall be enforced within all Solar Facility areas during construction.*
- *A long-term trash abatement program shall be established for construction, operations, and decommissioning of the Solar Facility. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to wildlife such as common raven (*Corvus corax*), coyote (*Canis latrans*), and feral dogs.*
- *Workers shall be prohibited from bringing pets and firearms to the Solar Facility area and from feeding wildlife.*
- *Intentional killing or collection of any special-status wildlife species shall be prohibited.*
- *Fencing of the Solar Facility site shall incorporate wildlife-friendly fencing design. Fencing plans may use one of several potential designs that would allow SJKF to pass through the fence while still providing for Solar Facility security and exclusion of other unwanted species (i.e., domestic dogs and coyotes). Raised fences or fences with entry/exit points of at least 6 inches in diameter spaced along the bottom of the fence to allow species such as San Joaquin kit fox access into and through the Solar Facility site would be appropriate designs.*

**Impact 4.5-3: The Solar Facility could have a substantial adverse direct or indirect, non-collision-related impact on burrowing owl, Swainson's hawk, and other raptors.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to less than significant. Project surveys conducted in 2013 and 2014 observed burrowing owl on and immediately adjacent to the Project site. However, the site does not include features needed for long-term habitation, as it lacks safeguarded berms, ditches, or other areas along the margins of agricultural fields that are not subject to regular tilling. The presence of ground squirrel burrows, which burrowing owl often use, on the Project site presents the potential for site occupancy prior to construction. Thus, the development of the Solar Facility could result in impacts through nest destruction or the loss of owls within burrows.

Suitable nesting locations for raptors, including Swainson's hawk, red-tailed hawk, and American kestrel, include trees and artificial structures such as transmission poles that occur on the Project site and immediate vicinity. If raptors were present on or near the site during construction activities, the Solar Facility has the potential to directly impact individuals through mortality or injury related to collision with Project infrastructure. Any adverse impacts, either direct or indirect, to Swainson's hawk or other raptors as a result of the Project would be considered significant. The following mitigation measures will be implemented to ensure that impacts on burrowing owls, Swainson's hawk and other raptors are less than significant.

**Mitigation Measure 4.5-3a: Preconstruction Burrowing Owl Surveys.**

*Prior to the initiation of equipment staging or ground-disturbing activities, biological surveys shall be performed within 14 days of such activities to ensure that burrowing owls are not impacted by construction activities. Given the large size of the construction site, multiple or ongoing burrowing owl surveys may be required during successive phases of the Project (e.g., between successive construction in different areas). To protect burrowing owls, the following conditions shall be met prior to construction within each successive work area:*

- *A qualified wildlife biologist (i.e., a wildlife biologist with previous burrowing owl survey experience) shall conduct pre-construction surveys on the Solar Facility site and immediate vicinity only in areas of the site with suitable burrowing habitat to locate any active breeding or wintering burrowing owl burrows no fewer than 14 days prior to ground-disturbing activities (i.e., vegetation clearance, grading, tilling). The survey methodology shall be consistent with the methods outlined in the CDFW (2012) Staff Report on Burrowing Owl Mitigation and shall consist of walking parallel transects 7 to 20 meters apart, noting any potential burrows with fresh burrowing owl sign or presence of burrowing owls. As each burrow is investigated, biologists shall also look for sign of San Joaquin kit fox. Copies of the survey results shall be submitted to CDFW and the Fresno County Public Works and Planning Department. The surveys can be conducted concurrently with San Joaquin kit fox surveys.*
- *If burrowing owls are detected on-site, no ground-disturbing activities, such as vegetation clearance or grading, shall be permitted within a buffer of no fewer than 200 meters (660 feet) from an active burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW with the exception noted below. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with CDFW.*
- *The Project site shall be resurveyed to locate any breeding or wintering burrowing owls in the event that ground disturbing construction activities lapse for a period of 14 days after the most recent preconstruction survey.*
- *If burrow avoidance is infeasible during the non-breeding season, a qualified biologist shall implement a passive relocation program in accordance the CDFW (2012) Staff Report on Burrowing Owl Mitigation.*

- *If passive relocation is required, a qualified biologist shall prepare a Burrowing Owl Exclusion and Mitigation Plan and Mitigation Land Management Plan in accordance with CDFW 2012 Staff Report on Burrowing Owl Mitigation and for review by CDFW prior to passive relocation activities. The Mitigation Land Management Plan shall include a requirement for the permanent conservation of off-site Burrowing Owl Passive Relocation Compensatory Mitigation.*
- *Burrowing Owl Passive Relocation Compensatory Mitigation. If passive relocation is required, the Project proponent shall implement the Mitigation Land Management Plan and permanently conserve in a conservation easement off-site habitat suitable for burrowing owl at ratio of 6 acres per passively relocated burrowing owl pair, not to exceed the size of the final project footprint. Land identified to mitigate for passive relocation of burrowing owl may be combined with other off-site mitigation requirements of the Project if the compensatory habitat is deemed suitable to support the species. The Passive Relocation Compensatory Mitigation habitat shall be approved by CDFW. If the Project is located within the service area of a CDFW-approved burrowing owl conservation bank, the Project proponent may purchase available burrowing owl conservation bank credits in lieu of placing off-site habitat into a conservation easement.*

**Mitigation Measure 4.5-3b: Nesting Birds and Raptors:**

*If construction is scheduled to commence during the non-nesting season (September 1 to January 31) within a given construction area (e.g., Power Block), no preconstruction surveys or additional measures are required for nesting birds and raptors within that specific construction area. To avoid impacts to nesting birds in the Project site and immediate vicinity, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the Project sites for ground-disturbing activities that are initiated during the breeding season (February 1 to August 31). The survey for special-status raptors shall focus on potential nest sites (e.g., mature trees) within a 0.5-mile buffer around the site in areas where access to neighboring properties is available or visible using a spotting scope. Surveys shall be conducted no more than 14 days prior to construction activities. Surveys need not be conducted for the entire Project site at one time; they may be phased so that surveys occur shortly before a portion of the Project site is disturbed. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (e.g., 300 feet for common raptors; 0.5 mile for Swainson's hawk; 100 feet for passerines) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). Construction within 0.5 mile of currently or recently active Swainson's hawk nest sites shall not occur during the nesting season without authorization by the CDFW. Encroachment into the buffer may occur at the discretion of a qualified biologist except that encroachment into the buffer for Swainson's hawk must be authorized by the CDFW.*



**Impact 4.5-4: The Project could have a substantial adverse direct or indirect, non-collision-related impact on nesting and migratory birds.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Several bird species, including several that are protected under the California Fish and Game Code (Fish and Game Code §2050 et seq.) and the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.), were observed on and adjacent to the site during Project surveys. Solar Facility-related impacts on nesting birds unrelated to collision could include mortality of individuals by crushing and destruction of nests and eggs through clearing and grading activities. Additional indirect impacts could include interference with reproductive success and nest abandonment brought on by increased noise levels during construction within the breeding season (January 15 through August 31). The installation of buildings and other structures could provide new perches for predators, such as ravens and raptors, which could contribute to declines in local bird populations. (DEIR p. 4.5-22; FEIR pp. 2-45, 2-125). The following mitigation measures will be implemented to ensure that impacts on nesting and migratory birds are less than significant.

**Mitigation Measures:**

- Mitigation Measure 4.5-3a: Preconstruction Burrowing Owl Surveys.
- Mitigation Measure 4.5-3b: Nesting Birds and Raptors.

**Impact 4.5-5: The Project could have a substantial adverse impact to special-status and migratory birds related to the introduction of potential collision hazards.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. During both daytime and nighttime activity, special-status and migratory birds could collide with Project infrastructure, including solar panels and gen-tie lines, beginning when Project structures are erected during construction and remaining until they are removed during decommissioning. Mitigation measures that require collision-minimizing design features to be incorporated into gen-tie line designs thereby reduce the likelihood of bird collisions and electrocutions with these structures to a less-than-significant level. Existing data suggests the possibility that the Solar Facility's solar panels could attract common and special-status migratory bird species, including water birds, to the site that might not otherwise be expected to occur there, where they could be at risk of collision with Project infrastructure (DEIR p. 4.5-23; FEIR pp. 2-45, 2-46, 2-63, 2-70, 2-71). While not expected, it is possible that the Solar Facility's panels could attract birds, including water birds, to the site and, thereby, expose them to significant collision-related risks. To address the uncertainty that exists around this issue, and to assure that any ecologically significant impacts are mitigated to the extent feasible, mitigation measures include the implementation of a Collision Reduction Strategy.

**Mitigation Measure 4.5-5a:**

*Would require compliance with the Avian Power Line Interaction Committee's (APLIC) guidance, Reducing Avian Collisions with Power Lines: State of the Art in 2012 (APLIC, 2012). Transmission lines and all electrical components shall be designed, installed, and maintained in accordance with APLIC (2012) guidance to reduce the likelihood of large bird electrocutions and collisions. Compliance with APLIC standards would reduce the potential impact of collisions and electrocutions with power line structures to a less than significant level.*

**Mitigation Measure 4.5-5b: Collision Reduction Strategy.**

*The Applicant shall implement the following measures to reduce the risk of bird collisions with PV panels.*

- *Installation of visual deterrents or cues to encourage bird avoidance of the Project site. These deterrents will be made of a material that is both reflective and highly visible, such that the material reflects ambient light and is stimulated by air movement. The effect of installation will create the visual impression of continuous and varied movement, which has been shown as an avian deterrent in agricultural applications. Example of the types of material that could be used include plastic compact discs and reflective tape. Within 30 days after project commissioning, materials will be installed in 50-acre blocks to achieve coverage of a total of 200 acres within the Solar Facility on a 3-month trial basis to examine panel performance issues. Following the initial 3-month period, visual deterrents will either be adjusted to reduce performance issues and reexamined on continuing 3-month basis, or if adjustments are not deemed necessary to improve panel performance, deployed on the remainder of the site and maintained for the life of the project or until determined infeasible (based on the definition of "feasible" in CEQA Guidelines §15364) or ineffective by the Project owner in consultation with CDFW and the County.*
- *Panels shall include, if feasible, a light-colored, UV-reflective, or otherwise non-polarizing outline, frame, grid, or border, which has been shown to substantially reduce panel attractiveness to aquatic insects (Horvath, 2010) and may reduce avian mortality by avoiding collisions with panel faces (NFL, 2014).*

**Impact 4.5-7: The Solar Facility could conflict with local policies protecting biological resources.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Fresno County General Plan Goal OS-E contains policies protecting wildlife habitat (DEIR p. 4.5-27). Implementation of preconstruction wildlife surveys, environmental training, and wildlife avoidance and protection measures would avoid or minimize potential impacts to these species and ensure compliance with General Plan Goal OS-E. Therefore, the Solar Facility would not conflict with General Plan Goal OS-E.

**Mitigation Measures:**

- Mitigation Measure 4.5-1a: Preconstruction San Joaquin kit fox Surveys.
- Mitigation Measure 4.5-1b: Solar Facility Construction Worker Environmental Awareness Program.
- Mitigation Measure 4.5-1c: Avoidance and Protection of Biological Resources.
- Mitigation Measure 4.5-3a: Preconstruction Burrowing Owl Surveys.
- Mitigation Measure 4.5-3b: Nesting Birds and Raptors.

**1.4.4 Cultural and Paleontological Resources Impacts:**

**Impact 4.6-1: The Solar Facility could cause a substantial adverse change in the significance of a historical or archaeological resource, as defined in CEQA Guidelines §15064.5.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Construction of the Solar Facility could impact previously unknown, buried archaeological resources. Although overall there is a low probability of significant prehistoric resources existing within the Project site, there nevertheless exists the possibility that buried archaeological resources may be encountered during ground disturbing activities (DEIR p. 4.6-16). Retention of a qualified archaeologist and cultural resources awareness training, and establishing procedures in the event of inadvertent discovery of archaeological materials, impacts to historical and unique archaeological resources from construction of the Project would mitigate impacts to a less-than-significant level.

**Mitigation Measure 4.6-1:**

*The Project proponent shall retain a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior, 2012), to carry out all mitigation measures related to archaeological and historical resources.*

*Prior to the start of any ground disturbing activities, the Project owner shall ensure that the qualified archaeologist has conducted a Cultural Resources Awareness Training for all construction personnel working on the Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified archaeologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of archaeological resources. A sign-in sheet shall be completed and retained to demonstrate attendance at the awareness training.*

**Mitigation Measure 4.6-2:**

*In the event archaeological materials are encountered during the course of grading or construction, the Project contractor shall cease any ground disturbing activities within*

*50 feet of the find. The qualified archaeologist shall evaluate the significance of the resources and recommend appropriate treatment measures. Per CEQA Guidelines §15126.4(b)(3)(A), project redesign and preservation in place shall be the preferred means to avoid impacts to significant archaeological sites. Consistent with CEQA Guidelines §15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures. The County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature. Archaeological materials recovered during any investigation shall be curated at an accredited curatorial facility. The qualified archaeologist shall prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the County and to the Southern San Joaquin Valley Information Center. Construction can recommence based on direction of the qualified archaeologist.*

**Impact 4.6-2: The Solar Facility could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. While no paleontological resources were discovered during the course of the archaeological and historical resources survey of the Project site, the possibility that such resources exist on the site cannot be completely ruled out; therefore, the impact is potentially significant (DEIR p. 4.6-18; see also FEIR p. 2-83 regarding Applicant-proposed clarifications of the specialized training that would occur for all construction personnel prior to the start of any ground-disturbing activities). The following mitigation measures render the impact less than significant.

**Mitigation Measure 4.6-3:**

*The Project proponent shall retain a qualified paleontologist to carry out all mitigation measures related to paleontological resources.*

*Prior to the start of any ground disturbing activities where disturbance will be undertaken at depths equal to or greater than 20 feet, the Project owner shall ensure that the qualified paleontologist has conducted Paleontological Resources Awareness Training for all construction personnel working on the Project. This may be conducted in conjunction with the archaeological resources training required by **Mitigation Measure 4.6-1**. The training shall include an overview of potential paleontological resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified paleontologist for further evaluation and action, as appropriate; and penalties for unauthorized collecting or intentional disturbance of paleontological resources. A sign-in sheet shall be completed and retained to demonstrate attendance at the awareness training.*

**Mitigation Measure 4.6-4:**

*If a paleontological resource is found, the Project contractor shall cease ground-disturbing activities within 50 feet of the find. The qualified paleontologist shall evaluate the*

*significance of the resources and recommend appropriate treatment measures. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Any fossils encountered and recovered shall be catalogued and donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County. Accompanying notes, maps, and photographs shall also be filed at the repository. The qualified paleontologist shall prepare a report documenting evaluation and/or additional treatment of the resource. The report shall be filed with the County and with the repository.*

**Impact 4.6-3: The Project could disturb any human remains, including those interred outside of formal cemeteries.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. While no human remains were discovered during the course of the archaeological and historical resources survey of the Project site, the possibility that such resources exist on the site cannot be completely ruled out; therefore, the impact is potentially significant (DEIR p. 4.6-19). The following mitigation measure renders the impact less than significant.

**Mitigation Measure 4.6-5:**

*If human remains are uncovered during Project construction, the Project owner shall immediately halt work, contact the Fresno County Coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines §15064.5 (e)(1). If the County Coroner determines that the remains are Native American in origin, the Native American Heritage Commission (NAHC) will be notified, in accordance with Health and Safety Code Section 7050.5(c), and Public Resources Code 5097.98 (as amended by AB 2641). The NAHC shall designate a Most Likely Descendent (MLD) for the remains per Public Resources Code Section 5097.98, and the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in Public Resources Code Section 5097.98 with the MLD regarding their recommendations for the disposition of the remains, taking into account the possibility of multiple human remains.*

## 1.4.5 Greenhouse Gas Emissions Impacts:

**Impact 4.9-2: The Solar Facility could conflict with CARB's Climate Change Scoping Plan.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Operation of the Solar Facility could result in fugitive SF<sub>6</sub> emissions. Mitigation Measure 4.9-2 would be implemented to ensure that emissions of SF<sub>6</sub> are negligible.

**Mitigation Measure 4.9-2:**

*The Applicant shall utilize hermetically sealed circuit breakers and gas insulated switchgear for all SF<sub>6</sub>-containing equipment associated with the Project.*

## 1.4.6 Hazards and Hazardous Materials Impacts:

**Impact 4.10-1: The Solar Facility could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Construction, operation, maintenance, and decommissioning of the Solar Facility will use materials that could be hazardous if spilled. Hazardous materials include a variety of liquids that will be stored, transported, used and disposed of on the Project site (DEIR p. 4.10-12).

The use, storage, transport, and disposal of hazardous materials in connection with the Solar Facility will be carried out in accordance with federal, state, and local regulations. Prior to construction, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared by the Applicants. Stormwater runoff quality control measures or best management practices (BMPs) to be included in the SWPPP will minimize the risk of hazardous materials leakage.

The Solar Facility may be constructed using PV panels that contain a thin semiconductor layer containing cadmium telluride (CdTe). While CdTe itself is a hazardous substance in an isolated form, the CdTe in the PV panels is bound and sealed within the glass sheets and a laminate material. If CdTe PV panels are used, implementation of Mitigation Measure 4.10-1, which requires the Applicants to prepare and implement a Broken PV Module Detection and Handling Plan, would minimize the potential for CdTe leaching from damaged panels, and would reduce the potential for the release of hazardous materials from damaged panels to less than significant.

**Mitigation Measure 4.10-1: Broken PV Module Detection and Handling Plan.**

*If PV panels containing CdTe are used, the Applicant shall prepare and implement a Broken PV Module Detection and Handling Plan. The plan shall describe the Applicant's plan for identifying, handling and disposing of PV modules that may break, chip, or crack at some point during the Project's life cycle to ensure the safe handling, storage, transport, and recycling and/or disposal of the modules and related electrical components in a manner that is compliant with applicable law and protective of human health and the environment. The plan shall have the following elements:*

- **Worker health and safety provisions and handling protocol.** *These measures shall address isolating workers from the CdTe during the recovery of broken PV panels and shall include the following requirements:*
  - *Workers shall wear gloves during the handling of broken pieces of PV panels to prevent cuts to the workers.*
  - *If broken pieces are separated from the PV panel, the pieces shall be collected and the areal extent of the collected pieces compared to the broken area on the PV panel to ensure that the pieces have been accounted for.*
  - *The broken pieces shall be placed in drums, sealed boxes, puncture-proof bags, or equivalent containers so as to prevent the broken pieces from tearing the containers and being re-released into the environment.*
- **Timing of removal.** *The PV panels shall be inspected for breakage prior to each washing PV panel event. In the event that broken PV panels are discovered, the broken PV panels and any pieces shall be removed prior to washing any adjacent PV panels so as to prevent wash water from spreading CdTe.*
- **Recycling or disposal requirements.** *If available, broken panels shall be sent to a recycling or CdTe PV panel manufacturing facility licensed for the recycling of CdTe PV panels, if recycling is unavailable, the broken panels shall be sent to a landfill licensed to receive broken CdTe PV panels.*

*The plan shall be submitted to the County for review and approval prior to delivery of CdTe-containing PV panels to the Project site and shall be distributed to all construction crew members and temporary and permanent employees prior to construction and operation of the Project. All available data from the panel manufacturer(s) regarding materials used and safety procedures and/or concerns shall be appended to the plan to assist the County with identifying potential hazards and abatement measures.*

#### 1.4.7 Hydrology and Water Quality Impacts:

**Impact 4.11-2: Dewatering during construction activities could release previously contaminated groundwater to surface water channels and/or increase sediment loading to surface water channels through overland discharge and subsequent erosion, both processes could decrease water quality in surface waterways.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level. Dewatering during construction activities could release previously contaminated groundwater to surface water channels and/or increase sediment loading to surface water channels through overland discharge and subsequent erosion, both processes could decrease water quality in surface waterways.

The dewatering process would be temporary, yielding only a small volume of groundwater, the potential exists for water or saturated soils removed during dewatering to already be contaminated. Discharge (i.e., through dewatering) or displacement of contaminated water

or soil, as a result of excavation related to the Solar Facility, could potentially impact the beneficial uses of surface water or groundwater identified in the Basin. Mitigation Measure 4.11-1 would be required to specifically address the potential water quality impacts associated with dewatering discharge of previously contaminated groundwater.

**Mitigation Measure 4.11-1:**

*If degraded soil or groundwater is encountered during excavation (e.g., there is an obvious sheen, odor, or unnatural color to the soil or groundwater), the Solar Facility Owner and/or its contractor(s) shall excavate, segregate, test, and dispose of degraded soil or groundwater in accordance with state hazardous waste disposal requirements.*

**Impact 4.11-3: Construction and operation and maintenance of the Solar Facility could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measure that will reduce the effects of the impact to a less-than-significant level. Construction and operation and maintenance of the Solar Facility could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume.

During construction, it is anticipated that up to 1,000 acre-feet of water per year would be used for dust suppression and other purposes, while during the operation and maintenance phase the Solar Facility would use up to 20 acre-feet per year for panel washing and other uses. Water for construction needs may be obtained from on-site or neighboring groundwater wells. Depending on the location of the well(s) that would be used by the Solar Facility, construction, operation and maintenance could result in a lowering of the local groundwater table such that nearby wells could be affected. This would be a significant impact that could be reduced to a less than significant level with the incorporation of Mitigation Measure 4.11-2, discussed below.

**Mitigation Measure 4.11-2: Groundwater Monitoring and Mitigation Plan:**

*Prior to extracting groundwater at the Solar Facility site or from nearby wells, a well survey and pump test, as well as a Groundwater Monitoring and Mitigation Plan, shall be prepared. The Plan is not required if groundwater is not used for the Solar Facility. These documents shall be prepared by a qualified professional geologist, hydrogeologist, or civil engineer registered in the State of California. The documents shall be submitted by the Applicants to the County of Fresno (County) for approval, and to the CVRWQCB and/or other agencies as deemed appropriate by the County for review and comment.*

*Well Survey and Pump Test(s): For any existing and/or new groundwater well(s) that would be installed and/or used for the Project: a pump-test shall be conducted during the dry season (June through October). At a minimum, the pump test shall establish (or confirm):*



- *The maximum sustained yield of the well (or the maximum sustained pumping rate that would be used during construction and operation);*
- *The drawdown depth and corresponding stable groundwater elevation;*
- *The area of influence of the well.*

*A well survey shall be conducted to locate nearby, existing groundwater wells that are or will be in active use, and that could potentially be impacted by the Project well(s) based upon the information gathered from the pump-test(s). The well survey shall include detailed information for each identified well, including but not limited to: date of installation, completed depth, screened interval, and any available information on pumping rate and corresponding static groundwater level.*

***Groundwater Monitoring and Mitigation Plan:*** *This Plan shall provide a detailed methodology for monitoring background and Project area groundwater levels and flow. At least one monitoring well shall be established between the Project well(s) and all identified wells (above) in reasonable proximity (e.g., within a distance equivalent to the diameter of the radius of influence of the Project well[s]) to the Project area. Monitoring shall be performed during pre-construction, construction, and operation and maintenance of the Project, with the intent to establish pre-construction and Project-related groundwater level trends that can be quantitatively compared against observed and/or simulated trends near the Project pumping wells and near potentially affected existing wells, if any. Based on the existing and/or proposed Project well location(s), and for the estimated maximum pumping rate, the pre-construction monitoring shall demonstrate that less than 1-foot of drawdown would occur at the Project area boundary location nearest the neighboring well(s).*

*The Groundwater Monitoring and Mitigation Plan shall include a schedule for submittal of quarterly data reports by the Project Owner to the Fresno County Environmental Health Department for the duration of the monitoring period, which shall include the entire duration of construction and one year post-construction. The monitoring reports shall include data from the construction and operation of all Power Blocks in the active construction or operational phase. These quarterly data reports shall be prepared and submitted to the County for review and approval, and shall include:*

1. *Daily usage, monthly range, and monthly average of daily water usage in gallons per day;*
2. *Total water used on a monthly and annual basis in acre-feet; summary of all water level data;*
3. *Identification of trends that indicate potential for off-site wells to experience decline of water level;*
4. *Identification of all sources of water by type (i.e., groundwater, surface water, municipal water) and well/location used on the Project site;*
5. *Water level monitoring data (trend analyses) from all pumping and monitoring wells.*

*Based on the results of the quarterly reports, the Project Owner and County shall determine if the Project's pumping activities have resulted in water level declines in the baseline at any of the monitoring wells, including nearby operating private wells, if any. If, due to Project activities, significant drawdown occurs at active off-site groundwater supply*

wells (e.g., such that the production rate of these wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted as of the date of certification of this EIR), the Project Owner shall: 1) immediately reduce groundwater pumping until water levels stabilize or recover to a reasonable level, and 2) establish an alternative source of water (e.g., those identified by Aspen [2014]) for the remaining construction and/or operations needs of the Project, beyond that which can be sustainably produced from the Project well(s) (i.e., such that active off-site wells are not affected, as described above).

### 1.4.8 Noise Impacts:

#### **Impact 4.14-1: Operation and maintenance of the Solar Facility could result in exposure of persons to noise levels in excess of standards and limits established by Fresno County.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measure, which will reduce the effects to a less-than-significant level. Noise associated with substation operation (DEIR p. 4.14-3) could expose persons to noise levels in excess of standards and limits established by the County. In order to reduce this impact to a less-than-significant level, the Project includes both design features and mitigation measures that will minimize noise. Implementation of the mitigation measure listed below is recommended to reduce the potential significant impacts to a less-than-significant level.

#### **Mitigation Measure 4.14-1: Substation Noise Control.**

*The Applicant shall ensure that the combined noise levels associated with the substations at the Solar Facility site do not exceed the Fresno County exterior noise standards or the Fresno County substation noise limit at the on-site residence location expected to be inhabited at the start of construction (Appendix L). Noise control techniques may include, but not be limited to: locating the transformers with as much setback from the existing residential properties as possible, use of noise walls or equivalent sound attenuation devices, and the use of a transformer with special noise control specifications designed in a way to specifically achieve acceptable regulatory noise standards.*

*Prior to the installation of the substations and associated transformers, the Applicant shall submit to the County, for review and approval, a plan that describes the specific measures that will be taken to ensure compliance with the County's noise standards and limits.*

#### **Impact 4.14-3: Solar Facility operation and maintenance activities would result in a long-term increase in local ambient noise levels.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Project-related operation and maintenance noise levels could result in a long-term increase in local ambient noise levels.

Combined maximum Project-related operation and maintenance noise levels at the on-site residence would be up to 61 dBA. Ambient daytime noise levels in the vicinity of this residence have been measured to be approximately 45 dBA (DEIR Table 4.14-1). This represents a 16 dBA increase compared to ambient levels without the Solar Facility, which would exceed the 5 dBA increase in ambient levels significance criterion, and would result in a significant impact. Implementation of Mitigation Measure 4.14-1 would ensure that combined substation transformer noise levels would not exceed 50 dBA at the on-site residence. This would reduce the noise increase to 5 dBA compared to ambient conditions, which would reduce the significance of this impact to a less-than-significant level.

**Mitigation Measures:**

- Mitigation Measure 4.14-1: Substation Noise Control.

### 1.4.9 Cumulative Impacts:

#### ***Cumulative Aesthetics Resources***

**Cumulative Aesthetics Resources Impacts:** The Project could cause or contribute to a significant adverse cumulative effect on visual resources for as long as the Solar Facility contributes to visual changes to the landscape that are visible or perceived by the public, either within the same viewpoints, or as a noticeable element in a cumulative viewing experience.

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

However, specific economic, legal, social, technological, or other considerations as specified in Section 2 of these findings make infeasible the mitigation measures or alternatives identified in the EIR (Pub. Res. Code §21081(a)(3); 14 Cal. Code Regs. §15091(a)(3)).

**Facts in Support of Finding:** The County finds that the Solar Facility's incremental impact would be cumulatively considerable as part of the proposed conversion of hundreds of acres of rural agricultural land to a solar energy production use. Mitigation measures recommended for this and other renewable energy projects would have a limited ability to appreciably reduce visual impacts from highly exposed areas, such as Interstate 5 and State Route 33. The potential impacts cannot be mitigated to a level below established thresholds of significance, and so the impact would remain significant and unavoidable.

#### ***Cumulative Air Quality***

**Cumulative Air Quality Impacts:** Emissions during construction of the Solar Facility would exceed the SJVAPCD threshold of 10 tons per year for ROG and NO<sub>x</sub> (ozone precursors) and therefore contribute to a cumulative impact regarding ROG and NO<sub>x</sub>.

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

However, specific economic, legal, social, technological, or other considerations as specified in Section 2 of these findings make infeasible the mitigation measures or alternatives identified in the EIR (Pub. Res. Code §21081(a)(3); 14 Cal. Code Regs. §15091(a)(3)).

**Facts in Support of Finding:** The County finds that construction of the Solar Facility could contribute to cumulatively considerable impacts regarding PM<sub>10</sub> and PM<sub>2.5</sub>. Decommissioning of the Solar Facility could contribute to cumulative impacts regarding PM<sub>10</sub>. These pollutants have similar cumulative regional emphasis because particles can be entrained into the atmosphere and contribute to unhealthful levels over time. PM<sub>10</sub> and PM<sub>2.5</sub> also have the potential to cause significant impacts at a local scale if several grading or earth moving projects are underway simultaneously at nearby sites. As shown in DEIR Figure 4.1-1, numerous projects are proposed in the vicinity of the Project site. These projects include one solar project in close proximity to the Project site: the Giffen Solar Park LLC Project. If grading and earth moving activities associated with this project would overlap with activities associated with construction of the Solar Facility, cumulative local impacts to PM<sub>10</sub> and PM<sub>2.5</sub> levels would be potentially significant. The County adopts Mitigation Measure 4.4-1a; however, the Solar Facility's contribution to a PM<sub>10</sub>- or PM<sub>2.5</sub>-related significant cumulative impact would be cumulatively considerable.

**Mitigation Measure 4.4-1a: Solar Facility Fugitive Dust Control Measures:**

*Prior to grading on site, the Applicants shall submit a Solar Facility Fugitive Dust Control Plan to the SJVAPCD for review and approval. The Fugitive Dust Control Plan shall be applicable to only the construction and decommissioning phases and shall meet the requirements in Table 8021-1 and incorporate the Regulation VIII recommended fugitive dust control measures to reduce PM<sub>10</sub> emissions to the extent practical, including but not limited to:*

- *All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.*
- *Stockpiles of excavated soils on the Solar Facility site shall be wetted during daily construction activities and shall be covered at the end of each workday, during weekends, and periods of extended storage.*
- *All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.*
- *All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water, dust palliatives, or by presoaking.*
- *When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.*
- *All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.*

- *Use of blower devices is expressly forbidden.*
- *Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.*
- *Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.*
- *Limit traffic speeds on unpaved roads to 15 mph.*
- *Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope toward the road of greater than one percent.*
- *Install wind screens (fabric incorporated into fencing) at the windward side of active construction areas.*
- *Suspend excavation and grading activity if dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or off-site property.*
- *After active clearing, grading, and earth moving is completed within any portion of the site, the following dust control practices shall be implemented:*
  - *Once initial leveling and vegetation removal has been completed within a given area, that portion of the site shall be immediately treated with a dust suppressant (water or palliative).*
  - *Dependent on specific site conditions (season and wind conditions), revegetation shall occur in those areas where planned as soon as practical.*
  - *All unpaved road areas shall be treated with a dust suppressant or graveled as soon as possible to prevent excessive dust.*

### **Cumulative Biological Resources**

**Impact 4.5-8: The Project could cause a cumulatively considerable contribution to a significant cumulative effect to migratory birds related to the introduction of potential collision hazards.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The project would not contribute to a cumulative impact to the San Joaquin kit fox, burrowing owl, Swainson's hawk or other raptors, or to nesting birds. The Solar Facility could cause impacts to migratory birds including injury and mortality associated with panel collisions. Cumulative projects that include the application of pesticides, construction of new buildings or power lines, or the introduction of vehicles or cats also have the potential to cause injury or mortality related impacts to migratory birds. To further reduce the incremental contribution of the Project and alternatives to this cumulative regional population impact the County adopts Mitigation Measure 4.5-8, Off-site Avian Predation Reduction. Funding from this mitigation measure could reduce current and future feral cat populations in and around the Mendota Wildlife Area and accordingly reduce bird mortality in the affected region. Such funding would off-set

potential incremental Project or alternative-related impacts to migratory birds and, thereby, reduce the contribution of the Solar Facility and alternatives to less than cumulatively considerable.

**Mitigation Measure 4.5-8, Off-site Avian Predation Reduction:**

*The Project Owner shall partner with CDFW, the Rabies and Animal Control Program of the Environmental Health Division in Fresno County, and/or a similar program to fund existing feral cat control programs to be targeted within 10 miles of the Mendota Wildlife Area. The first project owner to be issued a notice to proceed shall fund the program in the amount of \$25,000 within 6 months of the notice to proceed. The obligation set forth in this measure shall not apply to the PG&E Switching Station.*

**Cumulative Hydrology and Water Quality Impacts:**

**Impact 4.11-6: Construction and operation and maintenance of the Solar Facility, the Phased Decommissioning Alternative, or the Reduced Acreage Alternative could cause a cumulatively considerable contribution to a significant adverse over-draft condition in the Westside Basin.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that substantially lessen the significant effects on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

However, specific economic, legal, social, technological, or other considerations as specified in Section 2 of these findings make infeasible the mitigation measures or alternatives identified in the EIR (Pub. Res. Code §21081(a)(3); 14 Cal. Code Regs. §15091(a)(3)).

**Facts in Support of Finding:** The project would result in less than significant impacts to surface water quality. The Solar Facility could result in a cumulative effect on hydrological resources for as long it contributes to an average annual net deficit in the aquifer volume. The County finds that the Solar Facility's incremental impact would be cumulatively considerable as a result of its contribution to the average annual net deficit in the aquifer volume, and subsequently to the exacerbation of local subsidence issues, even with the implementation of Mitigation Measure 4.11-2, Groundwater Monitoring and Mitigation Plan. This potential impact cannot be mitigated to a degree that it no longer would be significant and unavoidable.

**Cumulative Transportation and Traffic Impacts:**

**Impact 4.18-1: Construction traffic associated with the Solar Facility, Phased Decommissioning Alternative, or Reduced Acreage Alternative, when combined with traffic generated by other projects anticipated to use SR 33, could combine to cause a significant adverse cumulative impact relating to traffic flow (LOS) conditions on SR 33.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that substantially lessen the significant effects on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** To avoid a potential significant adverse cumulative impact relating to traffic flow (LOS) conditions on SR 33 the County adopts Mitigation Measure 4.18-1, which would require the Project Owner to prepare a Construction Traffic Control Plan that assures that the necessary permitting of any oversize vehicles used on public roadways during construction would occur, and that the County has sufficient information about anticipated Project construction delivery times and vehicle travel routes in advance to work with other project owners to minimize construction traffic during peak a.m. and p.m. hours and to coordinate as necessary with emergency services provides to assure adequate access on shared roads.

**Mitigation Measure 4.18-1:**

*Prior to the issuance of construction or building permits, the Solar Facility sponsor and/or its construction contractor shall:*

- *Prepare and submit a Construction Traffic Control Plan to Fresno County Divisions of Public Works and Planning and the California Department of Transportation District 6 office for approval. The Construction Traffic Control Plan must be prepared in accordance with current Caltrans standard plans, and both the California Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following issues:*
  - *Timing of deliveries of heavy equipment and building materials;*
  - *Directing construction traffic with a flagger;*
  - *Placing temporary signing, lighting, and traffic control devices if required, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic;*
  - *Ensuring access for emergency vehicles to the project sites;*
  - *Temporarily closing travel lanes or delaying traffic during materials delivery, transmission line stringing activities, or any other utility connections;*
  - *Maintaining access to adjacent property;*
  - *Specifying both construction-related vehicle travel and oversize load haul routes, minimizing construction traffic during the a.m. and p.m. peak hour, distributing construction traffic flow across alternative routes to access the project sites, and avoiding residential neighborhoods to the maximum extent feasible.*
- *Obtain all necessary permits for the work within the road right of way or use of oversized/overweight vehicles that would utilize county-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Fresno County Divisions of Public Works and Planning.*
- *Prior to the start of construction, enter into a secured agreement with Fresno County to ensure that any county roads that are demonstrably damaged by project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the state and/or Fresno County.*

- *Any work for the proposed intersection improvements on Manning Avenue at the Ohio and Monterey alignments first shall require that plans for the improvements be submitted to Road Maintenance & Operations Division (RMO) for review and approval prior to issuance of any encroachment or road improvement permit for the work.*
- *The improvements for these new access roads shall include a requirement that they be paved with asphalt concrete surfacing for a minimum distance of 100 feet from the edge of the Fresno County road right of way to help ensure that no sediment track-out is carried onto the Fresno County road from construction activities. The paved width of this access road shall be a minimum of 24 feet. Any material that is deposited onto the Fresno County-maintained roadway shall be swept clean as soon as possible and at least prior to the end of each working day.*
- *Maintenance of these new access roads shall be the sole responsibility of the Applicant.*
- *The scope of any necessary repair work shall be mutually agreed upon by the Applicant and Fresno County prior to performance of the repair work.*
- *Obtainment of any access easements from private property owners necessary to perform required repair work shall be the sole responsibility of the Applicant.*
- *If the County intends to hire a firm to perform mitigation monitoring, that firm shall be under contract and the Applicant shall have a cost recovery agreement in place prior to the start of construction activities so that “before” and “after” construction conditions for the Fresno County roads can be documented.*
- *Submit documentation that identifies the public roads to be used during construction. The project operator shall be responsible for repairing any damage to non-county maintained roads that may result from construction activities. The project operator shall submit a preconstruction video log and inspection report regarding roadway conditions for roads used during construction to the Fresno County Divisions of Public Works and Planning.*
- *Subsequent to completion of construction, submit a post-construction video log and inspection report to the County. This information shall be submitted in DVD format. The County, in consultation with the project operator’s engineer, shall determine the extent of remediation required, if any.*

#### **1.4.10 Growth Inducing Impacts**

CEQA Guidelines Section 15126.2(d) requires an evaluation of growth inducing impacts that may result from a proposed project and provides the following guidance regarding growth-inducing impacts: A project is identified as growth inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment.

Growth inducement can be a result of new development that increases employment levels, removes barriers to development, or provides resources that lead to secondary growth. With respect to employment, the Project would require up to 256 people at the peak of construction.



The existing construction labor pool in Fresno County is sufficient for meeting Project needs. Following construction, up to 40 temporary staff and 10 permanent staff could be on the site at any one time. Decommissioning activities are expected to require a workforce of approximately 100 workers, and would take approximately 12 months to complete. Because the construction and decommissioning phases of the Project are temporary, the Project is unlikely to cause substantial numbers of people to relocate to Fresno County. Therefore, this Project would not result in a large increase in employment levels that would significantly induce growth.

While it is expected that construction workers would commute to the Project site instead of relocating to Fresno County, even if all workers were to migrate into Fresno County, the existing available housing supply could accommodate them without requiring new construction. Therefore, the Project (including the Solar Facility and the Switching Station) is not expected to induce population growth, the housing and provision of services for which could cause significant adverse environmental impacts.

Although the Project would contribute to the energy supply, which supports growth, the development of power infrastructure is a response to increased market demand, and the availability of electrical capacity by itself does not ensure or encourage growth within a particular area. Other factors such as economic conditions, land availability, population trends, availability of water supply or sewer services and local planning policies have a more direct effect on growth.

#### **1.4.11 Significant Irreversible Environmental Changes That Would Be Involved If the Project Is Implemented**

Section 15126.2(c) of the CEQA Guidelines defines an irreversible impact as an impact that uses nonrenewable resources during the initial and continuing phases of the project. Irreversible impacts also can result from damage caused by environmental accidents associated with a project. Irretrievable commitments of resources are evaluated to ensure that such consumption is justified.

Buildout of the Project would commit nonrenewable resources during construction and ongoing utility services during the operation and maintenance phase. During operations, oil, gas, and other fossil fuels and nonrenewable resources would be consumed and irreversible commitments of small quantities of nonrenewable resources would occur as a result of long-term project operations. However, once operational, the Project would result in a substantial net benefit with respect to nonrenewable resources as a result of the large amounts of renewable energy that would be generated (DEIR p. ES-8).

### **1.5 Mitigation Monitoring Program**

Public Resources Code Section 21081.6(a)(1) states:

- (a) When making the findings required by paragraph (1) of subdivision (a) of Section 21081 [that changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment]. . . [1] The public agency shall adopt a reporting or monitoring program for the*

*changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment...*

The County will use the Mitigation Monitoring and Reporting Program (MMRP) included in the Mitigation Monitoring and Conditions Compliance Program to track Project compliance with required mitigation measures. The Final Mitigation Monitoring and Conditions Compliance Program is attached to and incorporated into the environmental document approval resolution and is approved in conjunction with certification of the EIR and adoption of these Findings of Fact.

## 1.6 Recirculation of DEIR is Not Required

CEQA Guidelines Section 15088.5 requires a lead agency to recirculate an EIR for further review and comment when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR but before certification of the Final EIR. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project proponent declines to implement. The CEQA Guidelines provide the following examples of significant new information under this standard:

A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

A substantial increase in the severity of an environmental impact would result unless mitigation are adopted that reduce the impact to a level of insignificance.

A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (CEQA Guidelines §150885(a); *Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043).

Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. The above standard is "not intend[ed] to promote endless rounds of revision and recirculation of EIRs." *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1993) 6 Cal. 4th 1112, 1132. "Recirculation was intended to be an exception, rather than the general rule." *Id.*

The County recognizes that the FEIR incorporates information obtained by the County since the DEIR was completed, and contains several clarifications. For instance, as a result of changes to Power Block boundaries received from the Applicant following publication of the DEIR, which resulted in associated changes in the UCUP boundaries prepared by the County, numerous text changes were made in the DEIR, including revision to figures showing the Solar Facility layout. See generally, FEIR p. 2-73 (Letter N and responses to the comments therein). None of the changes between the DEIR and FEIR involve "significant new information" triggering recirculation because the additional information did not result in any new significant environmental effects, nor any

substantial increase in the severity of any previously identified significant effects, and otherwise do not trigger recirculation.

## 1.7 Findings Regarding Project Alternatives

Where a lead agency has determined that, even after the adoption of all feasible mitigation measures, a project as proposed will still cause one or more significant environmental effects that cannot be substantially lessened or avoided, the agency, prior to approving the project as mitigated, must first determine whether, with respect to such impacts, there remain any alternatives that are both environmentally superior and feasible within the meaning of CEQA. (*See, e.g., Citizens for Quality Growth v. City of Mt. Shasta* (1988) 198 Cal.App.3d 433, 445.)

Public Resources Code Section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would *substantially lessen* the significant environmental effects of such project" (Pub. Res. Code §21002, italics added.) Section 21002 further states that "in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects."

CEQA defines "feasible" to mean capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal and technological factors (Pub. Res. Code §21061.1; CEQA Guidelines §15364). Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (CEQA Guidelines §15126.6(f)(1)). The concept of "feasibility" also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410,417).

Where the significant impact can be substantially lessened (i.e., mitigated to an "acceptable level") solely by the adoption of mitigation measures, the lead agency, in drafting its findings, has no obligation to consider the feasibility of alternatives with respect to that impact, even if the alternative would mitigate the impact to a greater degree than the project (Pub. Res. Code §21002; *Laurel Hills Homeowners Ass'n v. City Council* (1978) 83 Cal.App.3d 515,521; *Laurel Heights Improvement Ass'n of San Francisco v. Regents of the Univ. of California* (1988) 47 Cal.3d 376,400-403). Thus, CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that otherwise would occur. Project alternatives are not required, however, where such changes are infeasible (CEQA Guidelines §15091).

As noted in the preceding discussion regarding Project impacts, the County finds that the Switching Station would have less-than-significant impacts on all environmental resources (and so requires no mitigation measures) and that most of the potential Solar Facility impacts either would be avoided or reduced to less-than-significant levels as a result of the incorporation of BMPs into the Project

design or through the implementation of feasible mitigation measures recommended in the FEIR. In limited circumstances, even with the implementation of all feasible mitigation measures, the FEIR discloses that some impacts of the Solar Facility may not be reduced to a less-than-significant level relative to the significance thresholds relied upon in the FEIR. The Solar Facility would cause or contribute to significant and unavoidable impacts at the Project level to: visual resources from substantial degradation of existing visual character, hydrology and water quality from depletion of groundwater supplies affecting groundwater recharge and air quality from violation of an air quality standard or a substantial contribution to an existing or projected air quality violation. Cumulatively, the Solar Facility would cause or contribute to a significant unavoidable impact related to its cumulative considerable contribution to impacts on visual character and quality, air quality impacts from criteria pollutants for which the project region is in non-attainment under applicable federal and state ambient air quality standards; and hydrology and water quality from significant adverse over-draft conditions of the Westside Basin. Thus, as a legal matter, the County, in considering alternatives in these findings, need only determine whether any alternatives are environmentally superior with respect to those significant and unavoidable impacts to agricultural land, air, and traffic. If any alternatives are in fact superior with respect to those impacts, the County is then required to determine whether the alternatives are feasible. If the County determines that no alternative is both feasible and environmentally superior with respect to the unavoidable significant impacts identified in the EIR, the County may approve the Project as mitigated, after adopting a statement of overriding considerations.

CEQA does not require an evaluation of all possible alternatives, only an evaluation of "a range of feasible alternatives" so as to encourage both meaningful public participation and informed decision making (CEQA Guidelines §15126.6(a)). "The discussion of alternatives need not be exhaustive, and the requirement as to the discussion of alternatives is subject to a construction of reasonableness" (*Residents Ad Hoc Stadium Committee v. Board of Trustees* (1979) Cal.App.3d 274,286-287).

The Planning Commission has considered the alternatives presented and analyzed in the EIR and presented during the comment period and public hearing process. In considering the Project alternatives, the Planning Commission considered not only the relative environmental impacts and the feasibility of the alternatives, but also the ability of the alternatives to achieve most of the basic stated objectives of the Project.<sup>4</sup> The potential direct, indirect, and cumulative impacts of the Alternatives are analyzed on a resource-by-resource basis throughout DEIR Chapter 4 and then compared in DEIR Chapter 5. The alternatives evaluated in detail in the EIR are (DEIR p. 3-8 et seq.; FEIR p. 3-19):

Phased Decommissioning Alternative

Reduced Acreage Alternative

No Project Alternative

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<sup>4</sup> The Project has eight distinct objectives, which are listed at page 4 of these findings.

It is the Finding of the Planning Commission that there is no feasible environmentally superior alternative to the Project. Thus, the Project may be approved as mitigated, along with a Statement of Overriding Considerations (see Section 2.)

### **1.7.1 Alternatives Considered and Rejected From Detailed Evaluation**

As noted above, potential alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects (14 Cal. Code Regs. §15126.6(c)). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, also do not require consideration (14 Cal. Code Regs. §15126(f)(2)). The County considered several potential alternatives to determine whether they could reduce impacts to air quality, noise, and utilities and public services. Per CEQA, the lead agency may make an initial determination as to which alternatives are feasible and warrant further consideration and which are infeasible. The following potential alternatives initially were considered but then eliminated from further consideration based on the screening criteria described in DEIR Section 3.2 (DEIR p. 3-3):

- An alternative configuration.
- Alternative locations: Other potential candidate sites initially identified by the Applicant, degraded agricultural lands, and impaired or underutilized lands.
- Alternative solar technology: Concentrated solar.
- Two alternative approaches to the proposed generation of solar energy: conservation and demand side management and distributed generation solar.

Each of these alternatives is summarized below, including the rationale for not carrying it forward for more detailed environmental review.

#### ***Alternative Configuration***

As requested during scoping by the owner of property adjacent to the proposed site, the County evaluated the possibility of including an additional parcel (APN 038-08-004S), located at the southwest corner of West Floral Avenue and South San Benito Avenue (DEIR Figure 2-2), into the Project boundary. However, including the parcel in the footprint of the Project would not reduce any of the significant impacts of the Project, could introduce new significant environmental impacts, and would involve risks and costs unique to the parcel that could have detrimental impacts on the development and financing of the Project.

The parcel exhibits extreme variability in topography due to its previous use as a series of water retention basins. The variability in topography **would add significant additional costs** for constructing the Project in order to produce a generally flat site appropriate for a solar facility. Fill material would need to be imported, which would also increase environmental impacts related to **air emissions, traffic, and noise**.

The parcel also is subject to a contract under the California Land Conservation Act (commonly known as the Williamson Act). Solar facilities are not considered a compatible use on Williamson

Act contracted land in Fresno County. Therefore, contract cancellation would be required before a solar facility could be constructed. Cancellation of a contract includes a substantial financial penalty and an additional approval from the County that would add risk to the Project. In addition, cancellation of the existing Williamson Act contract would result in a potentially significant impact on agricultural resources.

While this alternative configuration of the Project would meet most of the Project's objectives, it would not decrease significant impacts of the Project. To the contrary, it would introduce new significant impacts. Further, a potential alternative that included the proposed parcel is considered by the Applicant to be potentially infeasible from an economic perspective. Therefore, this alternative was not carried forward for detailed consideration.

### **Alternative Sites**

#### **Other Potential Candidate Sites Initially Identified by the Applicant**

During the initial phases of Project planning, the Applicant considered the suitability of numerous privately-owned and water district-owned candidate sites in four counties based on their solar insolation potential. The Applicant's initial screening criteria included a preference for contiguous sites with one or a limited number of owners and generally flat topography where the land area was large enough to accommodate a solar generating facility meeting key Project objectives, avoiding pristine and biologically sensitive areas, and favoring proximity to existing transmission facilities with suitable interconnection locations. Based on these screening criteria, candidate sites in Tulare, Kings, and Kern counties were eliminated from further consideration. The Applicant then determined whether candidate sites were available for sale or lease at a reasonable cost. Many sites clearly did not meet the Project objectives, were technically infeasible, or would have presented significant environmental challenges. The Applicants eliminated these potential sites from further consideration before filing permit applications for the proposed site with the County.

#### **Other Degraded Agricultural Lands**

Fresno County actively participated in the Central Valley Renewable Energy Project, which identified opportunities and constraints for renewable energy development in Fresno County and elsewhere in the southern San Joaquin Valley to focus the siting of new renewable energy projects in low-conflict or impaired areas, or on degraded agricultural lands to accelerate renewable energy development while protecting natural resources. Defenders of Wildlife synthesized input received from the County and other government agencies, renewable energy developers, agricultural interests, the conservation community, and others resulted in a report called *Smart From the Start: Responsible Renewable Energy Development in the Southern San Joaquin Valley*. One key recommendation of the report is that renewable energy development be focused on impaired or degraded lands, such as agricultural lands that are demonstrably chemically or physically impaired. The report describes Westlands Water District lands, which include the Project site, as an example of smart-from-the-start renewable energy project siting. Because the Project is proposed on a site expressly recommended in the report, the County did not consider other degraded agricultural lands within the County as potential alternative sites.

**Impaired or Underutilized Lands**

A second key recommendation made in *Smart From the Start: Responsible Renewable Energy Development in the Southern San Joaquin Valley* is that renewable energy development be focused on brownfields, closed landfills, Superfund sites, Resource Conservation and Recovery Act and closed mine lands. The EIR preparers (DEIR p. 6-1 et seq.) researched potentially contaminated and underutilized sites identified as appropriate for solar-PV projects as part of the United States Environmental Protection Agency's 2009 Re-Power America's Lands Project and considered the qualitative assessment tool. The EIR preparers then used spatial data provided by the RE-Powering America's Land Initiative to identify potential renewable solar energy sites in Fresno County that were located on existing contaminated lands, landfills, or mines. The search generated 27 sites that were identified as being suitable for utility scale solar development. Of these 27 sites, 18 sites are under 500 acres in size with an estimated solar PV capacity potential below 65 MW per site. These sites were eliminated from further consideration as inadequately sized to meet the Project objective of establishing a solar PV energy-generating facility of a sufficient size and configuration to produce up to 400 MW of electricity in a cost competitive manner. Of the remaining nine sites, seven are between 500 and 1,000 acres in size with an estimated solar PV capacity potential below 300 MW and were similarly eliminated from further consideration. The two remaining sites are the Fresno Air Terminal/Old Hammer Field located at McKinley (Site Id No. 10450005) and Clovis Avenues and the Mount Owen Rifle Range (Site Id No. 71000033), located approximately 6 miles northeast of Clovis. Both these sites are over 1,000 acres in size. However, the Repowering Initiative identified the power generation capacity of each site as a maximum of 300 megawatts. Accordingly, these sites could not meet the Project objective for power generation, and so were eliminated from further consideration.

**Alternative Solar Technology: Concentrated Solar**

Concentrated solar power systems (parabolic trough or power tower) were considered as potential alternatives to the Project. However, for the reasons discussed below, these types of systems were not carried forward for detailed consideration. Concentrated solar power systems use reflective surfaces in large arrays to focus the sun's energy on a fixed point to produce intense heat from which electricity can be generated. Parabolic troughs concentrate sunlight onto individual units, each of which is equipped with receiver tubes filled with a heat transfer fluid. Power towers focus sunlight onto a single receiver – the tower. For both of these concentrated solar technologies, the transfer fluid is super-heated before being pumped to heat exchangers that transfer the heat to boil water and run a conventional steam turbine to produce electricity. Although concentrated solar power systems can store heated fluids to deliver electricity even when the sun is not shining, these systems can cause environmental issues related to reflectivity and thermal plumes, and radar interference.

The land required to develop a concentrated solar energy facility is comparable to that required for a PV project – approximately 3.5 acres per GWh per year for solar thermal, approximately 3.6 acres per GWh per year for PV. Use of a concentrated solar technology would meet most of the basic Project objectives; however, use of this technology would not avoid or substantially lessen any of the potential significant effects of the Project and could generate new significant impacts such as those associated with the use, transport, disposal of hazardous materials (the heat

transfer fluid), as a result of the use of reflective surfaces of the solar thermal arrays (as compared to the non-reflective surfaces of solar panels) causing or contributing to substantial glint or glare related impacts. Accordingly, a concentrated solar power system alternative was not considered further.

### ***Alternative Approaches***

The County considered whether conservation and demand side management, distributed generation solar, or a phased construction alternative could provide a reasonable feasible alternative to the Project and elected not to carry them forward for further consideration. Briefly, and as described in more detail below, conservation and demand side management, and distributed generation alternatives are clearly part of a sustainable energy future; however, these methods alone will not meet the State's renewable energy goals. Therefore, it is critical for PG&E and other utilities to supplement these methods by considering renewable energy resources in planning for future energy needs.

### **Conservation and Demand Side Management**

Conservation and demand side management consists of a variety of approaches to reduce electricity use. It includes increased energy efficiency and conservation, building and appliance standards, and load management. Implementation of conservation and demand side management techniques could result in a reduction in demand thus reducing the need for new generation, and thereby serve the region's growing demand for power. However, this alternative would not meet the Project objectives. Unmet Project objectives include: constructing a PV solar energy facility on a previously-disturbed site within close proximity to existing transmission lines and assisting California utilities in meeting renewable energy and GHG emissions reduction goals.

PG&E has a conservation and demand side management program in place that provides information to the public regarding energy efficiency, free energy surveys, and rebate programs for residential, commercial, and other customers. In addition, the population is projected to increase within Fresno County every year that the Project would be in service. Consequently, reliance on conservation and demand side management alone would be a technically infeasible alternative to the Project.

The CPUC regulates distributed generation policies and programs on both the customer and utility (wholesale) sides of the electric meter. Customer-side programs include the California Solar Initiative and the Self-Generation Incentive Program. These programs require customers to proactively install solar electric systems on homes, businesses and other sites; solar thermal (also known as "solar hot water") systems; or eligible distributed energy resources such as energy storage devices, wind turbines, and fuel cells. Rooftop systems already are prevalent in the region: the City of Fresno ranks third in the state (behind San Diego and Bakersfield) in terms of the number of residential rooftop solar projects, Clovis ranks seventh, and Visalia ranks 20th. Utility-side procurement programs encourage net export onto the electrical system side of the customer's electrical meter and include programs implemented under the Renewable Portfolio Standard as well as programs whereby utilities such as PG&E can purchase PV generated power pursuant to a power purchase agreement such as the one being negotiated for this Project.



**Distributed Generation**

A distributed generation solar alternative could result in the installation of additional PV systems on public and private residential, commercial, or industrial rooftops; commercial and public parking facilities; and/or shade structures in playgrounds and parks throughout PG&E's service area in Fresno County. However, distributed solar energy generation would not meet Project Objectives relating to the location of PV solar plant facilities capable of generating up to 400 MW as near as possible to existing electrical sub-transmission and distribution facilities, or accommodate an economically viable mix of agricultural and non-agricultural uses of the proposed site that includes solar power generation. In addition, distributed solar would be an infeasible alternative to the Project because the Applicant does not own or have a right to use the many sites that would be required to generate a comparable amount of solar-generated energy as the Project.

**Phased Construction Alternative**

The County considered, but rejected from more detailed consideration, the possibility that the proposed construction period could be phased to preclude overlapping activities as necessary for construction-related air emissions to remain below established significance thresholds and, thereby, to avoid some of the Project's significant unavoidable construction emissions; however, such permutations resulted in extremely long construction periods. The County determined that a phased construction approach would not meet feasibility criteria due to unpredictable contractor availability and field conditions as well as potential technical and economic constraints.

**1.7.2 Alternatives Considered for Detailed Evaluation**

The Phased Decommissioning Alternative and the Reduced Acreage Alternative were selected through the screening process described above; the No Project alternative also is included as required by CEQA. The Phased Decommissioning Alternative would meet most of the basic Project objectives, would be feasible, and would avoid or reduce potential environmental effects of the Project related to decommissioning-related air emissions. The Reduced Acreage Alternative would similarly meet most of the Project objectives, while reducing potential environmental impacts associated with air quality, biology, hydrology and aesthetics.

***Phased Decommissioning Alternative*****Description**

Under the Phased Decommissioning Alternative, all aspects of the Project would remain as described in DEIR (p. 3-8), except for the decommissioning schedule, which would be extended from 1 year to 3 years, and the decommissioning of the Switching Station, which would not be undertaken as part of the Project. Following the completion of construction the Switching Station would be owned and operated by PG&E under the regulation of the CPUC. Any decision to decommission the Switching Station would be made by PG&E independent of the Project. This alternative would meet most of the basic Project objectives; would meet all legal, regulatory, and technical feasibility criteria; and would reduce some of the Project's significant unavoidable air quality impacts. By extending the duration of Project decommissioning activities, direct emissions of PM<sub>10</sub> during decommissioning would be below annual significance thresholds.

Under this Alternative the incremental contribution to significant cumulative effects relating to PM<sub>10</sub> would be similarly reduced to below established thresholds.

### Impacts

**Aesthetics:** Under the Phased Decommissioning Alternative, all aspects of the Project would remain, except for the decommissioning schedule, which would be extended. The extension of the decommissioning phase would incrementally increase the duration of decommissioning-related impacts to Aesthetics, but not sufficiently to affect the impact conclusions. Accordingly, impacts associated with the Phased Decommissioning Alternative would be the same as for the Project during all phases.

**Agriculture and Forestry Resources:** The Phased Decommissioning Alternative would affect the timing of development but not the number of acres to be developed or the activities that would occur on the land. Therefore, like the Project, the Phased Decommissioning Alternative would cause no impact to Agriculture and Forestry resources.

**Air Quality:** Under the Phased Decommissioning Alternative, decommissioning would be phased over 3 years in order to reduce air quality impacts. Emissions associated with construction and operation of the Phased Decommissioning Alternative would be the same as described for the Solar Facility; construction emissions would be significant and unavoidable even with the implementation of mitigation. PM<sub>10</sub> emissions would be reduced compared to the Solar Facility by extending the duration of decommissioning activities over three years instead of one, which would reduce decommissioning PM<sub>10</sub> emissions to below established thresholds and result in a less than significant impact.

**Biological Resources:** The Phased Decommissioning Alternative would result in similar impacts to the Project with respect to Biological Resources but could result in additional impacts to special-status biological resources due to the extension of decommissioning activities into multiple breeding seasons or migration periods for several special-status species (e.g., San Joaquin kit fox; raptors including Swainson's hawk, burrowing owl, red-tailed hawk, and American kestrel; and migratory birds including loggerhead shrike, mourning dove, and Brewer's blackbird). A longer duration for decommissioning could also increase the risk of impacts on any special-status species or other wildlife present on or near the site due to construction activity-related mortality or injury. Although potential construction related impacts would be incrementally greater as a result of the extended decommissioning period required for this Alternative, the implementation of pre-construction wildlife surveys, environmental training, and wildlife avoidance and protection measures would be effective in reducing the significance of impacts from year to year. Accordingly, although the intensity of individual impacts may vary slightly as a result of the duration of the decommissioning period between the Project and the Phased Decommissioning Alternative, the variation would not be sufficient in any instance to change the significance conclusions. Therefore, the Phased Decommissioning Alternative would have the same potential impacts as those described for the Project, including less than significant impacts to migratory birds.

**Cultural and Paleontological Resources:** Under the Phased Decommissioning Alternative, the Project would not change, except for the Solar Facility decommissioning schedule. Because the

area of ground disturbance would not change from the Project, impacts to historical and unique archaeological resources, paleontological resources, and human remains as a result of construction, operation and maintenance, and decommissioning of the Phased Decommissioning Alternative would be the same as for the Project Energy Conservation: The Phased Decommissioning Alternative would affect the timing of Project development but not the amount of energy that would be consumed or generated by it. The Phased Decommissioning Alternative, like the Project, would be a net producer of renewable energy.

**Geology and Soils:** If the Phased Decommissioning Alternative is implemented, all aspects of the Project would remain the same as described in Chapter 2, Project Description, except for the decommissioning schedule. An expanded decommissioning schedule would not substantially affect potential impacts to Geology and Soils relative to the Project with the exception of potential impacts related to soil erosion. Decommissioning phasing generally reduces the overall amount of soil eroded because a smaller area of soil is cleared and disturbed at any one time during the process. The Phased Decommissioning Alternative therefore could result in less total soil loss than the Project but would otherwise have the same impacts. Although less total soil loss would occur under the Phased Decommissioning Alternative than the Project, the conclusion about the significance of the impact would not change. Like the Project, the Phased Decommissioning Alternative would have a less than significant impact.

**Greenhouse Gas Emissions:** Under this alternative, the Project would be decommissioned on an extended schedule but all the Project components would remain the same. Changing the timing of decommissioning would not alter the total GHG emissions associated with Project construction, operation and maintenance, or decommissioning. Impacts associated with GHG emissions under this alternative would be similar as those described for the Project.

**Hazards and Hazardous Materials:** The Phased Decommissioning Alternative would have similar hazards and hazardous materials impacts as the Project. If this alternative is implemented, all aspects of the Project would remain the same except for the decommissioning schedule, which would not affect the hazards or hazardous materials associated with the Project.

**Hydrology and Water Quality:** The Phased Decommissioning Alternative would have similar Hydrology and Water Quality impacts as the Project. If this alternative is implemented, all aspects of the Project would remain the same except for the decommissioning schedule. Of the Hydrology and Water Quality impacts associated with the Project, an extended decommissioning schedule would only change impacts related to soil erosion and groundwater hydrology. Decommissioning phasing generally reduces the amount of soil eroded because a smaller area of soil is cleared and disturbed at any one time during the process. Otherwise, the Phased Decommissioning Alternative would have the same impacts as the Project.

**Land Use and Planning:** The Phased Decommissioning Alternative would affect the decommissioning schedule of the Project, but all other aspects would remain the same as the Project. Therefore, similar to the Project, there would be no impacts to Land Use and Planning under the Phased Decommissioning Alternative.

**Mineral Resources:** The Phased Decommissioning Alternative would affect the timing of development but not the location or extent of proposed development. Therefore, the Phased Decommissioning Alternative would have the same mineral resource impacts as the Project: a less than significant impact related to the loss of availability of a mineral resource of state or regional significance and no impact relating to the loss of availability of a locally-important mineral resource recovery site.

**Noise:** Under this alternative, the Project would be decommissioned on an extended schedule but all the Project components would remain the same. Impacts conclusions related to Noise generated by this alternative would be the same as those that would occur under the Project.

**Population and Housing:** Similar to the Project, the Phased Decommissioning Alternative would have a less than significant impact on population and housing. If this alternative is implemented, all aspects of the Project would remain, except for the decommissioning schedule, which not affect potential impacts to population and housing.

**Public Services:** Similar to the Project, the Phased Decommissioning Alternative would have no impact to Public Services. If this alternative is implemented, all aspects of the Project would remain, except for the decommissioning schedule, which would not have an impact to Public Services.

**Recreation:** Similar to the Project, the Phased Decommissioning Alternative would have no impact on Recreation. If this alternative is implemented, all aspects of the Project would remain, except for the decommissioning schedule, which would not affect the potential for impacts on Recreation.

**Transportation and Traffic:** If the Phased Decommissioning Alternative is implemented, all aspects of the Project would remain, except for the decommissioning schedule. Impacts would be the same as those that occur under the Project.

**Utilities and Service Systems:** Under the Phased Decommissioning Alternative, all aspects of the Project would remain, except for the decommissioning schedule, which would be extended. Therefore, like the Project, the Phased Decommissioning Alternative would cause no impact related to wastewater treatment requirements, water and wastewater treatment facilities, wastewater treatment capacity and solid waste regulations, and, similar to the Project, would have a less than significant impact to stormwater facilities and landfill capacities.

## Findings

Based on the whole record, the County finds that the Phased Decommissioning Alternative would result in fewer environmental impacts than under the Project and is considered the environmentally superior alternative.

### **Reduced Acreage Alternative:**

#### **Description**

The Reduced Acreage Alternative would be similar to the Project in all aspects except that, under this Alternative, construction of the Solar Facility east of State Route 33 (Power Blocks 4, 5, 6, 7 and 8) would not be undertaken. The total 400 MW capacity at the Project site would be reduced by 230 MW to 170 MW, and the Project footprint would be reduced by 1,433 acres to a total of approximately 2,299 acres. This alternative would reduce but not eliminate significant and unavoidable impacts associated with aesthetics, air quality, and hydrology.

#### **Impacts**

**Aesthetics:** Under the Reduced Acreage Alternative, all aspects of the Project would remain as described in Chapter 2, Project Description, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. By not constructing and operating these Power Blocks, the significant and unavoidable impact to existing visual character as viewed from KOP 2 along State Highway 33 that would occur under the Project would no longer occur because no construction would be undertaken east of State Highway 33. All other impacts of this alternative on Aesthetics would be the same as those that would occur under the Project.

**Agriculture and Forestry Resources:** Under the Reduced Acreage Alternative, all aspects of the Project would remain as described in Chapter 2, Project Description, except for the exclusion of RE Tranquillity 4, 5, 6, 7 and 8 LLC's Power Blocks (Power Blocks 4, 5, 6, 7 and 8) (DEIR Figure 3-1). The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Similar to the Project, the Reduced Acreage Alternative would not result in any impacts on Agriculture and Forestry Resources and no mitigation measures would be required.

**Air Quality:** Under the Reduced Acreage Alternative, all aspects of the Project would remain as described in Chapter 2, Project Description, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The footprint of this Alternative would be approximately 2,299 acres. No construction would occur east of State Highway 33.

Construction emissions from the Reduced Acreage Alternative were calculated by scaling the emissions calculations based on MW. This alternative would eliminate just under half of the MW capacity included in the Project. It is therefore estimated that emissions would be just under 50 percent of those calculated for the Project. Emissions calculated for the Switching Station would not differ from those described for the Project, above, and are not included in this section. Emissions associated with construction of the Reduced Acreage Alternative are summarized in the DEIR on pages 4.4-21 through 4.4-23.

The extent to which estimated emissions during construction of the Reduced Acreage Alternative exceed SJVAPCD thresholds differ from those calculated for the Project. In year 1, ROG emissions would not exceed SJVAPCD thresholds under the Reduced Acreage Alternative, these thresholds would be exceeded under the Project. In year 2, NOx emissions from the Reduced Acreage Alternative would not exceed SJVAPCD thresholds.

On-site and off-site emissions of criteria pollutants associated with operation of the Reduced Acreage Alternative would be similar to but less than those associated with the Project because the reduced total area of the Solar Facility would shorten the travel distance necessary to maintain and wash panels. The number of workers commuting to the site would also likely decrease with the smaller acreage, lowering the emissions generated by worker commute vehicles. None of the SJVAPCD thresholds would be exceeded by the Reduced Acreage Alternative, similar to the Project.

While emissions of criteria pollutants associated with decommissioning of the Reduced Acreage Alternative would also be approximately half of those estimated for the Project, PM<sub>10</sub> emissions associated with decommissioning would remain above the SJVAPCD threshold.

In summary, while the emissions of criteria pollutants associated with the Reduced Acreage Alternative are lower than those estimated for the Project, they remain above established thresholds for NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> during construction, and for PM<sub>10</sub> during decommissioning and therefore impacts to air quality would be the same as described for the Project.

**Biological Resources:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8 (DEIR Figure 3-1). The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway. As a result of the reduction in project size, impacts to Biological Resources from the Reduced Acreage Alternative would be similar but less when compared to impacts resulting from the Project.

**Cultural and Paleontological Resources:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project Site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Because the area of ground disturbance under this Alternative would be smaller than that which would result from the Project, impacts of the Reduced Acreage Alternative would be similar but slightly reduced as compared to the Project.

**Energy Conservation:** Under the Reduced Acreage Alternative, all aspects of the Project would remain as described in Chapter 2, *Project Description*, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. No construction would occur east of State Highway 33. The total energy generating capacity of the Reduced Acreage Alternative would be a maximum of 170MW instead of the 400MW that would be generated by the Project. The amount of petroleum fuel used for construction would be reduced compared with the fuel usage estimated for the Project. However, under the Reduced Acreage Alternative the amount of energy supplied to the grid also would be reduced compared to the Project, though there would still be a substantial net gain for regional renewable energy supplies.

**Geology and Soils:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Impacts related to geology and soils would be the similar to those discussed for the Project. The area of the Project site subject to erosion would be reduced

under the Reduced Acreage Alternative; this would not affect the impact significance conclusion, which would remain less than significant.

**Greenhouse Gas Emissions:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project Site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Total capacity of the Reduced Acreage Alternative would be up to 170MW instead of the 400MW proposed for the Project. The construction and decommissioning efforts would reduce construction GHG emissions to just under 36,170 metric tons instead of the Project's 72,340 metric tons. The amount of carbon-based energy production offset by the Reduced Acreage Alternative also would decrease just under half; just under 167,350 metric tons of annual CO<sub>2</sub>e would be offset annually by the Reduced Acreage Alternative.

As described in Section 4.9.1.2, Regulatory Setting, the SJVAPCD considers a project not to have a significant impact on GHG emissions if the project would emit GHGs in an amount 29 percent (or more) lower than would be emitted in the business-as-usual scenario. Assumptions for the business-as-usual scenario are described in the discussion of Impact 4.9-1, above. Similar to the Project, the Reduced Acreage Alternative would reduce GHG emissions by 99.5 percent compared to the business-as-usual scenario, and thus impacts associated with GHG emissions would be less than significant.

**Hazards and Hazardous Materials:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except that Power Blocks 4, 5, 6, 7 and 8 would not be constructed (DEIR Figure 3-1). The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Less equipment requiring the storage and use of hazardous materials would be used for the Reduced Acreage Alternative; likewise, fewer solar panels would be installed than are proposed for the Project. While smaller quantities of hazardous materials or structures would be used, the impacts of the Reduced Acreage Alternative would be reduced but otherwise similar in nature and type to those of the Project.

**Hydrology and Water Quality:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8 (DEIR Figure 3-1). The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Both the total amount of soil eroded during construction and operation of the Reduced Acreage Alternative and the extent of alteration of site drainage would be smaller than that anticipated for the Project due to the smaller area of ground surface disturbance. If used, groundwater needs would be approximately half of that used for the Project. This alternative would have similar but reduced Hydrology and Water Quality impacts as the Project.

**Land Use and Planning:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project would decrease from approximately 3,732 acres to approximately 2,299 acres, and no construction would occur east of State Highway 33. The Reduced Acreage Alternative would be

constructed within the Project site. Similar to the Project, this alternative would have no impacts on Land Use and Planning.

**Mineral Resources:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Impacts on Mineral Resources would be similar to those associated with the Project.

**Noise:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Noise generated during construction, operation and decommissioning would be similar but slightly less than that associated with the Project as a result of a reduced project area and one fewer substation. Impact conclusions associated with this alternative would be the same as those that would occur under the Project.

**Population and Housing:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. The Reduced Acreage Alternative would require a lower number of construction and operational workers in comparison to the Project. It would include the same existing residence within the site footprint that would be included in the Project site. This Alternative would result in similar but slightly reduced impacts to Population and Housing in comparison to the Project.

**Public Services:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Similar to the Project, this alternative would not impact public services.

**Recreation:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Similar to the Project, this alternative would not impact recreational resources in the area.

**Transportation and Traffic:** Under the Reduced Acreage Alternative, all aspects of the Project would remain as described in Chapter 2, *Project Description*, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Due to the reduced size of this alternative, traffic volumes generated by its construction would be smaller than the traffic generated by the Project. Impacts associated with the Reduced Acreage Alternative would be similar but slightly less than those associated with the Project.



**Utilities and Service Systems:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Because of the reduced size of this Alternative, construction and operation would require just under half the water needed for the Project, just under 500 acre feet annually for construction and just under 10 acre-feet annually for operation. This would result in similar but lesser impacts on water supplies compared to the Project. The substantial reduction in the size project site also would reduce the Reduced Acreage Alternative's impact related to landfill capacity compared to the Project. Impacts would be less than significant.

### **Findings**

Based on the whole record, the County finds that the Reduced Acreage Alternative would result in fewer environmental impacts than under the Project. The Reduced Acreage Alternative would reduce the significant and unavoidable impacts of the Project with respect to air quality and aesthetics during construction. This alternative also would produce less solar energy than the Project, making a lower contribution to energy conservation and, halving the reduction in GHG that would result from the operation of the Project. Therefore, as compared to the Project, the Reduced Acreage Alternative is considered the environmentally superior alternative with respect to aesthetics and air quality. With respect to GHG and Energy Conservation, the Project would be environmentally superior.

### ***No Project Alternative:***

#### **Description**

If the No Project Alternative is implemented, the Project site would continue to be used for dry-farmed agriculture and/or left fallow. The Project site is designated "Agriculture" pursuant to the Fresno County General Plan and is zoned A-2 (General Agricultural) with a 40 acre minimum parcel size. If the Project were not approved, then other uses consistent with the A-2 zoning designation could be made of one or more of the parcels that comprise the Project site. Uses (among others) that are allowed by right without a permit relate to livestock, poultry, and crops; apiaries and honey extraction; single-family dwellings, accessory buildings, and farm buildings; certain home occupations; the use, storage, repair and maintenance of certain agricultural equipment; and moderate intensity parks and golf courses (Fresno County Ordinance Code §819). No such competing proposals for site use are before the County. Accordingly, rather than speculate as to possible other uses, the analysis of the No Project Alternative in this Draft EIR assumes a no-development/no Project scenario where the existing agricultural use is continued as it exists under pre-Project conditions.

Under a no-development scenario, the property would continue in agricultural use and the existing environmental setting would be maintained. Changes to that setting, including changes to the landscape (visual resources, habitat, and land use/agriculture); Project-related construction-related noise, traffic, and air emissions would not occur; and environmental benefits relating to renewable energy would not be realized from solar development of the site. Existing housing and

electrical infrastructure would remain in place, and public and utility services would continue to be provided or available to the site and its occupants as they are now.

### **Impacts**

**Aesthetics:** Under the No Project Alternative, the Project would not be constructed and the Project site would remain in use for dry-farmed agriculture. Therefore, the No Project Alternative would create no impact related to Aesthetics.

**Agriculture and Forestry Resources:** If the No Project Alternative is implemented, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture. Consequently, this alternative would result in no conversion of Farmland, no conflicts with existing zoning or Williamson Act contracts, and no physical changes in the environment that could result in the conversion of Farmland to non-agricultural use.

**Air Quality:** Under the No Project Alternative, the Project would not be constructed, operated and maintained, or decommissioned and the Project site would continue to be used for dry-farmed agriculture. Therefore, the No Project Alternative would have no impact on Air Quality.

**Biological Resources:** Under the No Project Alternative, the Project would not be constructed, operated, or decommissioned, and the Project site would continue to be used for dry-farmed agriculture. Therefore, the No Project Alternative would cause no impacts to Biological Resources.

**Cultural and Paleontological Resources:** Under the No Project Alternative, the Project would not be constructed, operated and maintained, or decommissioned and the Project site would continue to be used for dry-farmed agriculture. Therefore, the No Project Alternative would have no impact on Cultural or Paleontological Resources and Mitigation Measures 4.6-1 through 4.6-5 would not be applicable.

**Energy Conservation:** The No Project Alternative would have no effect on the goal of conserving energy.

**Geology and Soils:** If the No Project Alternative is implemented, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact related to Geology and Soils.

**Greenhouse Gas Emissions:** If the No Project Alternative is implemented, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture. The No Project Alternative would result in the continued long-term adverse impact associated with annual GHG emissions compared to implementation of the Project.

**Hazards and Hazardous Materials:** If the No Project Alternative is implemented, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact related to hazards or hazardous materials.

**Hydrology and Water Quality:** If the No Project Alternative is implemented, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact to Hydrology and Water Quality. No mitigation would be required.

**Land Use and Planning:** Under the No Project Alternative, the Project would not be constructed and the Project site would continue to be used for dry-farmed agriculture. No change to existing land uses, and no impact to land use and planning, would occur. There would be no effect on existing established communities, no impact on applicable planning documents, and no impact to adopted Habitat Conservation Plans or Natural Community Conservation Plans.

**Mineral Resources:** Under the No Project Alternative, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact to mineral resources.

**Noise:** Under the No Project Alternative, the Project would not be constructed, operated and maintained, or decommissioned and the Project site would continue to be used for dry-farmed agriculture. The existing on-site residence would remain in residential use. Therefore, the No Project Alternative would have no impact associated with Noise.

**Population and Housing:** Under the No Project Alternative, the Project would not be constructed, operated and maintained, or decommissioned and the Project site would continue to be used for dry-farmed agriculture. The existing onsite residence would remain in residential use. Therefore, the No Project Alternative would have no impact on population and housing.

**Public Services:** If the No Project Alternative is implemented, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact related to public services.

**Recreation:** Under the No Project Alternative, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact to Recreation.

**Transportation and Traffic:** Under the No Project Alternative, the Project would not be constructed, operated and maintained, or decommissioned, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact related to transportation.

**Utilities and Service Systems:** Under the No Project Alternative, the Project would not be constructed, operated, maintained, or decommissioned; and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact related to Utilities and Service Systems.

### **Findings**

Based on the whole record, the County finds that the No Project Alternative would result in fewer environmental impacts than the Project. The County also finds that the No Project Alternative would not meet any of the Project objectives; as such, it is not a feasible alternative.

## Conclusions Regarding the Evaluated Alternatives:

Table 5-1 compares the conclusions of the impact analyses for both alternatives against the conclusions for the Project (DEIR Table 5-1).

## The Environmentally Superior Alternative is the Reduced Acreage Alternative:

CEQA Guidelines §15126.6(e)(2) requires an EIR to identify an environmentally superior alternative. If the environmentally superior alternative is the No Project Alternative, the EIR also must identify an environmentally superior alternative from among the other alternatives. In general, the environmentally superior alternative is defined as that alternative with the least adverse impacts to the project area and its surrounding environment. CEQA Guidelines Section 15126.6(a) places emphasis on alternatives that “avoid or substantially lessen the significant effects” of a project; distinctions between impacts that are less than significant or are mitigated to less than significant are typically not considered when selecting an environmentally superior alternative.

The No Project Alternative would avoid all impacts of the Project and would not create any new significant impacts of its own. However, as noted in EIR Section 4.9, Greenhouse Gas Emissions, the No Project Alternative would not result in the GHG emissions reductions benefits that would result from the Project. The No Project Alternative also would fail to meet any of the basic Project Objectives, including assisting California utilities in meeting their obligations under California’s RPS Program.

The second alternative, the Phased Decommissioning Alternative, would reduce the significant unavoidable decommissioning-related impacts of the Project to air quality. Therefore, as compared with the Project, the Phased Decommissioning Alternative is considered the environmentally superior alternative.

The Reduced Acreage Alternative would reduce the significant and unavoidable impacts of the Project with respect to air quality and aesthetics during construction. This alternative also would produce less solar energy than the Project, making a lower contribution to energy conservation and, halving the reduction in GHG that would result from the operation of the Project. Therefore, as compared to the Project, the Reduced Acreage Alternative is considered the environmentally superior alternative with respect to aesthetics and air quality. With respect to GHG and Energy Conservation, the Project would be environmentally superior.

## Finding:

The County finds that the Reduced Acreage Alternative is the environmentally superior alternative, other than the No Project Alternative.

**DEIR TABLE 5-1  
PROJECT VERSUS PHASED DECOMMISSIONING AND REDUCED ACREAGE ALTERNATIVES  
SUMMARY OF ENVIRONMENTAL IMPACT CONCLUSIONS**

Resource Area	Proposed Project	Phased Decommissioning Alternative	Reduced Acreage Alternative
Aesthetics, Visual Quality, and Light and Glare	Significant and Unavoidable Impacts with Mitigation Incorporated. <b>No Preference</b>	Impacts would be the same as the Project. <b>No Preference</b>	Impacts would be similar but reduced compared to the Project; this would generally not affect significance determinations, which would remain the same as for the Project. One visual impact would be reduced from Significant and Unavoidable to Less than Significant with Mitigation Incorporated <b>Environmentally Preferred</b>
Agriculture and Forest Resources	No Impacts. <b>No Preference</b>	No Impacts. <b>No Preference</b>	No Impacts. <b>No Preference</b>
Air Quality	Significant and Unavoidable Impacts during construction and decommissioning with Mitigation Incorporated. <b>No Preference</b>	Significant and Unavoidable Impacts during construction with Mitigation Incorporated. Decommissioning impacts would be Less than Significant with Mitigation Incorporated. <b>Environmentally Preferred</b>	Some construction and decommissioning impacts would be Less than Significant with Mitigation Incorporated. <b>Environmentally Preferred</b>
Biological Resources	Impacts determined to be Less than Significant with Mitigation Incorporated. <b>No Preference</b>	Impacts would be similar to the Project. <b>No Preference</b>	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. <b>No Preference</b>
Cultural and Paleontological Resources	Impacts determined to be Less than Significant with Mitigation Incorporated. <b>No Preference</b>	Impacts would be the same as the Project. <b>No Preference</b>	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. <b>No Preference</b>
Energy Conservation	Impacts determined to be Less than Significant; beneficial contribution resulting from generation of renewable energy. <b>Environmentally Preferred</b>	Impacts would be the same as the Project. <b>No Preference</b>	Impacts (including beneficial contribution to energy supply) would be similar to the Project but reduced. <b>No Preference</b>
Geology and Soils	Impacts determined to be Less than Significant. <b>No Preference</b>	Impacts would be the same as the Project. <b>No Preference</b>	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. <b>No Preference</b>
Greenhouse Gas (GHG) Emissions	Impacts determined to be Less than Significant with Mitigation Incorporated; overall beneficial impact from net GHG reduction. <b>Environmentally Preferred</b>	Impacts would be the same as the Project. <b>No Preference</b>	Impacts would be the same as the Project, overall beneficial impact from net GHG reduction would be reduced in comparison to the Project. <b>No Preference</b>

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## 2.0 Statement of Overriding Considerations

This section of the findings addresses CEQA Guidelines Section 15093 requiring the lead agency "to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered 'acceptable.'" This is known as a Statement of Overriding Considerations.

This Commission hereby determines that specific economic, legal, social, technological, and other benefits of the proposed project outweigh the unavoidable adverse environmental effects identified in the EIR, including any effects not mitigated because of the infeasibility of mitigation measures and/or alternatives and that the adverse environmental effects are considered acceptable. This statement of overriding considerations is adopted by the County for the benefits listed in Section 2.1 (below) that warrant Project approval as provided in CEQA Guidelines section 15093. This Statement of Overriding Considerations warrants rejection of Project alternatives, including the No Project Alternative, set forth in the EIR, and for finding the significant adverse environmental effects of the Project acceptable that cannot be avoided or substantially lessened.

The County further determines that, based on the findings herein and the evidence in the record, the benefits identified are each one in and of themselves sufficient to make a determination that the adverse Project-level and cumulative environmental effects are acceptable and that, having balanced the adverse environmental effects of the Project that cannot be avoided or substantially lessened against each of the benefits, hereby adopts this Statement of Overriding Considerations based upon each of the benefits individually as stated herein.

### 2.1 Project Benefits

The County finds that approving the Tranquillity Solar Generating Facility Project will provide the following benefits:

1. Assist California utilities in meeting their obligations under California's Renewable Portfolio Standard (RPS) Program, including 25 percent of retail sales from renewable sources by the end of 2016 and 33 percent by the end of 2020.

California's RPS was established in 2002 by Senate Bill (SB) 1078, accelerated in 2006 under SB 107 and expanded in April 2011 under SB 2. The RPS program currently requires investor-owned utilities, electric service providers, and community choice aggregators to procure 33 percent of electricity from eligible renewable energy resources by 2020. The program is jointly implemented by the CPUC and the California Energy Commission (CEC).

The Solar Facility would contribute toward meeting the state's requirements under the RPS. The RPS promotes multiple objectives, including diversifying the electricity supply. Increasing the RPS to 33 percent is designed to accelerate the transformation of the

electricity sector, including investment in the transmission infrastructure and system changes to allow integration of large quantities of intermittent solar and wind generation. The Project would add up to 400 MW of renewable solar-generated energy to the electricity supply; therefore, the Project would be consistent with this recommended action.

2. Assist California utilities in meeting their obligations under the CPUC's Energy Storage Framework and Design Program, including procurement targets of 470 MWs by 2016 and 1,325 MWs by 2020, by providing up to 200 MW of storage capacity.
3. Facilitate grid integration of intermittent and variable PV generation and minimize line losses associated with off-site storage by collocating battery storage at the PV facility site.
4. Assist California in meeting the GHG emissions reduction goal by 2020 as required by the California Global Warming Solutions Act (AB 32).

The Solar Facility would use a reliable and proven solar technology (PV) with minimal disturbance to or depletion of natural resources as compared to alternative types of development (including solar thermal trough, which would require extensive grading). Once operational, PV solar panels use no fuel source other than the energy from the sun, as opposed to natural gas or coal.

The production of energy from solar facilities like the Tranquillity Solar Generating Facility Project has the added benefit of reducing air quality impacts and GHG emissions that would be produced by fossil-fuel based generation facilities.

5. Stimulating the County's Economy/Job Creation

Construction of the Solar Facility would require between 80 and 256 construction workers at any given time. Once operational, up to 10 permanent staff could be on the site at any one time for ongoing facility maintenance and repairs if the entire site is operated as a single unit. Alternatively, approximately 2 permanent staff and 8 Project operators would be located off-site who would be on call to respond to alerts generated by the monitoring equipment at the Project site. The maximum number of staff onsite at any time during the operation and maintenance period would be 50 (40 temporary staff and 10 permanent staff).

The Tranquillity Solar Generating Facility Project would provide other important benefits to the local and regional economy from the purchase of equipment and supplies, increased sales tax revenue, and property taxes.

6. Increased Tax Revenue for Fresno County.

The Tranquillity Solar Generating Facility Project will increase tax revenue for Fresno County, both in terms of sales tax through the sale of electricity, and real property taxes because the property value over the next several decades as a solar facility is significantly greater than the property value as unirrigated agricultural land.

7. The Tranquillity Solar Generating Facility Project optimizes the use of the site, which possesses characteristics ideal for locating a solar energy facility. These characteristics include, but are not limited to, proximity to the electrical grid and minimal conflicts with surrounding land uses.
8. The Project owner would post or establish financial assurances related to the decommissioning and restoration of the site should the solar facility become inoperable

within the anticipated lifespan of the project or at the end of the permit period (anticipated to be approximately 30 years) in order to ensure the maintenance of the health, safety, and welfare of the County's citizens. To the extent the solar equipment is removed, the land will be available for other uses consistent with applicable land use regulations.



# EXHIBIT 1

## Mitigation Monitoring and Reporting Program, Conditions of Approval, and Project Notes

### Introduction

This Mitigation Monitoring and Reporting Program, Conditions of Approval, and Project Notes document (MMRP/COA) has been prepared by Fresno County (the County) in connection with its consideration of the Unclassified Conditional Use Permit (UCUP) applications filed by RE Tranquillity LLC, RE Tranquillity 2 LLC, RE Tranquillity 3 LLC, RE Tranquillity 4 LLC, RE Tranquillity 5 LLC, RE Tranquillity 6 LLC, RE Tranquillity 7 LLC, and RE Tranquillity 8 LLC (the Applicants) to construct, operate, maintain, and decommission the Tranquillity Solar Generating Facility (the Project).

Section 21081.6 of the California Environmental Quality Act (CEQA) and CEQA Guidelines Section 10591(d) require a lead agency to adopt a monitoring or reporting program when it either has required changes in a project or has made a condition of approval to avoid or substantially lessen significant environmental effects of a project. The County has designed this MMRP/COA to ensure compliance during Project implementation with the mitigation measures identified in the *Tranquillity Solar Generating Facility Project Final Environmental Impact Report (EIR)* prepared by the County to document its analysis of potential environmental impacts of the Project and with the County's conditions of Project approval. This MMRP/COA contains measures identified in the EIR that would be implemented through monitoring of an activity, such as grading or excavation, and other measures that would be implemented through a reporting mechanism, such as obtaining an air quality permit or an Emergency/Contingency Plan. With implementation of the mitigation measures identified in the EIR and the conditions of Project approval, the potential environmental effects of the Project would be reduced or eliminated.

The MMRP that was circulated as Appendix D in the Final EIR has been updated to incorporate conditions of approval adopted by the County Board of Supervisors. This MMRP/COA supersedes Final EIR Appendix D. This MMRP/COA has been prepared as a matrix containing the following elements:

- Measures that will mitigate significant impacts on the environment;
- Conditions of use permit approval; and
- Notes referencing mandatory requirements of the County or other agencies that are provided as information to the Applicants.

The MMRP/COA has been designed to provide focused, yet flexible guidelines. As monitoring progresses, changes to compliance procedures may be necessary based upon recommendations by those responsible for the program.

## Program Management

The MMRP/COA will be in place through all phases of the Project. The Project planner, assigned by the County Planning Director, shall coordinate enforcement of the MMRP/COA and oversee it to ensure that proper action is taken on each mitigation measure. Each County department or division shall ensure that the Project complies with the conditions (including mitigation measures) that relate to that department.

The Project planner or responsible County department has the authority to stop the work of the operator if compliance with any aspect of the MMRP/COA is not occurring after written notification has been issued. The Project planner or responsible County department also has the authority to deny entry into a new construction phase until compliance with a requirement of this program occurs.

## Condition Compliance Matrix

*Table 1, "Mitigation Monitoring and Conditions Compliance Program,"* includes mitigation measures and conditions of approval that will mitigate the potential significant environmental impacts of the Project. A procedure of compliance and verification has been outlined for each measure. This procedure designates what action will be taken and when, who will take action, and to whom and when compliance will be reported. Mitigation Measures are identified beginning on page 1-3. Conditions of approval are identified beginning on page 1-211. All conditions of approval apply to all UCUPs except as noted. Notes referencing mandatory requirements of the County or other agencies are provided as information to the Applicants beginning on page 1-243.

**TABLE 1  
MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM  
UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES</b>				
<b>Aesthetics</b>				
<p><b>Impact 4.2-1:</b> The Solar Facility would substantially degrade the existing visual character and quality of the site and its surroundings.</p>	<p><b>Mitigation Measure 4.2-1:</b> The Solar Facility operator, to the extent commercially feasible, shall underground electrical collection systems to reduce the random tall vertical lines created by electrical poles.</p> <p><b>Mitigation Measure 4.2-2:</b> The Solar Facility operator shall clear debris from the Project area at least four times per year; this can be in conjunction with regular panel washing and site maintenance activities.</p> <p><b>Mitigation Measure 4.2-3:</b> The Solar Facility operator shall apply appropriate treatments to structures, as approved by the Fresno County Public Works and Planning Department. Solar Facility structures include buildings, electrical enclosures, and inverters. Paints having little or no reflectivity shall be used whenever possible. Grouped structures shall be painted the same color to reduce visual complexity and color contrast. The choice of color treatments shall be based on the appearance at typical viewing distances and consider the entire landscape around the proposed development as it would be viewed from publically accessible locations. Appropriate colors for smooth surfaces often need to be two to three shades darker than the background color to compensate for shadows that darken most textured natural surfaces. Examples of the color contrast created by exposed metal and untreated inverters are shown on Figure 4.2-20.</p> <p><b>Mitigation Measure 4.2-4:</b> Prior to the commencement of operations, the Solar Facility operator shall submit a landscape revegetation plan for the Solar Facility site. The plan shall include the requirement that a native seed mix shall be spread under the solar panels as needed to establish ground cover. The seed mix shall be determined through consultation with local experts and shall be approved by the Fresno County Public Works and Planning Department prior to planting. The plan must include a timeline for seeding the Project site, and limitations on guarantee of revegetation success should be considered due to the lack of irrigation available on the Project site.</p>	<p>Applicants and/or their designees to implement measure as defined.</p> <p>Applicants and/or their designees to implement measure as defined.</p> <p>Applicants and/or their designees to implement measure as defined.</p> <p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p> <p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p> <p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p> <p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>During Solar Facility construction.</p> <p>During Solar Facility construction and operation.</p> <p>During Solar Facility construction and, as necessary, during operation.</p> <p>Prior to the commencement of operation.</p>
<p><b>Impact 4.2-2:</b> The Solar Facility could create a new source of light and glare that could adversely affect day and nighttime views in the area.</p>	<p><b>Mitigation Measure 4.2-5:</b> Project facility lighting shall be designed to provide the minimum illumination needed to achieve safety and security objectives. All lighting shall be directed downward and shielded to focus illumination on the desired areas only and avoid light trespass into adjacent areas. Lenses and bulbs shall not extend below the shields.</p>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>During Solar Facility construction and operation.</p>

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Air Quality</b>				
<p><b>Impact 4.4-1:</b> The Solar Facility would violate an air quality standard or contribute substantially to an existing or projected air quality violation.</p>	<p><b>Mitigation Measure 4.4-1a: Solar Facility Fugitive Dust Control Measures.</b></p> <p>Prior to grading on site, the Applicants shall submit a Solar Facility Fugitive Dust Control Plan to the SJVAPCD for review and approval. The Fugitive Dust Control Plan shall be applicable to only the construction and decommissioning phases and shall meet the requirements in Table 8021-1 and incorporate the Regulation VIII recommended fugitive dust control measures to reduce PM<sub>10</sub> emissions to the extent practical, including but not limited to:</p> <ul style="list-style-type: none"> <li>• All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.</li> <li>• Stockpiles of excavated soils on the Solar Facility site shall be wetted during daily construction activities and shall be covered at the end of each workday, during weekends, and periods of extended storage.</li> <li>• All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.</li> <li>• All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water, dust palliatives, or by presoaking.</li> <li>• When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.</li> <li>• All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.</li> <li>• Use of blower devices is expressly forbidden.</li> <li>• Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.</li> <li>• Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.</li> <li>• Limit traffic speeds on unpaved roads to 15 mph.</li> <li>• Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope toward the road of greater than one percent.</li> <li>• Install wind screens (fabric incorporated into fencing) at the windward side of active construction areas.</li> <li>• Suspend excavation and grading activity if dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or off-site property.</li> </ul>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>Prior to grading activities.</p>

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
 UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Air Quality (cont.)</b>				
Impact 4.4-1 (cont.)	<ul style="list-style-type: none"> <li>• After active clearing, grading, and earth moving is completed within any portion of the site, the following dust control practices shall be implemented:                             <ul style="list-style-type: none"> <li>– Once initial leveling and vegetation removal has been completed within a given area, that portion of the site shall be immediately treated with a dust suppressant (water or palliative).</li> <li>– Dependent on specific site conditions (season and wind conditions), revegetation shall occur in those areas where planned as soon as practical.</li> <li>– All unpaved road areas shall be treated with a dust suppressant or graveled as soon as possible to prevent excessive dust.</li> </ul> </li> </ul> <p><b>Mitigation Measure 4.4-1b: Solar Facility Construction/Decommissioning Equipment Exhaust Control Measures.</b></p> <ul style="list-style-type: none"> <li>• During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications. Equipment maintenance records and equipment design specification data sheets shall be kept onsite during construction.</li> <li>• Electricity from power poles shall be used whenever practicable instead of temporary diesel or gasoline powered generators to reduce the associated emissions.</li> <li>• To reduce construction vehicle (truck) idling while waiting to enter/exit the site, the contractor shall submit a traffic control plan that will describe in detail safe detours to prevent traffic congestion to the best of the Solar Facility's ability, and provide temporary traffic control measures during construction activities that will allow both construction and on-street traffic to move with less than 5-minute idling times.</li> <li>• Construction equipment will use only California certified diesel or gasoline fuels.</li> <li>• The Applicant will utilize construction equipment that is at the Tier 3 emission level (Appendix E).</li> </ul> <p><b>Mitigation Measure 4.4-1c: Valley Fever Training.</b></p> <p>Prior to ground disturbance activities, the project operator shall provide evidence to the Fresno County Public Works and Planning Department that the project operator and/or construction manager has developed a "Valley Fever Training Handout," training, and schedule of sessions for education to be provided to all construction personnel. All evidence of the training session materials, handout(s), and schedule shall be submitted to the Fresno County Public Works and Planning Department within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews will come to the site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Fresno County Public Works and Planning Department regarding the "Valley Fever Training Handout," and Session(s) shall include the following:</p> <p>a) A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session.</p>	<p>Applicants and/or their designees to implement measure as defined.</p> <p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p> <p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>During construction.</p> <p>Prior to ground disturbance activities.</p>

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Air Quality (cont.)</b>				
Impact 4.4-1 (cont.)	<ul style="list-style-type: none"> <li>b) Distribution of a written flier or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever.</li> <li>c) Training on methods that may help prevent Valley Fever infection.</li> <li>d) A demonstration to employees on how to use personal protective equipment, such as respiratory equipment (masks), to reduce exposure to pollutants and facilitate recognition of symptoms and earlier treatment of Valley Fever. Though use of the equipment is not mandatory during work, the equipment shall be readily available and shall be provided to employees for use during work, if requested by an employee. Proof that the demonstration is included in the training shall be submitted to the County. This proof can be via printed training materials/agenda, DVD, digital media files, or photographs.</li> <li>e) Prior to the Notice to Proceed for decommissioning, the project operator will follow the above process for all decommissioning work.</li> </ul>			
Impact 4.4-2: The Solar Facility would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under applicable federal and state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	Implementation of Mitigation Measures 4.4-1a, 4.4-1b, and 4.4-1c.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to and during construction.
Impact 4.4-3: The Solar Facility would expose sensitive receptors to substantial pollutant concentrations.	Implementation of Mitigation Measure 4.4-1a, 4.4-1b, and 4.4-1c.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to and during construction.
Impact 4.4-4: Solar Facility construction and decommissioning activities could potentially expose local sensitive receptors and San Joaquin kit fox, a federally- and state-listed species, to <i>Coccidioides</i>	Implementation of Mitigation Measure 4.4-1a and 4.4-1c.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to grading activities.

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**TABLE 1 (Continued)  
MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM  
UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<i>immitis</i> spores.				
<b>MITIGATION MEASURES (cont.)</b>				
<b>Biological Resources</b>				
<p>Impact 4.5-1: The Project could have a substantial adverse direct or indirect impact on San Joaquin kit fox.</p>	<p><b>Mitigation Measure 4.5-1a: Preconstruction San Joaquin kit fox Surveys.</b> Preconstruction surveys shall be conducted by a qualified biologist for the presence of San Joaquin kit fox dens within 14 days prior to commencement of construction activities. The surveys shall be conducted in areas of suitable habitat for San Joaquin kit fox. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur within 14 days prior to that portion of the Solar Facility site is disturbed. Surveys shall utilize the U.S. Fish and Wildlife Service (1999a) San Joaquin Kit Fox Survey Protocol for the Northern Range. If no potential San Joaquin kit fox dens are present, no further mitigation is required under this measure. If potential dens are observed and avoidance is determined to be feasible by a qualified biologist in consultation with the Project Owner and the County (as defined in CEQA Guidelines §15364 consistent with the USFWS (1999) Standardized Recommendations for Protection of the San Joaquin Kit Fox), the following minimum buffer distances shall be established prior to construction activities:</p> <ul style="list-style-type: none"> <li>• San Joaquin kit fox potential den: 50 feet.</li> <li>• San Joaquin kit fox active den: 100 feet.</li> <li>• San Joaquin kit fox natal den: 500 feet.</li> </ul> <p>If avoidance of the potential dens is not feasible, the following measures are required to avoid potential adverse effects to the San Joaquin kit fox:</p> <ul style="list-style-type: none"> <li>• If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers or foxes from re-using them during construction.</li> <li>• If the qualified biologist determines that potential a non-natal den may be active, an on-site passive relocation program may be implemented with prior concurrence from the USFWS. This program shall consist of excluding San Joaquin kit foxes from occupied burrows by installation of one way doors at burrow entrances, monitoring of the burrow for one week to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the San Joaquin kit foxes have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction.</li> </ul> <p><b>Mitigation Measure 4.5-1b: Solar Facility Construction Worker Environmental Awareness Program.</b> Prior to the issuance of grading or building permits and for the duration of construction activities, within one week of employment all new construction workers at the Project site shall attend a Construction Worker Environmental Awareness Program, developed and presented by the Lead Biologist (a pre-recorded video presentation will suffice). Any employee responsible for the operation and maintenance or decommissioning of the completed facilities shall also attend/watch the Construction Worker Environmental Awareness Program. The program shall include information on the life history of the San Joaquin kit fox and shall also describe other special-</p>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>14 days prior to commencement of construction activities.</p>
		Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to construction.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	status wildlife species that may occur on-site, including burrowing owl and Swainson's hawk.			
<b>MITIGATION MEASURES (cont.)</b>				
<b>Biological Resources (cont.)</b>				
Impact 4.5-1 (cont.)	<p>The program shall also discuss each species' legal protection status, the definition of "take" under the federal and state Endangered Species Acts, measures the Solar Facility operator is implementing to protect the species, reporting requirements, specific measures that each worker shall employ to avoid take of wildlife species, and penalties for violation of the federal or state Endangered Species Act. An acknowledgement form signed by each worker indicating that environmental training has been completed would be kept on record. A sticker shall be placed on hard hats indicating that the worker has completed the environmental training. Construction workers shall not be permitted to operate equipment within the construction areas unless they have attended the training and are wearing hard hats with the required sticker. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms shall be submitted to Fresno County Public Works and Planning Department. The construction crews and contractor(s) shall be responsible for unauthorized impacts from construction activities to sensitive biological resources that are outside the areas defined as subject to impacts by Solar Facility permits.</p> <p><b>Mitigation Measure 4.5-1c: Avoidance and Protection of Biological Resources.</b></p> <p>During construction, operation and maintenance, decommissioning of the Solar Facility, the Solar Facility operator and/or contractor shall implement the following general avoidance and protective measures to protect San Joaquin kit fox and other special-status wildlife species:</p> <ul style="list-style-type: none"> <li>• All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid special status species where possible. Construction-related activities outside of the impact zone shall be avoided.</li> <li>• The Solar Facility operator shall limit the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. These areas shall be flagged and disturbance activities, vehicles, and equipment shall be confined to these flagged areas.</li> <li>• Spoils shall be stockpiled in disturbed areas that lack native vegetation. Best Management Practices shall be employed to prevent erosion in accordance with the Project's approved Stormwater Pollution Prevention Plan. All detected erosion shall be remedied within two days of discovery or as described in the Stormwater Pollution Prevention Plan.</li> <li>• To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches with a 2-foot or greater depth shall be covered with plywood or similar materials at the close of each working day, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected by the Lead Biologist or approved biological monitor for trapped animals. Open trenches, holes, or excavations that could trap wildlife shall be inspected daily by the environmental compliance monitor. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If a listed species is trapped, the</li> </ul>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction, operation and maintenance.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	USFWS and/or CDFW shall be contacted immediately.			
<b>MITIGATION MEASURES (cont.)</b>				
<b>Biological Resources (cont.)</b>				
Impact 4.5-1 (cont.)	<ul style="list-style-type: none"> <li>• All construction pipes, culverts, or similar structures with a 4-inch or greater diameter that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until the Lead Biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated by the Lead Biologist. The Lead Biologist shall have the appropriate state or federal permits necessary to capture and/or relocate non-listed special-status species potentially occurring on the Project site. Capture and/or relocation of a state or federally listed species shall not occur without prior consultation with, and approval from, the applicable resource agencies.</li> <li>• No vehicle or equipment parked on the Solar Facility sites shall be moved prior to inspecting the ground beneath the vehicle or equipment for the presence of wildlife. If present, the animal shall be left to move on its own.</li> <li>• Vehicular traffic to and from the Solar Facility sites shall use existing routes of travel. Cross country vehicle and equipment use outside of the Project properties shall be prohibited.</li> <li>• A speed limit of 20 miles per hour shall be enforced within all Solar Facility areas during construction.</li> <li>• A long-term trash abatement program shall be established for construction, operations, and decommissioning of the Solar Facility. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to wildlife such as common raven (<i>Corvus corax</i>), coyote (<i>Canis latrans</i>), and feral dogs.</li> <li>• Workers shall be prohibited from bringing pets and firearms to the Solar Facility area and from feeding wildlife.</li> <li>• Intentional killing or collection of any special-status wildlife species shall be prohibited.</li> <li>• Fencing of the Solar Facility site shall incorporate wildlife-friendly fencing design. Fencing plans may use one of several potential designs that would allow SJKF to pass through the fence while still providing for Solar Facility security and exclusion of other unwanted species (i.e., domestic dogs and coyotes). Raised fences or fences with entry/exit points of at least 6 inches in diameter spaced along the bottom of the fence to allow species such as San Joaquin kit fox access into and through the Solar Facility site would be appropriate designs.</li> </ul>			
Impact 4.5-3: The Solar Facility could have a substantial adverse direct or indirect, non-collision-related impact on burrowing owl, Swainson's hawk, and other raptors.	<p>Implementation of Mitigation Measures 4.5-1b through 4.5-1c.</p> <p><b>Mitigation Measure 4.5-3a: Preconstruction Burrowing Owl Surveys.</b></p> <p>Prior to the initiation of equipment staging or ground-disturbing activities, biological surveys shall be performed within 14 days of such activities to ensure that burrowing owls are not impacted by construction activities. Given the large size of the construction site, multiple or ongoing burrowing owl surveys may be required during successive phases of the Project (e.g., between successive construction in different areas). To protect burrowing owls, the following conditions shall be met</p>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	14 days prior to the initiation of equipment staging or ground-disturbing activities.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	prior to construction within each successive work area:			
<b>MITIGATION MEASURES (cont.)</b>				
<b>Biological Resources (cont.)</b>				
Impact 4.5-3 (cont.)	<ul style="list-style-type: none"> <li>• A qualified wildlife biologist (i.e., a wildlife biologist with previous burrowing owl survey experience) shall conduct pre-construction surveys on the Solar Facility site and immediate vicinity only in areas of the site with suitable burrowing habitat to locate any active breeding or wintering burrowing owl burrows no fewer than 14 days prior to ground-disturbing activities (i.e., vegetation clearance, grading, tilling). The survey methodology shall be consistent with the methods outlined in the CDFW (2012) Staff Report on Burrowing Owl Mitigation and shall consist of walking parallel transects 7 to 20 meters apart, noting any potential burrows with fresh burrowing owl sign or presence of burrowing owls. As each burrow is investigated, biologists shall also look for sign of San Joaquin kit fox. Copies of the survey results shall be submitted to CDFW and the Fresno County Public Works and Planning Department. The surveys can be conducted concurrently with San Joaquin kit fox surveys.</li> <li>• If burrowing owls are detected on-site, no ground-disturbing activities, such as vegetation clearance or grading, shall be permitted within a buffer of no fewer than 200 meters (660 feet) from an active burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW with the exception noted below. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with CDFW.</li> <li>• The Project site shall be resurveyed to locate any breeding or wintering burrowing owls in the event that ground disturbing construction activities lapse for a period of 14 days after the most recent preconstruction survey.</li> <li>• If burrow avoidance is infeasible during the non-breeding season, a qualified biologist shall implement a passive relocation program in accordance the CDFW (2012) Staff Report on Burrowing Owl Mitigation.</li> <li>• If passive relocation is required, a qualified biologist shall prepare a Burrowing Owl Exclusion and Mitigation Plan and Mitigation Land Management Plan in accordance with CDFW 2012 Staff Report on Burrowing Owl Mitigation and for review by CDFW prior to passive relocation activities. The Mitigation Land Management Plan shall include a requirement for the permanent conservation of off-site Burrowing Owl Passive Relocation Compensatory Mitigation.</li> </ul> <p>Burrowing Owl Passive Relocation Compensatory Mitigation. If passive relocation is required, the Project proponent shall implement the Mitigation Land Management Plan and permanently conserve in a conservation easement off-site habitat suitable for burrowing owl at ratio of 6 acres per passively relocated burrowing owl pair, not to exceed the size of the final project footprint. Land identified to mitigate for passive relocation of burrowing owl may be combined with other off-site mitigation requirements of the Project if the compensatory habitat is deemed suitable to support the species. The Passive Relocation Compensatory Mitigation habitat shall be approved by CDFW. If the Project is located within the service area of a CDFW-approved burrowing owl conservation bank, the Project proponent may purchase available burrowing owl</p>			

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**TABLE 1 (Continued)  
MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM  
UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	conservation bank credits in lieu of placing off-site habitat into a conservation easement.			
<b>MITIGATION MEASURES (cont.)</b>				
<b>Biological Resources (cont.)</b>				
Impact 4.5-3 (cont.)	<p><b>Mitigation Measure 4.5-3b: Nesting Birds and Raptors.</b></p> <p>If construction is scheduled to commence during the non-nesting season (September 1 to January 31) within a given construction area (e.g., Power Block), no preconstruction surveys or additional measures are required for nesting birds and raptors within that specific construction area. To avoid impacts to nesting birds in the Project site and immediate vicinity, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the Project sites for ground-disturbing activities that are initiated during the breeding season (February 1 to August 31). The survey for special-status raptors shall focus on potential nest sites (e.g., mature trees) within a 0.5-mile buffer around the site in areas where access to neighboring properties is available or visible using a spotting scope. Surveys shall be conducted no more than 14 days prior to construction activities. Surveys need not be conducted for the entire Project site at one time; they may be phased so that surveys occur shortly before a portion of the Project site is disturbed. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (e.g., 300 feet for common raptors; 0.5 mile for Swainson's hawk; 100 feet for passerines) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). Construction within 0.5 mile of currently or recently active Swainson's hawk nest sites shall not occur during the nesting season without authorization by the CDFW. Encroachment into the buffer may occur at the discretion of a qualified biologist except that encroachment into the buffer for Swainson's hawk must be authorized by the CDFW.</p>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction activities.
Impact 4.5-4: The Project could have a substantial adverse direct or indirect, non-collision-related impact on nesting and migratory birds.	Implementation of <b>Mitigation Measures 4.5-3a and 4.5-3b.</b>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to and during construction.
Impact 4.5-5: The Project could have a substantial adverse impact to special status and migratory birds related to the introduction of potential collision hazards.	<p><b>Mitigation Measure 4.5-5a Compliance with the Avian Power Line Interaction Committee's (APLIC) guidance, Reducing Avian Collisions with Power Lines: State of the Art in 2012 (APLIC, 2012).</b></p> <p>Transmission lines and all electrical components shall be designed, installed, and maintained in accordance with APLIC (2012) guidance to reduce the likelihood of large bird electrocutions and collisions. Compliance with APLIC standards would reduce the potential impact of collisions and electrocutions with power line structures to a less than significant level.</p>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During installation of transmission lines and all electrical components.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Biological Resources (cont.)</b>				
Impact 4.5-5 (cont.)	<p><b>Mitigation Measure 4.5-5b: Collision Reduction Strategy.</b>                      The Applicant shall implement the following measures to reduce the risk of bird collisions with PV panels.</p> <ul style="list-style-type: none"> <li>Installation of visual deterrents or cues to encourage bird avoidance of the Project site. These deterrents will be made of a material that is both reflective and highly visible, such that the material reflects ambient light and is stimulated by air movement. The effect of installation will create the visual impression of continuous and varied movement, which has been shown as an avian deterrent in agricultural applications. Example of the types of material that could be used include plastic compact discs and reflective tape. Within 30 days after project commissioning, materials will be installed in 50-acre blocks to achieve coverage of a total of 200 acres within the Solar Facility on a 3-month trial basis to examine panel performance issues. Following the initial 3-month period, visual deterrents will either be adjusted to reduce performance issues and reexamined on continuing 3-month basis, or if adjustments are not deemed necessary to improve panel performance, deployed on the remainder of the site and maintained for the life of the project or until determined infeasible (based on the definition of "feasible" in CEQA Guidelines §15364) or ineffective by the Project owner in consultation with CDFW and the County.</li> <li>Panels shall include, if feasible, a light-colored, UV-reflective, or otherwise non-polarizing outline, frame, grid, or border, which has been shown to substantially reduce panel attractiveness to aquatic insects (Horvath, 2010) and may reduce avian mortality by avoiding collisions with panel faces (NFL, 2014).</li> </ul>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction.
Impact 4.5-7: The Solar Facility could conflict with local policies protecting biological resources.	Implementation of <b>Mitigation Measures 4.5-1a through 4.5-1c and 4.5-3a and 4.5-3b.</b>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to and during construction.
Impact 4.5-8: The Project could cause a cumulatively considerable contribution to a significant cumulative effect to migratory birds related to the introduction of potential collision hazards.	<p><b>Mitigation Measure 4.5-8: Off-site Avian Predation Reduction.</b>                      The Project Owner shall partner with CDFW, the Rabies and Animal Control Program of the Environmental Health Division in Fresno County, and/or a similar program to fund existing feral cat control programs to be targeted within 10 miles of the Mendota Wildlife Area. The first project owner to be issued a notice to proceed shall fund the program in the amount of \$25,000 within 6 months of the notice to proceed. The obligation set forth in this measure shall not apply to the PG&amp;E Switching Station.</p>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During Solar Facility operation

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing	
<b>MITIGATION MEASURES (cont.)</b>					
<b>Cultural and Paleontological Resources</b>					
Exhibit 4 - Page 85	<p><b>Impact 4.6-1:</b> The Solar Facility could cause a substantial adverse change in the significance of a historical or archaeological resource, as defined in CEQA Guidelines Section 15064.4.</p>	<p><b>Mitigation Measure 4.6-1:</b> The Project proponent shall retain a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology, to carry out all mitigation measures related to archaeological and historical resources.</p> <p>Prior to the start of any ground disturbing activities, the Project owner shall ensure that the qualified archaeologist has conducted a Cultural Resources Awareness Training for all construction personnel working on the Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified archaeologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of archaeological resources. A sign-in sheet shall be completed and retained to demonstrate attendance at the awareness training.</p> <p><b>Mitigation Measure 4.6-2:</b> In the event archaeological materials are encountered during the course of grading or construction, the Project contractor shall cease any ground disturbing activities within 50 feet of the find. The qualified archaeologist shall evaluate the significance of the resources and recommend appropriate treatment measures. Per CEQA Guidelines §15126.4(b)(3)(A), project redesign and preservation in place shall be the preferred means to avoid impacts to significant archaeological sites. Consistent with CEQA Guidelines §15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures. The County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthened cultural resources if the resources are prehistoric or Native American in nature. Archaeological materials recovered during any investigation shall be curated at an accredited curatorial facility. The qualified archaeologist shall prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the County and to the Southern San Joaquin Valley Information Center. Construction can recommence based on direction of the qualified archaeologist.</p>	<p>Applicants and/or their designees to implement measure as defined.</p>           <p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>           <p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>Prior to and during construction.</p>           <p>During construction.</p>
	<p><b>Impact 4.6-2:</b> The Solar Facility could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, as defined in CEQA Guidelines Section 15064.</p>	<p><b>Mitigation Measure 4.6-3:</b> The Project proponent shall retain a qualified paleontologist to carry out all mitigation measures related to paleontological resources. Prior to the start of any ground disturbing activities, the Project owner shall ensure that the qualified paleontologist has conducted Paleontological Resources Awareness Training for all construction personnel working on the Project. This may be conducted in conjunction with the archaeological resources training required by Mitigation Measure 4.6-1. The training shall include an overview of potential paleontological resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified paleontologist for further evaluation and action, as appropriate; and penalties for unauthorized collecting or intentional disturbance of paleontological resources. A sign-in sheet shall be completed and retained to demonstrate attendance at the awareness training.</p>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>Prior to and during construction.</p>

**TABLE 1 (Continued)  
MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM  
UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Cultural and Paleontological Resources (cont.)</b>				
Impact 4.6-2 (cont.)	<b>Mitigation Measure 4.6-4:</b> If a paleontological resource is found, the Project contractor shall cease ground-disturbing activities within 50 feet of the find. The qualified paleontologist shall evaluate the significance of the resources and recommend appropriate treatment measures. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Any fossils encountered and recovered shall be catalogued and donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County. Accompanying notes, maps, and photographs shall also be filed at the repository. The qualified paleontologist shall prepare a report documenting evaluation and/or additional treatment of the resource. The report shall be filed with the County and with the repository.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction.
Impact 4.6-3: The Project could disturb any human remains, including those interred outside of formal cemeteries.	<b>Mitigation Measure 4.6-5:</b> If human remains are uncovered during Project construction, the Project operator shall immediately halt work, contact the Fresno County Coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines Section 15064.4 (e)(1). If the County Coroner determines that the remains are Native American in origin, the Native American Heritage Commission (NAHC) will be notified, in accordance with Health and Safety Code Section 7050.5(c), and Public Resources Code 5097.98 (as amended by AB 2641). The NAHC shall designate a Most Likely Descendent (MLD) for the remains per Public Resources Code Section 5097.98, and the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in Public Resources Code Section 5097.98 with the MLD regarding their recommendations for the disposition of the remains, taking into account the possibility of multiple human remains.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction.
<b>Greenhouse Gas Emissions</b>				
Impact 4.9-2: The Solar Facility could conflict with CARB's Climate Change Scoping Plan.	<b>Mitigation Measure 4.9-2:</b> The Applicant shall utilize hermetically sealed circuit breakers and gas insulated switchgear for all SF <sub>6</sub> -containing equipment associated with the Project.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During installation and operation.
<b>Hazards and Hazardous Materials</b>				
Impact 4.10-1: The Solar Facility could create a significant hazard to the public or the environment through the routine transport, use, or disposal	<b>Mitigation Measure 4.10-1: Broken PV Module Detection and Handling Plan.</b> If PV panels containing CdTe are used, the Applicant shall prepare and implement a Broken PV Module Detection and Handling Plan. The plan shall describe the Applicant's plan for identifying, handling and disposing of PV modules that may break, chip, or crack at some point during the Project's life cycle to ensure the safe handling, storage, transport, and recycling and/or disposal of the modules and related electrical components in a manner that is compliant with applicable law	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During Solar Facility operation.

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**TABLE 1 (Continued)  
MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM  
UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
of hazardous materials.	and protective of human health and the environment. The plan shall have the following elements:			
<b>MITIGATION MEASURES (cont.)</b>				
<b>Hazards and Hazardous Materials (cont.)</b>				
Impact 4.10-1 (cont.)	<ul style="list-style-type: none"> <li>• Worker health and safety provisions and handling protocol – These measures shall address isolating workers from the CdTe during the recovery of broken PV panels and shall include the following requirements:                             <ul style="list-style-type: none"> <li>- Workers shall wear gloves during the handling of broken pieces of PV panels to prevent cuts to the workers.</li> <li>- If broken pieces are separated from the PV panel, the pieces shall be collected and the areal extent of the collected pieces compared to the broken area on the PV panel to ensure that the pieces have been accounted for.</li> <li>- The broken pieces shall be placed in drums, sealed boxes, puncture-proof bags, or equivalent containers so as to prevent the broken pieces from tearing the containers and being re-released into the environment.</li> </ul> </li> <li>• Timing of removal – The PV panels shall be inspected for breakage prior to each washing PV panel event. In the event that broken PV panels are discovered, the broken PV panels and any pieces shall be removed prior to washing any adjacent PV panels so as to prevent wash water from spreading CdTe.</li> <li>• Recycling or disposal requirements – If available, broken panels shall be sent to a recycling or CdTe PV panel manufacturing facility licensed for the recycling of CdTe PV panels, if recycling is unavailable, the broken panels shall be sent to a landfill licensed to receive broken CdTe PV panels.</li> </ul> <p>The plan shall be submitted to the County for review and approval prior to delivery of CdTe-containing PV panels to the Project site and shall be distributed to all construction crew members and temporary and permanent employees prior to construction and operation of the Project. All available data from the panel manufacturer(s) regarding materials used and safety procedures and/or concerns shall be appended to the plan to assist the County with identifying potential hazards and abatement measures.</p>			
<b>Hydrology and Water Quality</b>				
Impact 4.11-2: Dewatering during construction activities could release previously contaminated groundwater to surface water channels and/or increase sediment loading to surface water channels through overland discharge and subsequent erosion, both processes could decrease water quality	<b>Mitigation Measure 4.11-1:</b> If degraded soil or groundwater is encountered during excavation (e.g., there is an obvious sheen, odor, or unnatural color to the soil or groundwater), the Project Owner and/or its contractor(s) shall excavate, segregate, test, and dispose of degraded soil or groundwater in accordance with state hazardous waste disposal requirements.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
in surface waterways.				



**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Hydrology and Water Quality (cont.)</b>				
<p><b>Impact 4.11-3:</b> Construction and operation and maintenance of the Solar Facility could 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.</p>	<p><b>Mitigation Measure 4.11-2: Groundwater Monitoring and Mitigation Plan.</b></p> <p>Prior to extracting groundwater at the Solar Facility site or from nearby wells, a well survey and pump test, as well as a Groundwater Monitoring and Mitigation Plan, shall be prepared. The Plan is not required if groundwater is not used for the Solar Facility. These documents shall be prepared by a qualified professional geologist, hydrogeologist, or civil engineer registered in the State of California. The documents shall be submitted by the Applicants to the County of Fresno (County) for approval, and to the CVRWQCB and/or other agencies as deemed appropriate by the County for review and comment.</p> <p><b>Well Survey and Pump Test(s):</b> For any existing and/or new groundwater well(s) that would be installed and/or used for the Project: a pump-test shall be conducted during the dry season (June through October). At a minimum, the pump test shall establish (or confirm):</p> <ul style="list-style-type: none"> <li>• The maximum sustained yield of the well (or the maximum sustained pumping rate that would be used during construction and operation);</li> <li>• The drawdown depth and corresponding stable groundwater elevation;</li> <li>• The area of influence of the well.</li> </ul> <p>A well survey shall be conducted to locate nearby, existing groundwater wells that are or will be in active use, and that could potentially be impacted by the Project well(s) based upon the information gathered from the pump-test(s). The well survey shall include detailed information for each identified well, including but not limited to: date of installation, completed depth, screened interval, and any available information on pumping rate and corresponding static groundwater level.</p> <p><b>Groundwater Monitoring and Mitigation Plan:</b> This Plan shall provide a detailed methodology for monitoring background and Project area groundwater levels and flow. At least one monitoring well shall be established between the Project well(s) and all identified wells (above) in reasonable proximity (e.g., within a distance equivalent to the diameter of the radius of influence of the Project well(s)) to the Project area. Monitoring shall be performed during pre-construction, construction, and operation and maintenance of the Project, with the intent to establish pre-construction and Project-related groundwater level trends that can be quantitatively compared against observed and/or simulated trends near the Project pumping wells and near potentially affected existing wells, if any. Based on the existing and/or proposed Project well location(s), and for the estimated maximum pumping rate, the pre-construction monitoring shall demonstrate that less than 1-foot of drawdown would occur at the Project area boundary location nearest the neighboring well(s).</p> <p>The Groundwater Monitoring and Mitigation Plan shall include a schedule for submittal of quarterly data reports by the Project Owner to the Fresno County Environmental Health Department for the duration of the monitoring period, which shall include the entire duration of construction and one year post-construction. The monitoring reports shall include data from the construction and operation of all Power Blocks in the active construction or operational phase. These quarterly data reports shall be prepared and submitted to the County for review and approval, and shall include:</p>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>Prior to construction.</p>

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Hydrology and Water Quality (cont.)</b>				
Impact 4.11-3 (cont.)	1. Daily usage, monthly range, and monthly average of daily water usage in gallons per day; 2. Total water used on a monthly and annual basis in acre-feet; summary of all water level data; 3. Identification of trends that indicate potential for off-site wells to experience decline of water level; 4. Identification of all sources of water by type (i.e., groundwater, surface water, municipal water) and well/location used on the Project site; 5. Water level monitoring data (trend analyses) from all pumping and monitoring wells. Based on the results of the quarterly reports, the Project Owner and County shall determine if the Project's pumping activities have resulted in water level declines in the baseline at any of the monitoring wells, including nearby operating private wells, if any. If, due to Project activities, significant drawdown occurs at active off-site groundwater supply wells (e.g., such that the production rate of these wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted as of the date of certification of this EIR), the Project Owner shall: 1) immediately reduce groundwater pumping until water levels stabilize or recover to a reasonable level, and 2) establish an alternative source of water (e.g., those identified by Aspen [2014]) for the remaining construction and/or operations needs of the Project, beyond that which can be sustainably produced from the Project well(s) (i.e., such that active off-site wells are not affected, as described above).			
Impact 4.11-6: Construction and operation and maintenance of the Solar Facility, the Phased Decommissioning Alternative, or the Reduction Acreage Alternative could cause a cumulatively considerable contribution to a significant adverse over-draft condition in the Westside Basin.	Implementation of Mitigation Measure 4.11-2.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction.
<b>Noise</b>				
Impact 4.14-1: Operation and maintenance of the Solar Facility could result in exposure of persons to noise levels in excess of standards and limits established by Fresno County.	<b>Mitigation Measure 4.14-1: Substation Noise Control.</b> The Applicant shall ensure that the combined noise levels associated with the substations do not exceed the Fresno County exterior noise standards or the Fresno County substation noise limit at the on-site residence locations. Noise control techniques may include, but not be limited to: locating the transformers with as much setback from the existing residential properties as possible, use of noise walls or equivalent sound attenuation devices, and the use of a transformer with special noise control specifications designed in a way to specifically achieve acceptable regulatory noise standards.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During Solar Facility operation and maintenance.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Noise (cont.)</b>				
Impact 4.14-1 (cont.)	Prior to the installation of the substations and associated transformers, the Applicant shall submit to the County, for review and approval, a plan that describes the specific measures that will be taken in order to comply with the County's noise standards and limits.			
Impact 4.14-3: Solar Facility operation and maintenance activities would result in a long-term increase in local ambient noise levels.	Implementation of <b>Mitigation Measure 4.14-1</b> .	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During Solar Facility operation and maintenance.
Cumulative Traffic	<p><b>Mitigation Measure 4.18-1:</b> Prior to the issuance of construction or building permits, the Project sponsor and/or its construction contractor shall:</p> <ul style="list-style-type: none"> <li>• Prepare and submit a Construction Traffic Control Plan to Fresno County Divisions of Public Works and Planning and the California Department of Transportation District 6 office for approval. The Construction Traffic Control Plan must be prepared in accordance with current Caltrans standard plans, and both the California Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following issues:                             <ul style="list-style-type: none"> <li>- Timing of deliveries of heavy equipment and building materials;</li> <li>- Directing construction traffic with a flagger;</li> <li>- Placing temporary signing, lighting, and traffic control devices if required, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic;</li> <li>- Ensuring access for emergency vehicles to the project sites;</li> <li>- Temporarily closing travel lanes or delaying traffic during materials delivery, transmission line stringing activities, or any other utility connections;</li> <li>- Maintaining access to adjacent property;</li> <li>- Specifying both construction-related vehicle travel and oversize load haul routes, minimizing construction traffic during the a.m. and p.m. peak hour, distributing construction traffic flow across alternative routes to access the project sites, and avoiding residential neighborhoods to the maximum extent feasible;</li> </ul> </li> <li>• Obtain all necessary permits for the work within the road right of way or use of oversized/overweight vehicles that would utilize county-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Fresno County Divisions of Public Works and Planning.</li> <li>• Prior to the start of construction enter into a secured agreement with Fresno County to ensure that any county roads that are demonstrably damaged by project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the</li> </ul>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to construction.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	state and/or Fresno County.			
<b>MITIGATION MEASURES (cont.)</b>				
<b>Noise (cont.)</b>				
Cumulative Traffic (cont.)	<ul style="list-style-type: none"> <li>- Any work for the proposed intersection improvements on Manning Avenue at the Ohio and Monterey alignments first shall require that plans for the improvements be submitted to Road Maintenance and Operations Division (RMO) for review and approval prior to issuance of any encroachment or road improvement permit for the work.</li> <li>- The improvements for these new access roads shall include a requirement that they be paved with asphalt concrete surfacing for a minimum distance of 100 feet from the edge of the Fresno County road right of way to help ensure that no sediment track-out is carried onto the Fresno County road from construction activities. The paved width of this access road shall be a minimum of 24 feet. Any material that is deposited onto the Fresno County-maintained roadway shall be swept clean as soon as possible and at least prior to the end of each working day.</li> <li>- Maintenance of these new access roads shall be the sole responsibility of the Applicant.</li> <li>- The scope of any necessary repair work shall be mutually agreed upon by the Applicant and Fresno County prior to performance of the repair work.</li> <li>- Obtainment of any access easements from private property owners necessary to perform required repair work shall be the sole responsibility of the Applicant.</li> <li>- If the County intends to hire a firm to perform mitigation monitoring, that firm shall be under contract and the Applicant shall have a cost recovery agreement in place prior to the start of construction activities so that "before" and "after" construction conditions for the Fresno County roads can be documented.</li> <li>• Submit documentation that identifies the roads to be used during construction. The project operator shall be responsible for repairing any damage to non-county maintained roads that may result from construction activities. The project operator shall submit a preconstruction video log and inspection report regarding roadway conditions for roads used during construction to the Fresno County Divisions of Public Works and Planning.</li> <li>• Subsequent to completion of construction, submit a post-construction video log and inspection report to the County. This information shall be submitted in DVD format. The County, in consultation with the project operator's engineer, shall determine the extent of remediation required, if any.</li> </ul>			

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>CONDITIONS OF APPROVAL</b>				
<b>Fresno County</b>				
1. Mitigation Monitoring (Reimbursement for Third Party Monitor)	The Applicant shall enter into an agreement with the County of Fresno to implement a Mitigation Monitoring and/or Reporting Plan and Condition Compliance Matrix to be administered by a third party in accordance with Section 21081.6 of the California Public Resources Code and Section 15097 of Title 14, Chapter 3 of the California Code of Regulations. This agreement shall cover monitoring the Project's mitigation measures and conditions of approval as provided in the Mitigation Monitoring and/or Reporting Plan and Condition Compliance Matrix.  Fees shall be submitted at the time the property owner submits the signed mitigation monitoring agreement.	Applicant, in coordination with Fresno County Dept. of Public Works and Planning Development Services Division		Within 60 days after project approval or prior to the issuance of grading and building permits, which-ever occurs first.
2. Mitigation Monitoring (Reimbursement for Staff Time in Mitigation and Condition of Approval Implementation)	The Applicant shall enter into an agreement with the County of Fresno to provide funding to compensate for County Staff's time in reviewing and administering any materials related to Mitigation Monitoring and/or Reporting, including those prepared by the third party administrator.	Applicant, in coordination with Fresno County Dept. of Public Works and Planning Development Services Division		Within 60 days after project approval or prior to the issuance of grading and building permits, which-ever occurs first.
3. Mitigation Monitoring (Indemnification)	a. The Applicant Shall Enter into an Agreement Indemnifying the County for Legal Costs Associated with its Approval of Unclassified Conditional Use Permit Nos. 3451 - 3458. The Indemnification Agreement shall be submitted to the County Department of Public Works and Planning Development Services Division.	Applicant, in coordination with Fresno County Dept. of Public Works and Planning Development Services Division	The Indemnification Agreement shall be submitted to the Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits
	b. The Applicant shall implement the mitigation measures adopted by the County.		Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits
	c. Development and operation of the use shall be in conformance with the site plan, elevation drawings, operational statement, and Reclamation Plan approved by the Commission.		Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits
	d. Site Plan Review (SPR) approval shall be required to assure compliance with setback requirements. A merger procedure shall be required to combine all affected parcels into one if: (i) any PV systems or related equipment or structures would cross over individual property boundary lines, or if (ii) minimum setback requirements are not met and a variance application has not been approved.	Applicant compliance through agency-specific application, permitting, and/or monitoring procedures.	Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>CONDITIONS OF APPROVAL (cont.)</b>				
<b>Fresno County (cont.)</b>				
4. Expiration of Land Use Permits and Reapplication	The life of this each land use permit (UCUP Nos. 3451, 3452, 3453, 3454, 3455, 3456, 3457 and 3458) shall expire upon expiration of the initial life of the solar lease or the 40-year initial life of each of the projects. If the solar leases are to be extended or the initial life of each project extends beyond this approval, approval of new land use permits shall be obtained.	Applicant compliance through agency-specific application, permitting, and/or monitoring procedures.	Fresno County Dept. of Public Works and Planning, Development Services Division	Ongoing
5. Site Plan Review requirements (NOTE: This language can also be combined with 3d)	A Site Plan Review (SPR) Application shall be submitted for approval by the Director of the Department of Public Works and Planning, in accordance with Section 874 of the Fresno County Zoning Ordinance prior to the issuance of Building Permits for each approved land use permit (UCUP Nos. 3451, 3452, 3453, 3454, 3455, 3456, 3457 and 3458). The SPRs shall be applicable to those portions of the project site(s) to be improved with sub-stations, inverters, perimeter access roads, parking, and driveway access, excluding the solar panel fields. Items to be addressed under the SPR process may include, but are not limited to, design of parking and circulation, driveway, access, grading and drainage, fire protection and lighting.	Applicant compliance through agency-specific application, permitting, and/or monitoring procedures.	Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits
6. Right-to-Farm Notification	As part of the SPR submittal process for each land use permit, an agreement incorporating the provisions of the "Right-to-Farm" Notice (Ordinance Code Section 17.40.100) shall be entered into with Fresno County acknowledging the presence of surrounding agricultural operations and their related activities.	Applicant compliance through agency-specific application, permitting, and/or monitoring procedures.	Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits
7. Fencing	The Applicant shall obtain a permit for fencing in excess of 6 feet high.	Applicant compliance through agency-specific application, permitting, and/or monitoring procedures.	Fresno County Dept. of Public Works and Planning, Development Services Division	
8. Easements	The Applicant shall obtain private road or access easements.	Applicant compliance through agency-specific application, permitting, and/or monitoring procedures.	Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits
9. Intersection Improvements on Manning Avenue at the Ohio and Monterey Alignments	a. The Applicant shall submit plans to Road Maintenance and Operations Division (RMO) for review and approval prior to issuance of any encroachment or road improvement permit for any work for the proposed intersection improvements on Manning Avenue at the Ohio and Monterey alignments. b. The improvements for these new access roads shall be paved with asphalt concrete surfacing for a minimum distance of 100 feet from the edge of the County road right of way to help ensure that no sediment track-out is carried onto the County road from construction activities. The	Applicant, in coordination with Fresno County Dept. of Public Works and Planning Road Maintenance and Operations Division	Fresno County Dept. of Public Works and Planning, Road Maintenance and Operations Division	Plan submittal required prior to issuance of an encroachment or road improvement permit for the proposed work.

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**TABLE 1 (Continued)  
MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM  
UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>CONDITIONS OF APPROVAL (cont.)</b>				
<b>Fresno County (cont.)</b>				
9. Intersection Improvements on Manning Avenue at the Ohio and Monterey Alignments (cont.)	<p>paved width of this access road shall be a minimum of 24 feet. Any material that is deposited onto the County-maintained roadway shall be swept clean as soon as possible and at least prior to the end of each working day.</p> <p>c. Maintenance of these new access roads shall be solely the responsibility of the applicant.</p> <p>d. A secured agreement for the road improvements shall be in place prior to the start of construction.</p> <p>e. If the County intends to hire a firm to perform mitigation monitoring, that firm shall be under contract prior to the start of construction activities so that "before" and "after" construction conditions for the County roads can be documented. The scope of the repair work shall be mutually agreed upon between the Applicant and the County prior to performance of the repair work.</p> <p>f. Obtainment of any access easements from private property owners shall be solely the responsibility of the applicant.</p>			Secured agreement and third-party contracting (if elected by the County) required prior to the start of construction.
<b>California Department of Transportation</b>				
10. SR-33 ROW dedication (Power Blocks 1, 5, 6, and 8; UCUPs 3451, 3455, 3456, and 3458)	The Applicants for the Power Blocks adjacent to SR-33 [i.e., Power Block 1 (UCUP 3451), Power Block 5 (UCUP 3455), Power Block 6 (UCUP 3456), and Power Block 8 (UCUP 3458)] shall dedicate a five-foot right-of-way (ROW) along SR 33 for the future road widening. The distance of the appurtenance shall be measured from centerline to include the future ROW.	Applicant, in coordination with Caltrans	Caltrans	Prior to receipt of a final certificate of occupancy for each Power Block/UCUP
<b>Applicant-Proposed</b>				
11. Worker Health: Valley Fever	<p>a. Limit construction workers' exposure to dust by suspending construction work in affected areas during heavy wind events or dust storms. "Affected area" is defined as a portion of the project where visible airborne dust is present. "Heavy wind event" is defined as winds in excess of 20 mph averaged over the prior 1 hour period.</p> <p>b. Heavy equipment, trucks and other construction vehicles that generate heavy dust shall have enclosed, air-conditioned cabs with high efficiency particulate air (HEPA) filters (if reasonably commercially available in California).</p> <p>c. NIOSH-approved respiratory protection with particulate filters rated as N95, N99, N100, P100 or HEPA shall be provided to construction workers. When digging a trench or performing other soil-disturbing tasks, workers shall be positioned upwind when possible.</p> <p>d. Construction workers shall be trained on ways to minimize exposure to dust.</p>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to ground disturbance activities.
12. Financial Assurances	Section No. 9 of each Reclamation Plan for UCUP Nos. 3451 through 3458 shall be modified to state that the Applicant will establish and maintain an Irrevocable Letter of Credit from a state or national financial institution in the amount identified for each individual UCUP prior to the issuance	Applicants and/or their designees to implement measure as	Fresno County Department of Public Works and Planning,	Prior to issuance of building permits.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	of building permits for each Phase to be maintained throughout the life of the Project.	defined.	Development Services Division, and/or its designee	
<b>NOTES: The following Notes reference mandatory requirements of Fresno County or other Agencies and are provided as information to the Project Applicant.</b>				
1.	This Use Permit will become void, unless there has been substantial development within two years of the effective date of this approval			
2.	Prior to occupancy, the Applicant shall complete and submit either a Hazardous Materials Business Plan or a Business Plan Exemption form to the Fresno County Department of Community Health, Environmental Health Division. Contact the Certified Unified Program Agency at (559) 445-3271 for more information.			
3.	All hazardous waste shall be handled in accordance with requirements set forth in the California Health and Safety Code, Chapter 6.5. This chapter discusses proper labeling, storage and handling of hazardous wastes.			
4.	A storm water pollution prevention plan shall be submitted to the U.S. Environmental Protection Agency and administered by the California State Regional Water Quality Control Board.			
5.	Because the proposed project includes land disturbances of more than five acres, the Applicant will be required to obtain a National Pollution Discharge Elimination System (NPDES) General Construction Storm Water Permit from the Regional Water Quality Control Board.			
6.	The Applicant shall adhere to San Joaquin Air Pollution Control District Regulation VIII – Fugitive Dust Rules. The Applicant also shall adhere to the District's permitting requirements, which include a District-Issued Dust Control Plan and Authority to Construct (ATC). The Applicant shall consider entering into a voluntary emission reduction agreement (VERA) with the District.			





# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING  
**ALAN WEAVER**  
DIRECTOR

## Planning Commission Staff Report Agenda Item No. 6 October 9, 2014

**SUBJECT:** Unclassified Conditional Use Permit (UCUP) Application Nos. 3451 through 3458 for the Tranquillity Solar Generating Facility Project, and associated Environmental Impact Report No. 6730 (State Clearinghouse No. 2013111056)

Certify Environmental Impact Report No. 6730 in compliance with the California Environmental Quality Act (CEQA), adopt a Statement of Overriding Considerations, and allow photovoltaic (PV) electricity generating facilities and associated infrastructure including up to eight power blocks of solar arrays in different configurations, up to eight electrical substations, and other necessary infrastructure including up to eight permanent operation and maintenance buildings, a supervisory control and data acquisition (SCADA) system, up to 200 megawatts (MW) of on-site energy storage (either battery or flywheel system), meteorological data system, buried conduit for electrical wires, overhead collection lines strung on 300 to 500 wood power line poles (each up to 70 feet tall), on-site access roads, and security fencing.

**LOCATION:** The Project site is located approximately seven miles southwest of the community of Tranquillity, 5.5 miles east of Interstate 5, and five miles north of the community of Three Rocks. The Project site is comprised of approximately 3,732 acres in western unincorporated Fresno County and would encompass 39 parcels located south of West Manning, north of West Nebraska Avenue, east of South San Bernardino Avenue, and west of South San Benito Avenue. All of the parcels are within the jurisdictional boundaries of Fresno County.

**Applicants:** RE Tranquillity LLC, RE Tranquillity 2 LLC, RE Tranquillity 3 LLC, RE Tranquillity 4 LLC, RE Tranquillity 5 LLC, RE Tranquillity 6 LLC, RE Tranquillity 7 LLC, RE Tranquillity 8 LLC

**Owners:** Westlands Water District  
David and Sharon Wakefield

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**STAFF CONTACTS:** Briza Sholars, Planner  
(559) 600-4207

Eric VonBerg, Senior Planner  
(559) 600-4569

Chris Motta, Principal Planner  
(559) 600-4497

**RECOMMENDATION:**

- Move to certify the Environmental Impact Report (EIR) prepared for the Tranquillity Solar Generating Facility Project No. 6730, UCUP Application Nos. 3451 through 3458, as complete and adequate in conformance with CEQA.
- Move to approve and adopt for the Tranquillity Solar Generating Facility Project:
  - UCUP Application Nos. 3451-3458;
  - CEQA Findings of Fact and Statement of Overriding Considerations (see Exhibit 9, "CEQA Findings of Fact and Statement of Overriding Considerations");
  - Related mitigation measures and Conditions of Approval; and
  - The Mitigation Monitoring and Reporting Program (see Exhibit 1, "Mitigation Monitoring and Reporting Program, Conditions of Approval, and Project Notes (MMRP/COA)").
- Direct the Secretary to prepare a Resolution documenting the Commission's action.

**IMPACTS ON JOB CREATION:**

The Commission's action will have a limited effect on job creation. Up to ten permanent staff would be needed to operate and maintain the project. Short-term construction-related jobs would include an average of 188 and a maximum of 256 workers to prepare the site, an average of 110 and maximum of 146 workers to install the PV panels, and an average of 80 and maximum of 108 workers to install inverters, substations and the generation-tie line connection. Additionally, an average of six and a maximum of 12 workers would be needed to construct a Pacific Gas and Electric Company (PG&E) Switching Station. The Project site currently is used for dry farming; converting the land to a solar farm would result in a minimal loss of agricultural jobs.

**EXHIBITS:**

1. Mitigation Monitoring and Reporting Program, Conditions of Approval, and Project Notes (MMRP/COA)
2. Location Map
3. Existing Zoning Map
4. Existing Land Use Map
5. Assessor's Parcel Map

6. Site Plans
7. Elevations/Details
8. Operational Statement
9. CEQA Findings of Fact and Statement of Overriding Considerations
10. Public Correspondence

## **ENVIRONMENTAL ANALYSIS:**

### **Environmental Context**

According to information provided by the Applicants, siting of the project focused on impaired or degraded lands, such as “agricultural lands that are demonstrably chemically or physically impaired.” All but approximately 80 acres of the project site are owned by Westlands Water District. Westlands Water District lands have been severely impacted by drainage problems, resulting in a buildup of salt-impaired crop root zones and a concomitant reduction in yields and diminished land productivity. Westlands Water District soils also have naturally high levels of selenium – an impairment worsened by the poor drainage. Past years of drought, along with reduced and less reliable water deliveries from the Bureau of Reclamation’s Central Valley Project, further strain agricultural use of the land in the project area.

Although the Project site is located within the area served by Westlands Water District, it does not currently receive any surface water from the District. Irrigation is not allowed on any of the land within the project site aside from ten acres within a single parcel (APN 028-101-75S) that receive a water allotment of 2.5 acre-feet per year per acre. However, the land has not been irrigated during the last ten years. The remaining 70 acres of that parcel do not receive surface water allocation.

### **California Environmental Quality Act**

The project requires the County’s discretionary approval of eight UCUPs. Such approvals trigger the environmental review process prescribed by CEQA.

As stated in the CEQA Guidelines §15121(a), “[a]n EIR is an informational document which will inform public agency decision makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.” An EIR is not intended to recommend either approval or denial of a project. Rather, an EIR is a document whose primary purpose is to disclose the potential environmental impacts associated with an action or ‘project.’”

In addition, CEQA Guidelines §15151 contains the following standards of adequacy:

*An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible.*

*Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts.*

As required by CEQA Guidelines §15120(c), an EIR shall:

- Provide a sufficiently-detailed project description;
- Discuss the existing environmental setting;
- Identify and evaluate potential environmental impacts of the project, the cumulative effects of the project, and other existing or proposed activities in the vicinity;
- Describe feasible mitigation measures that could substantially lessen or avoid the project's significant adverse environmental impacts; and
- Identify and evaluate alternatives to the project that could substantially lessen or avoid any of the project's significant environmental impacts.

CEQA does not require evaluation of all possible alternatives, only evaluation of "a range of reasonable alternatives" to encourage both meaningful public participation and informed decision making (CEQA Guidelines §15126.6(a)). "The discussion of alternatives need not be exhaustive, and the requirement as to the discussion of alternatives is subject to a construction of reasonableness. The statute does not demand what is not realistically possible given the limitation of time, energy, and funds" (*Residents Ad Hoc Stadium Committee v. Board of Trustees* (1979) 89 Cal.App.3d 274, 286; see also CEQA Guidelines §15126.6(f)(3)). In addition, as stated by the court in *Village of Laguna Beach, Inc. v. Board of Supervisors* (1982) (134 Cal.App.3d 1022, 1029), "Absolute perfection is not required; what is required is the production of information sufficient to permit a reasonable choice of alternatives so far as environmental aspects are concerned."

### **Summary of Tranquillity Solar Generating Facility Project Environmental Impact Report**

UCUP applications for the project were submitted to Fresno County on July 10, 2013; clarifications to the applications were submitted on July 7, 2014. County staff determined that preparation of an EIR was necessary. The EIR was prepared in compliance with CEQA (Pub. Res. Code §21000 *et seq.*) and the CEQA Guidelines (14 Cal. Code Regs. §15000 *et seq.*). Technical analyses were conducted and public comment was solicited and considered to ensure that potential environmental impacts of the project have been evaluated and disclosed in the EIR. A summary of the steps of environmental review and public comment process is below:

- A Notice of Preparation was prepared for the project and circulated to all responsible agencies and interested parties beginning on October 16, 2013, for a 30-day review period ending on November 14, 2014, which later was extended to December 18, 2013.
- On October 30, 2013, the County Department of Public Works and Planning, Development Services Division, hosted an agency and public scoping meeting at Tranquillity Elementary School in Tranquillity, California, to discuss the scope of the analysis to be conducted for the EIR.
- A Notice of Completion for the Draft EIR was filed with the State of California Clearinghouse on May 21, 2014, and a Notice of Availability was posted on the County's website and sent to 31 property owners within approximately 5,280 feet (one mile) of the project site and to individuals, organizations, and agencies that previously expressed interest in the project.
- The Draft EIR was circulated for review and comment during a 47-day period that began on May 21, 2014, and ended on July 7, 2014.

- The Draft EIR was made available for public review at the Fresno County Main Library, the County Public Works and Planning offices, and on the County's Internet website.
- Copies of the Draft EIR were provided, upon request, to responsible, trustee, and other federal, state, and local agencies expected or known to have expertise or interest in the resources that the project may affect.
- Copies of the Draft EIR or notices of the Draft EIR's availability were sent to organizations and individuals with special expertise on environmental impacts and/or who had previously expressed an interest in this project or other related activities.
- On June 25, 2014, the County Department of Public Works and Planning, Development Services Division, hosted a public meeting at Tranquillity Elementary School, Tranquillity, California, to discuss the Draft EIR and project review process and to receive public comments.
- On September 10, 2014, the Final EIR, which includes responses to comments on the Draft EIR, was provided to commenting agencies and the public in electronic form on CD.
- On September 10, 2014, a Notice of Availability of the Final EIR also was provided to agencies, organizations, and members of the public who previously expressed an interest in the project, but who did not comment on the Draft EIR. Notices were sent to 31 property owners within approximately 5,280 feet (one mile) of the project site, exceeding the 300-foot minimum notification requirement prescribed by the California Government Code and County Zoning Ordinance. Additionally, notices were sent to 58 agencies and interested parties (89 total).
- Notice also was provided via publication and posting: The Notice of Availability of the Final EIR was published in the West Side Advance and posted in the County Clerk's Office. The Notice of Public Hearing was published in the Business Journal.

Based on the EIR, County staff has determined that the PG&E Switching Station (which is under the sole jurisdictional authority of the California Public Utilities Commission [CPUC]) would not result in any significant impacts requiring mitigation. Most of the Solar Facility impacts either would be avoided or reduced to a less-than-significant level as a result of the incorporation of Best Management Practices (BMPs) into the project design. The majority of the remaining Solar Facility impacts identified in the Final EIR would be reduced to a less-than-significant level through the implementation of the mitigation measures recommended in the Final EIR. In limited instances, even with the incorporation of recommended mitigation measures, the Final EIR discloses that some Solar Facility impacts would remain above established thresholds of significance. The Final EIR identifies the following Solar Facility impacts as significant and unavoidable:

Resource	Project Impacts	Cumulative Impacts
Aesthetics	The project would substantially degrade the existing visual character and quality of the site and its surroundings.	The project's contribution to a significant cumulative impact on visual character and quality would be cumulatively considerable.
Air Quality	Exceedance of significance thresholds for construction and decommissioning for ROG, NO <sub>x</sub> , PM <sub>10</sub> and PM <sub>2.5</sub> .	Exceedance of significance thresholds for construction ROG, NO <sub>x</sub> , PM <sub>10</sub> and PM <sub>2.5</sub> . Exceedance of PM <sub>10</sub> significance thresholds for decommissioning.
Hydrology and Water Quality	Not applicable	Construction, operation and maintenance, and decommissioning of the project could cause a cumulatively considerable contribution to a significant adverse overdraft condition in the Westside Basin.

## **PROCEDURAL CONSIDERATIONS:**

A UCUP application may be approved only if the County Planning Commission makes the following four Findings as specified in Zoning Ordinance §873-F:

- 1. That the site of the proposed use is adequate in size and shape to accommodate said use and all yards, spaces, walls and fences, parking, loading, landscaping, and other features required by this Division, to adjust said use with land and uses in the neighborhood;*
- 2. That the site for the proposed use relates to streets and highways adequate in width and pavement type to carry the quantity and kind of traffic generated by the proposed use;*
- 3. That the proposed use will have no adverse effect on abutting property and surrounding neighborhood or the permitted use thereof; and*
- 4. That the proposed use is consistent with the Fresno County General Plan.*

The UCUP Findings analysis/discussion below provides information in support of County staff's conclusion regarding each of the four required Findings. The Findings below address the entire approximately 3,732-acre project site, which includes all eight UCUP application areas, although each of the eight UCUP applications would be approved individually. The decision of the Planning Commission on a UCUP application is final, unless appealed to the Board of Supervisors within 15 days of the Commission's action.

## **BACKGROUND INFORMATION:**

The project includes the proposed construction, operation and maintenance, and decommissioning of a proposed solar power generation facility with the capacity to generate up to 400 MW by converting sunlight into electrical energy (the "Solar Facility") and a switching station to be owned and operated by Pacific Gas and Electric Company (PG&E) (the "Switching Station"). The Solar Facility would operate year-round to generate electricity during daylight hours when electricity demand is at its peak. The new Switching Station is necessary to interconnect the Solar Facility to the statewide high-voltage electrical grid. The total impervious surface that would be constructed for the project would comprise approximately 20 acres and seven acres, respectively, for the Solar Facility and the Switching Station.

The project would be located on 39 parcels totaling approximately 3,732 acres in western unincorporated Fresno County. The site is zoned AE-20 (Exclusive Agricultural, 20-acre minimum parcel size). It is located approximately seven miles southwest of the community of Tranquillity, 5.5 miles east of Interstate 5, and five miles north of the community of Three Rocks. It is located south of West Manning, north of West Nebraska Avenue, east of South San Bernardino Avenue, and west of South San Benito Avenue. Access to the site would be provided from two points along West Manning Avenue, via Ohio Avenue for the portion of the site west of State Route 33 (SR 33, or "Derrick Avenue") and via Monterey Avenue for the portion east of SR 33. As noted above, the project site does not currently receive water from Westlands Water District and has not been irrigated in the last ten years. Irrigation is not allowed on any of the land within the project site aside from ten acres within a single 80-acre parcel.

## **PROJECT DESCRIPTION SUMMARY:**

### **The Solar Facility**

The Solar Facility would include up to eight power blocks of solar arrays in different configurations (arrays include PV panels and steel support structures, electrical inverters, intermediate voltage transformers, cabling, and other infrastructure); eight electrical substations, each approximately 30,000 square feet (150 feet by 200 feet), which would transform voltage from 34.5 kilovolt (kV) to 230 kV; and other necessary infrastructure, including up to eight permanent operation and maintenance buildings (each approximately 40 feet by 50 feet by 15 feet at its tallest point), supervisory control and data acquisition (SCADA) system, up to 200 MW of on-site energy storage (either battery or flywheel system), meteorological data system, buried conduit for electrical wires, overhead collection lines, on-site access roads, and security fencing. The project substations (either all located within Power Block 1 or distributed one per Power Block) would receive consolidated intermediate voltage conduit from the collector system, step the voltage up to 230 kV via a high-voltage transformer bank, and by tying into the 230 kV Switching Station, would connect to PG&E's two existing 230 kV transmission lines as described below. Each substation area would include an electrical control building.

Construction of the Solar Facility would occur in three phases: site preparation; PV panel system installation; and installation of inverters, transformers, substations and the electrical collector system. Following the completion of construction, the project site would be re-seeded/ re-vegetated with low-growing plant species appropriate for maintaining soil quality and controlling weed growth to reduce fire hazards. Depending upon the number of Power Blocks constructed, construction of the Solar Facility would take between six and 36 months and would require up to 256 workers on site.

Upon commissioning, the solar panels at the site would operate during daylight hours every day of the year. Operation and maintenance activities at the site would include: solar panel washing; vegetation, weed, and pest management; security; responding to automated alerts as necessary; and communicating with entities involved in facility operations. A maximum of 50 staff (40 temporary staff and 10 permanent staff) would be on site at any time for operation and maintenance activities.

Each Power Block is anticipated to have a life of between 35 and 50 years. After this period, the Power Blocks would be either repowered or decommissioned. Repowering is not anticipated at this time. Project decommissioning would be phased in accordance with the expiration of UCUPs by Power Block and would involve the removal of all above-grade facilities, buried electrical conduit, and all concrete foundations in accordance with a Reclamation Plan.

### **The Switching Station**

The PG&E Switching Station, which is under the sole jurisdictional authority of the CPUC, would occupy approximately seven acres in the northern portion of the site. It would include one high-voltage 230 kV utility switching station and grid interconnection, which would interconnect the eight substations to PG&E's two existing 230 kV transmission lines (the Panoche-Helm and Panoche-Kearney lines) via two 500-foot gen-tie lines carried on either a single set or two sets of transmission poles; either a 100-foot radio tower or approximately 2.5 miles of buried fiber optic cable for telecommunications; 150-foot monopole transmission structures; a pre-fabricated control building; and other necessary infrastructure. Specifications are provided below. The Switching Station would be constructed within the Solar Facility footprint, but would have

separate access and security fencing. Upon completion, the Switching Station would be owned and operated by PG&E.

The total duration of the Switching Station construction would be approximately 12 months; this would be undertaken concurrently with the first phase of construction of the Solar Facility. Once operational, the Switching Station would operate continuously and would receive regular maintenance as part of PG&E's maintenance program in the area, including inspections, equipment replacement and vegetation management.

**SITE DEVELOPMENT AND OPERATIONAL INFORMATION:**

Criteria	Existing	Proposed
General Plan Designation	Agriculture	No change
Zoning	AE-20 (Exclusive Agricultural, 20-acre minimum parcel size)	No change
Parcel Size	A total of approximately 3,732 acres consisting of APN Nos. 028-101-45ST; 028-101-46ST; 028-101-47ST; 028-101-48ST; 028-101-50ST; 028-101-51ST; 028-101-53ST; 028-101-70ST; 028-101-23ST; 028-101-22T; 038-320-17T; 038-320-18ST; 038-320-23ST; 038-320-01ST; 038-320-06ST; 038-320-24ST; 038-320-25ST; 038-320-27ST; 038-320-28ST; 038-320-16T; 038-320-30ST; 038-320-29ST; 038-320-02T; 038-320-37ST; 038-320-38ST; 028-111-60ST; 028-111-50ST; 028-111-52ST; 028-111-53ST; 028-111-47ST; 028-111-46T; 028-111-45T; 028-111-44ST; 038-080-35ST; 038-080-03S; 028-111-43ST; 038-080-38ST; 038-080-05S; 028-101-75S	No change
Project Site	The existing land use of the site is predominantly dry-farmed agriculture. For the past ten years, the site intermittently has been in low-yield agricultural production (tilled, seeded, and harvested for winter wheat and oats) or disked twice a year and left fallow.	A 400-megawatt solar photovoltaic electricity generating facility and associated PG&E Switching Station
Structural Improvements	One on-site residence and unimproved private access roads	A solar facility and associated PG&E Switching Station. The Solar Facility would include: <ul style="list-style-type: none"> <li>• Up to eight power blocks of solar arrays, including either</li> </ul>



Criteria	Existing	Proposed
		<p>fixed-tilt or single-axis photovoltaic ground-mounted tracking panels, inverters, transformers, and cabling;</p> <ul style="list-style-type: none"> <li>• Up to eight electrical substations (one per power block, each with one microwave tower [monopole] structure up to 50 feet in height); and</li> <li>• Other necessary infrastructure, including up to eight operation and maintenance buildings, up to 200 MW of battery storage, buried conduit, overhead power lines strung on wood poles up to 70 feet tall, 100-foot radio tower, access roads, up to 200 security cameras installed on 20-foot-tall poles, and a six- to eight-foot-high, chain-link perimeter fence topped with three-strand barbed wire.</li> </ul> <p>The PG&amp;E Switching Station would include:</p> <ul style="list-style-type: none"> <li>• One high-voltage 230 kV utility switching station and grid interconnection to be constructed within the Solar Facility footprint, but with separate access and security fencing; and</li> <li>• Related infrastructure to include: a 100-foot radio tower for telecommunications, ten steel A-frame dead-end poles up to 80 feet in height, ten H-frame dead-ends poles up to 80 feet in height, and ten 150-foot-tall steel monopole transmission support structures.</li> </ul>

Criteria	Existing	Proposed
Nearest Residence	Within the northern portion of the project site, along Dinuba Avenue. The next nearest homes are located approximately 105 feet to 2,000 feet from the site along Nebraska Avenue and SR 33.	No change
Surrounding Development	The project site is located in a predominantly agricultural area used for non-irrigated crops and a cotton gin operation. Roadways surrounding the site include West Dinuba Avenue, South San Bernardino Avenue, West Nebraska Avenue, and South San Benito Avenue. The closest community to the site is Three Rocks, which is located approximately five miles to the south. The next closest community, Tranquillity, is located approximately seven miles northeast of the site.	No change
Operational Features	N/A	See above "Project Site"
Employees	N/A	<p>The total number of construction workers at any given time would range between 80 and 256, with the peak number of workers (256) on site during February and March of 2015.</p> <p>Up to ten permanent employees to operate and maintain the project. Additional staff could be needed for maintenance activities such as panel washing. The maximum number of staff on site at any time during the operation and maintenance phase would be 50 (40 temporary staff and 10 permanent staff).</p> <p>Decommissioning activities are expected to require a workforce of approximately 100 workers and to take approximately 12 months to complete for each Power Block.</p>
Customers	N/A	None

Criteria	Existing	Proposed
Traffic Trips	Residential trips associated with the one home located within the project site (APN 028-101-75S); seasonal trips associated with harvesting during years with sufficient rainfall to support a crop, or trips associated with the transport of animals for grazing in years without sufficient rainfall to support harvesting	Up to 596 one-way construction worker trips per day (298 round trips per day) during the construction period. [The total duration of construction for each Power Block would take approximately six to 12 months; total project construction would range from a minimum of six months (construction of one Power Block) to a maximum of 36 months (sequential construction of eight Power Blocks).] Up to 680 one-way truck trips per day (340 round trips per day) during the construction period Up to 20 one-way employee trips per day (ten round trips per day) regular operations. Up to 100 one-way employee trips per day (50 round trips per day) for periodic maintenance and solar panel washing
Lighting	Residential lighting on APN 028-101-75S	Motion-sensitive, directional security lights would be installed to provide adequate illumination around the substation areas, each inverter cluster, at gates, and along perimeter fencing.
Hours of Operation	N/A	The solar panels at the site would operate during daylight hours seven days a week, 365 days a year.

**EXISTING VIOLATION (Y/N) AND NATURE OF VIOLATION:** No

**CUP FINDINGS ANALYSIS for UCUP Nos. 3451 through 3458:**

The Tranquillity Solar Generating Facility, including the Solar Facility and PG&E Switching Station, was evaluated in a single EIR under CEQA. The Solar Facility was configured to reflect eight separate legal owners so that the development of the eight individual Power Blocks could proceed in response to market conditions for power purchase agreements in California. As

such, eight separate UCUP applications (one per owner) were filed with the County. A supplemental information packet for each UCUP application is available on the Fresno County Project website (<http://www.co.fresno.ca.us/DepartmentPage.aspx?id=56086>) and has been distributed to the Planning Commissioners in their agenda packets. The findings provided in this Staff Report apply to all eight UCUP applications.

*Finding 1: That the site of the proposed use is adequate in size and shape to accommodate said use and all yards, spaces, walls and fences, parking, loading, landscaping, and other features required by this Division, to adjust said use with land and uses in the neighborhood.*

	<b>Current Standard:</b>	<b>Proposed Operation:</b>	<b>Is Standard Met (y/n)</b>
Setbacks	Front: 35 feet Side: 20 feet Street Side: 35 feet Rear: 20 feet	<ul style="list-style-type: none"> <li>Solar panels to be setback at least 50 feet from the property line</li> <li>Setbacks from property boundaries interior to the project site: None</li> </ul>	Yes, as conditioned to require all interior improvements to meet minimum setbacks
Building Heights	Main: 35 feet Accessory: 35 feet	<p>Solar Facility</p> <ul style="list-style-type: none"> <li>Prefabricated control buildings (one per substation area): 12 feet</li> <li>O&amp;M buildings (one per Power Block): between nine feet and 15 feet at tallest point</li> <li>Equipment storage containers (two per substation area): nine feet</li> </ul> <p>Switching Station</p> <ul style="list-style-type: none"> <li>Prefabricated control building: 12 feet</li> <li>Modular protection automation and control (MPAC) building for PG&amp;E's substation control and protection equipment: 12 feet</li> </ul>	Yes
Lot Area, Width, Depth, Ratio, Frontage, Density, and Coverage	No requirement	N/A	N/A
Separation Between Buildings	No requirement	N/A	N/A
Signs	No requirement	<ul style="list-style-type: none"> <li>Temporary construction signage could be posted</li> </ul>	Yes

	<b>Current Standard:</b>	<b>Proposed Operation:</b>	<b>Is Standard Met (y/n)</b>
		<p>along access routes to indicate the presence of heavy vehicles and construction traffic.</p> <ul style="list-style-type: none"> <li>• Solar Facility perimeter safety and identification signage to be posted during all phases. No large billboard or advertising signs are proposed. All signage to conform to Fresno County signage requirements.</li> <li>• PG&amp;E Switching Station: signage to be installed as required by the CPUC and any other entities with jurisdiction.</li> </ul>	
Height of Fences	Six feet	<p>Solar Facility Fence: Eight feet high along the perimeter topped with three-strand barbed wire; each Power Block to be fenced individually</p> <p>Switching Station Fence: up to 12 feet high</p>	Yes, as conditioned to require a permit for fencing in excess of six feet high
Height of Other Structures	35 feet	<p>Solar Facility:</p> <ul style="list-style-type: none"> <li>• Security Cameras: up to 200 total security cameras (seven to 100 per Power Block), each on 20-foot-tall pole</li> <li>• Collection Poles: 300 to 500 wood poles up to 70 feet high</li> <li>• Gen-tie Line Structures: up to ten monopoles up to 150 feet tall</li> </ul> <p>Switching Station:</p> <ul style="list-style-type: none"> <li>• Radio Tower: one 100-foot-tall digital microwave antenna</li> <li>• Dead-End Poles: ten 230 kV A-frame poles up to 80 feet high; ten 230 kV steel H-frame poles up to 80 feet high</li> <li>• Transmission Support</li> </ul>	Yes, as conditioned to require a permit for structures in excess of 35 feet high

	<b>Current Standard:</b>	<b>Proposed Operation:</b>	<b>Is Standard Met (y/n)</b>
		Structures: ten 230 kV steel monopoles up to 150 feet high	
Wall Requirements	No requirement	N/A	N/A
Parking	No requirement	Parking to be provided for workers and equipment; to be confined to staging and laydown areas to limit ground disturbance.	Yes. Site plan notes state, "Onsite parking to adhere to County requirements. Parking area to be pervious per County Standards."
Access	No requirements for lots greater than five (5) acres – Fresno County Zoning Ordinance Section 816.5.J	Power Blocks to the west of SR 33 would be accessed via West Manning Avenue to Ohio Avenue. Power Blocks to the east of SR 33 would be accessed via West Manning Avenue to Monterey Avenue.	N/A
Turn arounds	No requirement	N/A	N/A
District Size	No requirement	N/A	N/A
Septic Separations	No requirement	N/A	N/A
Landscaping	No requirement	N/A	N/A
Plan Lines	No requirement	N/A	N/A

**Reviewing Agency/Department Comments Regarding Site Adequacy:**

Zoning Section of the Fresno County Department of Public Works and Planning: A merger/mapping procedure may be required if any equipment or structures are crossing individual property boundary lines. A Site Review Application is recommended as a Condition of Approval. Private road or access easements may be required. If the photovoltaic systems and all related equipment will be crossing over property boundary lines, an approved merger procedure combining all parcels into one will be required prior to permits being issued. If the Applicants do not want to merge the parcels, then all structures (including fencing) will need to meet the minimum setback requirements listed above. If the setback requirements cannot be met, then an approved variance application will be required prior to permits.

All proposed structures listed in the above table, including fencing exceeding six feet in height, will require a permit. Demolition permits for any existing permitted structures that will be removed will be required.

No other comments specific to the adequacy of the site were expressed by reviewing Agencies or Departments.

**Analysis:**

Staff review of the Site Plans demonstrates that the proposed solar panels would be setback a minimum of 50 feet from the external property lines of the project site. These setbacks satisfy the minimum setback requirements prescribed by the AE-20 Zone District and the “Solar Facility Guidelines” approved by the Fresno County Board of Supervisors on May 3, 2011 as amended on March 13, 2012 and May 21, 2013. Adherence to a Site Plan Review (SPR), which has been required as a Condition of Approval, will ensure compliance with the setback requirements by requiring either parcel merger or adjustment of improvements to remain outside of the minimum required setbacks. All improvements will be kept out of the minimum setbacks required between parcels or a parcel merger must occur.

Based on the above information, and with adherence to the Conditions of Approval described above, staff believes the site will be adequate to accommodate the proposed use.

**Recommended Condition of Approval:**

- See the recommended Conditions of Approval included in the Mitigation Monitoring and Condition Compliance Matrix attached as Exhibit 1.

**Conclusion:**

Finding 1 can be made.

*Finding 2: That the site for the proposed use relates to streets and highways adequate in width and pavement type to carry the quantity and kind of traffic generated by the proposed use.*

		Existing Conditions	Proposed Operation
State Route	Yes	SR 33 bisects the project site	No change. Solar panels would be set back at least 105 feet from the centerline of SR 33. However, a five-foot ROW dedication to be required on each side of SR 33 for future road widening.
Private Road	Yes	South Ohio Avenue South Monterey Avenue West Floral Avenue	Existing vehicle use of SR 33 would continue; however, through traffic on South Ohio, South Monterey, and West Floral avenues would not continue through the Solar Facility.
Public Road Frontage	Yes	Multiple County roadway easements cross the project site.	All easements will be retained; no change.
Direct Access to Public	Yes	Access to be provided from	No change

	Existing Conditions	Proposed Operation
Road	two points along West Manning Avenue: via Ohio Avenue for the portion of the site west of SR 33 and via Monterey Avenue for the portion east of SR 33.	
Road ADT	Level of Service (LOS) A West Manning Avenue: approximately 1,380 vehicles near SR 33 Ohio and Monterey Avenues are unpaved and primarily serve agriculturally-related traffic, with corresponding low existing traffic volumes	No change: LOS A
Road Classification	West Manning, Ohio and Monterey avenues are County roads	No change
Road Width	West Manning Avenue: two lanes Ohio and Monterey Avenues (unknown)	West Manning Avenue: no change Ohio and Monterey Avenues to be improved to 24 feet wide
Road Surface	West Manning Avenue: paved Ohio and Monterey Avenues: unimproved dirt	West Manning Avenue: no change Ohio and Monterey avenues: to be paved with asphalt concrete surfacing for 100 feet as measured from West Manning Avenue; remaining roadway would be gravel or compacted dirt
Traffic Trips		If construction phasing is sequential: <ul style="list-style-type: none"> <li>• Phase 1-Site preparation (46 weeks): 590 daily vehicle trips;</li> <li>• Phase 2-PV system installation (38 weeks): 686 daily trips;</li> <li>• Phase 3-Inverters, substation and connection work (30 weeks): 162 daily trips</li> </ul> If phasing overlaps:



		Existing Conditions	Proposed Operation
			<ul style="list-style-type: none"> <li>• Phases 1 &amp; 2 (10 weeks): 1,276 daily trips;</li> <li>• Phases 2 and 3 (16 weeks): 848 daily trips</li> </ul>
Traffic Impact Study (TIS) Prepared	No	N/A	None required, as regular operations will not generate more than 100 daily trips or ten peak-hour trips (peak-hour trips defined as 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.)
Road Improvements Required		N/A	Improvements to Ohio Avenue and Monterey Avenue

**Reviewing Agency/Department Comments Regarding Adequacy of Streets and Highways:**

California Department of Transportation: Right-of-way (ROW) dedication along SR 33 is required for the future road widening. A five-foot ROW dedication will be required on each side of SR 33. The distance of the appurtenance shall be measured from centerline to include the future ROW. This shall be made as a Condition of Approval.

Road Maintenance and Operations (RMO) Division of the Fresno County Department of Public Works and Planning: Any work for the proposed intersection improvements on Manning Avenue at the Ohio and Monterey alignments will first require that plans for the improvements be submitted to RMO for review and approval prior to issuance of any encroachment or road improvement permit for the work. The improvements for these new access roads shall include a requirement that they be paved with asphalt concrete surfacing for a minimum distance of 100 feet from the edge of the County road right-of-way to help ensure that no sediment track-out is carried onto the County road from construction activities. The paved width of this access road shall be a minimum of 24 feet. Any material that is deposited onto the County-maintained roadway shall be swept clean as soon as possible and at least prior to the end of each working day. Maintenance of these new access roads shall be solely the responsibility of the Applicants. The secured agreement recommended by Mitigation Measure 4.18-1 for the road improvements will have to be in place prior to the start of construction. If the County intends to hire a firm to perform mitigation monitoring, that firm will have to be under contract prior to the start of construction activities so that "before" and "after" construction conditions for the County roads can be documented. The scope of the repair work shall be mutually agreed on between the Applicants and the County prior to performance of the repair work. Obtainment of any access easements from private property owners shall be solely the responsibility of the Applicants.

No other comments specific to the adequacy of streets and highways were expressed by reviewing Agencies or Departments.

**Analysis:**

The project site has public road frontage, including along SR 33. Staff acknowledges that vehicular traffic in the area will be increased during the time of construction; however, this increase will be temporary. Total duration of construction for each Power Block within the Solar

Facility is anticipated to be approximately six to 12 months; total construction therefore would range from a minimum of six months (construction of one Power Block) to a maximum of 36 months (sequential construction of eight Power Blocks). Construction of the Switching Station would last for a total of approximately 8.5 months concurrent with Solar Facility construction. Up to ten permanent staff during the operation and maintenance phase of the project would be located at an off-site location, so as to not contribute to traffic conditions in the immediate vicinity of the site. Additional employees would perform periodic maintenance such as solar panel washing.

Based on the above information, staff believes that the surrounding streets and highways serving the project site will remain adequate to accommodate the proposed use.

**Recommended Conditions of Approval:**

- See the recommended Conditions of Approval included in the Mitigation Monitoring and Condition Compliance Matrix attached as Exhibit 1.

**Conclusion:**

Finding 2 can be made.

*Finding 3: That the proposed use will have no adverse effect on abutting property and surrounding neighborhood or the permitted use thereof.*

Surrounding Parcels				
	Size:	Use:	Zoning:	Nearest Residence:
North	80.00 ac 20.00 ac 20.00 ac 15.00 ac 40.00 ac 153.36 ac 25.00 ac 165.55 ac 562.27 ac	Irrigated agriculture  Non-irrigated agricultural land owned by Westlands Water District	AE-20 (all)	Along SR 33 at the site's northern edge
South	160.00 ac 160.00 ac 157.56 ac 94.98 ac 10.00 ac 10.00 ac 20.00 ac 20.00 ac 20.00 ac	Non-irrigated agricultural land owned by Westlands Water District	AE-20 (all)	A single-family residential development is located south of the site at the intersection of SR 33 and West Nebraska Avenue.
East	10.00 ac 30.00 ac 20.00 ac 15.00 ac	Non-irrigated agricultural land owned by Westlands Water District	AE-20 (all)	Approximately two miles southeast of the site

Surrounding Parcels				
	Size:	Use:	Zoning:	Nearest Residence:
	30.00 ac 15.00 ac 161.24 ac 320.81 ac			
	160.29 ac	Cotton gin operation		On this parcel
West	156.96 ac 320.00 ac	Non-irrigated agricultural land owned by Westlands Water District	AE-20 (all)	N/A

**Reviewing Agency/Department Comments:**

California Department of Public Health, Drinking Water Program (CDPH): CDPH requested clarification of the number of workers who would be employed on site to assist in making a determination as to whether the planned facility would be a public water system, and to ascertain whether the Applicants would be subject to CDPH's domestic water supply permit requirements. CDPH also provided information specific to the use of Westlands Water District (WWD) groundwater (in case WWD water would be used on site for any domestic water supply purpose) and about the potential for recycled water that had received tertiary treatment to be used for project purposes. (See Letter A and related responses in the Final EIR.)

Fresno County Environmental Health Division: The Division noted that the proposed portable facilities are appropriate for project use during the course of construction and its discretion to require permanent restroom structures with plumbed fixtures and an adequate supply of potable running water if operations and maintenance personnel would be located onsite. (See Letter G and related responses in the Final EIR.)

Fresno County Department of Agriculture: The common theme of all the CUP's is that the land is non-prime with low soil quality and with no surface water available. The ten-year crop history was dry land farming of wheat and oats, which is very low value. Although the Department of Agriculture has always objected to the loss of land with agricultural production, the lack of water and poor soil makes the loss minimal. Therefore, the Department has no other comment on this project. The Department acknowledges that the Applicants have provided a Pest Management Plan and Site Reclamation Plan, and that the Applicants have acknowledged the County's Right-to-Farm Ordinance. (See Letter D and related responses in the Final EIR.)

California Division of Oil, Gas, & Geothermal Resources, Coalinga: There are six abandoned wells located within the boundary of the project: three wells in Section 2, T16S, R14E; one well in Section 1, T16S, R14E; one well in Section 36, T15S, R14E; and one well in Section 31, T15S, R15E. All the wells are plugged and abandoned, and should be buried at least five feet below the surface. They should pose no hazard other than the fact we do not recommend building a habitable structure over any well. (See Letter E and related responses in the Final EIR.)

California Department of Fish and Wildlife (CDFW): CDFW questioned why mitigation measures recommended for the Solar Facility were not also recommended for the Switching Station, and regarding the recommended mitigation measures, suggested revisions relating to protections for San Joaquin kit fox, burrowing owl, nesting birds, and Swainson's hawk; species that could be

entrapped within trenches, holes, or other excavations, or within pipes or other hollow structures; and nocturnal species including San Joaquin kit fox. (See Letter J and related responses in the Final EIR.) For example, for the Switching Station, which is under the sole jurisdictional authority of the California Public Utilities Commission, PG&E proposed measures (called "Avoidance and Protection Measures" beginning on page 2-21 of the Draft EIR), the implementation of which would assure that the Switching Station would cause no significant environmental impacts. Under these circumstances, no additional County-proposed mitigation measures are warranted under CEQA. For example, as identified in APM BIO-1 through BIO-6, preconstruction surveys would be performed at the Switching Station for all special-status species identified as potentially occurring on the Project site (APM BIO-1). This may include performing surveys for San Joaquin kit fox to accepted federal and/or state protocols or standards. In addition, construction personnel would receive environmental training to ensure protection of sensitive wildlife (APM BIO-2).

San Joaquin Valley Air Pollution Control District (Air District): This proposal is subject to District Rule 9510 (Indirect Source Review) and Regulation VIII requirements to obtain a District-issued Dust Control Plan (DCP), and also may require Authority to Construct (ATC) permits. These requirements are included in the Notes section of the Mitigation Monitoring and Condition Compliance Matrix attached as Exhibit 1. The District suggests that the County evaluate the feasibility of requiring project impacts to be offset via the implementation of a voluntary emission reduction agreement (VERA).<sup>1</sup> County staff is not aware of any environmental, social, or technological factors that would prevent the Applicants from participating in the District's VERA program to offset construction- and decommissioning-generated emissions; however, the County does not have authority to compel the Applicants to enter into a contract that is, by its terms, "voluntary." Nonetheless, as indicated in the Notes section of the Mitigation Monitoring and Condition Compliance Matrix attached as Exhibit 1, the County encourages the Applicants to consider entering into a VERA with the District. (See Letter Q and related responses in the Final EIR.)

#### **Analysis:**

The project includes a Solar Facility and a Switching Station. The Solar Facility is under the County's jurisdiction; the Switching Station would be constructed, operated, and maintained within the boundaries of the Solar Facility but would be owned and operated by PG&E and subject to the jurisdiction of the CPUC. The proposed solar power generation facility would be capable of generating up to 400 MW on 39 parcels (approximately 3,732 acres) in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District in western unincorporated Fresno County.

The site is located approximately seven miles southwest of the community of Tranquillity, five and one-half miles east of Interstate 5, and five miles north of the community of Three Rocks. It is located south of West Manning, north of West Nebraska Avenue, east of South San Bernardino Avenue, and west of South San Benito Avenue. The site is owned by Westlands Water District with the exception of approximately 80 acres of private land that are included within the project boundary. The owners of the included private property support the project as

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<sup>1</sup> As the Air District explained in its comment letter on the DEIR (see Comment Q3), a VERA is a voluntary agreement between a project proponent and the Air District pursuant to which the project proponent provides funding to offset emissions reduction projects identified in the District's Strategies and Incentive (SI) Program. The District disburses the funds in the form of grants, administers the emissions reduction projects, and verifies the mitigation effort. Types of emission reduction projects that previously have been funded include electrification of stationary internal combustion engines (such as agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of old farm tractors.

“a proper alternative for the land,” the use of which is limited to farming unirrigated (dry-farmed) crops. (See Letter O in the Final EIR.) Additional private land is adjacent to the project boundary. Once initial concerns about access and availability of electrical service were resolved, these private owners also gave their support for the project.

The Switching Station would not result in any significant impacts requiring mitigation. Most of the Solar Facility impacts would be reduced below established thresholds of significance either through the implementation of BMPs or the mitigation measures recommended in the Final EIR. In three instances, even with implementation of mitigation measures, Solar Facility impacts may not be reduced to a less-than-significant level. First, the project would substantially degrade the existing visual character and quality of the site and its surroundings by converting agricultural land used to grow dry-farmed wheat and oats to a solar power generation facility with man-made industrial features such as panels, poles, substations and related infrastructure. This is acknowledged in the EIR as a significant unavoidable impact at the project level as well as cumulatively. Second, project-related air emissions would exceed applicable thresholds for Reactive Organic Gases (ROG), gaseous nitrogen compounds (NOx) and Particulate Matter (PM). However, these exceedances would be temporary and limited to the construction and decommissioning phases of the project. Third, during construction, the project could require up to 1,000 acre-feet of water per year for dust suppression and other purposes. This would contribute to an existing overdraft condition that would be significant and unavoidable when considered cumulatively with the demands of other past, present and reasonably-foreseeable future projects in that part of the County.

Based on the above information and with adherence to the recommended Mitigation Measures, Conditions of Approval, and Project Notes identified in the Mitigation Monitoring and Condition Compliance Matrix prepared for this project and discussed in this Staff Report, staff believes the project will not have an adverse effect upon surrounding properties.

**Recommended Conditions of Approval:**

- See the recommended Conditions of Approval included in the Mitigation Monitoring and Condition Compliance Matrix attached as Exhibit 1.

**Conclusion:**

Finding 3 can be made.

*Finding 4: The proposed development is consistent with the General Plan.*

Relevant Policies:	Consistency/Considerations:
<p>General Plan Policy LU-A.3: County may allow by discretionary permit in areas designated Agriculture, certain agricultural uses and agriculturally-related activities, including certain non-agricultural uses, subject to following Criteria:</p> <p>a) Use shall provide a needed service to surrounding agricultural area which cannot be provided within urban areas;</p>	<p>a) The proposed use will operate more efficiently in a non-urban area due to the property size required to produce electricity with solar panels and the availability of large undeveloped land in the subject area.</p>

Relevant Policies:	Consistency/Considerations:
<p>b) Use shall not be sited on productive agricultural lands if less productive lands available;</p> <p>c) Use shall not have a detrimental impact on water resources or the use or management of surrounding properties within 0.25-mile radius; [and]</p> <p>d) Probable workforce located nearby or readily available.</p>	<p>b) Loss of farmland resulting from this project would be less-than-significant considering the lack of water and poor soil. Further, the proposed use will be conditionally limited to 40 years and, upon cessation of the proposed use at the end of the project's 25-year life, the site could be restored to a pre-development condition for dry-farming operations.</p> <p>c) Although the analysis under Finding 3 identifies significant unavoidable impacts pertaining to overdraft conditions in the groundwater basin, no County departments, other agencies, or members of the public expressed a concern about the project's contribution to this existing adverse groundwater resource condition. Groundwater overdraft may occur in the Westside Basin during implementation of the project; however, the project's construction demand for water is temporary and represents a small portion of both the lower aquifer estimated safe yield and the current average annual rate of withdraw. The proposed annual volume for operations represents only 0.01 and 0.007 percent of the lower aquifer estimated safe yield and current average annual rate of withdraw, respectively. Further, with adherence to the recommended Mitigation Measures, Conditions of Approval, and Project Notes discussed under Finding 3 of this Staff Report, staff believes the project will not have a detrimental impact on the use or management of surrounding properties within the vicinity.</p> <p>d) The site is easily accessible via Interstate 5 and a network of state highways, which have the ability to provide ready access to an adequate workforce. The majority of the labor force for this project is expected to be from Fresno and the surrounding communities with a maximum round-trip commute of up to 80 miles.</p>
<p>General Plan Policy LU-A.12: County shall seek to protect agricultural activities from encroachment of incompatible land uses.</p>	<p>The proposed facility has been proposed on degraded agricultural land where irrigation is prohibited. The resulting crop value is low and the loss of this land as an agricultural resource has been described by the County Department of Agriculture as "minor." Nonetheless, the use is temporary in nature and could be restored to agricultural use once the facility operation ceases. Also, as noted in the Solar Facility Guidelines, weed and rodent control plans will be implemented</p>

Relevant Policies:	Consistency/Considerations:
	during the life of the project to reduce weed and rodent impacts to adjacent farmland.
General Plan Policy LU-A.13: County shall require buffers between proposed non-agricultural uses and adjacent agricultural operations.	The project site will have perimeter fencing for security purposes and to separate the use from farming and other non-agricultural operations on adjacent properties. Further, the project will have a 50-foot-wide buffer between the proposed use and adjacent operations. Further, adherence to a Site Plan Review (SPR) shall be required as a Condition of Approval to ensure compliance with setback requirements.
General Plan Policy PF-C.17: County shall undertake a water supply evaluation, including determinations of water supply adequacy, impact on other water users in the County, and water sustainability.	A water supply assessment was prepared for the project. The California Department of Public Health reviewed the assessment and the EIR and its water supply concerns were addressed. No concerns were expressed by federal, state, or local agencies about the project's potential impacts to water quality.

**Reviewing Agency Comments:**

County Department of Agriculture: All of the Applicants have acknowledged the Fresno County "Right to Farm Ordinance" and provided a weed and rodent control acknowledgement.

**Analysis:**

As discussed above, this proposal is consistent with the General Plan Policies applicable to the project. The proposed development will: 1) be fenced and set back from the exterior boundary of the site to provide a buffer between the subject solar facility and adjoining agricultural uses; 2) protect adjoining farmland through implementation of a Weed and Rodent Control Plan; and 3) result only in a temporary conversion of agricultural land which could be restored to the prior farming state upon cessation of the solar use. None of the project site qualifies as protected farmland pursuant to the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP), and none of its acreage is enrolled under an Agricultural Land Conservation Contract.

On May 3, 2011, the Fresno County Board of Supervisors took action requiring supplemental application information based on the Nine-Point Solar Facilities Guidelines to be provided by solar utility applicants as part of their project submittal packages. The Guidelines were amended by the Board on March 13, 2012 to require crop yield information and clarified life of the approved land use permit, and amended again in May of 2013. Required supplemental application information includes historical information on the agricultural use of the property, including crop yield information, the source of water, current status of the parcel, including any Agricultural Land Conservation Contracts, the soil type, information on improvements and site buffering, the submittal of a Reclamation Plan, pest management information, and acknowledgement of the County's Right-to-Farm Ordinance. In this instance, the Applicants have provided this information, included as a separate supplemental document in the

Commission Agenda packets which indicates that the project site has not been irrigated for the last ten years.

Based on the above information, staff believes the proposal is consistent with the Fresno County General Plan.

**Recommended Conditions of Approval:**

None.

**Conclusion:**

Finding 4 can be made.

**PUBLIC COMMENT:**

A letter was received from the Fresno County Farm Bureau (Exhibit 10) expressing support for the proposal at its location on retired Westlands farmland.

**CONCLUSION:**

Staff believes the required Findings for granting the Unclassified CUP Applications can be made based on the factors cited in the analysis, the recommended Mitigation Measures, Conditions of Approval, and Project Notes included in the Mitigation Monitoring and Condition Compliance Matrix attached as Exhibit 1. Staff therefore recommends certification of the EIR prepared for the project and approval of Unclassified CUP Application Nos. 3451 through 3458, subject to the recommended requirements set forth in Exhibit 1.

**PLANNING COMMISSION MOTIONS:**

**Recommended Motion** (approval action)

- Move to certify the Environmental Impact Report (EIR) prepared for the Tranquillity Solar Generating Facility Project No. 6730, UCUP Application Nos. 3451 through 3458, as complete and adequate in conformance with CEQA; and
- Move to approve and adopt for the Tranquillity Solar Generating Facility Project:
  - UCUP Application Nos. 3451 through 3458
  - CEQA Findings of Fact and Statement of Overriding Considerations (see Exhibit 9, "CEQA Findings of Fact and Statement of Overriding Considerations")
  - Related mitigation measures and Conditions of Approval, and
  - The Mitigation Monitoring and Reporting Program (see Exhibit 1, "Mitigation Monitoring and Reporting Program, Conditions of Approval, and Project Notes (MMRP/COA)")
- Direct the Secretary to prepare a Resolution documenting the Commission's action.



**Alternative Motion 1** (denial action)

- Move to not certify the EIR (state basis for non-certification); and
- Do not make CEQA Findings (state basis for not making Findings); and
- Move to deny UCUP Application Nos. 3451 through 3458; and
- Direct the Secretary to prepare a Resolution documenting the Commission's action.

**Alternative Motion 2** (denial action)

- Move to certify the EIR; and
- Do not make CEQA Findings (state basis for not making Findings); and
- Move to deny UCUP Application Nos. 3451 through 3458; and
- Direct the Secretary to prepare a Resolution documenting the Commission's action.

**Mitigation Measures, Recommended Conditions of Approval and Project Notes:**

See attached Exhibit 1.

CM:cwm:evb:bs

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# EXHIBIT 1

## Mitigation Monitoring and Reporting Program, Conditions of Approval, and Project Notes

### Introduction

This Mitigation Monitoring and Reporting Program, Conditions of Approval, and Project Notes document (MMRP/COA) has been prepared by Fresno County (the County) in connection with its consideration of the Unclassified Conditional Use Permit (UCUP) applications filed by RE Tranquillity LLC, RE Tranquillity 2 LLC, RE Tranquillity 3 LLC, RE Tranquillity 4 LLC, RE Tranquillity 5 LLC, RE Tranquillity 6 LLC, RE Tranquillity 7 LLC, and RE Tranquillity 8 LLC (the Applicants) to construct, operate, maintain, and decommission the Tranquillity Solar Generating Facility (the Project).

Section 21081.6 of the California Environmental Quality Act (CEQA) and CEQA Guidelines Section 10591(d) require a lead agency to adopt a monitoring or reporting program when it either has required changes in a project or has made a condition of approval to avoid or substantially lessen significant environmental effects of a project. The County has designed this MMRP/COA to ensure compliance during Project implementation with the mitigation measures identified in the *Tranquillity Solar Generating Facility Project Final Environmental Impact Report* (EIR) prepared by the County to document its analysis of potential environmental impacts of the Project and with the County's conditions of Project approval. This MMRP/COA contains measures identified in the EIR that would be implemented through monitoring of an activity, such as grading or excavation, and other measures that would be implemented through a reporting mechanism, such as obtaining an air quality permit or an Emergency/Contingency Plan. With implementation of the mitigation measures identified in the EIR and the conditions of Project approval, the potential environmental effects of the Project would be reduced or eliminated.

The MMRP that was circulated as Appendix D in the Final EIR has been updated to incorporate conditions of approval adopted by the County Board of Supervisors. This MMRP/COA supersedes Final EIR Appendix D. This MMRP/COA has been prepared as a matrix containing the following elements:

- Measures that will mitigate significant impacts on the environment;
- Conditions of use permit approval; and
- Notes referencing mandatory requirements of the County or other agencies that are provided as information to the Applicants.

The MMRP/COA has been designed to provide focused, yet flexible guidelines. As monitoring progresses, changes to compliance procedures may be necessary based upon recommendations by those responsible for the program.

## Program Management

The MMRP/COA will be in place through all phases of the Project. The Project planner, assigned by the County Planning Director, shall coordinate enforcement of the MMRP/COA and oversee it to ensure that proper action is taken on each mitigation measure. Each County department or division shall ensure that the Project complies with the conditions (including mitigation measures) that relate to that department.

The Project planner or responsible County department has the authority to stop the work of the operator if compliance with any aspect of the MMRP/COA is not occurring after written notification has been issued. The Project planner or responsible County department also has the authority to deny entry into a new construction phase until compliance with a requirement of this program occurs.

## Condition Compliance Matrix

*Table 1, "Mitigation Monitoring and Conditions Compliance Program,"* includes mitigation measures and conditions of approval that will mitigate the potential significant environmental impacts of the Project. A procedure of compliance and verification has been outlined for each measure. This procedure designates what action will be taken and when, who will take action, and to whom and when compliance will be reported. Mitigation Measures are identified beginning on page 1-3. Conditions of approval are identified beginning on page 1-211. All conditions of approval apply to all UCUPs except as noted. Notes referencing mandatory requirements of the County or other agencies are provided as information to the Applicants beginning on page 1-243.

**TABLE 1  
MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM  
UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES</b>				
<b>Aesthetics</b>				
<p><b>Impact 4.2-1:</b> The Solar Facility would substantially degrade the existing visual character and quality of the site and its surroundings.</p>	<p><b>Mitigation Measure 4.2-1:</b> The Solar Facility operator, to the extent commercially feasible, shall underground electrical collection systems to reduce the random tall vertical lines created by electrical poles.</p>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>During Solar Facility construction.</p>
	<p><b>Mitigation Measure 4.2-2:</b> The Solar Facility operator shall clear debris from the Project area at least four times per year; this can be in conjunction with regular panel washing and site maintenance activities.</p>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>During Solar Facility construction and operation.</p>
	<p><b>Mitigation Measure 4.2-3:</b> The Solar Facility operator shall apply appropriate treatments to structures, as approved by the Fresno County Public Works and Planning Department. Solar Facility structures include buildings, electrical enclosures, and inverters. Paints having little or no reflectivity shall be used whenever possible. Grouped structures shall be painted the same color to reduce visual complexity and color contrast. The choice of color treatments shall be based on the appearance at typical viewing distances and consider the entire landscape around the proposed development as it would be viewed from publically accessible locations. Appropriate colors for smooth surfaces often need to be two to three shades darker than the background color to compensate for shadows that darken most textured natural surfaces. Examples of the color contrast created by exposed metal and untreated inverters are shown on Figure 4.2-20.</p>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>During Solar Facility construction and, as necessary, during operation.</p>
	<p><b>Mitigation Measure 4.2-4:</b> Prior to the commencement of operations, the Solar Facility operator shall submit a landscape revegetation plan for the Solar Facility site. The plan shall include the requirement that a native seed mix shall be spread under the solar panels as needed to establish ground cover. The seed mix shall be determined through consultation with local experts and shall be approved by the Fresno County Public Works and Planning Department prior to planting. The plan must include a timeline for seeding the Project site, and limitations on guarantee of revegetation success should be considered due to the lack of irrigation available on the Project site.</p>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>Prior to the commencement of operation.</p>
<p><b>Impact 4.2-2:</b> The Solar Facility could create a new source of light and glare that could adversely affect day and nighttime views in the area.</p>	<p><b>Mitigation Measure 4.2-5:</b> Project facility lighting shall be designed to provide the minimum illumination needed to achieve safety and security objectives. All lighting shall be directed downward and shielded to focus illumination on the desired areas only and avoid light trespass into adjacent areas. Lenses and bulbs shall not extend below the shields.</p>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>During Solar Facility construction and operation.</p>

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Air Quality</b>				
<p><b>Impact 4.4-1:</b> The Solar Facility would violate an air quality standard or contribute substantially to an existing or projected air quality violation.</p>	<p><b>Mitigation Measure 4.4-1a: Solar Facility Fugitive Dust Control Measures.</b></p> <p>Prior to grading on site, the Applicants shall submit a Solar Facility Fugitive Dust Control Plan to the SJVAPCD for review and approval. The Fugitive Dust Control Plan shall be applicable to only the construction and decommissioning phases and shall meet the requirements in Table 8021-1 and incorporate the Regulation VIII recommended fugitive dust control measures to reduce PM<sub>10</sub> emissions to the extent practical, including but not limited to:</p> <ul style="list-style-type: none"> <li>• All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.</li> <li>• Stockpiles of excavated soils on the Solar Facility site shall be wetted during daily construction activities and shall be covered at the end of each workday, during weekends, and periods of extended storage.</li> <li>• All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.</li> <li>• All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water, dust palliatives, or by presoaking.</li> <li>• When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.</li> <li>• All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.</li> <li>• Use of blower devices is expressly forbidden.</li> <li>• Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.</li> <li>• Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.</li> <li>• Limit traffic speeds on unpaved roads to 15 mph.</li> <li>• Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope toward the road of greater than one percent.</li> <li>• Install wind screens (fabric incorporated into fencing) at the windward side of active construction areas.</li> <li>• Suspend excavation and grading activity if dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or off-site property.</li> </ul>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>Prior to grading activities.</p>

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**TABLE 1 (Continued)  
MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM  
UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Air Quality (cont.)</b>				
Impact 4.4-1 (cont.)	b) Distribution of a written flier or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever. c) Training on methods that may help prevent Valley Fever infection. d) A demonstration to employees on how to use personal protective equipment, such as respiratory equipment (masks), to reduce exposure to pollutants and facilitate recognition of symptoms and earlier treatment of Valley Fever. Though use of the equipment is not mandatory during work, the equipment shall be readily available and shall be provided to employees for use during work, if requested by an employee. Proof that the demonstration is included in the training shall be submitted to the County. This proof can be via printed training materials/agenda, DVD, digital media files, or photographs. e) Prior to the Notice to Proceed for decommissioning, the project operator will follow the above process for all decommissioning work.			
Impact 4.4-2: The Solar Facility would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under applicable federal and state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	Implementation of <b>Mitigation Measures 4.4-1a, 4.4-1b, and 4.4-1c.</b>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to and during construction.
Impact 4.4-3: The Solar Facility would expose sensitive receptors to substantial pollutant concentrations.	Implementation of <b>Mitigation Measure 4.4-1a, 4.4-1b, and 4.4-1c.</b>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to and during construction.
Impact 4.4-4: Solar Facility construction and decommissioning activities could potentially expose local sensitive receptors and San Joaquin kit fox, a federally- and state-listed species, to <i>Coccidioides</i>	Implementation of <b>Mitigation Measure 4.4-1a and 4.4-1c.</b>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to grading activities.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<i>immitis</i> spores.				
<b>MITIGATION MEASURES (cont.)</b>				
<b>Biological Resources</b>				
Impact 4.5-1: The Project could have a substantial adverse direct or indirect impact on San Joaquin kit fox.	<b>Mitigation Measure 4.5-1a: Preconstruction San Joaquin kit fox Surveys.</b> Preconstruction surveys shall be conducted by a qualified biologist for the presence of San Joaquin kit fox dens within 14 days prior to commencement of construction activities. The surveys shall be conducted in areas of suitable habitat for San Joaquin kit fox. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur within 14 days prior to that portion of the Solar Facility site is disturbed. Surveys shall utilize the U.S. Fish and Wildlife Service (1999a) San Joaquin Kit Fox Survey Protocol for the Northern Range. If no potential San Joaquin kit fox dens are present, no further mitigation is required under this measure. If potential dens are observed and avoidance is determined to be feasible by a qualified biologist in consultation with the Project Owner and the County (as defined in CEQA Guidelines §15364 consistent with the USFWS (1999) Standardized Recommendations for Protection of the San Joaquin Kit Fox), the following minimum buffer distances shall be established prior to construction activities: <ul style="list-style-type: none"> <li>• San Joaquin kit fox potential den: 50 feet.</li> <li>• San Joaquin kit fox active den: 100 feet.</li> <li>• San Joaquin kit fox natal den: 500 feet.</li> </ul> If avoidance of the potential dens is not feasible, the following measures are required to avoid potential adverse effects to the San Joaquin kit fox: <ul style="list-style-type: none"> <li>• If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers or foxes from re-using them during construction.</li> <li>• If the qualified biologist determines that potential a non-natal den may be active, an on-site passive relocation program may be implemented with prior concurrence from the USFWS. This program shall consist of excluding San Joaquin kit foxes from occupied burrows by installation of one way doors at burrow entrances, monitoring of the burrow for one week to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the San Joaquin kit foxes have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction.</li> </ul>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	14 days prior to commencement of construction activities.
	<b>Mitigation Measure 4.5-1b: Solar Facility Construction Worker Environmental Awareness Program.</b> Prior to the issuance of grading or building permits and for the duration of construction activities, within one week of employment all new construction workers at the Project site shall attend a Construction Worker Environmental Awareness Program, developed and presented by the Lead Biologist (a pre-recorded video presentation will suffice). Any employee responsible for the operation and maintenance or decommissioning of the completed facilities shall also attend/watch the Construction Worker Environmental Awareness Program. The program shall include information on the life history of the San Joaquin kit fox and shall also describe other special-	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to construction.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	status wildlife species that may occur on-site, including burrowing owl and Swainson's hawk.			
<b>MITIGATION MEASURES (cont.)</b>				
<b>Biological Resources (cont.)</b>				
<p>Impact 4.5-1 (cont.)</p>	<p>The program shall also discuss each species' legal protection status, the definition of "take" under the federal and state Endangered Species Acts, measures the Solar Facility operator is implementing to protect the species, reporting requirements, specific measures that each worker shall employ to avoid take of wildlife species, and penalties for violation of the federal or state Endangered Species Act. An acknowledgement form signed by each worker indicating that environmental training has been completed would be kept on record. A sticker shall be placed on hard hats indicating that the worker has completed the environmental training. Construction workers shall not be permitted to operate equipment within the construction areas unless they have attended the training and are wearing hard hats with the required sticker. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms shall be submitted to Fresno County Public Works and Planning Department. The construction crews and contractor(s) shall be responsible for unauthorized impacts from construction activities to sensitive biological resources that are outside the areas defined as subject to impacts by Solar Facility permits.</p> <p><b>Mitigation Measure 4.5-1c: Avoidance and Protection of Biological Resources.</b></p> <p>During construction, operation and maintenance, decommissioning of the Solar Facility, the Solar Facility operator and/or contractor shall implement the following general avoidance and protective measures to protect San Joaquin kit fox and other special-status wildlife species:</p> <ul style="list-style-type: none"> <li>• All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid special status species where possible. Construction-related activities outside of the impact zone shall be avoided.</li> <li>• The Solar Facility operator shall limit the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. These areas shall be flagged and disturbance activities, vehicles, and equipment shall be confined to these flagged areas.</li> <li>• Spoils shall be stockpiled in disturbed areas that lack native vegetation. Best Management Practices shall be employed to prevent erosion in accordance with the Project's approved Stormwater Pollution Prevention Plan. All detected erosion shall be remedied within two days of discovery or as described in the Stormwater Pollution Prevention Plan.</li> <li>• To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches with a 2-foot or greater depth shall be covered with plywood or similar materials at the close of each working day, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected by the Lead Biologist or approved biological monitor for trapped animals. Open trenches, holes, or excavations that could trap wildlife shall be inspected daily by the environmental compliance monitor. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If a listed species is trapped, the</li> </ul>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>During construction, operation and maintenance.</p>

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	USFWS and/or CDFW shall be contacted immediately.			
<b>MITIGATION MEASURES (cont.)</b>				
<b>Biological Resources (cont.)</b>				
Impact 4.5-1 (cont.)	<ul style="list-style-type: none"> <li>• All construction pipes, culverts, or similar structures with a 4-inch or greater diameter that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until the Lead Biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated by the Lead Biologist. The Lead Biologist shall have the appropriate state or federal permits necessary to capture and/or relocate non-listed special-status species potentially occurring on the Project site. Capture and/or relocation of a state or federally listed species shall not occur without prior consultation with, and approval from, the applicable resource agencies.</li> <li>• No vehicle or equipment parked on the Solar Facility sites shall be moved prior to inspecting the ground beneath the vehicle or equipment for the presence of wildlife. If present, the animal shall be left to move on its own.</li> <li>• Vehicular traffic to and from the Solar Facility sites shall use existing routes of travel. Cross country vehicle and equipment use outside of the Project properties shall be prohibited.</li> <li>• A speed limit of 20 miles per hour shall be enforced within all Solar Facility areas during construction.</li> <li>• A long-term trash abatement program shall be established for construction, operations, and decommissioning of the Solar Facility. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to wildlife such as common raven (<i>Corvus corax</i>), coyote (<i>Canis latrans</i>), and feral dogs.</li> <li>• Workers shall be prohibited from bringing pets and firearms to the Solar Facility area and from feeding wildlife.</li> <li>• Intentional killing or collection of any special-status wildlife species shall be prohibited.</li> <li>• Fencing of the Solar Facility site shall incorporate wildlife-friendly fencing design. Fencing plans may use one of several potential designs that would allow SJKF to pass through the fence while still providing for Solar Facility security and exclusion of other unwanted species (i.e., domestic dogs and coyotes). Raised fences or fences with entry/exit points of at least 6 inches in diameter spaced along the bottom of the fence to allow species such as San Joaquin kit fox access into and through the Solar Facility site would be appropriate designs.</li> </ul>			
Impact 4.5-3: The Solar Facility could have a substantial adverse direct or indirect, non-collision-related impact on burrowing owl, Swainson's hawk, and other raptors.	<p>Implementation of Mitigation Measures 4.5-1b through 4.5-1c.</p> <p><b>Mitigation Measure 4.5-3a: Preconstruction Burrowing Owl Surveys.</b></p> <p>Prior to the initiation of equipment staging or ground-disturbing activities, biological surveys shall be performed within 14 days of such activities to ensure that burrowing owls are not impacted by construction activities. Given the large size of the construction site, multiple or ongoing burrowing owl surveys may be required during successive phases of the Project (e.g., between successive construction in different areas). To protect burrowing owls, the following conditions shall be met</p>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	14 days prior to the initiation of equipment staging or ground-disturbing activities.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	prior to construction within each successive work area:			
<b>MITIGATION MEASURES (cont.)</b>				
<b>Biological Resources (cont.)</b>				
Impact 4.5-3 (cont.)	<ul style="list-style-type: none"> <li>• A qualified wildlife biologist (i.e., a wildlife biologist with previous burrowing owl survey experience) shall conduct pre-construction surveys on the Solar Facility site and immediate vicinity only in areas of the site with suitable burrowing habitat to locate any active breeding or wintering burrowing owl burrows no fewer than 14 days prior to ground-disturbing activities (i.e., vegetation clearance, grading, tilling). The survey methodology shall be consistent with the methods outlined in the CDFW (2012) Staff Report on Burrowing Owl Mitigation and shall consist of walking parallel transects 7 to 20 meters apart, noting any potential burrows with fresh burrowing owl sign or presence of burrowing owls. As each burrow is investigated, biologists shall also look for sign of San Joaquin kit fox. Copies of the survey results shall be submitted to CDFW and the Fresno County Public Works and Planning Department. The surveys can be conducted concurrently with San Joaquin kit fox surveys.</li> <li>• If burrowing owls are detected on-site, no ground-disturbing activities, such as vegetation clearance or grading, shall be permitted within a buffer of no fewer than 200 meters (660 feet) from an active burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW with the exception noted below. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with CDFW.</li> <li>• The Project site shall be resurveyed to locate any breeding or wintering burrowing owls in the event that ground disturbing construction activities lapse for a period of 14 days after the most recent preconstruction survey.</li> <li>• If burrow avoidance is infeasible during the non-breeding season, a qualified biologist shall implement a passive relocation program in accordance the CDFW (2012) Staff Report on Burrowing Owl Mitigation.</li> <li>• If passive relocation is required, a qualified biologist shall prepare a Burrowing Owl Exclusion and Mitigation Plan and Mitigation Land Management Plan in accordance with CDFW 2012 Staff Report on Burrowing Owl Mitigation and for review by CDFW prior to passive relocation activities. The Mitigation Land Management Plan shall include a requirement for the permanent conservation of off-site Burrowing Owl Passive Relocation Compensatory Mitigation.</li> </ul> <p>Burrowing Owl Passive Relocation Compensatory Mitigation. If passive relocation is required, the Project proponent shall implement the Mitigation Land Management Plan and permanently conserve in a conservation easement off-site habitat suitable for burrowing owl at ratio of 6 acres per passively relocated burrowing owl pair, not to exceed the size of the final project footprint. Land identified to mitigate for passive relocation of burrowing owl may be combined with other off-site mitigation requirements of the Project if the compensatory habitat is deemed suitable to support the species. The Passive Relocation Compensatory Mitigation habitat shall be approved by CDFW. If the Project is located within the service area of a CDFW-approved burrowing owl conservation bank, the Project proponent may purchase available burrowing owl</p>			

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	conservation bank credits in lieu of placing off-site habitat into a conservation easement.			
<b>MITIGATION MEASURES (cont.)</b>				
<b>Biological Resources (cont.)</b>				
Impact 4.5-3 (cont.)	<p><b>Mitigation Measure 4.5-3b: Nesting Birds and Raptors.</b></p> <p>If construction is scheduled to commence during the non-nesting season (September 1 to January 31) within a given construction area (e.g., Power Block), no preconstruction surveys or additional measures are required for nesting birds and raptors within that specific construction area. To avoid impacts to nesting birds in the Project site and immediate vicinity, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the Project sites for ground-disturbing activities that are initiated during the breeding season (February 1 to August 31). The survey for special-status raptors shall focus on potential nest sites (e.g., mature trees) within a 0.5-mile buffer around the site in areas where access to neighboring properties is available or visible using a spotting scope. Surveys shall be conducted no more than 14 days prior to construction activities. Surveys need not be conducted for the entire Project site at one time; they may be phased so that surveys occur shortly before a portion of the Project site is disturbed. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (e.g., 300 feet for common raptors; 0.5 mile for Swainson's hawk; 100 feet for passerines) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). Construction within 0.5 mile of currently or recently active Swainson's hawk nest sites shall not occur during the nesting season without authorization by the CDFW. Encroachment into the buffer may occur at the discretion of a qualified biologist except that encroachment into the buffer for Swainson's hawk must be authorized by the CDFW.</p>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction activities.
Impact 4.5-4: The Project could have a substantial adverse direct or indirect, non-collision-related impact on nesting and migratory birds.	Implementation of <b>Mitigation Measures 4.5-3a and 4.5-3b.</b>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to and during construction.
Impact 4.5-5: The Project could have a substantial adverse impact to special status and migratory birds related to the introduction of potential collision hazards.	<p><b>Mitigation Measure 4.5-5a Compliance with the Avian Power Line Interaction Committee's (APLIC) guidance, Reducing Avian Collisions with Power Lines: State of the Art in 2012 (APLIC, 2012).</b></p> <p>Transmission lines and all electrical components shall be designed, installed, and maintained in accordance with APLIC (2012) guidance to reduce the likelihood of large bird electrocutions and collisions. Compliance with APLIC standards would reduce the potential impact of collisions and electrocutions with power line structures to a less than significant level.</p>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During installation of transmission lines and all electrical components.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Biological Resources (cont.)</b>				
Impact 4.5-5 (cont.)	<p><b>Mitigation Measure 4.5-5b: Collision Reduction Strategy.</b>                      The Applicant shall implement the following measures to reduce the risk of bird collisions with PV panels.</p> <ul style="list-style-type: none"> <li>• Installation of visual deterrents or cues to encourage bird avoidance of the Project site. These deterrents will be made of a material that is both reflective and highly visible, such that the material reflects ambient light and is stimulated by air movement. The effect of installation will create the visual impression of continuous and varied movement, which has been shown as an avian deterrent in agricultural applications. Example of the types of material that could be used include plastic compact discs and reflective tape. Within 30 days after project commissioning, materials will be installed in 50-acre blocks to achieve coverage of a total of 200 acres within the Solar Facility on a 3-month trial basis to examine panel performance issues. Following the initial 3-month period, visual deterrents will either be adjusted to reduce performance issues and reexamined on continuing 3-month basis, or if adjustments are not deemed necessary to improve panel performance, deployed on the remainder of the site and maintained for the life of the project or until determined infeasible (based on the definition of "feasible" in CEQA Guidelines §15364) or ineffective by the Project owner in consultation with CDFW and the County.</li> <li>• Panels shall include, if feasible, a light-colored, UV-reflective, or otherwise non-polarizing outline, frame, grid, or border, which has been shown to substantially reduce panel attractiveness to aquatic insects (Horvath, 2010) and may reduce avian mortality by avoiding collisions with panel faces (NFL, 2014).</li> </ul>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction.
Impact 4.5-7: The Solar Facility could conflict with local policies protecting biological resources.	Implementation of <b>Mitigation Measures 4.5-1a through 4.5-1c and 4.5-3a and 4.5-3b.</b>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to and during construction.
Impact 4.5-8: The Project could cause a cumulatively considerable contribution to a significant cumulative effect to migratory birds related to the introduction of potential collision hazards.	<p><b>Mitigation Measure 4.5-8: Off-site Avian Predation Reduction.</b>                      The Project Owner shall partner with CDFW, the Rabies and Animal Control Program of the Environmental Health Division in Fresno County, and/or a similar program to fund existing feral cat control programs to be targeted within 10 miles of the Mendota Wildlife Area. The first project owner to be issued a notice to proceed shall fund the program in the amount of \$25,000 within 6 months of the notice to proceed. The obligation set forth in this measure shall not apply to the PG&amp;E Switching Station.</p>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During Solar Facility operation

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Cultural and Paleontological Resources</b>				
<p><b>Impact 4.6-1:</b> The Solar Facility could cause a substantial adverse change in the significance of a historical or archaeological resource, as defined in CEQA Guidelines Section 15064.4.</p>	<p><b>Mitigation Measure 4.6-1:</b> The Project proponent shall retain a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology, to carry out all mitigation measures related to archaeological and historical resources.</p> <p>Prior to the start of any ground disturbing activities, the Project owner shall ensure that the qualified archaeologist has conducted a Cultural Resources Awareness Training for all construction personnel working on the Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified archaeologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of archaeological resources. A sign-in sheet shall be completed and retained to demonstrate attendance at the awareness training.</p> <p><b>Mitigation Measure 4.6-2:</b> In the event archaeological materials are encountered during the course of grading or construction, the Project contractor shall cease any ground disturbing activities within 50 feet of the find. The qualified archaeologist shall evaluate the significance of the resources and recommend appropriate treatment measures. Per CEQA Guidelines §15126.4(b)(3)(A), project redesign and preservation in place shall be the preferred means to avoid impacts to significant archaeological sites. Consistent with CEQA Guidelines §15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures. The County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthened cultural resources if the resources are prehistoric or Native American in nature. Archaeological materials recovered during any investigation shall be curated at an accredited curatorial facility. The qualified archaeologist shall prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the County and to the Southern San Joaquin Valley Information Center. Construction can recommence based on direction of the qualified archaeologist.</p>	<p>Applicants and/or their designees to implement measure as defined.</p> <p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p> <p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>Prior to and during construction.</p> <p>During construction.</p>
<p><b>Impact 4.6-2:</b> The Solar Facility could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, as defined in CEQA Guidelines Section 15064.</p>	<p><b>Mitigation Measure 4.6-3:</b> The Project proponent shall retain a qualified paleontologist to carry out all mitigation measures related to paleontological resources. Prior to the start of any ground disturbing activities, the Project owner shall ensure that the qualified paleontologist has conducted Paleontological Resources Awareness Training for all construction personnel working on the Project. This may be conducted in conjunction with the archaeological resources training required by <b>Mitigation Measure 4.6-1</b>. The training shall include an overview of potential paleontological resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified paleontologist for further evaluation and action, as appropriate; and penalties for unauthorized collecting or intentional disturbance of paleontological resources. A sign-in sheet shall be completed and retained to demonstrate attendance at the awareness training.</p>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>Prior to and during construction.</p>

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**TABLE 1 (Continued)  
MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM  
UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Cultural and Paleontological Resources (cont.)</b>				
Impact 4.6-2 (cont.)	<b>Mitigation Measure 4.6-4:</b> If a paleontological resource is found, the Project contractor shall cease ground-disturbing activities within 50 feet of the find. The qualified paleontologist shall evaluate the significance of the resources and recommend appropriate treatment measures. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Any fossils encountered and recovered shall be catalogued and donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County. Accompanying notes, maps, and photographs shall also be filed at the repository. The qualified paleontologist shall prepare a report documenting evaluation and/or additional treatment of the resource. The report shall be filed with the County and with the repository.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction.
Impact 4.6-3: The Project could disturb any human remains, including those interred outside of formal cemeteries.	<b>Mitigation Measure 4.6-5:</b> If human remains are uncovered during Project construction, the Project operator shall immediately halt work, contact the Fresno County Coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines Section 15064.4 (e)(1). If the County Coroner determines that the remains are Native American in origin, the Native American Heritage Commission (NAHC) will be notified, in accordance with Health and Safety Code Section 7050.5(c), and Public Resources Code 5097.98 (as amended by AB 2641). The NAHC shall designate a Most Likely Descendent (MLD) for the remains per Public Resources Code Section 5097.98, and the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in Public Resources Code Section 5097.98 with the MLD regarding their recommendations for the disposition of the remains, taking into account the possibility of multiple human remains.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction.
<b>Greenhouse Gas Emissions</b>				
Impact 4.9-2: The Solar Facility could conflict with CARB's Climate Change Scoping Plan.	<b>Mitigation Measure 4.9-2:</b> The Applicant shall utilize hermetically sealed circuit breakers and gas insulated switchgear for all SF <sub>6</sub> -containing equipment associated with the Project.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During installation and operation.
<b>Hazards and Hazardous Materials</b>				
Impact 4.10-1: The Solar Facility could create a significant hazard to the public or the environment through the routine transport, use, or disposal	<b>Mitigation Measure 4.10-1: Broken PV Module Detection and Handling Plan.</b> If PV panels containing CdTe are used, the Applicant shall prepare and implement a Broken PV Module Detection and Handling Plan. The plan shall describe the Applicant's plan for identifying, handling and disposing of PV modules that may break, chip, or crack at some point during the Project's life cycle to ensure the safe handling, storage, transport, and recycling and/or disposal of the modules and related electrical components in a manner that is compliant with applicable law	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During Solar Facility operation.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
of hazardous materials.	and protective of human health and the environment. The plan shall have the following elements:			
<b>MITIGATION MEASURES (cont.)</b>				
<b>Hazards and Hazardous Materials (cont.)</b>				
Impact 4.10-1 (cont.)	<ul style="list-style-type: none"> <li>• Worker health and safety provisions and handling protocol – These measures shall address isolating workers from the CdTe during the recovery of broken PV panels and shall include the following requirements:                             <ul style="list-style-type: none"> <li>– Workers shall wear gloves during the handling of broken pieces of PV panels to prevent cuts to the workers.</li> <li>– If broken pieces are separated from the PV panel, the pieces shall be collected and the areal extent of the collected pieces compared to the broken area on the PV panel to ensure that the pieces have been accounted for.</li> <li>– The broken pieces shall be placed in drums, sealed boxes, puncture-proof bags, or equivalent containers so as to prevent the broken pieces from tearing the containers and being re-released into the environment.</li> </ul> </li> <li>• Timing of removal – The PV panels shall be inspected for breakage prior to each washing PV panel event. In the event that broken PV panels are discovered, the broken PV panels and any pieces shall be removed prior to washing any adjacent PV panels so as to prevent wash water from spreading CdTe.</li> <li>• Recycling or disposal requirements – If available, broken panels shall be sent to a recycling or CdTe PV panel manufacturing facility licensed for the recycling of CdTe PV panels, if recycling is unavailable, the broken panels shall be sent to a landfill licensed to receive broken CdTe PV panels.</li> </ul> <p>The plan shall be submitted to the County for review and approval prior to delivery of CdTe-containing PV panels to the Project site and shall be distributed to all construction crew members and temporary and permanent employees prior to construction and operation of the Project. All available data from the panel manufacturer(s) regarding materials used and safety procedures and/or concerns shall be appended to the plan to assist the County with identifying potential hazards and abatement measures.</p>			
<b>Hydrology and Water Quality</b>				
Impact 4.11-2: Dewatering during construction activities could release previously contaminated groundwater to surface water channels and/or increase sediment loading to surface water channels through overland discharge and subsequent erosion, both processes could decrease water quality	<b>Mitigation Measure 4.11-1:</b> If degraded soil or groundwater is encountered during excavation (e.g., there is an obvious sheen, odor, or unnatural color to the soil or groundwater), the Project Owner and/or its contractor(s) shall excavate, segregate, test, and dispose of degraded soil or groundwater in accordance with state hazardous waste disposal requirements.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction.

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
in surface waterways.				

**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Hydrology and Water Quality (cont.)</b>				
<p><b>Impact 4.11-3:</b> Construction and operation and maintenance of the Solar Facility could 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.</p>	<p><b>Mitigation Measure 4.11-2: Groundwater Monitoring and Mitigation Plan.</b></p> <p>Prior to extracting groundwater at the Solar Facility site or from nearby wells, a well survey and pump test, as well as a Groundwater Monitoring and Mitigation Plan, shall be prepared. The Plan is not required if groundwater is not used for the Solar Facility. These documents shall be prepared by a qualified professional geologist, hydrogeologist, or civil engineer registered in the State of California. The documents shall be submitted by the Applicants to the County of Fresno (County) for approval, and to the CVRWQCB and/or other agencies as deemed appropriate by the County for review and comment.</p> <p><b>Well Survey and Pump Test(s):</b> For any existing and/or new groundwater well(s) that would be installed and/or used for the Project: a pump-test shall be conducted during the dry season (June through October). At a minimum, the pump test shall establish (or confirm):</p> <ul style="list-style-type: none"> <li>• The maximum sustained yield of the well (or the maximum sustained pumping rate that would be used during construction and operation);</li> <li>• The drawdown depth and corresponding stable groundwater elevation;</li> <li>• The area of influence of the well.</li> </ul> <p>A well survey shall be conducted to locate nearby, existing groundwater wells that are or will be in active use, and that could potentially be impacted by the Project well(s) based upon the information gathered from the pump-test(s). The well survey shall include detailed information for each identified well, including but not limited to: date of installation, completed depth, screened interval, and any available information on pumping rate and corresponding static groundwater level.</p> <p><b>Groundwater Monitoring and Mitigation Plan:</b> This Plan shall provide a detailed methodology for monitoring background and Project area groundwater levels and flow. At least one monitoring well shall be established between the Project well(s) and all identified wells (above) in reasonable proximity (e.g., within a distance equivalent to the diameter of the radius of influence of the Project well(s)) to the Project area. Monitoring shall be performed during pre-construction, construction, and operation and maintenance of the Project, with the intent to establish pre-construction and Project-related groundwater level trends that can be quantitatively compared against observed and/or simulated trends near the Project pumping wells and near potentially affected existing wells, if any. Based on the existing and/or proposed Project well location(s), and for the estimated maximum pumping rate, the pre-construction monitoring shall demonstrate that less than 1-foot of drawdown would occur at the Project area boundary location nearest the neighboring well(s).</p> <p>The Groundwater Monitoring and Mitigation Plan shall include a schedule for submittal of quarterly data reports by the Project Owner to the Fresno County Environmental Health Department for the duration of the monitoring period, which shall include the entire duration of construction and one year post-construction. The monitoring reports shall include data from the construction and operation of all Power Blocks in the active construction or operational phase. These quarterly data reports shall be prepared and submitted to the County for review and approval, and shall include:</p>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>Prior to construction.</p>

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**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Hydrology and Water Quality (cont.)</b>				
<p><b>Impact 4.11-3 (cont.)</b></p>	<p>1. Daily usage, monthly range, and monthly average of daily water usage in gallons per day;                  2. Total water used on a monthly and annual basis in acre-feet; summary of all water level data;                  3. Identification of trends that indicate potential for off-site wells to experience decline of water level;                  4. Identification of all sources of water by type (i.e., groundwater, surface water, municipal water) and well/location used on the Project site;                  5. Water level monitoring data (trend analyses) from all pumping and monitoring wells.                  Based on the results of the quarterly reports, the Project Owner and County shall determine if the Project's pumping activities have resulted in water level declines in the baseline at any of the monitoring wells, including nearby operating private wells, if any. If, due to Project activities, significant drawdown occurs at active off-site groundwater supply wells (e.g., such that the production rate of these wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted as of the date of certification of this EIR), the Project Owner shall: 1) immediately reduce groundwater pumping until water levels stabilize or recover to a reasonable level, and 2) establish an alternative source of water (e.g., those identified by Aspen [2014]) for the remaining construction and/or operations needs of the Project, beyond that which can be sustainably produced from the Project well(s) (i.e., such that active off-site wells are not affected, as described above).</p>			
<p><b>Impact 4.11-6:</b> Construction and operation and maintenance of the Solar Facility, the Phased Decommissioning Alternative, or the Reduction Acreage Alternative could cause a cumulatively considerable contribution to a significant adverse over-draft condition in the Westside Basin.</p>	<p>Implementation of <b>Mitigation Measure 4.11-2.</b></p>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>During construction.</p>
<b>Noise</b>				
<p><b>Impact 4.14-1:</b> Operation and maintenance of the Solar Facility could result in exposure of persons to noise levels in excess of standards and limits established by Fresno County.</p>	<p><b>Mitigation Measure 4.14-1: Substation Noise Control.</b>                  The Applicant shall ensure that the combined noise levels associated with the substations do not exceed the Fresno County exterior noise standards or the Fresno County substation noise limit at the on-site residence locations. Noise control techniques may include, but not be limited to: locating the transformers with as much setback from the existing residential properties as possible, use of noise walls or equivalent sound attenuation devices, and the use of a transformer with special noise control specifications designed in a way to specifically achieve acceptable regulatory noise standards.</p>	<p>Applicants and/or their designees to implement measure as defined.</p>	<p>Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee</p>	<p>During Solar Facility operation and maintenance.</p>

**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>MITIGATION MEASURES (cont.)</b>				
<b>Noise (cont.)</b>				
Impact 4.14-1 (cont.)	Prior to the installation of the substations and associated transformers, the Applicant shall submit to the County, for review and approval, a plan that describes the specific measures that will be taken in order to comply with the County's noise standards and limits.			
Impact 4.14-3: Solar Facility operation and maintenance activities would result in a long-term increase in local ambient noise levels.	Implementation of <b>Mitigation Measure 4.14-1</b> .	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During Solar Facility operation and maintenance.
Cumulative Traffic	<p><b>Mitigation Measure 4.18-1:</b> Prior to the issuance of construction or building permits, the Project sponsor and/or its construction contractor shall:</p> <ul style="list-style-type: none"> <li>• Prepare and submit a Construction Traffic Control Plan to Fresno County Divisions of Public Works and Planning and the California Department of Transportation District 6 office for approval. The Construction Traffic Control Plan must be prepared in accordance with current Caltrans standard plans, and both the California Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following issues:                             <ul style="list-style-type: none"> <li>- Timing of deliveries of heavy equipment and building materials;</li> <li>- Directing construction traffic with a flagger;</li> <li>- Placing temporary signing, lighting, and traffic control devices if required, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic;</li> <li>- Ensuring access for emergency vehicles to the project sites;</li> <li>- Temporarily closing travel lanes or delaying traffic during materials delivery, transmission line stringing activities, or any other utility connections;</li> <li>- Maintaining access to adjacent property;</li> <li>- Specifying both construction-related vehicle travel and oversize load haul routes, minimizing construction traffic during the a.m. and p.m. peak hour, distributing construction traffic flow across alternative routes to access the project sites, and avoiding residential neighborhoods to the maximum extent feasible;</li> </ul> </li> <li>• Obtain all necessary permits for the work within the road right of way or use of oversized/overweight vehicles that would utilize county-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Fresno County Divisions of Public Works and Planning.</li> <li>• Prior to the start of construction enter into a secured agreement with Fresno County to ensure that any county roads that are demonstrably damaged by project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the</li> </ul>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to construction.

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**TABLE 1 (Continued)  
MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM  
UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	state and/or Fresno County.			
<b>MITIGATION MEASURES (cont.)</b>				
<b>Noise (cont.)</b>				
Cumulative Traffic (cont.)	<ul style="list-style-type: none"> <li>- Any work for the proposed intersection improvements on Manning Avenue at the Ohio and Monterey alignments first shall require that plans for the improvements be submitted to Road Maintenance and Operations Division (RMO) for review and approval prior to issuance of any encroachment or road improvement permit for the work.</li> <li>- The improvements for these new access roads shall include a requirement that they be paved with asphalt concrete surfacing for a minimum distance of 100 feet from the edge of the Fresno County road right of way to help ensure that no sediment track-out is carried onto the Fresno County road from construction activities. The paved width of this access road shall be a minimum of 24 feet. Any material that is deposited onto the Fresno County-maintained roadway shall be swept clean as soon as possible and at least prior to the end of each working day.</li> <li>- Maintenance of these new access roads shall be the sole responsibility of the Applicant.</li> <li>- The scope of any necessary repair work shall be mutually agreed upon by the Applicant and Fresno County prior to performance of the repair work.</li> <li>- Obtainment of any access easements from private property owners necessary to perform required repair work shall be the sole responsibility of the Applicant.</li> <li>- If the County intends to hire a firm to perform mitigation monitoring, that firm shall be under contract and the Applicant shall have a cost recovery agreement in place prior to the start of construction activities so that "before" and "after" construction conditions for the Fresno County roads can be documented.</li> <li>• Submit documentation that identifies the roads to be used during construction. The project operator shall be responsible for repairing any damage to non-county maintained roads that may result from construction activities. The project operator shall submit a preconstruction video log and inspection report regarding roadway conditions for roads used during construction to the Fresno County Divisions of Public Works and Planning.</li> <li>• Subsequent to completion of construction, submit a post-construction video log and inspection report to the County. This information shall be submitted in DVD format. The County, in consultation with the project operator's engineer, shall determine the extent of remediation required, if any.</li> </ul>			

Exhibit 4 - Page 141

**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>CONDITIONS OF APPROVAL</b>				
<b>Fresno County</b>				
1. Mitigation Monitoring (Reimbursement for Third Party Monitor)	The Applicant shall enter into an agreement with the County of Fresno to implement a Mitigation Monitoring and/or Reporting Plan and Condition Compliance Matrix to be administered by a third party in accordance with Section 21081.6 of the California Public Resources Code and Section 15097 of Title 14, Chapter 3 of the California Code of Regulations. This agreement shall cover monitoring the Project's mitigation measures and conditions of approval as provided in the Mitigation Monitoring and/or Reporting Plan and Condition Compliance Matrix.  Fees shall be submitted at the time the property owner submits the signed mitigation monitoring agreement.	Applicant, in coordination with Fresno County Dept. of Public Works and Planning Development Services Division		Within 60 days after project approval or prior to the issuance of grading and building permits, which-ever occurs first.
2. Mitigation Monitoring (Reimbursement for Staff Time in Mitigation and Condition of Approval Implementation)	The Applicant shall enter into an agreement with the County of Fresno to provide funding to compensate for County Staff's time in reviewing and administering any materials related to Mitigation Monitoring and/or Reporting, including those prepared by the third party administrator.	Applicant, in coordination with Fresno County Dept. of Public Works and Planning Development Services Division		Within 60 days after project approval or prior to the issuance of grading and building permits, which-ever occurs first.
3. Mitigation Monitoring (Indemnification)	a. The Applicant Shall Enter into an Agreement Indemnifying the County for Legal Costs Associated with its Approval of Unclassified Conditional Use Permit 3100. The Indemnification Agreement shall be submitted to the County Department of Public Works and Planning Development Services Division.	Applicant, in coordination with Fresno County Dept. of Public Works and Planning Development Services Division	The Indemnification Agreement shall be submitted to the Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits
	b. The Applicant shall implement the mitigation measures adopted by the County.		Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits
	c. Development and operation of the use shall be in conformance with the site plan, elevation drawings, operational statement, and Reclamation Plan approved by the Commission.		Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits
	d. Site Plan Review (SPR) approval shall be required to assure compliance with setback requirements. A merger procedure shall be required to combine all affected parcels into one if: (i) any PV systems or related equipment or structures would cross over individual property boundary lines, or if (ii) minimum setback requirements are not met and a variance application has not been approved.	Applicant compliance through agency-specific application, permitting, and/or monitoring procedures.	Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits

Exhibit 4 - Page 142

**TABLE 1 (Continued)  
MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM  
UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>CONDITIONS OF APPROVAL (cont.)</b>				
<b>Fresno County (cont.)</b>				
4. Expiration of Land Use Permits and Reapplication	The life of this each land use permit (UCUP Nos. 3451, 3452, 3453, 3454, 3455, 3456, 3457 and 3458) shall expire upon expiration of the initial life of the solar lease or the 40-year initial life of each of the projects. If the solar leases are to be extended or the initial life of each project extends beyond this approval, approval of new land use permits shall be obtained.	Applicant compliance through agency-specific application, permitting, and/or monitoring procedures.	Fresno County Dept. of Public Works and Planning, Development Services Division	Ongoing
5. Site Plan Review requirements (NOTE: This language can also be combined with 3d)	A Site Plan Review (SPR) Application shall be submitted for approval by the Director of the Department of Public Works and Planning, in accordance with Section 874 of the Fresno County Zoning Ordinance prior to the issuance of Building Permits for each approved land use permit (UCUP Nos. 3451, 3452, 3453, 3454, 3455, 3456, 3457 and 3458). The SPRs shall be applicable to those portions of the project site(s) to be improved with sub-stations, inverters, perimeter access roads, parking, and driveway access, excluding the solar panel fields. Items to be addressed under the SPR process may include, but are not limited to, design of parking and circulation, driveway, access, grading and drainage, fire protection and lighting.	Applicant compliance through agency-specific application, permitting, and/or monitoring procedures.	Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits
6. Right-to-Farm Notification	As part of the SPR submittal process for each land use permit, an agreement incorporating the provisions of the "Right-to-Farm" Notice (Ordinance Code Section 17.40.100) shall be entered into with Fresno County acknowledging the presence of surrounding agricultural operations and their related activities.	Applicant compliance through agency-specific application, permitting, and/or monitoring procedures.	Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits
7. Fencing	The Applicant shall obtain a permit for fencing in excess of 6 feet high.	Applicant compliance through agency-specific application, permitting, and/or monitoring procedures.	Fresno County Dept. of Public Works and Planning, Development Services Division	
8. Easements	The Applicant shall obtain private road or access easements.	Applicant compliance through agency-specific application, permitting, and/or monitoring procedures.	Fresno County Dept. of Public Works and Planning, Development Services Division	Prior to Building Permits
9. Intersection Improvements on Manning Avenue at the Ohio and Monterey Alignments	a. The Applicant shall submit plans to Road Maintenance and Operations Division (RMO) for review and approval prior to issuance of any encroachment or road improvement permit for any work for the proposed intersection improvements on Manning Avenue at the Ohio and Monterey alignments. b. The improvements for these new access roads shall be paved with asphalt concrete surfacing for a minimum distance of 100 feet from the edge of the County road right of way to help ensure that no sediment track-out is carried onto the County road from construction activities. The	Applicant, in coordination with Fresno County Dept. of Public Works and Planning Road Maintenance and Operations Division	Fresno County Dept. of Public Works and Planning, Road Maintenance and Operations Division	Plan submittal required prior to issuance of an encroachment or road improvement permit for the proposed work.

Exhibit 4 - Page 143

**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>CONDITIONS OF APPROVAL (cont.)</b>				
<b>Fresno County (cont.)</b>				
9. Intersection Improvements on Manning Avenue at the Ohio and Monterey Alignments (cont.)	<p>paved width of this access road shall be a minimum of 24 feet. Any material that is deposited onto the County-maintained roadway shall be swept clean as soon as possible and at least prior to the end of each working day.</p> <p>c. Maintenance of these new access roads shall be solely the responsibility of the applicant.</p> <p>d. A secured agreement for the road improvements shall be in place prior to the start of construction.</p> <p>e. If the County intends to hire a firm to perform mitigation monitoring, that firm shall be under contract prior to the start of construction activities so that "before" and "after" construction conditions for the County roads can be documented. The scope of the repair work shall be mutually agreed upon between the Applicant and the County prior to performance of the repair work.</p> <p>f. Obtainment of any access easements from private property owners shall be solely the responsibility of the applicant.</p>			Secured agreement and third-party contracting (if elected by the County) required prior to the start of construction.
<b>California Department of Transportation</b>				
10. SR-33 ROW dedication (Power Blocks 1, 5, 6, and 8; UCUPs 3451, 3455, 3456, and 3458)	The Applicants for the Power Blocks adjacent to SR-33 [i.e., Power Block 1 (UCUP 3451), Power Block 5 (UCUP 3455), Power Block 6 (UCUP 3456), and Power Block 8 (UCUP 3458)] shall dedicate a five-foot right-of-way (ROW) along SR 33 for the future road widening. The distance of the appurtenance shall be measured from centerline to include the future ROW.	Applicant, in coordination with Caltrans	Caltrans	Prior to receipt of a final certificate of occupancy for each Power Block/UCUP
<b>Applicant-Proposed</b>				
11. Worker Health: Valley Fever	<p>a. Limit construction workers' exposure to dust by suspending construction work in affected areas during heavy wind events or dust storms. "Affected area" is defined as a portion of the project where visible airborne dust is present. "Heavy wind event" is defined as winds in excess of 20 mph averaged over the prior 1 hour period.</p> <p>b. Heavy equipment, trucks and other construction vehicles that generate heavy dust shall have enclosed, air-conditioned cabs with high efficiency particulate air (HEPA) filters (if reasonably commercially available in California).</p> <p>c. NIOSH-approved respiratory protection with particulate filters rated as N95, N99, N100, P100 or HEPA shall be provided to construction workers.</p> <p>When digging a trench or performing other soil-disturbing tasks, workers shall be positioned upwind when possible.</p> <p>d. Construction workers shall be trained on ways to minimize exposure to dust.</p>	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to ground disturbance activities.

Exhibit 4 - Page 144



**TABLE 1 (Continued)**  
**MITIGATION MONITORING AND CONDITION COMPLIANCE PROGRAM**  
**UNCLASSIFIED CONDITIONAL USE PERMIT NOS. 3451, 3452, 3453, 3454, 3455, 3456, 3457, AND 3458**

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
<b>NOTES: The following Notes reference mandatory requirements of Fresno County or other Agencies and are provided as information to the Project Applicant.</b>				
1.	This Use Permit will become void, unless there has been substantial development within two years of the effective date of this approval			
2.	Prior to occupancy, the Applicant shall complete and submit either a Hazardous Materials Business Plan or a Business Plan Exemption form to the Fresno County Department of Community Health, Environmental Health Division. Contact the Certified Unified Program Agency at (559) 445-3271 for more information.			
3.	All hazardous waste shall be handled in accordance with requirements set forth in the California Health and Safety Code, Chapter 6.5. This chapter discusses proper labeling, storage and handling of hazardous wastes.			
4.	A storm water pollution prevention plan shall be submitted to the U.S. Environmental Protection Agency and administered by the California State Regional Water Quality Control Board.			
5.	Because the proposed project includes land disturbances of more than five acres, the Applicant will be required to obtain a National Pollution Discharge Elimination System (NPDES) General Construction Storm Water Permit from the Regional Water Quality Control Board.			
6.	The Applicant shall adhere to San Joaquin Air Pollution Control District Regulation VIII – Fugitive Dust Rules. The Applicant also shall adhere to the District’s permitting requirements, which include a District-Issued Dust Control Plan and Authority to Construct (ATC). The Applicant shall consider entering into a voluntary emission reduction agreement (VERA) with the District.			

Exhibit 4 - Page 145

# LOCATION MAP

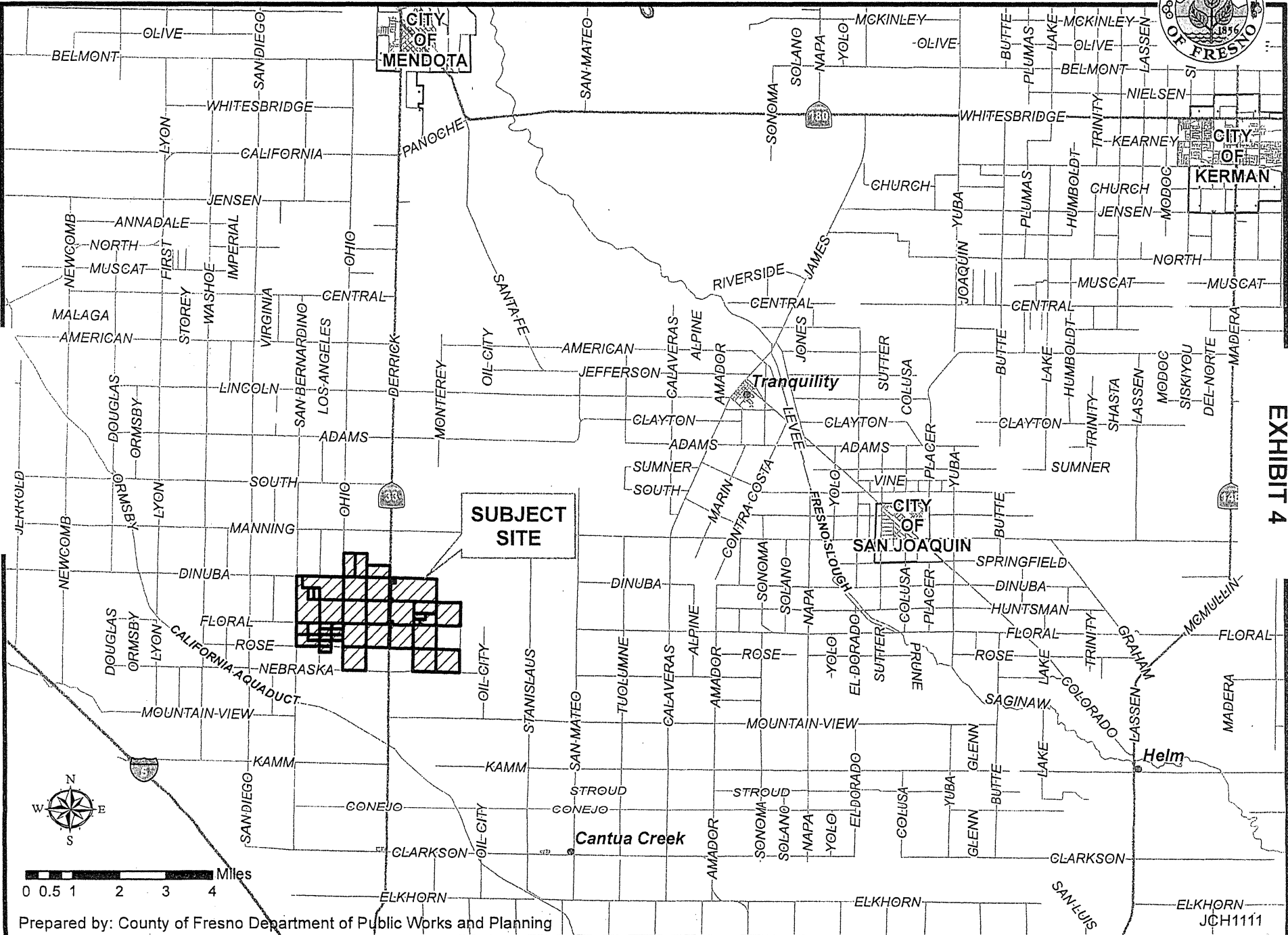


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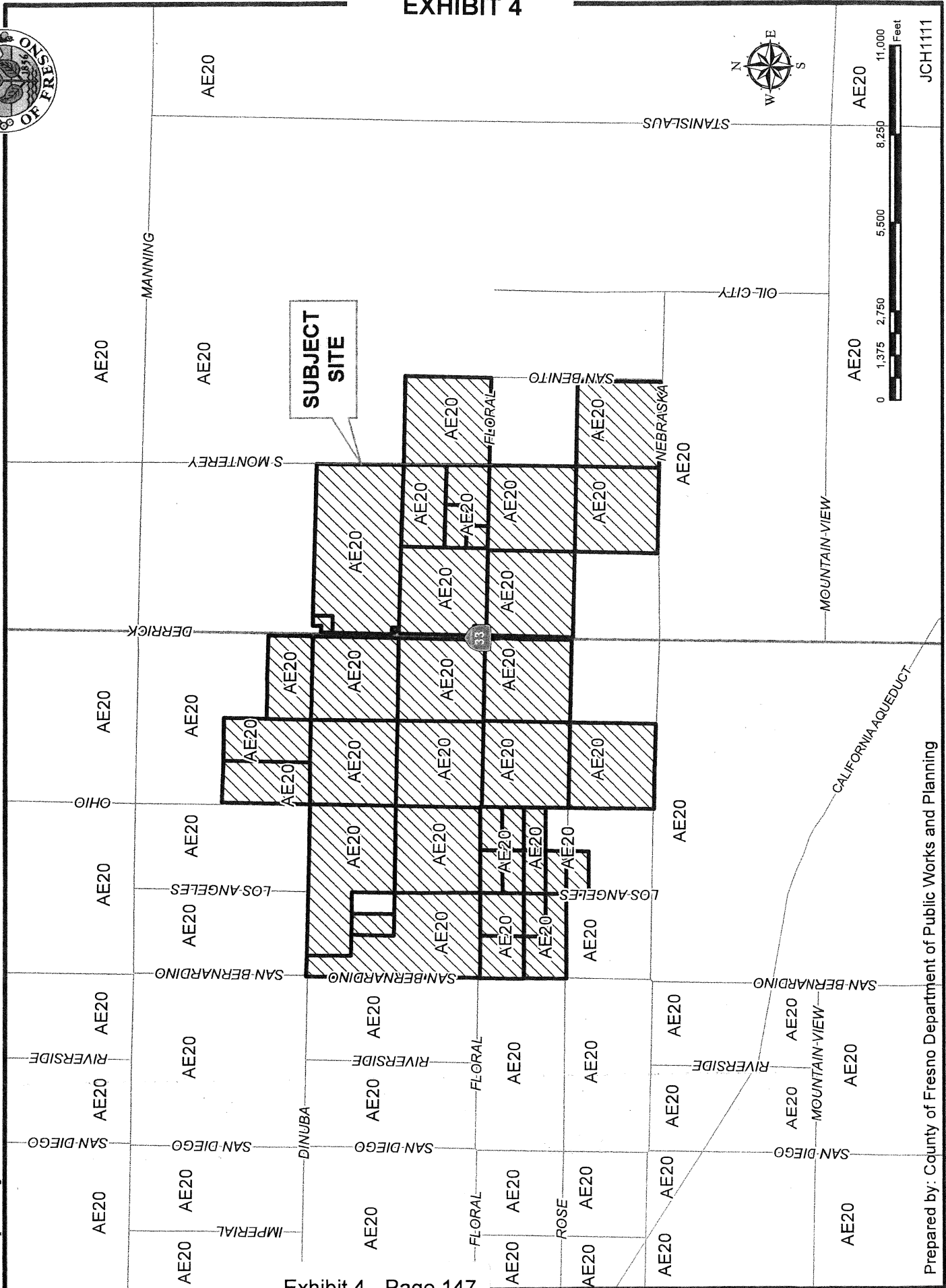
EXHIBIT 4



# EXISTING ZONING MAP

Tranquillity CUP

## EXHIBIT 4



# EXISTING LAND USE MAP

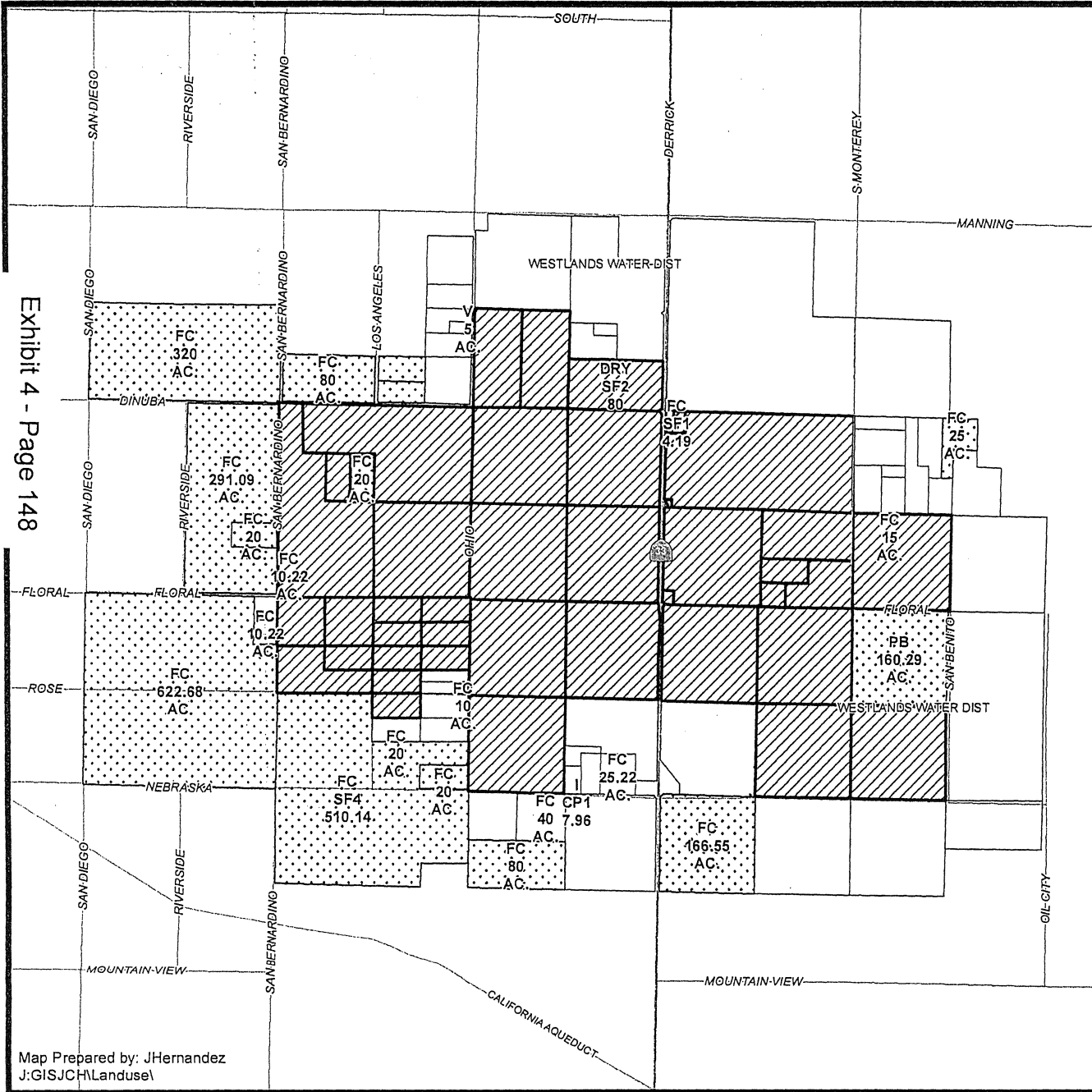


Exhibit 4 - Page 148

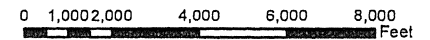
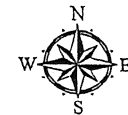
### LEGEND

- CP# - OFFICE COMM./PROF
- DRY - DRY FARMING
- FC - FIELD CROP
- I - INDUSTRIAL
- PONDING BASIN
- SF#- SINGLE FAMILY RESIDENCE
- V - VACANT

### LEGEND:

- Subject Property
- Ag Contract Land

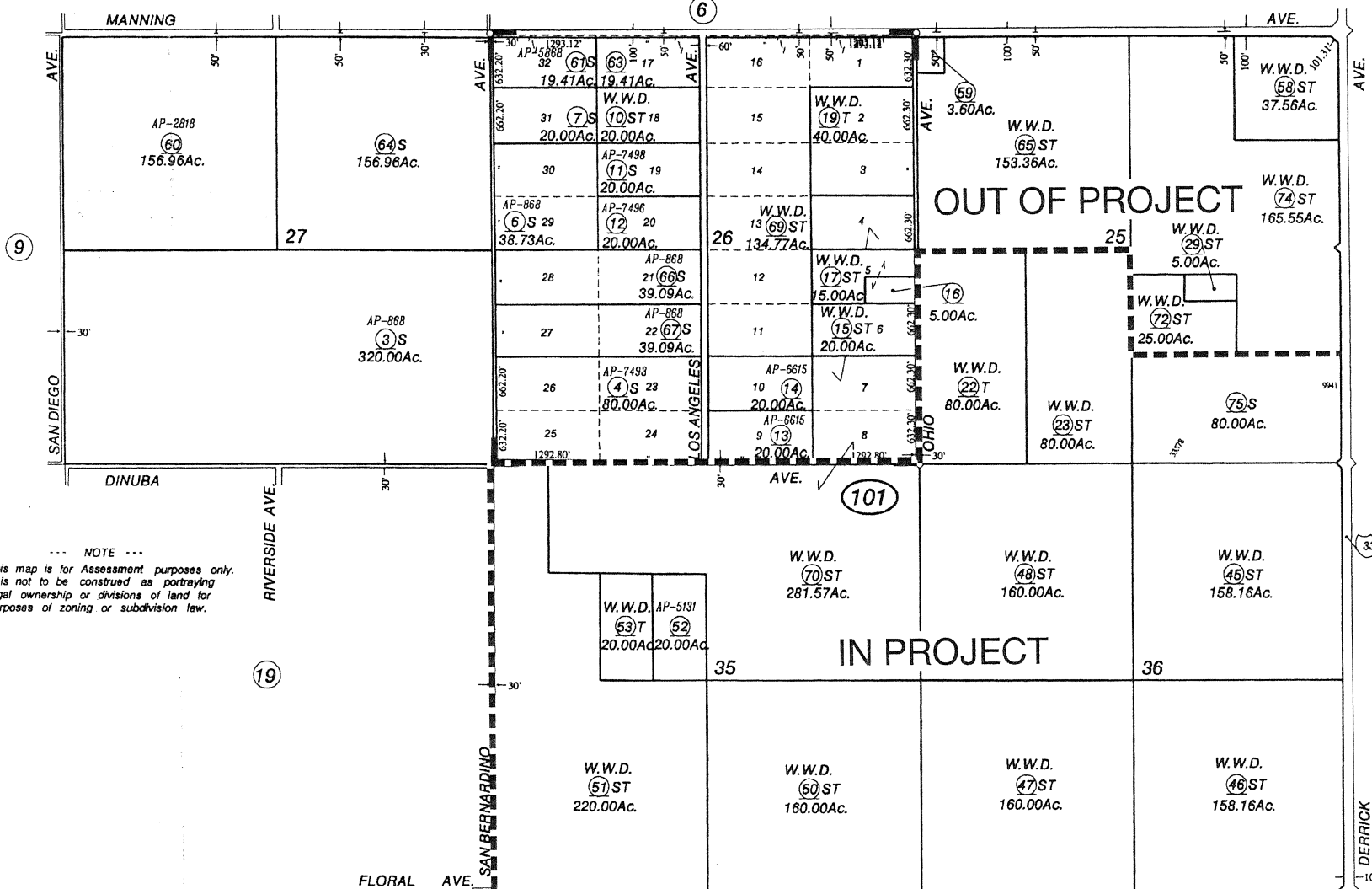
EXHIBIT 4



SEC'S. 25, 26, 27, 35 & 36, T.15S., R.14E., M.D.B.&M.

Tax Rate Area  
140-006

028-10



--- NOTE ---  
This map is for Assessment purposes only.  
It is not to be construed as portraying  
legal ownership or divisions of land for  
purposes of zoning or subdivision law.

Exhibit 4 - Page 149

Agricultural Preserve  
California Land Investment Co. - Tract No. 1 - R.S. Bk. 7, Pg. 7

NOTE - Assessor's Block Numbers Shown in Ellipses.  
Assessor's Parcel Numbers Shown in Circles.

Assessor's Map Bk. 28 - Pg. 10  
County of Fresno, Calif.

01-05-09

EXHIBIT 5 - PAGE 1

EXHIBIT 4

SEC.'S 28, 29, 30, 31, 32, & 33, T.15 S., R.15 E., M.D.B.& M.

Tax Rate Area  
111-018

028-11

NOTE  
This map is for Assessment purposes only.  
It is not to be construed as portraying  
legal ownership or divisions of land for  
purpose of zoning or subdivision law.

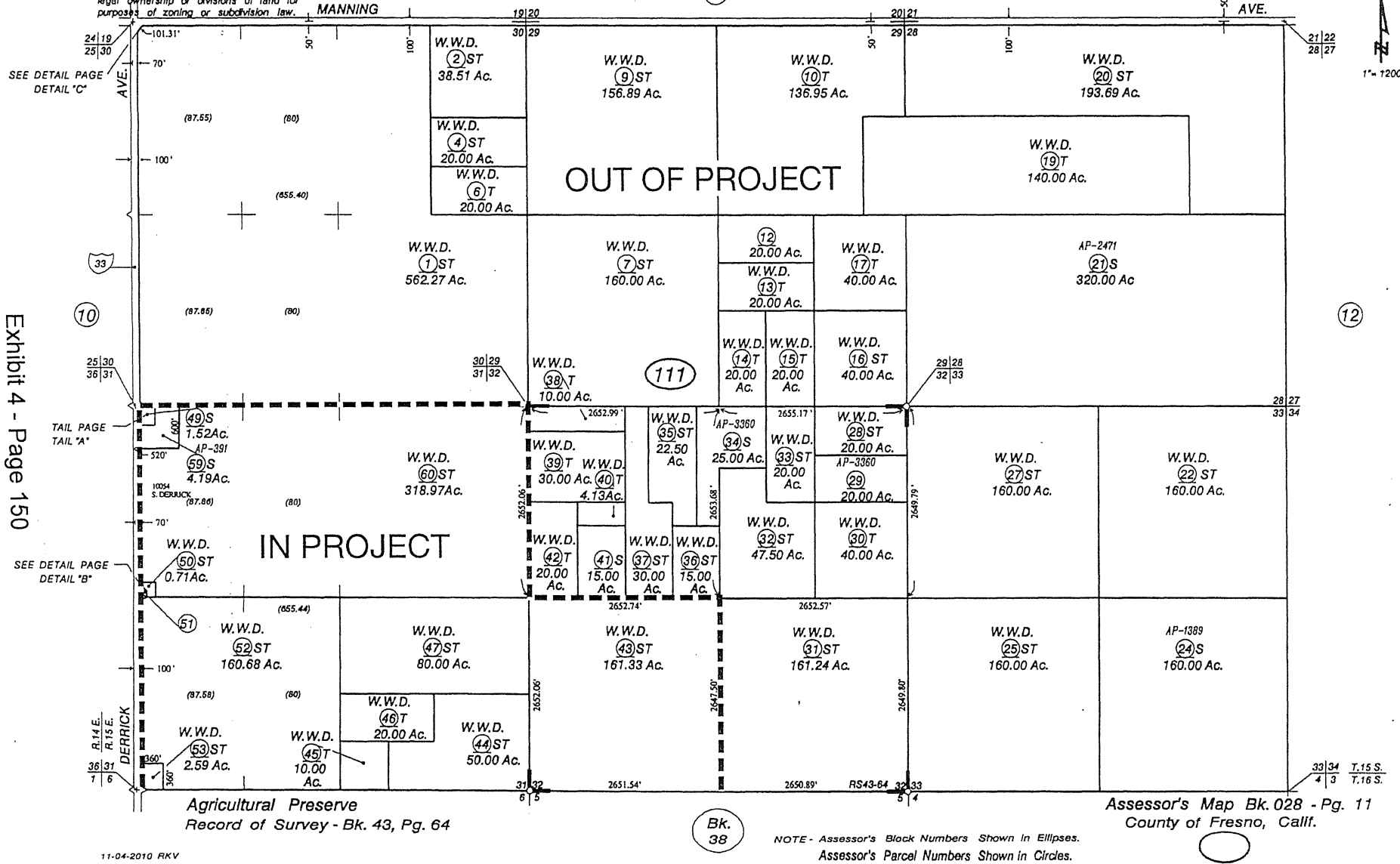


Exhibit 4 - Page 150



SUBDIVIDED LAND IN SEC'S. 1 & 2, T.16 S., R.14 E., M.D.B.&M.

Tax Rate Area  
111-005

038-32

NOTE  
This map is for Assessment purposes only.  
It is not to be construed as portraying  
legal ownership or divisions of land for  
purposes of zoning or subdivision law.

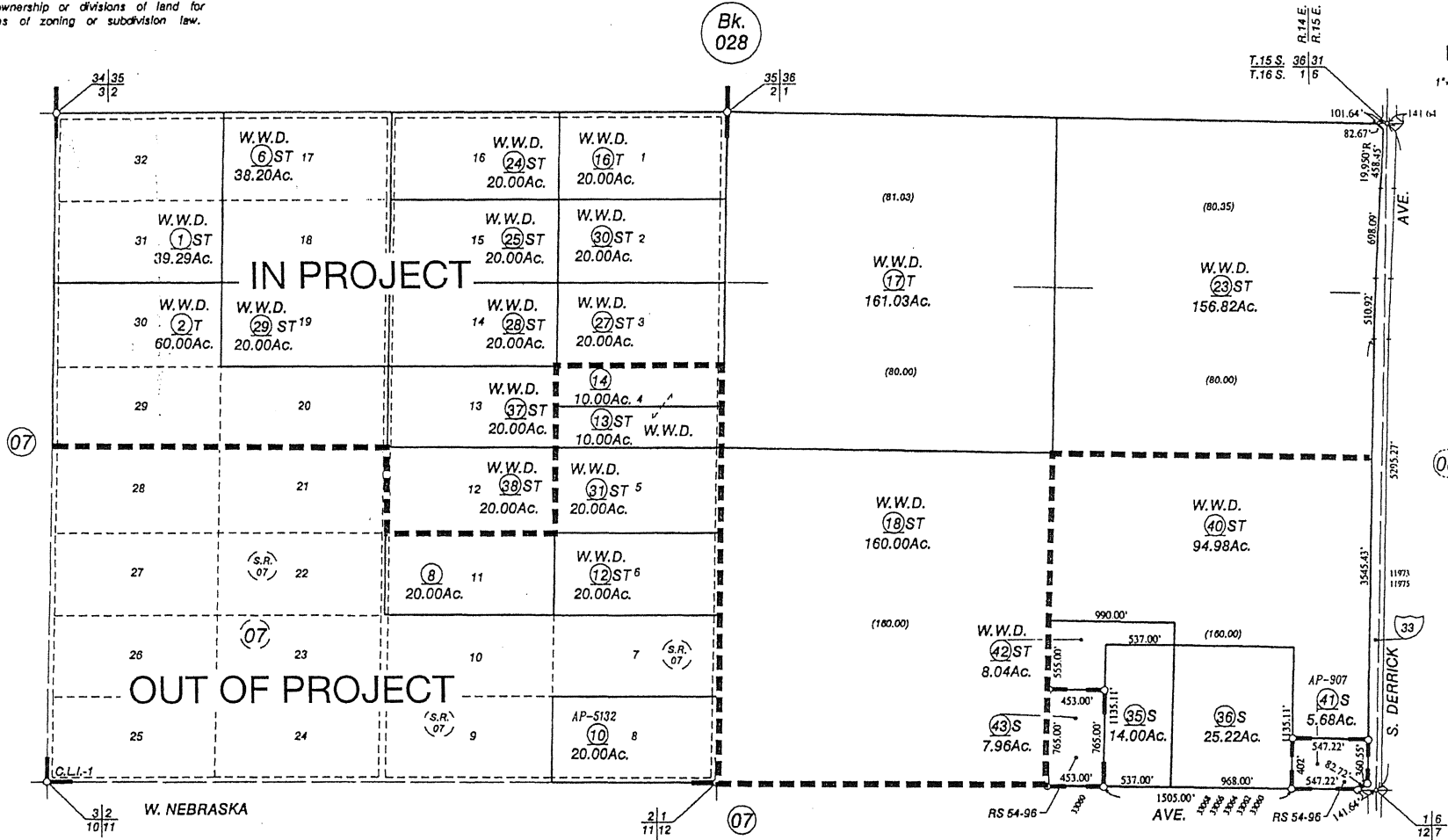


Exhibit 4 - Page 152

Agricultural Preserve  
California Land Investment Co., Tr. No.1 - R.S. Bk.7, Pg.49  
Record of Survey - Bk. 54, Pg. 96

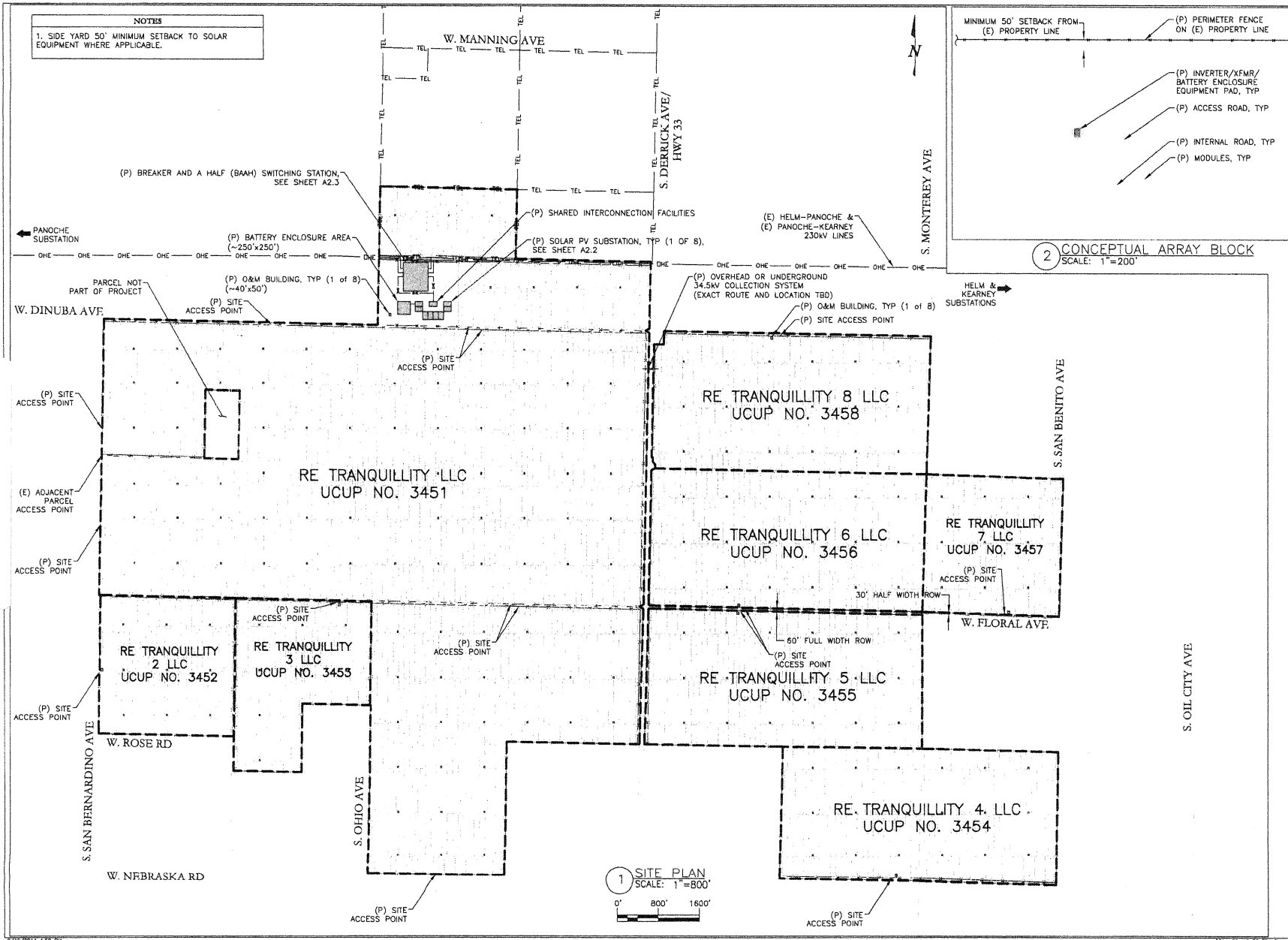
Assessor's Map Bk.038 - Pg. 32  
County of Fresno, Calif.

05-21-2009 JDD

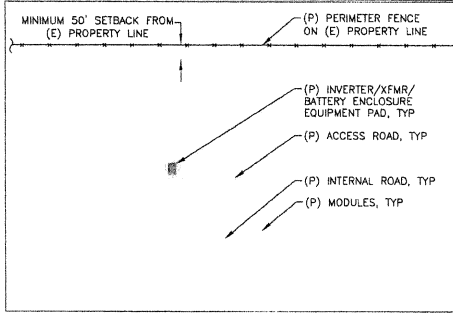
NOTE - Assessor's Block Numbers Shown in Ellipses.  
Assessor's Parcel Numbers Shown in Circles.

EXHIBIT 5 - PAGE 4





**NOTES**  
 1. SIDE YARD 50' MINIMUM SETBACK TO SOLAR EQUIPMENT WHERE APPLICABLE.



2 CONCEPTUAL ARRAY BLOCK  
 SCALE: 1"=200'

1 SITE PLAN  
 SCALE: 1"=800'

**RECURRANT ENGINEERING**  
 300 CALIFORNIA STREET, 17TH FLOOR  
 SAN FRANCISCO, CA 94104 USA  
 (415) 875-7000

CONCEPTUAL NOT FOR CONSTRUCTION  
 ENGINEER'S STAMP

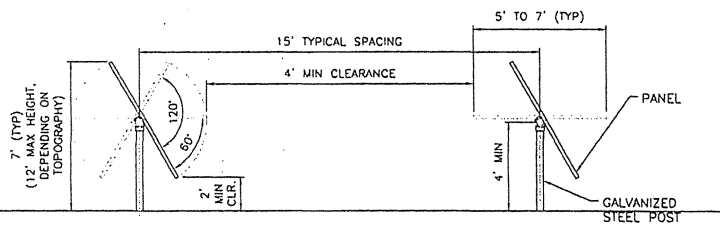
PROPOSED PHOTOVOLTAIC SYSTEM  
 RE TRANQUILLITY 1-8

**EXHIBIT 4**

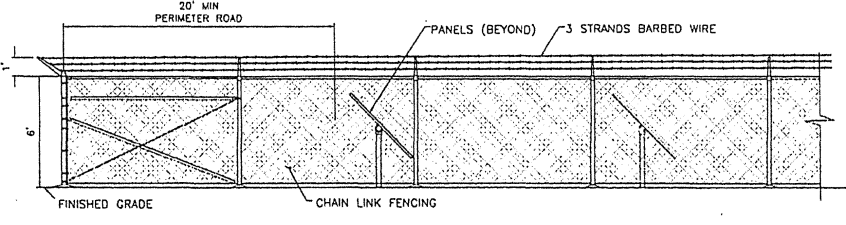
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2	11/14	
3	07/27	
4	07/27	
5	07/27	

PROGRAM	N/A
SITE NUMBER	N/A
DESIGN START	09/05/2010
DESIGN MGR.	M. BERGER

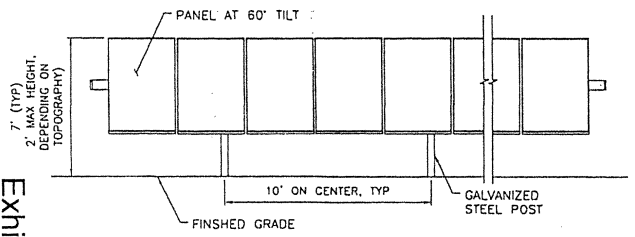
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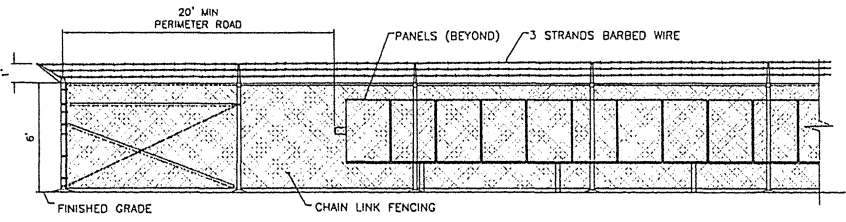
1 NORTH OR SOUTH - TYPICAL TRACKER ELEVATION  
SCALE: 3/8"=1'



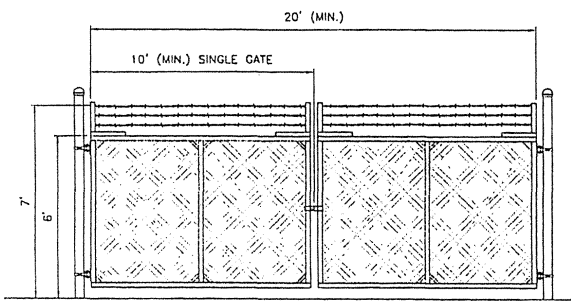
2 NORTH OR SOUTH - TYPICAL SITE PERIMETER ELEVATION  
SCALE: NTS



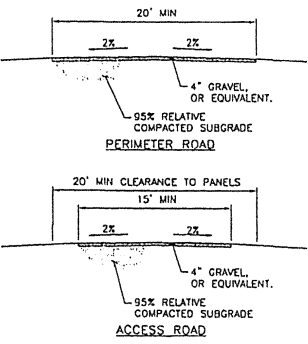
3 EAST OR WEST - TYPICAL TRACKER ELEVATION  
SCALE: 3/8"=1'



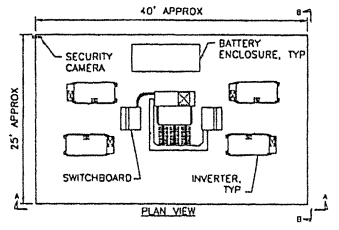
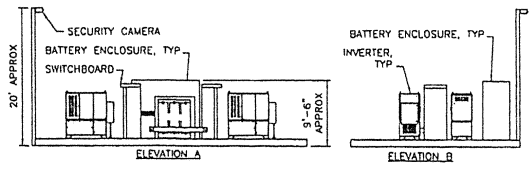
4 EAST OR WEST - TYPICAL SITE PERIMETER ELEVATION  
SCALE: NTS



5 GATE ELEVATION  
SCALE: NTS



6 ROAD DETAILS  
SCALE: 3/16"=1'



7 INVERTER/XFMR PAD  
SCALE: NTS

**RECURRENT ENERGY**  
380 CALIFORNIA STREET, 7TH FLOOR  
SAN FRANCISCO, CA 94104  
PH: 415.774.1400  
WWW.REENERGY.COM

CONCEPTUAL  
NOT FOR  
CONSTRUCTION

ENGINEER'S STAMP

PROPOSED PHOTOVOLTAIC SYSTEM  
RE TRANQUILITY 1-8  
ALONG HWY 33 AND SOUTH OF W. MAINING AVE  
TRANQUILITY, CA

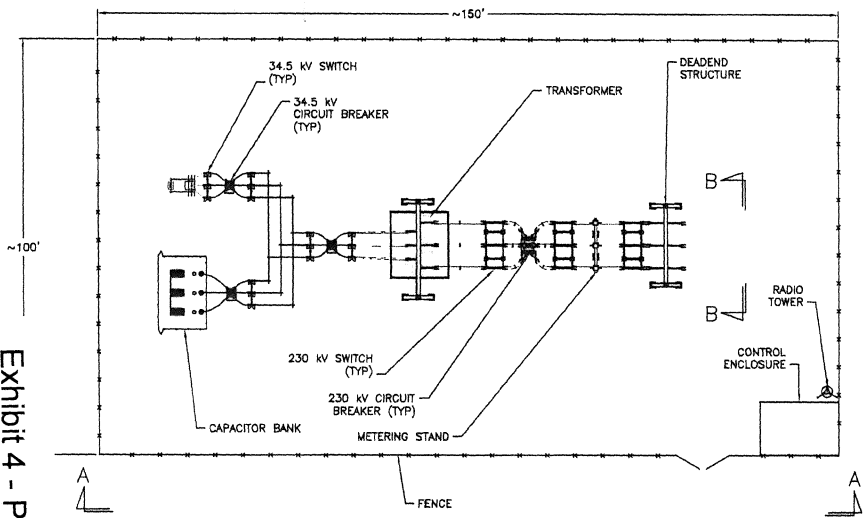
SH & DETAILS

EXHIBIT 4

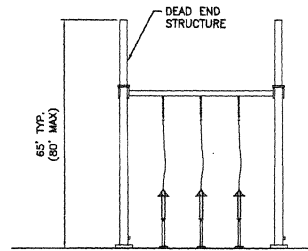
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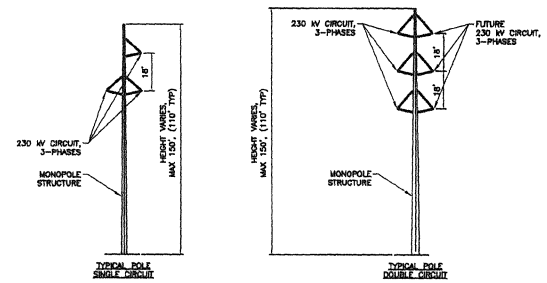
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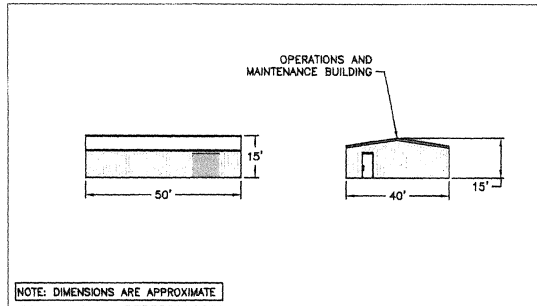
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3 ELEVATION B-B  
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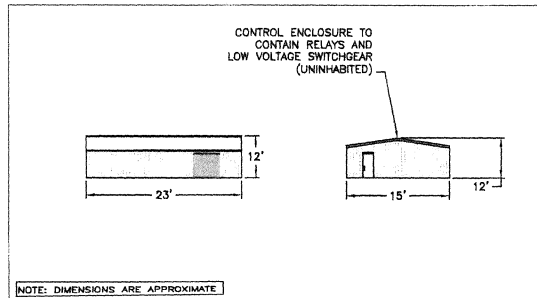


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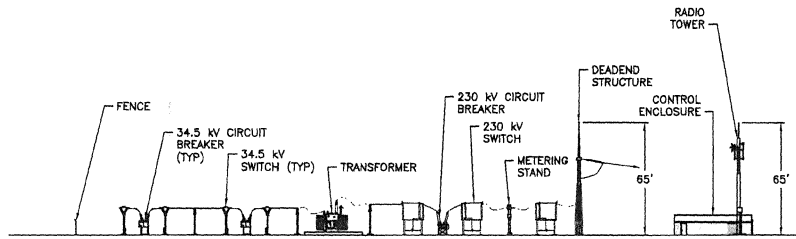
NOTE: DIMENSIONS ARE APPROXIMATE

5 OPERATIONS AND MAINTENANCE BUILDING  
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NOTE: DIMENSIONS ARE APPROXIMATE

6 CONTROL ENCLOSURE ELEVATIONS  
SCALE: NTS



2 ELEVATION A-A  
SCALE: NTS

NOTE: FINAL SUBSTATION TO BE DESIGNED BY EPC

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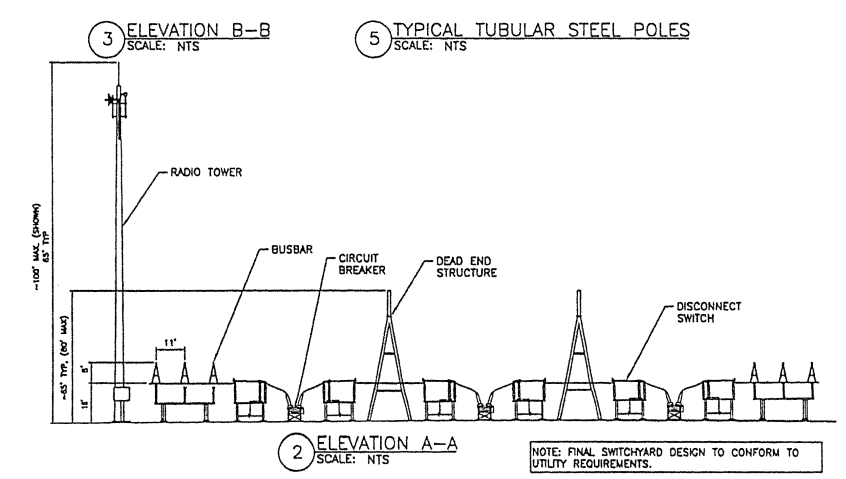
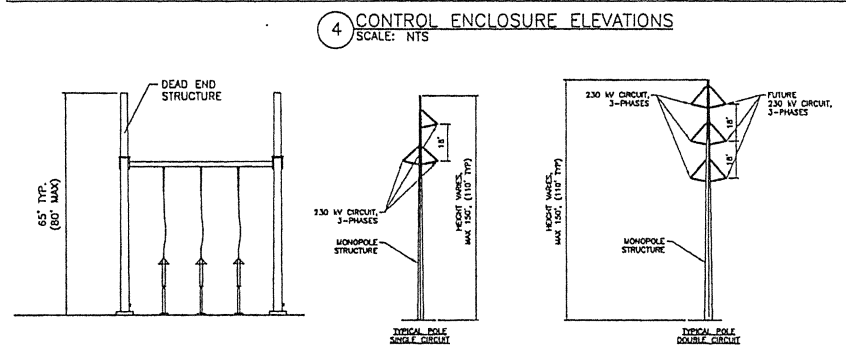
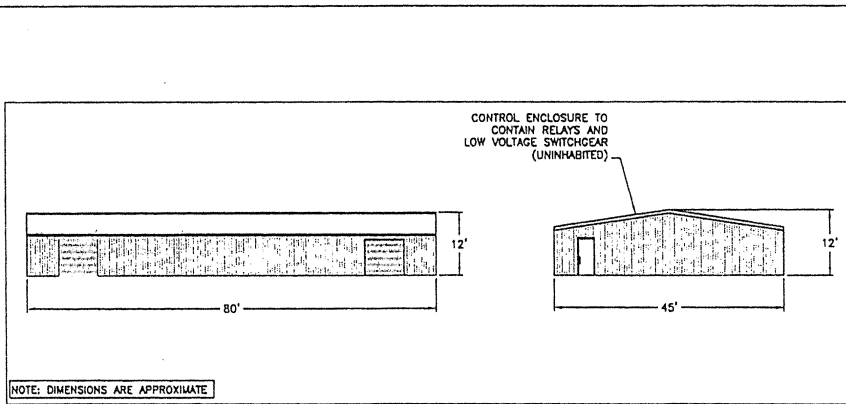
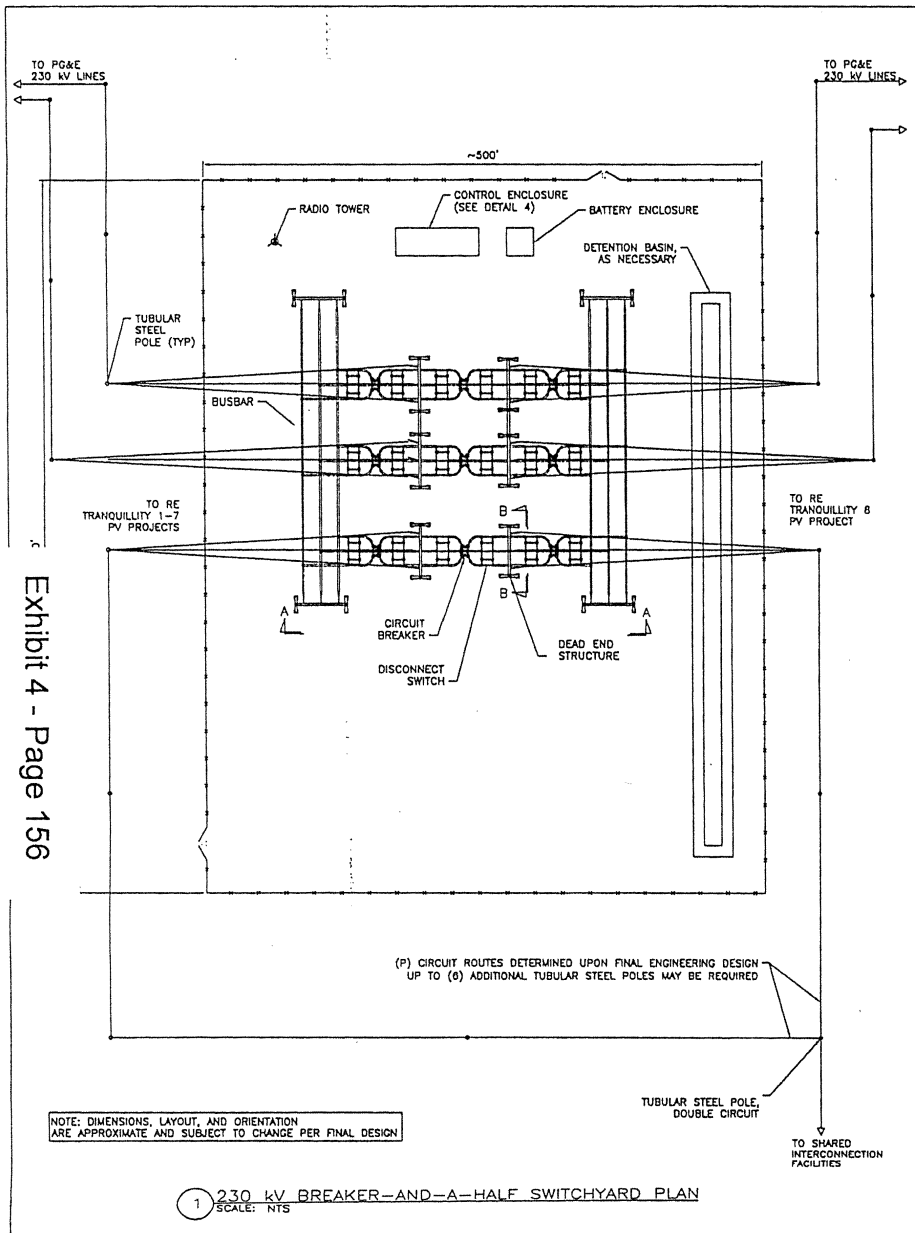
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CONSTRUCTION  
ENGINEER'S STAMP

PROPOSED PHOTOVOLTAIC SYSTEM  
RE TRANQUILITY 1-8  
ALONG HWY 33 AND SOUTH OF W WANNING AVE  
TRANQUILITY, CA  
230 kV SOLAR SUBSTATION  
PLAN & ELEVATIONS

NO.	DATE	DESCRIPTION	ISSUED FOR
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PROGRAM N/A  
SITE NUMBER N/A  
DESIGN START 09/09/2010  
DESIGN MOR. M. BERGER

0 3' 1"  
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SAN FRANCISCO, CA 94111  
(415) 398-1000

CONCEPTUAL NOT FOR CONSTRUCTION  
ENGINEER'S STAMP

PROPOSED PHOTOVOLTAIC SYSTEM  
RE TRANQUILLITY 1-8  
ALONG HWY 33 AND SOUTH OF W WARRING AVE  
TRANQUILLITY, CA  
230 kV UTILITY SWITCHYARD  
PLAN & ELEVATIONS

NO.	DATE	DESCRIPTION	BY	CHK	APP
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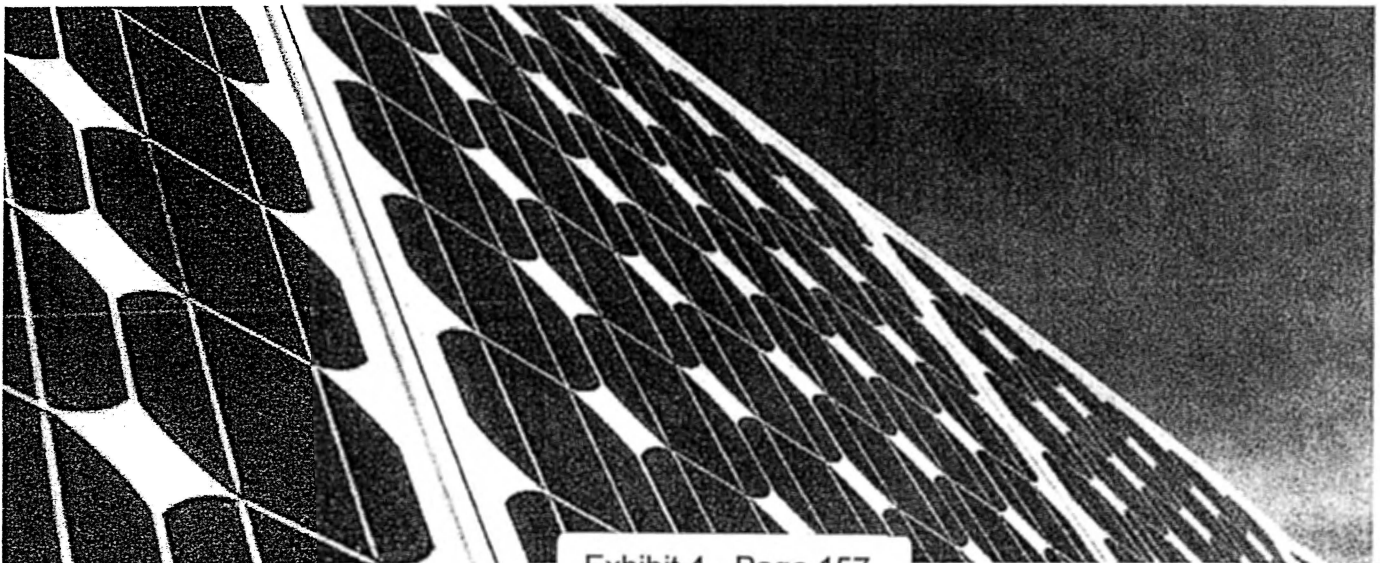
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DESIGN MGR.: M. BECHER  
SHEET: A2.3

RE TRANQUILLITY  
SOLAR GENERATING FACILITY  
FRESNO COUNTY, CALIFORNIA

OPERATIONAL STATEMENT

August 2014

RECURRENT  
ENERGY



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## 1. Purpose of Conditional Use Permit Application

The RE Tranquillity Solar Generation Facility ("Project") is proposed by RE Tranquillity LLC, RE Tranquillity 2 LLC, RE Tranquillity 3 LLC, RE Tranquillity 4 LLC, RE Tranquillity 5 LLC, RE Tranquillity 6 LLC, RE Tranquillity 7 LLC, and RE Tranquillity 8 LLC ("Applicants"). The Project would generate up to 400 megawatts (MW) of renewable energy using photovoltaic (PV) technology and would be located on eight contiguous sites encompassing approximately 3,732 acres in unincorporated Fresno County, California.

## 2. Project Overview

The proposed Project consists of the construction and operation of a solar PV power plant capable of generating up to 400 MW in unincorporated western Fresno County. Figure 1 shows the regional location of the Project, and Figure 2 shows the Project footprint. The Project is divided into eight Power Blocks of different configurations, each representing a portion of the electrical output capacity of the larger Project. One conditional use permit application has been filed for each Power Block. The Project includes eight onsite project substations, one for each Power Block, which would be located either in a cluster directly adjacent to an on-site utility Switching Station or dispersed within the Power Block boundaries. Figure 3 shows the overall Project site plan illustrating the boundaries of the eight Power Blocks.

The Project would be located on approximately 3,732 acres and would include development of the following components:

- PV panels
- PV module steel support structures
- Buried electrical collection conduit
- Electrical inverters and transformers
- Battery storage stations
- Eight electrical substations
- Up to eight separate operations and maintenance (O&M) buildings
- Up to eight separate electrical control buildings
- Busbar, breaker(s) and other shared facilities
- Telecommunications radio and/or microwave tower
- On-site access roads
- Security fencing and lighting
- Utility Switching Station and high-voltage grid interconnection

The Project requires eight conditional use permits from Fresno County to allow for the construction, operation, and maintenance of the facility and for the generation of clean, renewable energy from solar power, which would ultimately be sold and distributed for public consumption. The County will prepare an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts of the Project, and to encourage participation of members of the public, public agencies, non-profit groups, and other stakeholders.

Approval of the utility Switching Station is not subject to County of Fresno jurisdiction, but is under the jurisdiction of the California Public Utilities Commission (CPUC). The Applicants anticipate that the Switching Station will qualify for a permit exemption under CPUC General Order (GO) 131D Section III(B)(1)(f), and that PG&E will file a Notice to Construct with the CPUC for construction of the Switching Station. The Switching Station will be deeded over to PG&E after Project approval and construction. The Switching Station is necessary for the construction of the Project and is considered part of the “whole of the action” under CEQA; therefore, the Switching Station will be evaluated as part of the EIR prepared by Fresno County. To ensure that the PG&E Switching Station may achieve a GO 131D exemption, the County’s EIR will evaluate impacts related to the Switching Station both separately from the remainder of the Project and cumulatively as part of the whole Project to ensure thorough analysis of overall impacts of all Project components. To facilitate this separation, all Project components aside from the PG&E Switching Station and high-voltage interconnection are henceforth known as the Solar Facility.

### 3. Project Objectives

The Applicants’ project objectives for the Project are to:

- Establish a solar photovoltaic power-generating facility composed of eight individual, stand-alone Power Blocks of a sufficient size, configuration and proximity to one other to produce up to 400 MW of electricity in a cost competitive manner.
- Develop previously disturbed sites in close proximity to transmission infrastructure in order to minimize environmental impacts.
- Interconnect directly to the California Independent System Operator (CAISO) high-voltage electrical transmission system (grid).
- Use proven and established PV technology that is efficient, low maintenance, and recyclable.
- Assist California utilities in meeting their obligations under California’s Renewable Portfolio Standard (RPS) Program, including 25 percent of retail sales from renewable sources by the end of 2016 and 33 percent by the end of 2020.
- Assist California utilities in meeting their obligations under the CPUC’s Energy Storage Framework and Design Program, including procurement targets of 470 MWs by 2016 and 1,325 MWs by 2020, by providing up to 200 MW of storage capacity.
- Facilitate grid interconnection of intermittent and variable PV generation and minimize line losses associated with off-site storage by collocating battery storage at the PV facility site.
- Assist California in meeting the greenhouse gas (GHG) emissions reduction goal by 2020 as required by the California Global Warming Solutions Act (AB 32).

### 4. Site Description

The Project would be located on disturbed agricultural land in an unincorporated area of Fresno County 7.0 miles southwest of the community of Tranquillity. The site is located 5.45 miles east of Interstate 5 along the southern boundary of West Dinuba Avenue on primarily retired agricultural land acquired by Westlands Water District as part of a group of settlement agreements between Westlands Water District and various landowners (Settlement). The site is zoned AE20, designated as “Exclusive Agriculture” under the Fresno County General Plan, and consists entirely of Farmland of Local Importance as designated by the California Department of Conservation’s Farmland Mapping and Monitoring Program (FMMP). The site is not subject to Williamson Act contracts per the conditions of

the Settlement, as determined by the Department of Conservation and the Fresno County Board of Supervisors. The Project site is flat and surrounded by agricultural fields. One existing onsite residence is located in the northwest portion of the Project, which will be removed or converted to an alternate use to support construction and operation activities. The site is bisected by State Route (SR) 33. Site access will occur via West Manning Avenue to South Monterey Avenue and South Ohio Avenue.

The Project has been sited to avoid riparian corridors or wetlands. Biological due diligence demonstrates that the site and surrounding areas have a low potential to provide habitat to support special status species such as western burrowing owl, San Joaquin kit fox, and Swainson's hawk. Further detail regarding the site sourcing process, including avoidance of sensitive environmental resources, is presented in Section 8.

## 5. Detailed Project Description

The Project would be comprised of two major components: the Solar Facility and a utility-owned 230 kilovolt (kV) Switching Station with high-voltage grid interconnection. The Solar Facility would consist of the solar PV panels (or modules), battery storage stations, inverters, intermediate voltage transformers, access roads, electrical collector wiring, and eight Project substations. The eight Project substations would receive consolidated intermediate voltage electricity from the collector system and would subsequently step the voltage up to 230 kV with high-voltage transformers. The substations would tie into the new utility high-voltage 230 kV Switching Station, which will interconnect the Solar Facility to PG&E's two existing 230 kV transmission lines directly adjacent to the Switching Station site.

The Solar Facility site would be secured by chain link perimeter fence up to 8 feet high topped with 1 foot of barbed wire. Each Power Block would be separately fenced and gated. The Solar Facility would have multiple access points with locked gates that would be fully accessible by emergency responders. The Switching Station would be secured with a separate 8-foot-high chain link perimeter fence with two locked gates. It is anticipated that a maximum of 20 acres and 7 acres, respectively, of impervious surfaces would be constructed for the Solar Facility and PG&E Switching Station.

### 5.1 Solar Facility Components

#### 5.1.1 Photovoltaic Modules

The Solar Facility would include an estimated 2 million to 6 million solar panels, although the precise panel count will depend on the technology ultimately selected for each Power Block. The ultimate decision for the panel types and racking systems described here will depend on market conditions and environmental factors, including the recycling potential of the panels at the end of their useful lives.

Types of panels that may be installed include thin-film panels (including cadmium telluride [CdTe or "cad tel"] and copper indium gallium diselenide [CIGS] technologies), crystalline silicon panels, or any other commercially available PV technology. Solar thermal technology is not being considered. Panel mounting systems that may be installed include either fixed-tilt or tracking technology, depending on the PV panels ultimately selected. Multiple types of panels and racking systems may be installed across the site.

The PV modules would be manufactured at an offsite location and transported to the Solar Facility site. Panels would be arranged in strings with a maximum height of 12 feet. Panel faces would be minimally reflective, dark in color, and highly absorptive.

### ***5.1.2 Standard Installation, Array Assembly, and Racking***

The structure supporting the PV module arrays at the Solar Facility would consist of steel piles (e.g., cylindrical pipes, H-beams, or similar), which would be driven into the soil using pneumatic techniques, such as a hydraulic rock hammer attachment on the boom of a rubber-tired backhoe excavator. The piles are typically spaced 10 feet apart and installed to a revealed height of approximately 4 feet above grade.

Once the piles have been installed, the horizontal cross-members of the tracking system and associated motors would be placed and secured. A galvanized metal racking system, which holds the PV modules in the correct position for maximum capture of solar irradiance, would then be field assembled and attached to the horizontal cross members.

Fixed-tilt arrays would be oriented along an east-west axis with panels facing generally south, and tracking arrays would be oriented along a north-south axis with panels tracking east to west. The total height of the panel system measured from ground surface would be up to 12 feet. Figure 4 shows an elevation drawing of the solar panels and tracking system.

### ***5.1.3 Electrical Collection, Inverters, and Transformers***

Panels would be electrically connected into panel strings using wiring attached to the panel racking system. Panel strings would be electrically connected to one other via overhead and/or underground wiring installed from the panel strings to combiner boxes located throughout the PV arrays. Cabling would be installed to convey the direct current (DC) electricity from the combiner boxes to inverters which convert the DC to alternating current (AC). The output voltage of the inverters would be stepped up to the collection system voltage via transformers located in close proximity to the inverters. Electrical cables would be installed from the transformers to the separate Project substations accordingly. Underground cables would be installed using ordinary trenching techniques, which would typically include a rubber-tired backhoe excavator or trencher. Wire depths would be in accordance with local, state, and federal codes, and would likely be buried at a minimum of 18 inches below grade by excavating a trench wide enough to accommodate the cables. To accommodate the cables, a polyvinyl chloride (PVC) conduit may be installed in the trench, or, alternatively, cable rated for direct burial would be installed. Once cable installation is completed, the excavated soil would likely be used to backfill the trench and be lightly compressed. Where used, overhead cables would be installed on wood poles up to 50 feet in height.

The Solar Facility would be designed and laid out in approximately 2 MW increments. Each 2 MW increment would include an inverter-transformer station centrally located within the PV arrays. All electrical inverters and transformers would be placed on concrete pads or steel skids. Inverter pads would result in an estimated maximum of 4 acres of impervious surfaces at the Solar Facility site.

### ***5.1.4 Electrical Substations***

The substation areas would be excavated for the transformer equipment and control building foundation and oil containment area. Foundations for the substation would be formed with plywood and reinforced with structural rebar. Concrete would be poured to create foundations.

Structural components in the substation area would include:

For the Project Substation(s):

- Power transformers;

- Footings and oil containment system for power transformers;
- Pre-fabricated control enclosures to enclose the protection and control equipment;
- Footings for the control enclosure structure;
- Metering stand;
- Capacitor bank(s);
- Busbar and short generator intertie (gen-tie) line;
- Circuit breakers and air disconnect switches; and
- Dead-end structure(s) to connect the Project substation(s) to the PG&E Switching Station.

The Project substations would convert power from 34.5 kV to 230 kV. The Project substations, one for each Power Block, would connect into a shared busbar that will combine the electricity from each Power Block and transmit it via an estimated 500-foot-long gen-tie into the PG&E Switching Station north of Dinuba Avenue. The substation areas would be graded and compacted to an approximately level grade. Concrete pads would be constructed on site as foundations for substation equipment, and the remaining area would be graveled. Electrical transformers, switchgear, and related substation facilities would be designed and constructed to transform medium-voltage power to high-voltage power.

Each of eight substation transformers would contain mineral oil, and the substations would be designed to accommodate an accidental spill of transformer fluid by the use of containment-style mounting. No PCB-laden fluids would be used. Each of the dead-end structures would require foundations excavated to a depth of 20 feet or more.

#### ***5.1.6 Supervisory Control and Data Acquisition (SCADA) System***

The facility would be designed with a comprehensive SCADA system to allow remote monitoring of facility operation and/or remote control of critical components. The fiber optic or other cabling required for the monitoring system typically would be installed in buried conduit, leading to a SCADA system cabinet centrally located within the Project site or a series of appropriately located SCADA system cabinets constructed within the O&M buildings. The dimensions of each cabinet would be approximately 20 feet by 8 feet by 9 feet high. External telecommunications connections to the SCADA system cabinets could be provided through wireless or hard wired connections to locally available commercial service providers.

#### ***5.1.7 Storage System***

Storage systems can assist grid operators in more effectively integrating intermittent renewable resources into the statewide grid and can assist utilities in their efforts to meet energy storage goals mandated by the CPUC. The Project could include, at the Applicants' option, a battery or flywheel storage system capable of storing up to 200 MW of electricity. If provided, the storage system would consist of battery or flywheel banks housed in electrical enclosures and buried electrical conduit. The battery system would either be concentrated near the Project substations or dispersed throughout the Solar Facility site. Up to 1,600 electrical enclosures measuring 40 feet by 8 feet by 8.5 feet high would be installed on concrete foundations designed for secondary containment, representing up to 12 acres of impervious surface area. The Project could use any commercially available battery technology, including but not limited to lithium iron, lead acid, sodium sulfur and sodium or nickel hydride. Battery systems are operationally silent, and flywheel systems have a noise rating of 45 dBA.

#### ***5.1.8 Meteorological Data Collection System***

The Solar Facility would include a meteorological (met) data collection system. Each met station would have multiple weather sensors: a pyranometer for measuring solar irradiance, a thermometer to measure air temperature, a barometric pressure sensor, and wind sensors to measure speed and direction. The 4-foot horizontal cross-arm of each met system would include the pyranometer mounted on the left hand side and the two wind sensors installed on a vertical mast to the right. The temperature sensor would be mounted inside the solar shield behind the main mast. Each sensor would be connected by cable to a data logger inside the enclosure.

#### ***5.1.9 Operations and Maintenance Buildings and Electrical Control Buildings***

Up to eight operation and maintenance (O&M) buildings would be required for the Project, one in each of the Power Blocks. Power Blocks 1 and 8 would require O&M buildings approximately 2,000 square feet in size (approximately 40 feet by 50 feet by 15 feet at their tallest point), which would accommodate operation and maintenance staff. These buildings would be constructed within the Project site to the east and west of State Route 33. Power Blocks 2, 3, 4, 5, 6, and 7 would require smaller O&M buildings: each approximately 320 square feet in size (approximately 40 feet by 8 feet by 9 feet at their tallest point), which would not accommodate staff. Two equipment storage containers measuring 40 feet by 8 feet by 9 feet each also would be located at each substation area. All O&M buildings would be constructed on concrete foundations, and would result in an estimated maximum total of 2 acres of impervious surfaces across the Project site.

#### ***5.1.10 Telecommunications Facilities***

The Solar Facility's SCADA system would interconnect to a fiber optic network at the Switching Station.

#### ***5.1.11 Access Roads***

Access to the Project site would be provided from West Manning Avenue to South Ohio Avenue (for the Power Blocks west of SR-33) and South Monterey Avenue (for the Power Blocks east of SRR-33). The Solar Facility on-site roadway system would include a perimeter road, access roads, and internal roads (see Figures 2-2 and 2-3). The perimeter road and main access roads would be approximately 20 to 30 feet wide and constructed to be consistent with facility maintenance requirements and Fresno County Fire Department standards. These roads would be surfaced with gravel, compacted dirt, or another commercially available surface and would provide a fire buffer, accommodate Project O&M activities such as cleaning of solar panels, and facilitate on-site circulation for emergency vehicles.

Internal roads would have permeable surfaces and be approximately 12 to 20 feet in width or as otherwise required by Fresno County Fire Department standards. They would be treated to create a durable, dustless surface for use during construction and operation. This would not involve lime treatment but would likely involve surfacing with gravel, compacted native soil, or a dust palliative. During decommissioning of the facility, it is anticipated that the same access roads would be used for removal of the facility components.

There are numerous existing County roadway easements or offers for roadway dedication across the Project Site. In addition, there is one Caltrans future right-of-way (ROW) adjacent to SR-33. The Applicants may seek vacation of the County dedication offers and easements as part of the Project. The purpose of the vacation is to eliminate these public street easements so that the land on which they are located can be incorporated into the development of the Project. The Applicants would submit applications for vacation of these easements to Fresno County Roads Department, who would review

the potential vacations, and make a recommendation to the County Board of Supervisors. The Caltrans future ROW would be avoided by the Project. The Project panels and electrical infrastructure would be set back from this 92-foot ROW by 50 feet, such that the panels would set back be a minimum of 142 feet from the existing SR-33 highway.

#### **5.1.12 Access Roads**

The boundary of the Project site would be secured by up-to 8 foot-high chain-link perimeter fences, topped with three strand barbed wire. The Project site would be divided into eight Power Blocks, each individually surrounded by fencing. The fence design would be “wildlife friendly,” i.e., the bottom of the fence would be 5 inches above ground, on average, as measured from the top of the ground to the lowest point of the bottom of the fence. This design would allow wildlife to move freely into and out of the Project site and between individual Power Blocks. Existing vehicle use of South Derrick Avenue (State Route 33) would continue; however, through traffic on South Ohio Avenue and South Monterey Avenue would not continue through the Solar Facility. It should be noted that these unpaved roads are private roads and are not maintained by the County.

### **5.2 PG&E Switching Station and High-voltage Interconnection Components**

The utility Switching Station would connect the Project substations to the two existing high-voltage PG&E transmission lines: the Panoche-Helm 230 kV and the Panoche-Kearney 230 kV lines. The Switching Station would encompass approximately 7 acres. Concrete pads would be constructed as foundations for electrical equipment, and the remaining area would be graveled. An estimated 5 acres of impervious surfaces would be installed within the fence line. A modular protection automation and control (MPAC) building for PG&E’s substation control and protection equipment would be located at the Switching Station site. A battery building would also be located at the Switching Station site. One radio or microwave communication structure would be installed to support SCADA communication between the new Switching Station and the PG&E Operations Center (offsite). The footprint of the Switching Station would be 600 feet by 500 feet and would be located at the northern end of the Project site as shown on Figure 3. The equipment building would be equipped with a fire detection and protection system and security lighting. The Switching Station layout is shown on Figure 5. A photograph of a typical 230 kV Switching Station is shown on Figure 6. The height of structures at the Switching Station would be a maximum of 150 feet above grade.

PG&E Switching Station and high-voltage interconnection components would include:

- One pre-fabricated control building (approximately 80 feet by 14 feet, and 12 feet high) located at the north end of the Switching Station and installed on a concrete foundation to house protection and control equipment such as relays and low voltage switchgear;
- Either one 100 foot tall free-standing digital microwave antenna (radio tower) to support SCADA communication between the Switching Station and the offsite PG&E Operations Center or up to 2.5 miles of underground telecommunications fiber optic cable;
- Capacitor banks approximately 5 feet by 10 feet by 8 feet tall;
- Voltage transformers on concrete foundations;
- Ten 230 kV steel A-frame dead-end poles up to 80 feet in height with foundations up to 20 feet deep or more;
- Ten 230 kV steel H-frame dead-ends poles up to 80 feet in height with foundations up to 20 feet deep or more;

- Ten 230 kV steel monopole transmission support structures up to 150 feet in height with foundations up to 20 feet deep or more;
- Busbar (a conducting bar that carries heavy currents to supply several electric circuits);
- Modular protection automation and control (MPAC) building approximately 64 feet by 16 feet by 12 feet tall for PG&E's substation control and protection equipment;
- A Switching Station battery enclosure area approximately 34 feet by 16 feet by 12 feet tall;
- Circuit breakers and air disconnect switches;
- On-site stormwater retention pond (500 feet by 12 feet) for temporary run-off storage during rainfall events;
- Chainlink or similar security fencing up to 8 feet tall and two separate access gates plus one personnel gate.

Interconnection to the existing PG&E transmission lines would be via step-up transformers which would be located adjacent to the Switching Station or at the PV substations. The generation-tie lines coming out of the substation transformers, connecting to the Switching Station and then to the PG&E lines would be two overhead lines approximately 500 feet in length (carried on either a single set or two sets of transmission poles) supported on up to 6 new 150-foot steel monopole structures and would be contained within the Project site. Access to the gen-tie line would be via the new road constructed for access to the Switching Station and electrical control area.

Telecommunications for PG&E would be provided via PG&E's fiber optic cable system located at the Switching Station. PG&E's Remote Telemetry Unit installed at the solar facility would interconnect to the fiber optic network at the Switching Station. Either a microwave tower or underground fiber optic cable would be required to be installed.

Telecommunications requirements may include underground fiber optic cables between the RE Adams East project to the north and the RE Tranquillity Solar Generating Facility. If this work is undertaken, it would follow one of the several alternate routes. Up to 2.5 miles of cable would be either direct buried or installed in a conduit in a trench or bore. Cable would be installed to a maximum depth of 4 feet below the ground surface.

If, in lieu of the underground fiber optic cable installation a microwave tower is installed, the microwave tower would be up to 100 feet tall.

### 5.3 Site Access

#### Solar Facility

Access to the Solar Facility would be provided from multiple points identified in the Site Layout. Within the Project boundaries, pervious roadways would provide access to the PV modules and the substation. These roads would provide a fire buffer in accordance with the requirements of the Fresno County Fire Department, and they would accommodate Project O&M activities and facilitate onsite circulation for emergency vehicles. O&M roads would be constructed to accommodate passenger vehicle and light-duty utility vehicles or pickup trucks.

The Solar Facility onsite roadway system would include a perimeter road, access roads, and internal roads. The perimeter road and main access roads would be a minimum of 20 feet wide and constructed to be consistent with facility maintenance requirements and Fire Department standards. Internal roads would have permeable surfaces and be approximately 12 to 20 feet in width. Trafficked roads would be



treated to create a durable, dustless surface (e.g., lime-treated) for use during construction and operation. Temporary driveway aprons to points of ingress/egress during construction may be up to 80 feet wide to accommodate construction traffic; however, permanent driveway aprons will be built according to Fresno County Improvement Standards.

#### **PG&E Switching Station**

Separate site access would be provided to the PG&E Switching Station via South Ohio Avenue. Ohio Avenue would be improved (if necessary) and maintained as an all-weather access road in accordance with Fire Department recommendations and in coordination with Fresno County. An internal asphalt access road would provide site circulation within the Switching Station fence line.

### **5.4 Lighting**

#### **Solar Facility**

Motion sensitive, directional security lights would be installed to provide adequate illumination around the substation area, each inverter cluster, each battery storage cluster, at gates, and along perimeter fencing. All lighting would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties. All lighting would also conform to applicable Fresno County rules and regulations for outdoor lighting.

#### **PG&E Switching Station**

Security lighting would be installed with PG&E and CPUC standards, and would generally consist of sodium vapor lamps and non-glare light bulbs. Light fixtures would typically be designed and positioned to minimize casting light and glare to offsite locations. Security lighting would be typically designed such that all lighting is directed inwards. In addition, all exterior lighting would be typically hooded to reduce light pollution.

### **5.5 Signage**

#### **Solar Facility**

During both construction and operation, signage for safety and identification would be posted around the perimeter of the Project site. No large billboard or signage for advertisement is proposed. The Project Applicants would post all signs required by all jurisdictions with authority. All signage would conform to Fresno County signage requirements.

#### **PG&E Switching Station**

PG&E will install signage as required by the CPUC or PG&E's standards.

### **5.6 Landscaping**

#### **Solar Facility**

The Project Applicants do not anticipate installing on-site landscaping at the Solar Facility.

#### **PG&E Switching Station**

PG&E does not anticipate installing on-site landscaping at the Switching Station.

## 5.7 Fire Suppression and Safety

### Solar Facility

The Applicants would coordinate with the California Office of the State Fire Marshall and the Fresno County Fire Department to provide training for personnel to safely interrupt electrical power in the event of emergency incidents requiring fire suppression or rescue activities.

To minimize fire risk, combustible vegetation or agricultural products on and around the Solar Facility boundary would be actively managed by the Solar Facility owner or its affiliates. Combustible vegetation would either be limited in height or removed. In addition, fire breaks—in the form of 20-foot-wide roads—would be constructed around the Solar Facility Project boundary.

The Applicant's would coordinate with the Fresno County Fire District in the development of a Fire Prevention and Emergency Action Plan for the site, to address potential exposure to fire and other hazards in the Project area. The plan is described in Section 6, below.

### PG&E Switching Station

The equipment building would be equipped with a fire detection and protection system in accordance with PG&E and CPUC standards.

## 5.8 Project Construction

### 5.8.1 Construction Schedule and Phasing

Construction of the Solar Facility would commence as early as January of 2015, and would be complete by February 2017. The total duration of Solar Facility construction may be as short as 20 months. Construction of the PG&E Switching Station would occur concurrently with the site preparation phase of the Solar Facility construction, and would commence in January 2015 and conclude in May 2016. The total duration of Switching Station construction may be as short as 11 months.

### Solar Facility

Solar Facility construction phasing would be as follows:

- Phase 1, Site Preparation, extends for a duration of 46 weeks, or 226 working days and would involve 188 average daily worker trips with an average travel distance of up to 80 miles round trip to the project site from the City of Fresno area. During Phase 1, an average of 35 acres in various portions of the site would be disturbed daily at any given time.
- Phase 2, PV Panel System Installation, would extend for a duration of 38 weeks, or 186 working days, would overlap Phase 1 by approximately 10 weeks, and would involve 110 average daily worker trips with an average travel distance of up to 80 miles round trip to the project site from the City of Fresno area. During Phase 2, an average of 25 acres would be undergoing installation at any one time, with an estimated maximum active disturbance area of up to 90 acres when Phase 2 overlaps with Phase 1.
- Phase 3, Installation of Inverters, Substations, and Connection, would extend for a duration of 30 weeks, or 150 working days, and overlap Phase 2 by about 16 weeks, and would involve 80 average daily worker trips with an average travel distance of up to 80 miles round trip to the project site from the City of Fresno area.

Construction work days for all phases of Solar Facility construction would be 8 hours long and would include 5-day work weeks.

Table 1 details Solar Facility construction phasing and employment.

**TABLE 1 SOLAR FACILITY CONSTRUCTION PHASING AND EMPLOYMENT**

Solar Facility Construction Element	Construction Phase		
	1 - Site Preparation	2 - PV Panel System Installation	3 - Inverter, Transformer, Substation, and Electrical Collector System Installation
Average Number of Workers	188	110	80
Maximum Number of Workers	250	146	108
Length of Phase (work days)	226	186	150

**PG&E Switching Station**

Switching Station construction would include two phases: site work and electrical work, each of which would last for a total of 17 weeks. As a conservative estimate of cumulative disturbance, it is assumed that both Switching Station construction phases could be constructed concurrent with Phase 1 of the Solar Facility construction. Table 2 details Switching Station construction phasing and employment.

**TABLE 2 SWITCHING STATION CONSTRUCTION PHASING AND EMPLOYMENT**

Solar Facility Construction Element	Construction Phase	
	1 - Site Work	2 - Electrical Work
Average Number of Workers	6	6
Maximum Number of Workers	12	12
Length of Phase (work days)	85	85

**5.8.2 Construction Personnel Training**

Prior to construction of any Power Block, a qualified biologist would be retained by the Applicant to conduct environmental awareness training for Project personnel. Such training would communicate information related to the protection of sensitive biological resources that might be present at the Solar Facility site, and would include:

1. A description of species of concern and associated habitats.
2. The general provisions of applicable environmental regulations and the need to adhere to the provisions of the regulations.
3. General measures being implemented to conserve the species of concern as they relate to the Project.
4. A discussion of the defined access routes to the Solar Facility area and Project site boundaries within which Project activities must be accomplished. Construction employees would strictly limit their activities, vehicles, equipment, and construction materials to the Project footprint and designated staging areas and routes of travel. The construction area(s) would be the minimal area necessary to complete the Project and would be specified in the construction plans. Construction areas would be demarcated on site, and employees would be instructed to limit activities to these areas.

### 5.8.3 Construction Access and Equipment

All materials for Project construction would be delivered by truck. The majority of truck traffic would occur on designated truck routes and major streets. Flatbed trailers and trucks would be used to transport construction equipment and construction materials to the site. The Solar Facility Project components would be assembled on site. Traffic resulting from construction activities would be temporary and could occur along area roadways as workers and materials were transported to and from the Solar Facility area.

During Project construction, water use would primarily be 1) trucked in from neighboring wells, 2) purchased and trucked in from a nearby irrigation district or municipal water district, and/or 3) obtained from existing and/or planned wells on the Solar Facility site. During construction, it is anticipated that up to 1,000 acre-feet would be used per year for construction purposes and dust suppression (including truck wheel washing).

#### Solar Facility

Equipment to be used for the construction of the Solar Facility is detailed in Table 3. Construction of the Solar Facility is not expected to cause a significant short-term increase in traffic volumes on area roads due to the nature and scope of the required construction activities (i.e., limited grading, delivery of pre-constructed panels to the site, etc.). Additional detail is included in Rincon Consultants: Air Quality and Greenhouse Gases Technical Report, RE Tranquillity Solar Generating Facility, Fresno County, California.

**TABLE 3 SOLAR FACILITY ONSITE EQUIPMENT AND VEHICLE USE DURING CONSTRUCTION**

Equipment (Units)	Estimated Usage		
	Units	Hours/ Day	Total Days Per Unit
<b>Phase 1: Site Preparation</b>			
Bulldozers	70	7	197
Water Trucks	116	4	226
Graders	56	7	206
Flatbeds	26	4	205
Skid Steers	12	7	200
Front End Loaders	8	7	77
Roller Compactor	30	7	186
Water Buffaloes	4	4	98
Trenchers	4	4	13
Backhoes	6	7	13
Gravel Trucks	104	4	80
<b>Phase 2: Photovoltaic Panel System Installation</b>			
Pickups	24	4	148
Water Trucks	20	4	133
Flatbeds	200	4	186
Skid Steers	16	7	166
Pile Drivers	16	7	166
Forklifts	110	4	175
Welders	40	4	177
Trenchers	20	4	121

Equipment (Units) Phase 3: Installation of Inverters, Substation, and Connection	Estimated Usage		
	Units	Hours/ Day	Total Days Per Unit
Skid Steer	2	7	61
Pile Drivers	4	7	31
Trenchers	16	4	150
Backhoes	4	7	86
Cranes	8	4	108
Aerial Lifts	8	4	99
Concrete Trucks	60	4	1

## PG&E Switching Station

Equipment to be used for the construction of the Switching Station is detailed in Table 4.

**TABLE 4 SWITCHING STATION EQUIPMENT AND VEHICLE USE DURING CONSTRUCTION**

Equipment (Units)	Estimated Usage		
	Units	Hours/ Day	Total Days Per Unit
Cranes	1	6	4
Excavators	1	8	25
Forklifts	1	8	60
Generator Sets	1	8	40
Water Trucks	2	8	40
Surface Equipment	1	8	25
Graders	1	8	40
Rollers	1	8	2
Scrapers	1	8	14

Switching Station construction would overlap with Phase 1 (site preparation) of the Solar Facility construction.

### 5.8.4 Construction Activities

#### Solar Facility Phase 1: Site Preparation

A staging/refueling area would potentially be located at or near the primary access point of each Power Block, depending on the sequence of construction. If construction of all Power Blocks occurs simultaneously, one main staging area would be located just off of West Dinuba Avenue within Power Block 1. Preparation of laydown areas would include grubbing, clearing, grading, and compaction. The staging and laydown areas would be used for material and equipment storage, reporting location for workers, parking area for vehicles and equipment, and the ultimate location of the O&M building. Laydown areas would encompass up to 10 acres and would be secured with an 8-foot fence. Temporary power would be provided via mobile generators or local distribution lines.

Perimeter and site access roads would have 95 percent relative compacted subgrade, and four inches of gravel or equivalent. Internal site roads would have permeable surfaces (4-inch gravel) and be approximately 15 to 20 feet in width. Roads would be treated to create a durable, dust-minimizing surface for use during construction and operation. Temporary driveway aprons to points of ingress/egress during construction may be up to 80 feet wide to accommodate construction traffic; however, permanent driveway aprons would be built according to Fresno County Improvement Standards. Road construction would proceed as follows: the ground would be grubbed (cleared of vegetation), scarified (loosened up), moisture conditioned, compacted, and graded with a crown in the center.

Project fencing would include perimeter fencing around each Power Block. Fencing would be chain-link galvanized metal, up to 8 feet in height. Perimeter fencing could be topped with standard three-strand barbed wire. Fence posts would be spaced approximately 10 feet apart, drilled and grouted or driven pneumatically into the soil profile up to an estimated 5 feet deep.

As necessary for equipment access, the site would be grubbed and scarified. As the site is nearly flat and has been historically graded/tilled, and it is anticipated that Project-related grading would be minimal and occur only as necessary to level dips and hills. The site cut and fill would be approximately balanced, or minimal import/export would be necessary. During site preparation, an average of 35 acres in various portions of the site would be disturbed daily at any given time. During Phase 2, an average of 25 acres would be undergoing installation at any one time, with an estimated maximum active disturbance area of up to 90 acres when Phase 1 and 2 overlap.

As the construction of the Project would result in disturbance of an area greater than 1 acre, the applicant would be required to enroll under the State Construction General Permit, for the National Pollution Discharge Elimination System program. To enroll under this permit, the applicants would prepare a single or multiple Stormwater Pollution Prevention Plans (SWPPP), which would be based on the final engineering design and include all Power Block components.

The SWPPP would be prepared by a qualified engineer or erosion control specialist, and would be implemented before construction. The SWPPP would be designed to reduce potential impacts related to erosion and surface water quality during construction activities and throughout the life of the Project. It would include Project information and best management practices (BMPs). The BMPs would include dewatering procedures, stormwater runoff quality control measures, concrete waste management, watering for dust control, and construction of perimeter silt fences, as needed.

The SWPPP would be submitted to the RWQCB and Fresno County prior to issuance of any building or grading permits.

#### **Solar Facility Phase 2: Photovoltaic Panel System**

The structure supporting the PV module arrays would consist of steel piles (e.g., cylindrical pipes, H-beams, or similar), which would be driven into the soil using pneumatic techniques, similar to a hydraulic rock hammer attachment on the boom of a rubber-tired backhoe excavator. The piles typically are spaced 10 feet apart. For a single-axis tracking system, piles typically would be installed to a reveal height of approximately 4 feet above grade (see Figure 2-4), while for a fixed-tilt system the reveal height would vary based on the racking configuration specified in the final design. For single-axis tracking systems, following pile installation the associated motors, torque tubes, and drivelines (if applicable) would be placed and secured. Some designs allow for PV panels to be secured directly to the torque tubes using appropriate panel clamps. For some single-axis tracking systems and for all fixed-tilt systems, a galvanized metal racking system, which secures the PV panels to the installed foundations, would then be field-assembled and attached according to the manufacturer's guidelines.

#### **Solar Facility Phase 3: Inverters, Transformers, Substation and Electrical Collector System**

The 34.5 kV level collection cables would either be buried underground or installed overhead on wood poles up to 70 feet tall. Some of the wood poles could be located at the outside edge of the property line, but a majority of these poles are expected to be located interior to the site. Between 300 and 500 wood poles located at 250-foot intervals could be installed across the entire Solar Facility site. The typical height of the poles would be approximately 50 to 60 feet, with diameters varying from 12 to 14 inches. Poles would be direct buried and backfilled with concrete and native soil.

Underground cables to connect panel strings would be installed using ordinary trenching techniques, which typically include a rubber-tired backhoe excavator or trencher. Wire depths would be in accordance with local, State, and Federal requirements, and would likely be buried at a minimum of 18 inches below grade, by excavating a trench approximately 3 to 6 feet wide to accommodate the

conduits or direct buried cables. After excavation, cable rated for direct burial or cables installed inside a polyvinyl chloride (PVC) conduit would be installed in the trench, and, the excavated soil would likely be used to fill the trench and lightly compressed. All cabling excavations would be to a maximum depth of 10 feet.

All electrical inverters and the transformer would be placed on concrete foundation structures or steel skids. In lieu of steel skids or pre-cast concrete foundations, foundations for the transformer and inverter locations would be formed with plywood, and reinforced with structural rebar. Commissioning of equipment would include testing, calibration of equipment, and troubleshooting. The substation equipment, inverters, collector system, and PV array systems would be tested prior to commencement of commercial operations. Upon completion of successful testing, the equipment would be energized.

The eight substation areas would be excavated for the transformer equipment and control building foundation and oil containment area. The site area for the substations would be graded and compacted to an approximately level grade. Foundations for the substation would be formed with plywood and reinforced with structural rebar. Concrete pads would be constructed as foundations for substation equipment, and the remaining area would be graveled. Concrete for foundations would be brought on-site from a batching plant in Fresno.

#### Switching Station

The Switching Station would be constructed in two phases; Phase 1 Site Work and Phase 2 Electrical Work. Construction would begin with site grading, and installation of foundations and underground conduit and wiring. Concrete pads would be constructed as foundations for switching station equipment, and the remaining area would be graveled. Transmission monopoles would then be installed, and the conductor phases pulled and tensioned into place. After assembly, the equipment would be tested and commissioned. These activities would be undertaken using similar methods to those described previously for the Solar Facility. Ground disturbance for the Switching Station is estimated at 0.17 acres/day during Phase 1.

As discussed above, an underground telecom system may be installed for communications between the RE Adams East project and the RE Tranquillity projects. If trenching is the preferred technique, the trench would be a maximum of 1 foot wide. All cut material would be used as backfill, and no fill material would be imported. If trenching is the preferred technique, a trencher would be used to create the trench. Conduit would be installed in the trench by personnel using a medium-duty truck. Spooled cable would be mounted on a medium-duty cable truck, which would be used to lay the cable within the conduit. A water truck would wet soil for dust control. If directional boring is the preferred method of installation, a directional drill would be used to bore a hole for the conduit, which would be installed prior to inserting the cable. A cable spool truck would be used for installing cable. If the cable is direct buried, a plow would be used to lay the cable into the resultant narrow, shallow trench. A cable spool truck would follow alongside the plow during the installation process.

The total duration of construction would be up to 6 weeks. A maximum of 6 and an average of two workers would be on site throughout the duration of the earthwork and cable installation work. The work would be performed between 7 a.m. and 7 p.m., and work would generally be limited to 8 hours per day. No night work or night lighting would be required. There are no residences within the vicinity of the cabling work. Dust would be minimized by wetting the soil in the case of trenching. The direct bury and directional drill techniques would generate very little dust and soil wetting is not anticipated.



### **5.8.5 Site Restoration and Re-vegetation**

#### **Solar Facility**

Following the completion of major construction, the site would be re-seeded/re-vegetated with low-growing plant species appropriate for maintaining soil quality and controlling weed growth to reduce fire hazards. Vegetation would be selected based on growth habit (lower growing cover would be preferred) and suitability for the area. Site restoration activities would include:

- On-site repurposing or removal of all vegetative material from grubbing, clearing, and pruning;
- Removal of all trash and construction debris;
- Removal of temporary construction fencing marking the perimeter of sensitive areas (washes, set-aside areas, cultural area); and
- Removal of all construction equipment and any supplies and materials that were not consumed on site.

Following the completion of site restoration maintenance activities, the construction staging areas will be restored to their original condition by the planting of appropriate species.

#### **Switching Station**

Vegetation management at the Switching Station site would ensure no vegetation within the fence line of the facility in accordance with CPUC standards.

### **5.8.6 Construction Waste Recycling**

Construction materials would be sorted on site throughout construction and transported to appropriate waste management facilities. Recyclable materials would be separated from non-recyclable items and stored until they could be transported to a designated recycling facility. It is anticipated that at least 20 percent of construction waste would be recyclable, and 50 percent of those materials would be recycled. Wooden construction waste (such as wood from wood pallets) would be sold, recycled, or chipped and spread on the Project site for weed control as appropriate. Other compostable materials, such as vegetation, might also be composted off site. Hazardous waste and electrical waste would not be placed in a landfill, but rather would be transported to a hazardous waste handling facility (e.g., electronic-waste recycling). All contractors and workers would be educated about waste sorting, appropriate recycling storage areas, and how to reduce landfill waste.

## **5.9 Project Operation**

### **5.9.1 Operation, Security, Monitoring, and Maintenance**

Upon commissioning, the Solar Facility would enter the operation phase of the Project. The solar modules at the site would operate during daylight 7 days a week, 365 days a year. The Solar Facility operators would be located off site. The Project Applicants would have a maintenance program that would include an industry standard SCADA. The operators would be on call to respond to alerts generated by the monitoring equipment at the Solar Facility, and would analyze collected data on an ongoing basis to schedule maintenance.

#### **Solar Facility**

Operations activities at the Solar Facility would include:

- Solar module washing;

- Vegetation, weed, and pest management;
- Security;
- Responding to automated alarms based on monitored data, including actual versus expected tolerances for system output and other key performance metrics; and
- Communicating with customers, transmission system operators, and other entities involved in facility operations.

#### **PG&E Switching Station**

Operations of the PG&E Switching Station would entail the following:

The Switching Station would be remotely controlled. The Switching Station would be equipped with lead-acid batteries to provide backup power for monitoring, alarm, protective relaying, instrumentation and control, and emergency lighting during power outages. Routine inspections by PG&E personnel would occur monthly, or as needed under emergency conditions. Routine inspection would include inspection of hardware, insulator keys, and conductors. Equipment at the PG&E Switching Station would be inspected annually to allow the detection of problems with corrosion, equipment alignment, or foundations. Vegetation trimming would be conducted in accordance with the CPUC's GO 95 Rules for Overhead Electric Line Construction.

#### **5.9.2 Maintenance**

The Project Applicants' site maintenance program would be largely conducted on site during daytime hours. Equipment repairs could take place in the early morning or evening when the plant would be producing the least amount of energy. Key program elements would include maintenance activities (originating from a regional O&M facility) and on-site maintenance as required to clear weeds for ground-mount systems.

Maintenance would typically include panel repairs; panel washing; maintenance of transformers, inverters, and other electrical equipment as needed; maintenance of the oil/water separator system; and road and fence repairs. Visual inspections of the transformers and the oil/water separator system would be conducted monthly. Pest management would also be performed in accordance with the Weed and Pest Management Plan(s).

On-site vegetation would be managed to ensure access to all areas of the site and to screen Project elements as needed. Solar modules would be washed as needed (up to four times) each year using light utility vehicles with tow-behind water trailers, as needed, to maintain optimal electricity production. No chemical cleaners would be used for module washing.

For panel washing and maintenance, the Project Applicants would use water from 1) neighboring well(s), 2) nearby irrigation district or municipal water district, and/or 3) existing or new on-site groundwater well(s). During operation, the Solar Facility would require the use of approximately 6,500,000 gallons of water (23 acre-ft across 3,575 acres) annually for panel washing and other uses (equivalent to 16,250 gallons per MW annually). Approximately 500,000 gallons of non-potable water would be used by employees on site for washing or rinsing equipment, hand washing, and other non-toilet uses. Approximately 4,800,000 gallons would be used for washing the panels up to four times a year (up to 1,200,000 gallons of water per washing period). The remaining estimated water would be used to support onsite sheep (if employed for weed control) or other miscellaneous needs. Up to two small above ground on-site septic tanks may be required to retain wastewater from employee use, and would remain on site for the life of the Project. Should a septic tank be required, it is expected that this

septic tank would have a capacity of approximately 2,000 gallons. The septic tanks would be installed in accordance with County and State requirements. The tank would be emptied as needed by a contracted wastewater service vehicle. Potable water, for drinking and hand washing, would be brought to the site by employees or by a bottled water service provider.

### **5.9.3 Security**

Security measures would be taken to ensure the safety of the public and the Solar Facility. The Solar Facility would be fenced along all perimeters with specified points of ingress and egress. Up to an 8-foot chain-link galvanized metal perimeter fence would likely be topped with 1 foot of standard three-strand barbed wire. Fence posts would be drilled and grouted or driven pneumatically into the soil profile. A vehicle access gate would be installed at the southern end of the property; this gate would remain locked when not in use. Off-site security personnel could be dispatched during nighttime hours or could be on site, depending on security risks and operating needs. Security cameras may be placed along the perimeter of the facility and other specified locations. Any security cameras located at inverters and battery storage clusters may be posted on poles approximately 20 feet high.

The perimeter fence design would be “wildlife friendly”—i.e., the bottom of the fence would be 5 inches above ground, on average, along the entire perimeter, as measured from the top of the ground to the lowest point of the bottom of the fence. This design would allow wildlife to move freely into and out of the Solar Facility site.

### **5.9.4 Monitoring**

The Applicants or their representatives would continually monitor facility outputs and performance against forecast production to identify equipment failure or abnormalities. Attributes that would be monitored include:

- Energy generated would be monitored for comparison with expected generation.
- Inverter registers would be monitored for inverter failures, inverter voltage, and current flow for comparison with expected flows.
- Combiner output current would be monitored for combiner and re-combiner failures, and comparison with expected current.
- Weather, including horizontal and plane-of-array irradiance, ambient air temperature, wind speed and direction, and back-of-module temperature would be monitored for scheduling output to the transmission system operator, comparison with forecasts, and calculation of expected generation and expected currents.

Infrared security cameras, motion detectors, and/or other similar technology would also be installed to allow for monitoring of the site through review of live continuous footage.

### **5.9.5 Operations Employees**

It is anticipated that Project O&M activities would require 10 or fewer workers total on site at any one time. However, on intermittent occasions, up to 25 workers could be required for repairs or replacement of equipment or during panel washing operations. A record of inspections would be kept on site. The duration of maintenance activities would vary, but would typically involve up to 40 workers for up to two weeks up to four times annually for panel washing, and a similar number and duration for workers regularly visiting the site for routine maintenance activities. O&M workers would be stationed off-site and mobilized to the site as needed.

### 5.9.6 Operations Equipment

Equipment anticipated to be used during O&M is detailed in Table 5.

**TABLE 5. OPERATIONS AND MAINTENANCE EQUIPMENT**

Construction Phase & Duration	Equipment	Estimated Usage			
		Units	Hours/Day	Days/Week	Total Days
O&M – 25 years	ATVs	4	4	5	5
	Kubota Tractors	4	8	5	100
	Honda Portable Generators	4	8	5	60
	Portable Water Trailers with Pump	10	8	5	80
		Units	Miles/Round Trip	Round Trips/Day	Total Days
	Ford F150s (Routine O&M)	8	30	1	130
	Ford F150s (Water Wash Trucks)	15	40	1	80

Key: ATV = all-terrain vehicle; O&M = operations and maintenance

### 5.9.7 Solid and Liquid Wastes

Operations and maintenance would produce negligible volumes of solid and liquid wastes.

### 5.10 Project Decommissioning and Site Reclamation

Each Power Block is anticipated to have a life of between 35 years and up to 50 years. At the end of Power Block's life, the Power Block would either be repowered or decommissioned. Repowering is not anticipated at this time; however, if repowering were to be pursued it would require the Project owner to obtain all required permit approvals. Project decommissioning would occur in a phased fashion per Power Block and involve the removal of all above-grade facilities, buried electrical conduit, and all concrete foundations in accordance with a Decommissioning Plan. Utility-owned infrastructure would not be removed at the time Solar Facility (or Power Block) is decommissioned. In the event that a structure breaks off four feet or more beneath the ground surface, the remaining section would be left in place. If the structure breaks off in the upper four-foot portion of soil, it would be excavated and removed. Equipment would be repurposed off-site, recycled, or disposed of in a landfill as appropriate. Decommissioning would involve the use of heavy equipment and personnel similar to what was described for the construction phase.

All road and other areas compacted during original construction or by equipment used for decommissioning would be tilled in a manner adequate to restore the sub-grade material to the proper density and depth consistent with adjacent properties. Low areas would be filled with clean, compatible sub-grade material. After proper sub-grade depth is established, topsoil would be placed to a depth and density consistent with adjacent properties. Compost would be applied to the topsoil, and the entire site would be tilled to further loosen the soil and blend in the compost.

An appropriate seed mixture would be broadcast or drilled across the site, and a weed-free mulch would be applied to stabilize the soil and retain moisture for seedling germination and establishment.

## 6. Environmental Studies and Management Plans

The following environmental studies have been carried out for the Project:

- LSA Associates: RE Tranquillity Solar Project Noise Impact Analysis, April 25, 2014
- LSA Associates: RE Tranquillity Construction Trip Generation, April 25, 2014
- Rincon Consultants: RE Tranquillity Solar Generating Facility Biological Resources Assessment, February 2014
- Estep Consulting: The Distribution and Abundance of Nesting Swainson's Hawks in the Vicinity of the Proposed RE Tranquillity LLC Solar Generation Facility, November 2011
- Rincon Consultants: Phase I Cultural Resources Survey for the RE Tranquillity Solar Generation Facility Project near Three Rocks, Fresno County, California, September 23, 2013
- Rincon Consultants: RE Tranquillity LLC Solar Generating Facility Project Paleontological Resources Assessment, September 2013
- Rincon Consultants: Air Quality and Greenhouse Gases Technical Report, RE Tranquillity Solar Generating Facility, Fresno County, California, February 2014
- Rincon Consultants: Selenium Soil Level Discussion, RE Tranquillity Solar Generating Facility, Fresno County, California, April 22, 2014
- Aspen Environmental Group: Water Supply Assessment for Tranquillity Solar Generating Facility, Fresno County, California, February 2014

The following environmental management plans have been, or will be, prepared by the Project Applicants prior to initiation of construction. These environmental management plans would be prepared and implemented by the Project Applicant for each Power Block of the Solar Facility. PG&E would carry out environmental management plans associated with the Switching Station in accordance with PG&E policy and CPUC requirements.

### Stormwater Pollution Prevention Plan

Because construction of the Project would involve the disturbance of a surface area greater than 1 acre, the Applicants would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity under the National Pollutant Discharge Elimination System (NPDES) program. To enroll under this permit, the Applicants would prepare a Stormwater Pollution Prevention Plan (SWPPP), which would be based on the final engineering design and include all Solar Facility components.

The SWPPP would be prepared by a qualified engineer or erosion control specialist, and would be implemented before construction. The SWPPP would be designed to reduce potential impacts related to erosion and surface water quality during construction activities and throughout the life of the Project. It would include Project information, monitoring and reporting procedures, and best management practices (BMPs). The BMPs would include dewatering procedures, stormwater runoff quality control measures, concrete waste management, watering for dust control, and construction of perimeter silt fences, as needed. Specific BMPs would include:

1. Measures to prevent sediment from entering aquatic habitat near work areas, including the use of silt fencing and/or sterile hay bales.

2. Measures to prevent the cleaning of equipment in drainages or other wetlands.
3. Measures addressing temporary sediment disposal.
4. Measures to ensure that equipment storage, fueling, and staging areas are located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas would be located so as to prevent any runoff from entering sensitive habitat.
5. Measures to prevent releases of cement or other toxic substances into surface waters.
6. Reporting of Project-related spills of hazardous materials to appropriate regulatory entities, including but not limited to: Fresno County; the U.S. Fish and Wildlife Service (USFWS); the California Department of Fish and Wildlife (CDFW); and the Central Valley Regional Water Quality Control Board (RWQCB). Hazardous materials spills would be cleaned up immediately, and contaminated soils would be excavated and transported to approved disposal areas.

The SWPPP would be submitted to the Central Valley Regional Water Quality Control Board for review and approval and to Fresno County prior to issuance of any building or grading permits. Implementation of the SWPPP would comply with state and federal water quality regulations.

#### Fire Prevention and Emergency Action Plan

The Applicants would coordinate with the Fresno County Fire District in the development of a Fire Prevention and Emergency Action Plan for the site, to address potential exposure to fire and other hazards in the Project area. The plan would include:

1. Fire Prevention Training. The Applicants would provide training for fire personnel in the safe interruption of electrical power for emergency incidents requiring fire suppression or rescue activities.
2. Emergency Action Training. The applicant would train all construction and O&M personnel in:
  - a. Evacuation routes from the Solar Facility site to safe areas, in the event of fire or other natural hazards.
  - b. Coordination with local fire department, sheriff department, and emergency medical services.
  - c. Safety measures in accordance with the California Occupational Safety and Health Administration (Cal/OSHA) regulations and guidance for construction, which would be reviewed by all Solar Facility construction staff prior to starting work. Safety measures would include those that address potential electrical incidents and fire hazards.
3. Fire Prevention Measures. The Applicants would implement the following measures during Solar Facility construction and operation:
  - a. All applicable Fresno County improvement standards would be followed, to ensure accessibility and ground clearance of emergency vehicles (e.g., fire engines).
  - b. Agricultural vegetation would be maintained to reduce potential fire hazards at the Solar Facility site.
  - c. Smoking would be prohibited at the Solar Facility site, except within designated areas.

- d. Work crews would be required to park vehicles away from flammable vegetation such as dry grass and brush. At the end of each workday, heavy equipment would be required to be parked over mineral soil, asphalt, or concrete, where available, to reduce the risk of fire.

Fire-suppression equipment (e.g., fire extinguishers) would be made available on the Solar Facility site at all times. All heavy equipment would be required to include mechanisms for fire suppression, including spark arresters or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers.

#### **Pest and Weed Management Plan**

A Pest Management Plan has been prepared detailing methods of exotic weed and rodent control during Project operations and after Project decommissioning. The Plan would ensure operational vegetation management onsite to discourage harboring of rodents. The growth of on-site vegetation would be controlled either by periodic mowing, herbicide use, or sheep grazing, as appropriate.

#### **Reclamation Plan**

A Reclamation Plan for the Solar Facility will be submitted in advance of the Planning Commission hearing. The Reclamation Plan shall discuss steps required for restoring the site to pre-project conditions and will include an estimate for reclamation costs. The Project shall adhere to Fresno County requirements for posting a letter of credit or other security instrument for reclamation costs.

## **7. Other Permits and Approvals**

The following approvals may also be required for the Project:

- **Parcel Map.** The Project may result in the modification of the existing parcels to create new parcels. The Applicants would prepare a parcel map application and submit to the Fresno County Public Works and Planning Department for the creation of these parcel(s).
- **CPUC Notice of Construction.** The Applicant anticipates that the Switching Station will qualify for a permit exemption under CPUC General Order (GO) 131D Section B(1)(f), and that PG&E will file a Notice of Construction with the CPUC for construction of the Switching Station.
- **Building Permit.** A Fresno County Building Permit is required for the erection, demolition, or conversion of any building or structure. A Building Permit would be secured prior to the commencement of construction.
- **Grading Permit.** A Fresno County Grading Permit is required for movement of 50 cubic yards or more of soil. A Grading Permit will be secured to the commencement of major earth moving activities.
- **Caltrans Encroachment Permit.** A Caltrans Encroachment permit will be required for electrical wire crossing of SR-33. An encroachment permit will be secured prior to constructing any electrical cabling work across SR-33.

## **8. Site Sourcing and Alternatives Development Process**

Recurrent Energy pursues a disciplined approach to acquisition and site control with a careful eye toward those development opportunities where environmental and permitting obstacles as well as complexity of interconnection are minimized to the greatest extent possible. As part of this diligence exercise, significant development expenses are outlaid early in the process to thoroughly screen projects for potential fatal flaws that would impede viability. This process, explained in overview in Section 8.1, demonstrates that the proposed Tranquillity Solar Project site is uniquely well suited to Project

development and that no equivalent alternative project locations satisfy the siting constraints analysis. Section 8.2 provides further rationale for siting the Project at the proposed site and describes a Project phasing alternative that would potentially reduce construction air quality impacts of the proposed Project.

## 8.1 Site Sourcing

In early 2010, Recurrent Energy began a campaign to develop projects in PG&E's service territory that could be marketed to PG&E and other utilities in an effort to help utilities reach their procurement goals for cleaner renewable energy. The 400 MW Project size requires approximately 3,732 acres of developable land. The first step towards selecting the most appropriate land was to identify counties within PG&E's service territory with abundant solar resource, or high "insolation" value. The Central Valley, specifically Fresno, Kings, Kern, and Tulare Counties, were identified as prime areas to site projects given their high insolation values. Fresno County became of particular interest given its large inventory of retired agricultural lands.

In 2010 and 2011, a number of public agencies, conservation groups, and other stakeholders identified retired agricultural land within the Westlands Water District service area in Fresno and Kings Counties as being ideal for siting large-scale solar energy facilities. The California Energy Commission, the California Public Utilities Commission, and the California Independent System Operator hailed the region as having access to high-voltage transmission infrastructure with low economic barriers to development of new infrastructure (RETI 2010). The area was identified as having very low biological resource value according to the California Department of Fish and Wildlife (San Benito County 2011, page A-38; San Luis Obispo County 2011, page RTC A-56). Numerous conservation groups and other stakeholders encouraged large-scale solar development to move out of biologically sensitive areas within the San Joaquin Valley and into biologically disturbed Valley areas like the Westlands Water District lands, identifying the Westlands area as an "environmentally superior alternative" to development on more sensitive sites in the Panoche Valley and the Carrizo Plain (San Benito County 2011, page RTC GR-26; San Luis Obispo County 2011, page RTC GR-12). Recurrent Energy's commitment to environmental stewardship drove our site sourcing efforts toward retired agricultural lands in the Westlands Water District service area of Fresno County.

As a primary step in the site screening process, a power flow analysis was performed to identify transmission lines in Fresno County with sufficient capacity to interconnect up to a 400 MW. In a power flow analysis, hundreds of power lines are analyzed for their line rating, current loading, planned transmission upgrades, existing generators, and potential impact of new generators. Extra high voltage lines were excluded from the analysis due to the associated high cost of interconnection. As a result, only a handful of lines emerged with sufficient existing capacity and limited requests for new generator interconnection, such that the marginal generator would not overstress the system. Following the initial power flow analysis, all properties in Fresno County were filtered to avoid any that were:

- **Under Williamson Act Contract** – Parcels contracted under The California Land Conservation Act of 1965 (Williamson Act) are subject to a 10-year contract term and require Board of Supervisor approval and a fee for early cancellation.
- **Classified as Prime Farmland** – In an effort to identify lower production and lower value agricultural land, parcels classified as Prime Farmland under the FMMP were avoided.
- **Within the 100-year floodplain** – Given setback requirements and potential insurance and financing complications, parcels within the 100 - year floodplain were excluded.



- **Identified in the California Natural Diversity Database as containing protected wildlife** – Sites where significant impacts to biological resources are likely to occur are avoided given greater impacts to protected species, a potentially longer permitting timeline, and significant mitigation costs.
- **Topographically variable** – Sites with sufficient topography to adversely affect Project economics or create substantial air quality emissions from large-scale surface grading operations were eliminated.
- **Uneconomically distant from target lines** – All properties more than one mile from target lines were eliminated. Properties not directly adjacent to target lines were given lesser priority.

The existing PG&E Panoche-Helm and Panoche-Kearny 230kV lines were identified as a suitable for RE Tranquillity's interconnection. Upon review of parcels along the Panoche-Helm and Panoche-Kearny 230 kV lines, properties were screened for the above factors. The current Project site was identified as excluding all of the above constraints. Site control was subsequently pursued and obtained from Westlands Water District.

## References

- Renewable Energy Transmission Initiative (RETI). 2010. Phase 2B Final Report. Available: <http://www.energy.ca.gov/2010publications/RETI-1000-2010-002/RETI-1000-2010-002-F.PDF>.
- San Benito County. 2011. Final Environmental Impact Report, Panoche Valley Solar Farm Project. Page A-38. Available: <http://www.cosb.us/Solargen/feir/v2/a006.pdf>. Page RTC GR-26. [http://www.cosb.us/Solargen/feir/v2/general\\_responses.pdf](http://www.cosb.us/Solargen/feir/v2/general_responses.pdf)
- San Luis Obispo County. 2011. Final Environmental Impact Report, California Valley Solar Ranch. Page RTC A-56. Available: [http://www.sloplanning.org/EIRs/CaliforniaValleySolarRanch/feir/v2/comment\\_set\\_A010.pdf](http://www.sloplanning.org/EIRs/CaliforniaValleySolarRanch/feir/v2/comment_set_A010.pdf). Page RTC-GR-12. Available: [http://www.sloplanning.org/EIRs/CaliforniaValleySolarRanch/feir/v2/global\\_responses.pdf](http://www.sloplanning.org/EIRs/CaliforniaValleySolarRanch/feir/v2/global_responses.pdf).

## Figures



Figure 1. Regional Location

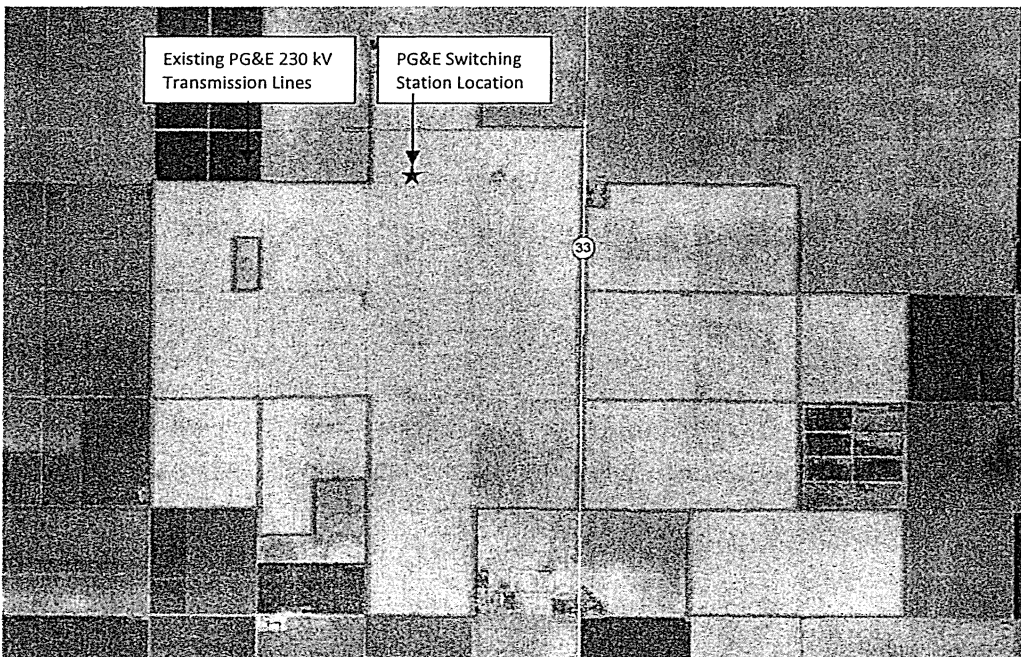


Figure 2. Project Footprint

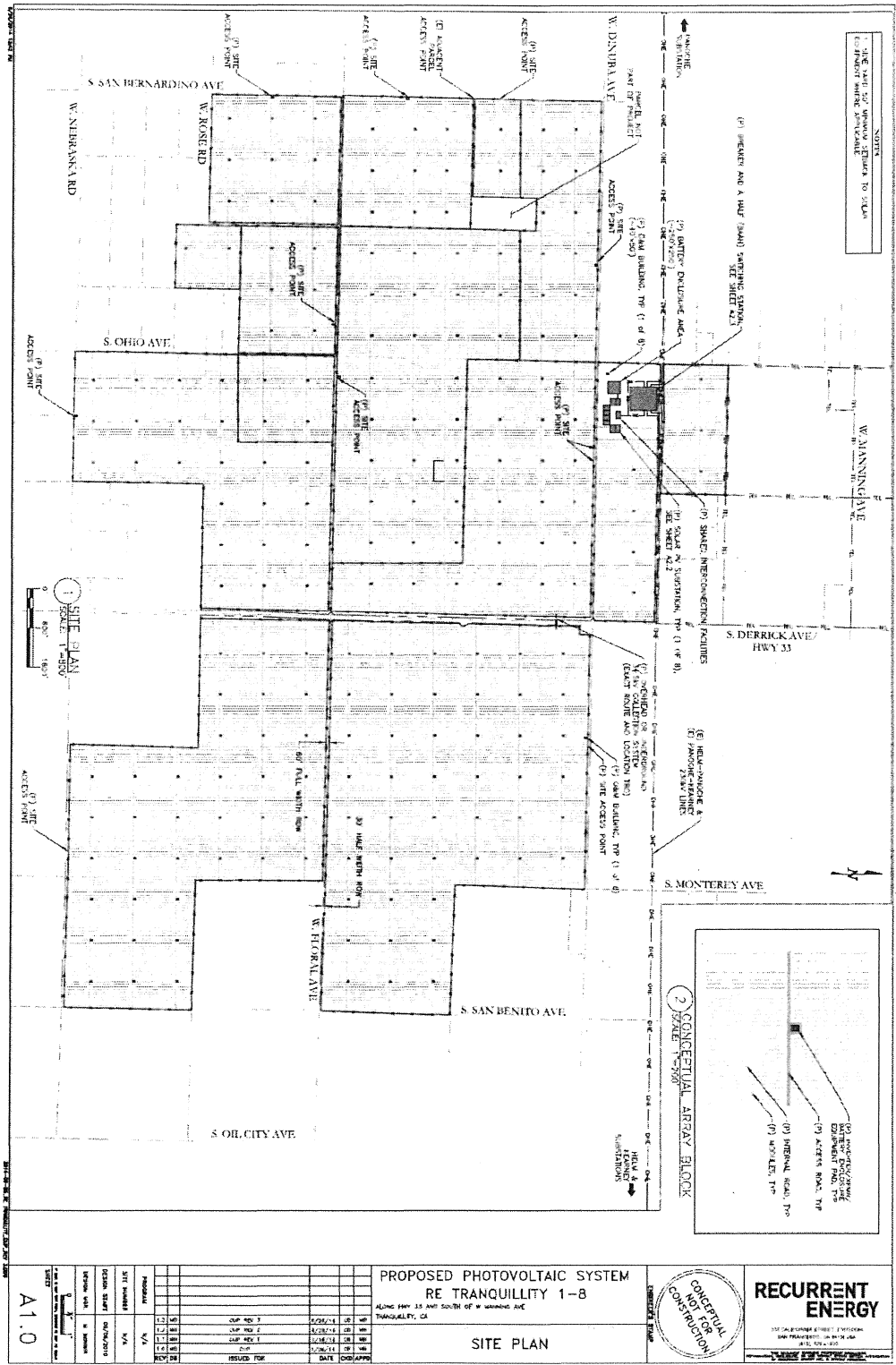
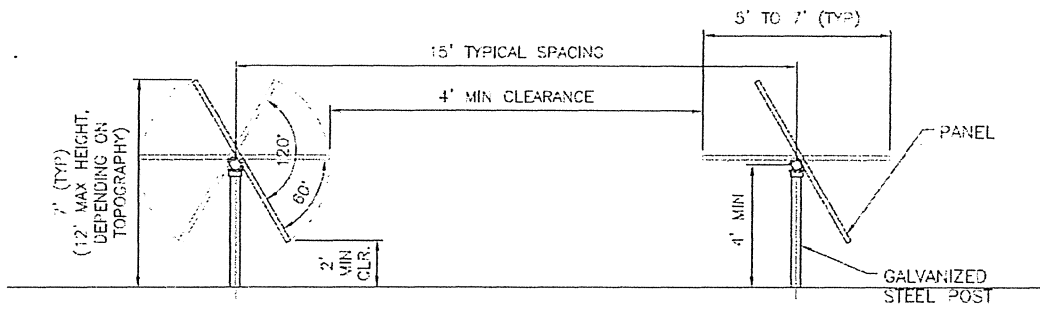


Figure 3. Site Plan



1 NORTH OR SOUTH — TYPICAL TRACKER ELEVATION  
SCALE: 3/8" = 1'

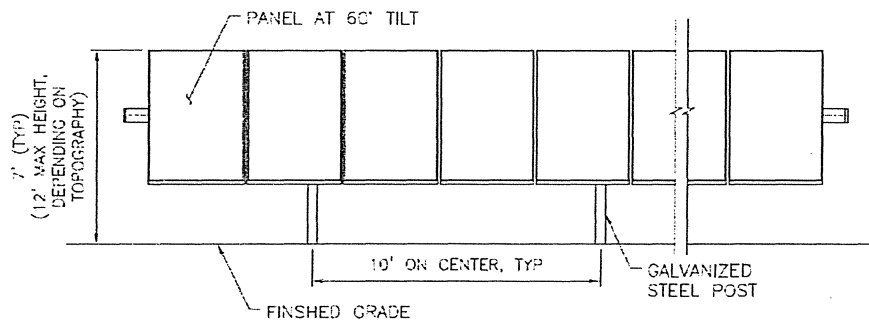


Figure 4. Solar Array Elevation Drawing

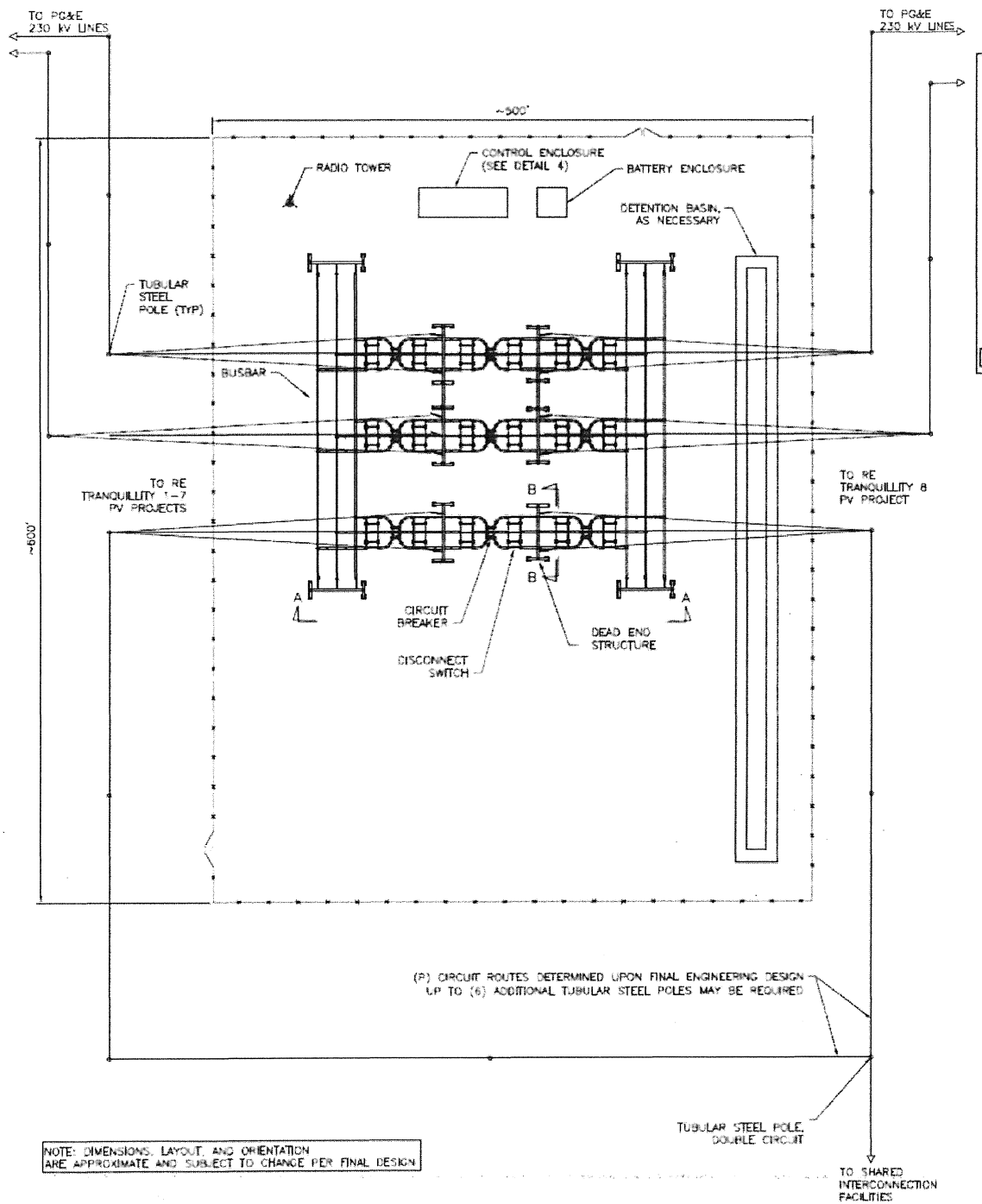


Figure 5. PG&E Switching Station Layout

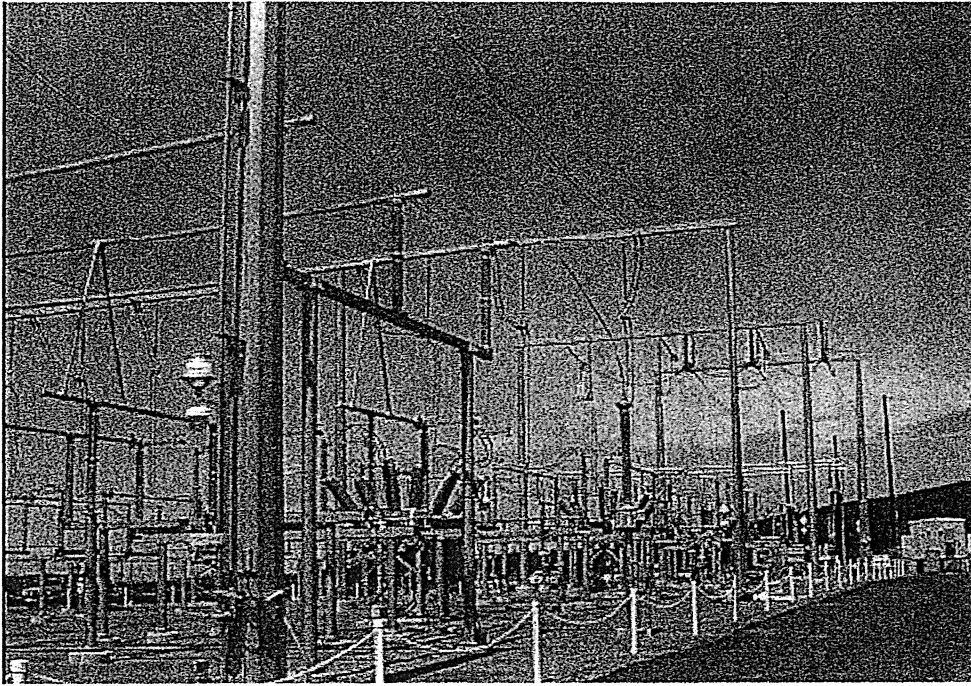


Figure 6. Photograph of Typical 230 kV Switching Station

**EXHIBIT 4**

**CEQA Findings of Fact and  
Statement of Overriding Considerations**

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# **CEQA FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS**

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## **1.0 Statement of Findings**

The findings and determinations contained herein are based on competent and substantial evidence, both oral and written, contained in the record relating to the Tranquillity Solar Generating Facility Project (Project) and the Environmental Impact Report (EIR). These findings and determinations constitute the independent findings and determinations by the County of Fresno (County) in all respects and are fully and completely supported by substantial evidence in the record as a whole.

Although the findings below identify specific pages within the Draft and Final EIRs in support of various conclusions reached below, the County incorporates by reference and adopts as its own, the reasoning set forth in both environmental documents, and thus relies on that reasoning, even where not specifically mentioned or cited below, in reaching the conclusions set forth below, except where additional evidence is specifically mentioned. The County further intends that if these findings fail to cross reference or incorporate by reference any other part of these findings, any finding required or permitted to be made by the County with respect to any particular subject matter of the Project must be deemed made if it appears in any portion of these findings or findings elsewhere in the record.

## **1.1 Introduction**

The County proposes to approve the RE Tranquillity Solar Generation Facility (Solar Facility) proposed by RE Tranquillity LLC, RE Tranquillity 2 LLC, RE Tranquillity 3 LLC, RE Tranquillity 4 LLC, RE Tranquillity 5 LLC, RE Tranquillity 6 LLC, RE Tranquillity 7 LLC, and RE Tranquillity 8 LLC (Applicants<sup>1</sup>). The Applicants have applied to the Fresno County Department of Public Works and Planning for eight Unclassified Conditional Use Permits (UCUPs) to construct, operate, maintain, and decommission solar photovoltaic (PV) electricity generating facilities and associated infrastructure (the “Solar Facility”). Construction of a new utility switching station (the “Switching Station”) is necessary to interconnect the Solar Facility to the statewide high-voltage electrical grid. While the County does not have approval authority over Switching Station, which would be owned and operated by Pacific Gas and Electric Company (PG&E) and be subject to the jurisdiction of the California Public Utilities Commission (CPUC), the environmental impacts of the Switching Station are reviewed as part of the Project.

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<sup>1</sup> The Applicants are wholly-owned subsidiaries of Recurrent Energy Development Holdings, LLC.

In accordance with the California Environmental Quality Act (CEQA) and its implementing guidelines (the "CEQA Guidelines"),<sup>2</sup> the County published the Draft Environmental Impact Report (DEIR) for the Project (EIR No. 2013111056) in May 2014. The DEIR assessed the potential environmental impacts of implementing the Project. The DEIR was circulated for public review and comment for a period of 45 days that ended July 7, 2014. In addition, a duly noticed public meeting to present the DEIR's conclusions and to receive comments on the DEIR was held on June 25, 2014. During and following the end of the review period, comments were received on the DEIR.

The County reviewed those comments to identify specific environmental concerns and to determine whether any additional environmental analysis would be required to respond to issues raised in the comments. The County determined that the comments raised no new significant issues, and responses to all substantive comments received on the DEIR were prepared and included in the Final EIR (FEIR), which was made available to the public on September 11, 2014.

Section 15132 of the CEQA Guidelines requires an FEIR to include:

- The DEIR or a revision of the draft;
- Comments and recommendations received on the DEIR either verbatim or in summary;
- A list of persons, organizations, and public agencies commenting on the DEIR;
- The responses of the lead agency to significant environmental points raised in the review and consultation process; and
- Any other information added by the lead agency.

The County has reviewed the FEIR prepared for this Project and has determined that it contains each of the items required by CEQA Guidelines Section 15132. Therefore, the County certifies that the FEIR has been completed in compliance with CEQA. Following certification of the FEIR, the County will evaluate the action it will take with regard to the Project, which could include approving the Project as proposed by the Applicants, approving the Project with modifications, approving an alternative to reflect changes or concerns identified as a result of this CEQA review, or denying the Project.

On October 9, 2014, the Fresno County Planning Commission considered and heard testimony on the Project from the Project proponents, the general public, and County staff. The Commission on XXX voted to certify the EIR and approve the Project by a vote of INSERT VOTES FOR AND AGAINST.

The documents and other materials that constitute the record of the proceedings on which the County's decision is based are located at the County of Fresno, Public Works & Planning Department, 2220 Tulare Street, 6th Floor, Fresno, California. The custodian for these documents and materials is Briza Sholars, Planner III; Fresno County Public Works and Planning Department;

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<sup>2</sup> Pub. Res. Code §21000 et seq.; 14 Cal. Code Regs. §15000 et seq.

Planning & Environmental Analysis. This information is provided in compliance with Public Resources Code Section 21081.6(a)(2) and CEQA Guidelines Section 15091(e).

## 1.2 Description of the Approved Project

### 1.2.1 Project Location

The Project site is located approximately 7 miles southwest of the community of Tranquillity, 5.5 miles east of Interstate 5, and 5 miles north of the community of Three Rocks. The Project site is comprised of approximately 3,732 acres in western unincorporated Fresno County and would encompass 39 parcels located south of West Manning, north of West Nebraska Avenue, east of South San Bernardino Avenue, and west of South San Benito Avenue. All of the parcels are within the County's jurisdictional boundaries (FEIR, p. 1-2):

### 1.2.2 Project Objectives

The Applicants have identified the following objectives for the Project (DEIR p. 2-6):

- Establish a solar PV power-generating facility of a sufficient size and configuration to produce up to 400 MW of electricity in a cost competitive manner.
- Develop previously disturbed sites in close proximity to transmission infrastructure in order to minimize environmental impacts.
- Interconnect directly to the California Independent System Operator (CAISO) high-voltage electrical transmission system (grid).
- Use proven and established PV technology that is efficient, low maintenance, and recyclable.
- Assist California utilities in meeting their obligations under California's Renewable Portfolio Standard (RPS) Program, including 25 percent of retail sales from renewable sources by the end of 2016 and 33 percent by the end of 2020.
- Assist California utilities in meeting their obligations under the CPUC's Energy Storage Framework and Design Program, including procurement targets of 470 MWs by 2016 and 1,325 MWs by 2020, by providing up to 200 MW of storage capacity.
- Facilitate grid interconnection of intermittent and variable PV generation and minimize line losses associated with off-site storage by collocating battery storage at the PV facility site.
- Assist California in meeting the greenhouse gas (GHG) emissions reduction goal by 2020 as required by the California Global Warming Solutions Act (AB 32).

### 1.2.3 Project Description

The Project as proposed and evaluated in the EIR consists of the following key components (FEIR pp. 1-2, 2-80, 2-81):

1. The Solar Facility, including:
  - a. Eight power blocks of solar arrays in different configurations (arrays include PV panels and steel support structures, electrical inverters, transformers, cabling, and other infrastructure);

- b. Eight electrical substations (one for each power block); and
  - c. Other necessary infrastructure, including up to eight permanent operation and maintenance buildings, supervisory control and data acquisition (SCADA) system, up to 200 MW of on-site energy storage, meteorological data system, buried conduit for electrical wires, overhead collection lines, a 140-foot radio tower for telecommunications, on-site access roads, and security fencing.
2. The Switching Station, including: one high-voltage 230 kV utility switching station and grid interconnection, which would interconnect the eight proposed substations to two existing 230 kV transmission lines owned and operated by PG&E; either one 100-foot radio tower or approximately 2.5 miles of buried fiber optic cable for telecommunications; and other necessary infrastructure such as a pre-fabricated control building, capacitor banks, and monopole structures. The Switching Station would be constructed within the Solar Facility, but would have separate access and security fencing. Upon completion, the Switching Station would be owned and operated by PG&E.

Fresno County, as lead agency for the Project, has discretionary authority over the primary Project proposal. To implement this Project, the Applicants would need to obtain, at a minimum, the following discretionary permits/approvals:

- Eight UCUPs.
- Approval of a parcel map application. This would be submitted to the Fresno County Public Works and Planning Department.
- Vacation of public roadway easements and offers for dedication.
- CPUC has discretionary authority over PG&E's construction and operation of the Switching Station. To construct and operate the Switching Station, PG&E would file a Notice of Construction with the CPUC.

### 1.3 Record of Proceedings

In addition to this Statement of Findings, in accordance with Public Resources Code Section 21167.6(e), the record of proceedings for the Project includes, but is not limited to, the following elements:

- The Notice of Preparation (NOP) and all other public notices issued by the County in conjunction with the Project;
- The May 2014 DEIR for the Project (State Clearinghouse No. No. 2013111056);
- The September 2014 FEIR for the Project (State Clearinghouse No. 2013111056);
- The Mitigation Monitoring and Reporting Program for the Project (Staff Report Exhibit 1);
- All reports, studies, memoranda, staff reports, or other documents related to the Project prepared by the County, or consultants to the County with respect to the County's compliance with the requirements of CEQA and with respect to the County's action on the Project;
- All documents submitted to the County by other public agencies, the Applicants or the Applicants' consultants, or members of the public in connection with the Project, up through the close of the public hearing;

- Any minutes and/or verbatim transcripts of all information sessions, public meetings, and public hearings held by the County in connection with the Project; and
- Any other materials required for the record of proceedings by Public Resources Code Section 21167.6(e).

## 1.4 Findings Required Under CEQA

These findings have been prepared in accordance with CEQA and the CEQA Guidelines. Public Resources Code Section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" Section 21002 goes on to state, "in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof."

The principles in Public Resources Code Section 21002 are implemented, in part, through the requirement that agencies must adopt findings before approving projects for which EIRs are required. Pursuant to CEQA Guidelines Section 15091, the approving agency must issue a written finding reaching one or more of three permissible conclusions for each significant environmental effect identified in an EIR for a project:

- Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.
- Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
- Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

The County's findings with respect to the Project's significant effects and mitigation measures are set forth below. The discussion below does not attempt to describe the full analysis of each environmental impact contained in the EIR. Instead, the discussion summarizes each potentially significant impact, describes the applicable mitigation measures identified in the FEIR and adopted by the County, and states the County's findings on the significance of each impact after imposition of the adopted mitigation measures. In making these findings, the County ratifies, adopts, and incorporates into these findings the analysis and explanation in the FEIR and the determinations and conclusions of the FEIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

CEQA does not require a lead agency to make individual findings for impacts that are determined to be less than significant without mitigation (CEQA Guidelines §15091(a)). Impacts associated with the Solar Facility deemed to be less than significant prior to mitigation are discussed in detail in the EIR (see, e.g., DEIR p. ES-6). For the following resources areas there either would be no impact or impacts would be less than significant:

- Agriculture and Forest Resources (including cumulative impacts)
- Geology and Soils (including cumulative impacts)
- Land Use and Planning (including cumulative impacts)
- Mineral Resources (including cumulative impacts)\_
- Public Services (including cumulative impacts)
- Population and Housing (including cumulative impacts)
- Recreation (including cumulative impacts)
- Transportation/Traffic (including cumulative impacts)
- Utilities and Service Systems (including cumulative impacts)

In addition, certain impacts on other resources were deemed to be less than significant without mitigation or no impact, despite the need for mitigation or a finding of significant and unavoidable impacts on other impacts with respect to that same resource area, as listed below:

- Aesthetics – The Solar Facility would not have a substantial adverse effect on a scenic vista (No Impact)
- Aesthetics – The Solar Facility would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (No Impact)
- Air Quality – The Solar Facility would not conflict with or obstruct implementation of the applicable air quality plan (No Impact)
- Air Quality – Construction and operation of the Solar Facility would not create objectionable odors (Impact 4.4-5)
- Biology – The Solar Facility would not have a substantial adverse impact, 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, of by CDFW or USFWS (No Impact)
- Biology – Solar Facility lighting could have a substantial adverse direct or indirect impact on special-status wildlife (Impact 4.5-2)
- Biology – The Solar Facility would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS (No Impact)
- Biology – The Solar Facility would not 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 (No Impact)
- Biology – The Solar Facility could interfere substantially with native resident or migratory wildlife corridors (Impact 4.5-6)

- Biology – The Solar Facility would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (No Impact)
- Greenhouse Gas Emissions – The Solar Facility would generate direct and indirect GHG emissions (Impact 4.9-1)
- Hazards and Hazardous Materials – The Solar Facility would not create a significant hazard to the public or the environment through reasonably foreseeably upset and accident conditions involving the release of hazardous materials into the environment (Impact 4.10-2)
- Hazards and Hazardous Materials – The project would not emit hazardous emissions or handle hazardous substances or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school (No Impact)
- Hazards and Hazardous Materials – The project would not 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 not create a significant hazard to the public or the environment (No Impact)
- Hazards and Hazardous Materials – The project is not located within an airport land use plan or within two miles of a public use airport, and so would not result in a safety hazard for people residing or working in the project area (No Impact)
- Hazards and Hazardous Materials – The project is not within the vicinity of a private airstrip, and so would not result in a safety hazard for people residing or working in the project area (No Impact)
- Hazards and Hazardous Materials – The Solar Facility could physically interfere with emergency response or evacuation routes (Impact 4.10-3)
- Hazards and Hazardous Materials – The Solar Facility would not expose structures to significant risk of loss involving wildland fires (Impact 4.10-4)
- Hydrology and Water Quality – Construction and maintenance of the Solar Facility could result in increased erosion and sedimentation and/or pollutant (e.g., fuels and lubricants) loading to surface waterways, which could increase turbidity, suspected soils, settleable solids, or otherwise decrease water quality in surface waterways (Impact 4.11-1)
- Hydrology and Water Quality - Construction and operation and maintenance of the Solar Facility could 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 (Impact 4.11-4)
- Hydrology and Water Quality – Construction and operation and maintenance of the Solar Facility could substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface run-off in a manner that could result in flooding on- or off-site (Impact 4.11-5)
- Hydrology and Water Quality – The project would not create or contribute runoff water which could exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff (No Impact)

- Hydrology and Water Quality – The project would not otherwise substantially degrade water quality (No Impact)
- Hydrology and Water Quality – The project would not 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 (No Impact)
- Hydrology and Water Quality – The project would not place within a 100-year flood hazard area structures which would impede or redirect flood flows (No Impact)
- Hydrology and Water Quality – The project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (No Impact)
- Hydrology and Water Quality – The project would not expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow (No Impact)
- Noise – Solar Facility activities could expose people and/or structures to vibration levels (Impact 4.14-2)
- Noise – Solar Facility construction and decommissioning activities would temporarily increase local ambient noise levels (Impact 4.14-4)
- Noise – The Solar Facility would not be located within an airport land use plan or, within two miles of a public airport or public use airport, exposing people residing or working in the project area to excessive noise levels (No Impact)
- Noise – The Solar Facility would not be located within the vicinity of a private airstrip, exposing people residing or working in the project area to excessive noise levels (No Impact)
- Cumulative impacts to cultural and paleontological resources
- Cumulative impacts to hazards and hazardous materials
- Cumulative impacts to greenhouse gas emissions
- Cumulative impacts to noise

The Switching Station would have less than significant impacts on all environmental resources and no mitigation would be required (DEIR p. ES-6; FEIR p. 2-74).

## Findings of Fact

The County has reviewed the FEIR, which contains responses to comments on the DEIR, any text changes to the DEIR, and additional information. The County also has considered the entire record for this Project (see Section 1.3 of these Findings of Fact). On the basis of this review, and because Findings of Fact are not required to be made for the Switching Station, the County hereby makes the following Findings of Fact regarding the significant effects of the Solar Facility pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15091.



### 1.4.1 Aesthetics Impacts:

#### **Impact 4.2-1: The Solar Facility would substantially degrade the existing visual character and quality of the site and its surroundings.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081 (a)(1); 14 Cal. Code Regs §15091(a)(1)).

However, specific economic, legal, social, technological, or other considerations as specified in Section 2 below of these findings make infeasible the mitigation measures or alternatives identified in the EIR (Pub. Res. Code §21081(a)(3); 14 Cal. Code Regs. §15091(a)(3)).

**Facts in Support of Finding:** The County adopts the following mitigation measures, but finds that no feasible mitigation can reduce the adverse impact of the Solar Facility to a less-than-significant level. Project components, including the Solar Facility's fencing and solar panels, would be visible and visually obtrusive from the viewpoint of motorists looking northeast from State Route 33, a primary area of visibility (described at DEIR p. 4.2-26). The height of the solar panels could create an enclosed feeling in an expansive landscape with low-lying vegetation. Due to the introduction of solar panels, collector line poles and conductors, and a chain link security fence, which are geometric forms that are more vertical and obstructive to the surrounding rural scenery in comparison to existing agricultural activities, the County finds that, even when combined with the mitigation measures below, the Solar Facility's impact on the visual character of the site and its surroundings is significant and unavoidable. Impacts that would result from proposed power lines and poles would be reduced with the implementation of **Mitigation Measures 4.2-1 to 4.2-4** but would remain significant and unavoidable. The use of additional landscaping for screening would not be entirely effective in reducing impacts due to the height of structures and would not be feasible due to the non-irrigation covenant<sup>3</sup> on the Project site. The following mitigation measures are required in order to minimize views of the solar panels, collector line poles and conductors, and a chain link security fence, which were identified as the primary source of potential aesthetic impacts (DEIR p. 4.2-28).

Beyond the mitigation identified below, no feasible mitigation measures were identified that reduce the potential impact to a less-than-significant level. To the extent that this impact will not be substantially lessened or avoided, the County finds that specific economic, social and other considerations identified in the Statement of Overriding Considerations (Section 2) support certification of the EIR and approval of the Project.

#### **Mitigation Measure 4.2-1:**

*The Solar Facility operator, to the extent commercially feasible, shall underground electrical collection systems to reduce the random tall vertical lines created by electrical poles.*

<sup>3</sup> See DEIR pages 2-2 and 4.2-28 and DEIR Appendix J regarding the prohibition on irrigation.

**Mitigation Measure 4.2-2:**

*The Solar Facility operator shall clear debris from the Project area at least four times per year; this can be in conjunction with regular panel washing and site maintenance activities.*

**Mitigation Measure 4.2-3:**

*The Solar Facility operator shall apply appropriate treatments to structures, as approved by the Fresno County Public Works and Planning Department. Solar Facility structures include buildings, electrical enclosures, and inverters. Paints having little or no reflectivity shall be used whenever possible. Grouped structures shall be painted the same color to reduce visual complexity and color contrast. The choice of color treatments shall be based on the appearance at typical viewing distances and consider the entire landscape around the proposed development as it would be viewed from publically accessible locations. Appropriate colors for smooth surfaces often need to be two to three shades darker than the background color to compensate for shadows that darken most textured natural surfaces. Examples of the color contrast created by exposed metal and untreated inverters are shown on Figure 4.2-20.*

**Mitigation Measure 4.2-4:**

*Prior to the commencement of operations, the Solar Facility operator shall submit a landscape revegetation plan for the Solar Facility site. The plan shall include the requirement that a native seed mix shall be spread under the solar panels as needed to establish ground cover. The seed mix shall be determined through consultation with local experts and shall be approved by the Fresno County Public Works and Planning Department prior to planting. The plan must include a timeline for seeding the Project site, and limitations on guarantee of revegetation success should be considered due to the lack of irrigation available on the Project site.*

**Impact 4.2-2: The Solar Facility could create a new source of light and glare that could adversely affect day and nighttime views in the area.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects of the impact to less than significant. Light and glare, in the form of an environmental impact, typically is associated with bright light emanating from a project site and illuminating adjacent properties during nighttime hours. In this case, construction of the Solar Facility generally would be undertaken during daylight hours; night work is not proposed other than electrical connection of PV panels; therefore construction lighting would not illuminate nighttime view. Minimal glare from reflection off construction equipment, representing a small surface area, would be temporary. During operation, the Solar Facility would include illumination for normal working conditions and security lighting. Motion sensor sight would be designed to provide the minimum illumination needed to achieve safety and security objectives. All lighting would be designed in accordance with applicable County requirements. (DEIR p. 4.2-32; FEIR pp. 2-44, 2-48). Potential impacts resulting from lighting would be minimized through compliance with all development standards and the implementation of the following mitigation measure will

further minimize the potential for spillover lighting to adversely affect residents and motorists to less than significant. During operation, the reflection of sunlight off the surfaces of the solar panels would be the primary source of potential glare from the Project (DEIR p. 4.2-33; FEIR pp. 2-44, 2-80, 2-123, 2-135). Potential design features including a fixed-tilt system or single axis tracking system would ensure the reflection would be toward the light source or back into the atmosphere away from receptors on the ground.

**Mitigation Measure 4.2-5:**

*Project facility lighting shall be designed to provide the minimum illumination needed to achieve safety and security objectives. All lighting shall be directed downward and shielded to focus illumination on the desired areas only and avoid light trespass into adjacent areas. Lenses and bulbs shall not extend below the shields.*

**1.4.2 Air Quality Impacts:**

**Impact 4.4-1: The Solar Facility would violate an air quality standard or contribute substantially to an existing or projected air quality violation.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

However, specific economic, legal, social, technological, or other considerations as specified in Section 2 below of these findings make infeasible the mitigation measures or alternatives identified in the EIR (Pub. Res. Code §21081(a)(3); 14 Cal. Code Regs. §15091(a)(3)).

**Facts in Support of Finding:** The County adopts the following mitigation measures, but finds that no feasible mitigation can reduce the Solar Facility construction and decommissioning generated criteria pollutant emissions to less than significant. Estimated construction emissions associated with the Solar Facility in Year 1 would exceed the annual San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds of significance for PM10, ROG, NOx, CO, and PM2.5. Solar Facility construction in Year 2 would result in exceedances of the NOx and PM10 thresholds (DEIR p. 4.4-12; FEIR pp. 2-124, 2-315, 2-319, 2-320). The SJVAPCD has identified PM10 as the pollutant of greatest concern for construction-related emissions. Mitigation would reduce these impacts but would not prevent an exceedance of the SJVAPCD thresholds and impacts of Solar Facility construction would remain significant and unavoidable.

The following mitigation addresses fugitive dust emissions by implementing measures such as watering, limiting vehicle speed, creating and implementing a Dust Control Plan, and limiting construction in windy conditions (Regulation VIII), and reducing exhaust emissions from construction equipment greater than 50 horsepower by 20 percent below statewide average NOx emissions and 45 percent below statewide average PM10 emissions (Rule 9510). Implementation of these mitigation measures would reduce emissions but would not prevent an exceedance of the SJVAPCD threshold and construction impacts under this criterion would remain significant and unavoidable for the Solar Facility. Beyond the mitigation measures identified below, no feasible mitigation measures have been identified that reduce the impact to a less-than-significant level. To the extent that this impact will not be substantially lessened or avoided, the County finds that specific

economic, social and other considerations identified in the Statement of Overriding Considerations (Section 2) support certification of the EIR and approval of the Project.

**Mitigation Measure 4.4-1a: Solar Facility Fugitive Dust Control Measures.**

*Prior to grading on site, the Applicants shall submit a Solar Facility Fugitive Dust Control Plan to the SJVAPCD for review and approval. The Fugitive Dust Control Plan shall be applicable to only the construction and decommissioning phases and shall meet the requirements in Table 8021-1 and incorporate the Regulation VIII recommended fugitive dust control measures to reduce  $PM_{10}$  emissions to the extent practical, including but not limited to:*

- *All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.*
- *Stockpiles of excavated soils on the Solar Facility site shall be wetted during daily construction activities and shall be covered at the end of each workday, during weekends, and periods of extended storage.*
- *All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.*
- *All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water, dust palliatives, or by presoaking.*
- *When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.*
- *All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.*
- *Use of blower devices is expressly forbidden.*
- *Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.*
- *Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.*
- *Limit traffic speeds on unpaved roads to 15 mph.*
- *Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope toward the road of greater than one percent.*
- *Install wind screens (fabric incorporated into fencing) at the windward side of active construction areas.*
- *Suspend excavation and grading activity if dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or off-site property.*

- *After active clearing, grading, and earth moving is completed within any portion of the site, the following dust control practices shall be implemented:*
  - *Once initial leveling and vegetation removal has been completed within a given area, that portion of the site shall be immediately treated with a dust suppressant (water or palliative).*
  - *Dependent on specific site conditions (season and wind conditions), revegetation shall occur in those areas where planned as soon as practical.*
  - *All unpaved road areas shall be treated with a dust suppressant or graveled as soon as possible to prevent excessive dust.*

**Mitigation Measure 4.4-1b: Solar Facility Construction/Decommissioning Equipment Exhaust Control Measures.**

- *During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications. Equipment maintenance records and equipment design specification data sheets shall be kept onsite during construction.*
- *Electricity from power poles shall be used whenever practicable instead of temporary diesel or gasoline powered generators to reduce the associated emissions.*
- *To reduce construction vehicle (truck) idling while waiting to enter/exit the site, the contractor shall submit a traffic control plan that will describe in detail safe detours to prevent traffic congestion to the best of the Solar Facility's ability, and provide temporary traffic control measures during construction activities that will allow both construction and on-street traffic to move with less than 5-minute idling times.*
- *Construction equipment will use only California certified diesel or gasoline fuels.*
- *The Applicant will utilize construction equipment that is at the Tier 3 emission level (Appendix E).*

**Mitigation Measure 4.4-1c: Valley Fever Training.**

*Prior to ground disturbance activities, the project operator shall provide evidence to the Fresno County Public Works and Planning Department that the project operator and/or construction manager has developed a "Valley Fever Training Handout," training, and schedule of sessions for education to be provided to all construction personnel. All evidence of the training session materials, handout(s), and schedule shall be submitted to the Fresno County Public Works and Planning Department within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews will come to the site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Fresno County Public Works and Planning Department regarding the "Valley Fever Training Handout," and Session(s) shall include the following:*

- a) *A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session.*
- b) *Distribution of a written flier or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever.*

- c) *Training on methods that may help prevent Valley Fever infection.*
- d) *A demonstration to employees on how to use personal protective equipment, such as respiratory equipment (masks), to reduce exposure to pollutants and facilitate recognition of symptoms and earlier treatment of Valley Fever. Though use of the equipment is not mandatory during work, the equipment shall be readily available and shall be provided to employees for use during work, if requested by an employee. Proof that the demonstration is included in the training shall be submitted to the County. This proof can be via printed training materials/agenda, DVD, digital media files, or photographs.*

*Prior to the Notice to Proceed for decommissioning, the project operator will follow the above process for all decommissioning work.*

**Impact 4.4-2: The Solar Facility would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is in non-attainment under applicable federal and state ambient air quality standards (including releasing emissions which exceed quantitative thresholds for ozone precursors).**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

However, specific economic, legal, social, technological, or other considerations as specified in Section 2 below of these findings make infeasible the mitigation measures or alternatives identified in the EIR (Pub. Res. Code §21081(a)(3); 14 Cal. Code Regs. §15091(a)(3)).

**Facts in Support of Finding:** The County adopts the following mitigation measures, but finds that no feasible mitigation can reduce the adverse impact to less than significant. The San Joaquin Valley Air Basin is currently classified as non-attainment for the 1-hour state ozone standard as well as for the federal and state 8-hour standards. Additionally, the Air Basin is classified as non-attainment for the state 24-hour and annual arithmetic mean PM10 standards as well as the state annual arithmetic mean and the national 24-hour PM2.5 standards. The Air Basin is unclassified or classified as attainment for all other pollutants standards (DEIR p. 4.4-5). Solar Facility construction and decommissioning emissions would exceed applicable significance thresholds for ROG, NOx, PM10, and PM2.5 criteria pollutants and ozone precursors (ROG and NOx); therefore the impacts of the Solar Facility would be cumulatively considerable.

The following mitigation measures address fugitive dust emissions by requiring watering, limiting vehicle speed, creating and implementing a Dust Control Plan, and limiting construction in windy conditions (Regulation VIII), and the reduction of exhaust emissions from construction equipment greater than 50 horsepower by 20 percent below statewide average NOx emissions and 45 percent below statewide average PM10 emissions (Rule 9510). Implementation of these mitigation measures would reduce emissions but would not prevent an exceedance of the SJVAPCD threshold and the Solar Facility's construction impacts would remain significant and unavoidable. Beyond the mitigation identified below, no feasible mitigation measures have been identified that reduce the impact to a less-than-significant level. To the extent that this impact will not be substantially lessened or avoided, the County finds that specific economic, social and other

considerations identified in the Statement of Overriding Considerations (Section 2) support certification of the EIR and approval of the Project.

**Mitigation Measures:**

- Mitigation Measure 4.4-1a: Solar Facility Fugitive Dust Control Measures.
- Mitigation Measure 4.4-1b: Solar Facility Construction/Decommissioning Equipment Exhaust Control Measures.
- Mitigation Measure 4.4-1c: Valley Fever Training

**Impact 4.4-3: The Solar Facility would expose sensitive receptors to substantial pollutant concentrations.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects of the impact to a less-than-significant level. The Solar Facility is not anticipated to result in a significant exposure risk to Diesel Particulate Matter (DPM), in part because of the large area within which project construction would occur relative to the fixed location of sensitive receptors. The Project would use construction equipment that is at the Tier 3 emission level. The following mitigation addresses fugitive dust emissions by implementing measures such as watering, limiting vehicle speed, creating and implementing a Dust Control Plan, and limiting construction in windy conditions (Regulation VIII), and reducing exhaust emissions from construction equipment greater than 50 horsepower by 20 percent below statewide average NOx emissions and 45 percent below statewide average PM10 emissions (Rule 9510).

**Mitigation Measures:**

- Mitigation Measure 4.4-1a: Solar Facility Fugitive Dust Control Measures.
- Mitigation Measure 4.4-1b: Solar Facility Construction/Decommissioning Equipment Exhaust Control Measures.
- Mitigation Measure 4.4-1c: Valley Fever Training.

**Impact 4.4-4: Solar Facility construction and decommissioning activities could potentially expose local sensitive receptors and San Joaquin kit fox, a federally- and state-listed species, to *Coccidioides immitis* spores.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Construction activities that include ground disturbance can result in fugitive dust, which can cause fungus *Coccidioides* spores to become airborne if they are present in the soil. Because ground disturbance in the County

is ongoing and the number of cases of Valley Fever reported in the County is low each year, and as independently enforceable protections of worker safety and healthy are in place, the risk is low that fugitive dust caused by the Project would cause substantial adverse effects on human beings. However, because the potential consequences of contracting Valley Fever are high (potentially including death), the County conservatively concludes that Solar Facility-related fugitive dust could cause a significant impact (DEIR p. 4.4-20; FEIR pp. 2-11, 2-306, 2-321). The following mitigation measure addresses fugitive dust emissions by implementing measures such as watering, limiting vehicle speed, creating and implementing a Dust Control Plan, and limiting construction in windy conditions (Regulation VIII), and would ensure that fugitive dust that could contain *coccidioides immitis* spores would be controlled to the maximum extent feasible. With the implementation of this mitigation, Valley Fever-related impacts to humans and wildlife would be less than significant.

**Mitigation Measures:**

- Mitigation Measure 4.4-1a: Solar Facility Fugitive Dust Control Measures.
- Mitigation Measure 4.4-1c: Valley Fever Training

### 1.4.3 Biological Resources Impacts:

**Impact 4.5-1: The Project could have a substantial adverse direct or indirect impact on San Joaquin kit fox.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects of the impact to a less-than-significant level. Surveys for San Joaquin kit fox did not detect this species or sign thereof on the Project site or immediate vicinity and the Project site is considered low quality foraging habitat due to agricultural uses and the low density of prey species. Therefore, San Joaquin kit fox is not expected to occur on the Project site or immediate vicinity on a regular basis. However, as the Project site is within potentially suitable habitat that this species could occasionally cross, the potential exists for San Joaquin kit foxes to occur sporadically within the Project site or immediate vicinity prior to or during construction. If present during construction activities, the Solar Facility would have the potential to directly (e.g., through mortality or injury) or indirectly (e.g., by altering prey abundance) impact the species. (DEIR p. 4.5-16; FEIR pp. 2-44, 2-46, 2-47). The following mitigation measures will be implemented to ensure that construction-related impacts to resident or transient San Joaquin kit foxes are less than significant.

**Mitigation Measure 4.5-1a: Preconstruction San Joaquin kit fox Surveys.**

*Preconstruction surveys shall be conducted by a qualified biologist for the presence of San Joaquin kit fox dens within 14 days prior to commencement of construction activities. The surveys shall be conducted in areas of suitable habitat for San Joaquin kit fox. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur within 14 days prior to that portion of the Solar Facility site is*



*disturbed. Surveys shall utilize the U.S. Fish and Wildlife Service (1999a) San Joaquin Kit Fox Survey Protocol for the Northern Range. If no potential San Joaquin kit fox dens are present, no further mitigation is required under this measure. If potential dens are observed and avoidance is determined to be feasible by a qualified biologist in consultation with the Project Owner and the County (as defined in CEQA Guidelines §15364 consistent with the USFWS (1999) Standardized Recommendations for Protection of the San Joaquin Kit Fox), the following minimum buffer distances shall be established prior to construction activities:*

- *San Joaquin kit fox potential den: 50 feet.*
- *San Joaquin kit fox active den: 100 feet.*
- *San Joaquin kit fox natal den: 500 feet.*

*If avoidance of the potential dens is not feasible, the following measures are required to avoid potential adverse effects to the San Joaquin kit fox:*

- *If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers or foxes from re-using them during construction.*
- *If the qualified biologist determines that potential a non-natal den may be active, an on-site passive relocation program may be implemented with prior concurrence from the USFWS. This program shall consist of excluding San Joaquin kit foxes from occupied burrows by installation of one way doors at burrow entrances, monitoring of the burrow for one week to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the San Joaquin kit foxes have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction.*

**Mitigation Measure 4.5-1b: Solar Facility Construction Worker Environmental Awareness Program.**

*Prior to the issuance of grading or building permits and for the duration of construction activities, within one week of employment all new construction workers at the Project site shall attend a Construction Worker Environmental Awareness Program, developed and presented by the Lead Biologist (a pre-recorded video presentation will suffice). Any employee responsible for the operation and maintenance or decommissioning of the completed facilities shall also attend/watch the Construction Worker Environmental Awareness Program. The program shall include information on the life history of the San Joaquin kit fox and shall also describe other special-status wildlife species that may occur on-site, including burrowing owl and Swainson's hawk.*

*The program shall also discuss each species' legal protection status, the definition of "take" under the federal and state Endangered Species Acts, measures the Solar Facility operator is implementing to protect the species, reporting requirements, specific measures that each worker shall employ to avoid take of wildlife species, and penalties for violation of the federal or state Endangered Species Act. An acknowledgement form signed by each worker indicating that environmental training has been completed would be kept on record. A sticker shall be placed on hard hats indicating that the worker has completed the environmental training. Construction workers shall not be permitted to operate equipment*

*within the construction areas unless they have attended the training and are wearing hard hats with the required sticker. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms shall be submitted to Fresno County Public Works and Planning Department. The construction crews and contractor(s) shall be responsible for unauthorized impacts from construction activities to sensitive biological resources that are outside the areas defined as subject to impacts by Solar Facility permits.*

**Mitigation Measure 4.5-1c: Avoidance and Protection of Biological Resources.**

*During construction, operation and maintenance, decommissioning of the Solar Facility, the Solar Facility operator and/or contractor shall implement the following general avoidance and protective measures to protect San Joaquin kit fox and other special-status wildlife species:*

- *All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid special status species where possible. Construction-related activities outside of the impact zone shall be avoided.*
- *The Solar Facility operator shall limit the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. These areas shall be flagged and disturbance activities, vehicles, and equipment shall be confined to these flagged areas.*
- *Spoils shall be stockpiled in disturbed areas that lack native vegetation. Best Management Practices shall be employed to prevent erosion in accordance with the Project's approved Stormwater Pollution Prevention Plan. All detected erosion shall be remedied within two days of discovery or as described in the Stormwater Pollution Prevention Plan.*
- *To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches with a 2-foot or greater depth shall be covered with plywood or similar materials at the close of each working day, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected by the Lead Biologist or approved biological monitor for trapped animals. Open trenches, holes, or excavations that could trap wildlife shall be inspected daily by the environmental compliance monitor. If trapped animals are observed, the Lead Biologist shall be notified and escape ramps or structures shall be installed immediately to allow escape. If a listed species is trapped, the USFWS and/or CDFW shall be contacted immediately.*
- *All construction pipes, culverts, or similar structures with a 4-inch or greater diameter that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until the Lead Biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated by the Lead Biologist. The Lead Biologist shall have the appropriate state or federal permits necessary to capture and/or relocate non-listed special-status species*

*potentially occurring on the Project site. Capture and/or relocation of a state or federally listed species shall not occur without prior consultation with, and approval from, the applicable resource agencies.*

- *No vehicle or equipment parked on the Solar Facility sites shall be moved prior to inspecting the ground beneath the vehicle or equipment for the presence of wildlife. If present, the animal shall be left to move on its own.*
- *Vehicular traffic to and from the Solar Facility sites shall use existing routes of travel. Cross country vehicle and equipment use outside of the Project properties shall be prohibited.*
- *A speed limit of 20 miles per hour shall be enforced within all Solar Facility areas during construction.*
- *A long-term trash abatement program shall be established for construction, operations, and decommissioning of the Solar Facility. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to wildlife such as common raven (*Corvus corax*), coyote (*Canis latrans*), and feral dogs.*
- *Workers shall be prohibited from bringing pets and firearms to the Solar Facility area and from feeding wildlife.*
- *Intentional killing or collection of any special-status wildlife species shall be prohibited.*
- *Fencing of the Solar Facility site shall incorporate wildlife-friendly fencing design. Fencing plans may use one of several potential designs that would allow SJKF to pass through the fence while still providing for Solar Facility security and exclusion of other unwanted species (i.e., domestic dogs and coyotes). Raised fences or fences with entry/exit points of at least 6 inches in diameter spaced along the bottom of the fence to allow species such as San Joaquin kit fox access into and through the Solar Facility site would be appropriate designs.*

**Impact 4.5-3: The Solar Facility could have a substantial adverse direct or indirect, non-collision-related impact on burrowing owl, Swainson's hawk, and other raptors.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to less than significant. Project surveys conducted in 2013 and 2014 observed burrowing owl on and immediately adjacent to the Project site. However, the site does not include features needed for long-term habitation, as it lacks safeguarded berms, ditches, or other areas along the margins of agricultural fields that are not subject to regular tilling. The presence of ground squirrel burrows, which burrowing owl often use, on the Project site presents the potential for site occupancy prior to construction. Thus, the development of the Solar Facility could result in impacts through nest destruction or the loss of owls within burrows.

Suitable nesting locations for raptors, including Swainson's hawk, red-tailed hawk, and American kestrel, include trees and artificial structures such as transmission poles that occur on the Project site and immediate vicinity. If raptors were present on or near the site during construction activities, the Solar Facility has the potential to directly impact individuals through mortality or injury related to collision with Project infrastructure. Any adverse impacts, either direct or indirect, to Swainson's hawk or other raptors as a result of the Project would be considered significant. The following mitigation measures will be implemented to ensure that impacts on burrowing owls, Swainson's hawk and other raptors are less than significant.

**Mitigation Measure 4.5-3a: Preconstruction Burrowing Owl Surveys.**

*Prior to the initiation of equipment staging or ground-disturbing activities, biological surveys shall be performed within 14 days of such activities to ensure that burrowing owls are not impacted by construction activities. Given the large size of the construction site, multiple or ongoing burrowing owl surveys may be required during successive phases of the Project (e.g., between successive construction in different areas). To protect burrowing owls, the following conditions shall be met prior to construction within each successive work area:*

- *A qualified wildlife biologist (i.e., a wildlife biologist with previous burrowing owl survey experience) shall conduct pre-construction surveys on the Solar Facility site and immediate vicinity only in areas of the site with suitable burrowing habitat to locate any active breeding or wintering burrowing owl burrows no fewer than 14 days prior to ground-disturbing activities (i.e., vegetation clearance, grading, tilling). The survey methodology shall be consistent with the methods outlined in the CDFW (2012) Staff Report on Burrowing Owl Mitigation and shall consist of walking parallel transects 7 to 20 meters apart, noting any potential burrows with fresh burrowing owl sign or presence of burrowing owls. As each burrow is investigated, biologists shall also look for sign of San Joaquin kit fox. Copies of the survey results shall be submitted to CDFW and the Fresno County Public Works and Planning Department. The surveys can be conducted concurrently with San Joaquin kit fox surveys.*
- *If burrowing owls are detected on-site, no ground-disturbing activities, such as vegetation clearance or grading, shall be permitted within a buffer of no fewer than 200 meters (660 feet) from an active burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW with the exception noted below. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with CDFW.*
- *The Project site shall be resurveyed to locate any breeding or wintering burrowing owls in the event that ground disturbing construction activities lapse for a period of 14 days after the most recent preconstruction survey.*
- *If burrow avoidance is infeasible during the non-breeding season, a qualified biologist shall implement a passive relocation program in accordance the CDFW (2012) Staff Report on Burrowing Owl Mitigation.*

- *If passive relocation is required, a qualified biologist shall prepare a Burrowing Owl Exclusion and Mitigation Plan and Mitigation Land Management Plan in accordance with CDFW 2012 Staff Report on Burrowing Owl Mitigation and for review by CDFW prior to passive relocation activities. The Mitigation Land Management Plan shall include a requirement for the permanent conservation of off-site Burrowing Owl Passive Relocation Compensatory Mitigation.*
- *Burrowing Owl Passive Relocation Compensatory Mitigation. If passive relocation is required, the Project proponent shall implement the Mitigation Land Management Plan and permanently conserve in a conservation easement off-site habitat suitable for burrowing owl at ratio of 6 acres per passively relocated burrowing owl pair, not to exceed the size of the final project footprint. Land identified to mitigate for passive relocation of burrowing owl may be combined with other off-site mitigation requirements of the Project if the compensatory habitat is deemed suitable to support the species. The Passive Relocation Compensatory Mitigation habitat shall be approved by CDFW. If the Project is located within the service area of a CDFW-approved burrowing owl conservation bank, the Project proponent may purchase available burrowing owl conservation bank credits in lieu of placing off-site habitat into a conservation easement.*

#### **Mitigation Measure 4.5-3b: Nesting Birds and Raptors:**

*If construction is scheduled to commence during the non-nesting season (September 1 to January 31) within a given construction area (e.g., Power Block), no preconstruction surveys or additional measures are required for nesting birds and raptors within that specific construction area. To avoid impacts to nesting birds in the Project site and immediate vicinity, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the Project sites for ground-disturbing activities that are initiated during the breeding season (February 1 to August 31). The survey for special-status raptors shall focus on potential nest sites (e.g., mature trees) within a 0.5-mile buffer around the site in areas where access to neighboring properties is available or visible using a spotting scope. Surveys shall be conducted no more than 14 days prior to construction activities. Surveys need not be conducted for the entire Project site at one time; they may be phased so that surveys occur shortly before a portion of the Project site is disturbed. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (e.g., 300 feet for common raptors; 0.5 mile for Swainson's hawk; 100 feet for passerines) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). Construction within 0.5 mile of currently or recently active Swainson's hawk nest sites shall not occur during the nesting season without authorization by the CDFW. Encroachment into the buffer may occur at the discretion of a qualified biologist except that encroachment into the buffer for Swainson's hawk must be authorized by the CDFW.*

**Impact 4.5-4: The Project could have a substantial adverse direct or indirect, non-collision-related impact on nesting and migratory birds.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Several bird species, including several that are protected under the California Fish and Game Code (Fish and Game Code §2050 et seq.) and the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.), were observed on and adjacent to the site during Project surveys. Solar Facility-related impacts on nesting birds unrelated to collision could include mortality of individuals by crushing and destruction of nests and eggs through clearing and grading activities. Additional indirect impacts could include interference with reproductive success and nest abandonment brought on by increased noise levels during construction within the breeding season (January 15 through August 31). The installation of buildings and other structures could provide new perches for predators, such as ravens and raptors, which could contribute to declines in local bird populations. (DEIR p. 4.5-22; FEIR pp. 2-45, 2-125). The following mitigation measures will be implemented to ensure that impacts on nesting and migratory birds are less than significant.

**Mitigation Measures:**

- Mitigation Measure 4.5-3a: Preconstruction Burrowing Owl Surveys.
- Mitigation Measure 4.5-3b: Nesting Birds and Raptors.

**Impact 4.5-5: The Project could have a substantial adverse impact to special-status and migratory birds related to the introduction of potential collision hazards.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. During both daytime and nighttime activity, special-status and migratory birds could collide with Project infrastructure, including solar panels and gen-tie lines, beginning when Project structures are erected during construction and remaining until they are removed during decommissioning. Mitigation measures that require collision-minimizing design features to be incorporated into gen-tie line designs thereby reduce the likelihood of bird collisions and electrocutions with these structures to a less-than-significant level. Existing data suggests the possibility that the Solar Facility's solar panels could attract common and special-status migratory bird species, including water birds, to the site that might not otherwise be expected to occur there, where they could be at risk of collision with Project infrastructure (DEIR p. 4.5-23; FEIR pp. 2-45, 2-46, 2-63, 2-70, 2-71). While not expected, it is possible that the Solar Facility's panels could attract birds, including water birds, to the site and, thereby, expose them to significant collision-related risks. To address the uncertainty that exists around this issue, and to assure that any ecologically significant impacts are mitigated to the extent feasible, mitigation measures include the implementation of a Collision Reduction Strategy.

**Mitigation Measure 4.5-5a:**

*Would require compliance with the Avian Power Line Interaction Committee's (APLIC) guidance, Reducing Avian Collisions with Power Lines: State of the Art in 2012 (APLIC, 2012). Transmission lines and all electrical components shall be designed, installed, and maintained in accordance with APLIC (2012) guidance to reduce the likelihood of large bird electrocutions and collisions. Compliance with APLIC standards would reduce the potential impact of collisions and electrocutions with power line structures to a less than significant level.*

**Mitigation Measure 4.5-5b: Collision Reduction Strategy.**

*The Applicant shall implement the following measures to reduce the risk of bird collisions with PV panels.*

- *Installation of visual deterrents or cues to encourage bird avoidance of the Project site. These deterrents will be made of a material that is both reflective and highly visible, such that the material reflects ambient light and is stimulated by air movement. The effect of installation will create the visual impression of continuous and varied movement, which has been shown as an avian deterrent in agricultural applications. Example of the types of material that could be used include plastic compact discs and reflective tape. Within 30 days after project commissioning, materials will be installed in 50-acre blocks to achieve coverage of a total of 200 acres within the Solar Facility on a 3-month trial basis to examine panel performance issues. Following the initial 3-month period, visual deterrents will either be adjusted to reduce performance issues and reexamined on continuing 3-month basis, or if adjustments are not deemed necessary to improve panel performance, deployed on the remainder of the site and maintained for the life of the project or until determined infeasible (based on the definition of "feasible" in CEQA Guidelines §15364) or ineffective by the Project owner in consultation with CDFW and the County.*
- *Panels shall include, if feasible, a light-colored, UV-reflective, or otherwise non-polarizing outline, frame, grid, or border, which has been shown to substantially reduce panel attractiveness to aquatic insects (Horvath, 2010) and may reduce avian mortality by avoiding collisions with panel faces (NFL, 2014).*

**Impact 4.5-7: The Solar Facility could conflict with local policies protecting biological resources.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Fresno County General Plan Goal OS-E contains policies protecting wildlife habitat (DEIR p. 4.5-27). Implementation of preconstruction wildlife surveys, environmental training, and wildlife avoidance and protection measures would avoid or minimize potential impacts to these species and ensure compliance with General Plan Goal OS-E. Therefore, the Solar Facility would not conflict with General Plan Goal OS-E.

**Mitigation Measures:**

- Mitigation Measure 4.5-1a: Preconstruction San Joaquin kit fox Surveys.
- Mitigation Measure 4.5-1b: Solar Facility Construction Worker Environmental Awareness Program.
- Mitigation Measure 4.5-1c: Avoidance and Protection of Biological Resources.
- Mitigation Measure 4.5-3a: Preconstruction Burrowing Owl Surveys.
- Mitigation Measure 4.5-3b: Nesting Birds and Raptors.

**1.4.4 Cultural and Paleontological Resources Impacts:**

**Impact 4.6-1: The Solar Facility could cause a substantial adverse change in the significance of a historical or archaeological resource, as defined in CEQA Guidelines §15064.5.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Construction of the Solar Facility could impact previously unknown, buried archaeological resources. Although overall there is a low probability of significant prehistoric resources existing within the Project site, there nevertheless exists the possibility that buried archaeological resources may be encountered during ground disturbing activities (DEIR p. 4.6-16). Retention of a qualified archaeologist and cultural resources awareness training, and establishing procedures in the event of inadvertent discovery of archaeological materials, impacts to historical and unique archaeological resources from construction of the Project would mitigate impacts to a less-than-significant level.

**Mitigation Measure 4.6-1:**

*The Project proponent shall retain a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior, 2012), to carry out all mitigation measures related to archaeological and historical resources.*

*Prior to the start of any ground disturbing activities, the Project owner shall ensure that the qualified archaeologist has conducted a Cultural Resources Awareness Training for all construction personnel working on the Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified archaeologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of archaeological resources. A sign-in sheet shall be completed and retained to demonstrate attendance at the awareness training.*

**Mitigation Measure 4.6-2:**

*In the event archaeological materials are encountered during the course of grading or construction, the Project contractor shall cease any ground disturbing activities within*



*50 feet of the find. The qualified archaeologist shall evaluate the significance of the resources and recommend appropriate treatment measures. Per CEQA Guidelines §15126.4(b)(3)(A), project redesign and preservation in place shall be the preferred means to avoid impacts to significant archaeological sites. Consistent with CEQA Guidelines §15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures. The County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature. Archaeological materials recovered during any investigation shall be curated at an accredited curational facility. The qualified archaeologist shall prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the County and to the Southern San Joaquin Valley Information Center. Construction can recommence based on direction of the qualified archaeologist.*

**Impact 4.6-2: The Solar Facility could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. While no paleontological resources were discovered during the course of the archaeological and historical resources survey of the Project site, the possibility that such resources exist on the site cannot be completely ruled out; therefore, the impact is potentially significant (DEIR p. 4.6-18; see also FEIR p. 2-83 regarding Applicant-proposed clarifications of the specialized training that would occur for all construction personnel prior to the start of any ground-disturbing activities). The following mitigation measures render the impact less than significant.

**Mitigation Measure 4.6-3:**

*The Project proponent shall retain a qualified paleontologist to carry out all mitigation measures related to paleontological resources.*

*Prior to the start of any ground disturbing activities where disturbance will be undertaken at depths equal to or greater than 20 feet, the Project owner shall ensure that the qualified paleontologist has conducted Paleontological Resources Awareness Training for all construction personnel working on the Project. This may be conducted in conjunction with the archaeological resources training required by **Mitigation Measure 4.6-1**. The training shall include an overview of potential paleontological resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified paleontologist for further evaluation and action, as appropriate; and penalties for unauthorized collecting or intentional disturbance of paleontological resources. A sign-in sheet shall be completed and retained to demonstrate attendance at the awareness training.*

**Mitigation Measure 4.6-4:**

*If a paleontological resource is found, the Project contractor shall cease ground-disturbing activities within 50 feet of the find. The qualified paleontologist shall evaluate the*

*significance of the resources and recommend appropriate treatment measures. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Any fossils encountered and recovered shall be catalogued and donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County. Accompanying notes, maps, and photographs shall also be filed at the repository. The qualified paleontologist shall prepare a report documenting evaluation and/or additional treatment of the resource. The report shall be filed with the County and with the repository.*

**Impact 4.6-3: The Project could disturb any human remains, including those interred outside of formal cemeteries.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. While no human remains were discovered during the course of the archaeological and historical resources survey of the Project site, the possibility that such resources exist on the site cannot be completely ruled out; therefore, the impact is potentially significant (DEIR p. 4.6-19). The following mitigation measure renders the impact less than significant.

**Mitigation Measure 4.6-5:**

*If human remains are uncovered during Project construction, the Project owner shall immediately halt work, contact the Fresno County Coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines §15064.5 (e)(1). If the County Coroner determines that the remains are Native American in origin, the Native American Heritage Commission (NAHC) will be notified, in accordance with Health and Safety Code Section 7050.5(c), and Public Resources Code 5097.98 (as amended by AB 2641). The NAHC shall designate a Most Likely Descendent (MLD) for the remains per Public Resources Code Section 5097.98, and the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in Public Resources Code Section 5097.98 with the MLD regarding their recommendations for the disposition of the remains, taking into account the possibility of multiple human remains.*

## 1.4.5 Greenhouse Gas Emissions Impacts:

**Impact 4.9-2: The Solar Facility could conflict with CARB's Climate Change Scoping Plan.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Operation of the Solar Facility could result in fugitive SF<sub>6</sub> emissions. Mitigation Measure 4.9-2 would be implemented to ensure that emissions of SF<sub>6</sub> are negligible.

**Mitigation Measure 4.9-2:**

*The Applicant shall utilize hermetically sealed circuit breakers and gas insulated switchgear for all SF<sub>6</sub>-containing equipment associated with the Project.*

#### 1.4.6 Hazards and Hazardous Materials Impacts:

**Impact 4.10-1: The Solar Facility could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Construction, operation, maintenance, and decommissioning of the Solar Facility will use materials that could be hazardous if spilled. Hazardous materials include a variety of liquids that will be stored, transported, used and disposed of on the Project site (DEIR p. 4.10-12).

The use, storage, transport, and disposal of hazardous materials in connection with the Solar Facility will be carried out in accordance with federal, state, and local regulations. Prior to construction, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared by the Applicants. Stormwater runoff quality control measures or best management practices (BMPs) to be included in the SWPPP will minimize the risk of hazardous materials leakage.

The Solar Facility may be constructed using PV panels that contain a thin semiconductor layer containing cadmium telluride (CdTe). While CdTe itself is a hazardous substance in an isolated form, the CdTe in the PV panels is bound and sealed within the glass sheets and a laminate material. If CdTe PV panels are used, implementation of Mitigation Measure 4.10-1, which requires the Applicants to prepare and implement a Broken PV Module Detection and Handling Plan, would minimize the potential for CdTe leaching from damaged panels, and would reduce the potential for the release of hazardous materials from damaged panels to less than significant.

**Mitigation Measure 4.10-1: Broken PV Module Detection and Handling Plan.**

*If PV panels containing CdTe are used, the Applicant shall prepare and implement a Broken PV Module Detection and Handling Plan. The plan shall describe the Applicant's plan for identifying, handling and disposing of PV modules that may break, chip, or crack at some point during the Project's life cycle to ensure the safe handling, storage, transport, and recycling and/or disposal of the modules and related electrical components in a manner that is compliant with applicable law and protective of human health and the environment. The plan shall have the following elements:*

- **Worker health and safety provisions and handling protocol.** *These measures shall address isolating workers from the CdTe during the recovery of broken PV panels and shall include the following requirements:*
  - *Workers shall wear gloves during the handling of broken pieces of PV panels to prevent cuts to the workers.*
  - *If broken pieces are separated from the PV panel, the pieces shall be collected and the areal extent of the collected pieces compared to the broken area on the PV panel to ensure that the pieces have been accounted for.*
  - *The broken pieces shall be placed in drums, sealed boxes, puncture-proof bags, or equivalent containers so as to prevent the broken pieces from tearing the containers and being re-released into the environment.*
- **Timing of removal.** *The PV panels shall be inspected for breakage prior to each washing PV panel event. In the event that broken PV panels are discovered, the broken PV panels and any pieces shall be removed prior to washing any adjacent PV panels so as to prevent wash water from spreading CdTe.*
- **Recycling or disposal requirements.** *If available, broken panels shall be sent to a recycling or CdTe PV panel manufacturing facility licensed for the recycling of CdTe PV panels, if recycling is unavailable, the broken panels shall be sent to a landfill licensed to receive broken CdTe PV panels.*

*The plan shall be submitted to the County for review and approval prior to delivery of CdTe-containing PV panels to the Project site and shall be distributed to all construction crew members and temporary and permanent employees prior to construction and operation of the Project. All available data from the panel manufacturer(s) regarding materials used and safety procedures and/or concerns shall be appended to the plan to assist the County with identifying potential hazards and abatement measures.*

#### 1.4.7 Hydrology and Water Quality Impacts:

**Impact 4.11-2: Dewatering during construction activities could release previously contaminated groundwater to surface water channels and/or increase sediment loading to surface water channels through overland discharge and subsequent erosion, both processes could decrease water quality in surface waterways.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measure that will reduce the effects to a less-than-significant level. Dewatering during construction activities could release previously contaminated groundwater to surface water channels and/or increase sediment loading to surface water channels through overland discharge and subsequent erosion, both processes could decrease water quality in surface waterways.

The dewatering process would be temporary, yielding only a small volume of groundwater, the potential exists for water or saturated soils removed during dewatering to already be contaminated. Discharge (i.e., through dewatering) or displacement of contaminated water

or soil, as a result of excavation related to the Solar Facility, could potentially impact the beneficial uses of surface water or groundwater identified in the Basin. Mitigation Measure 4.11-1 would be required to specifically address the potential water quality impacts associated with dewatering discharge of previously contaminated groundwater.

**Mitigation Measure 4.11-1:**

*If degraded soil or groundwater is encountered during excavation (e.g., there is an obvious sheen, odor, or unnatural color to the soil or groundwater), the Solar Facility Owner and/or its contractor(s) shall excavate, segregate, test, and dispose of degraded soil or groundwater in accordance with state hazardous waste disposal requirements.*

**Impact 4.11-3: Construction and operation and maintenance of the Solar Facility could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measure that will reduce the effects of the impact to a less-than-significant level. Construction and operation and maintenance of the Solar Facility could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume.

During construction, it is anticipated that up to 1,000 acre-feet of water per year would be used for dust suppression and other purposes, while during the operation and maintenance phase the Solar Facility would use up to 20 acre-feet per year for panel washing and other uses. Water for construction needs may be obtained from on-site or neighboring groundwater wells. Depending on the location of the well(s) that would be used by the Solar Facility, construction, operation and maintenance could result in a lowering of the local groundwater table such that nearby wells could be affected. This would be a significant impact that could be reduced to a less than significant level with the incorporation of Mitigation Measure 4.11-2, discussed below.

**Mitigation Measure 4.11-2: Groundwater Monitoring and Mitigation Plan:**

*Prior to extracting groundwater at the Solar Facility site or from nearby wells, a well survey and pump test, as well as a Groundwater Monitoring and Mitigation Plan, shall be prepared. The Plan is not required if groundwater is not used for the Solar Facility. These documents shall be prepared by a qualified professional geologist, hydrogeologist, or civil engineer registered in the State of California. The documents shall be submitted by the Applicants to the County of Fresno (County) for approval, and to the CVRWQCB and/or other agencies as deemed appropriate by the County for review and comment.*

*Well Survey and Pump Test(s): For any existing and/or new groundwater well(s) that would be installed and/or used for the Project: a pump-test shall be conducted during the dry season (June through October). At a minimum, the pump test shall establish (or confirm):*

- *The maximum sustained yield of the well (or the maximum sustained pumping rate that would be used during construction and operation);*
- *The drawdown depth and corresponding stable groundwater elevation;*
- *The area of influence of the well.*

*A well survey shall be conducted to locate nearby, existing groundwater wells that are or will be in active use, and that could potentially be impacted by the Project well(s) based upon the information gathered from the pump-test(s). The well survey shall include detailed information for each identified well, including but not limited to: date of installation, completed depth, screened interval, and any available information on pumping rate and corresponding static groundwater level.*

***Groundwater Monitoring and Mitigation Plan:*** *This Plan shall provide a detailed methodology for monitoring background and Project area groundwater levels and flow. At least one monitoring well shall be established between the Project well(s) and all identified wells (above) in reasonable proximity (e.g., within a distance equivalent to the diameter of the radius-of-influence of the Project well[s]) to the Project area. Monitoring shall be performed during pre-construction, construction, and operation and maintenance of the Project, with the intent to establish pre-construction and Project-related groundwater level trends that can be quantitatively compared against observed and/or simulated trends near the Project pumping wells and near potentially affected existing wells, if any. Based on the existing and/or proposed Project well location(s), and for the estimated maximum pumping rate, the pre-construction monitoring shall demonstrate that less than 1-foot of drawdown would occur at the Project area boundary location nearest the neighboring well(s).*

*The Groundwater Monitoring and Mitigation Plan shall include a schedule for submittal of quarterly data reports by the Project Owner to the Fresno County Environmental Health Department for the duration of the monitoring period, which shall include the entire duration of construction and one year post-construction. The monitoring reports shall include data from the construction and operation of all Power Blocks in the active construction or operational phase. These quarterly data reports shall be prepared and submitted to the County for review and approval, and shall include:*

1. *Daily usage, monthly range, and monthly average of daily water usage in gallons per day;*
2. *Total water used on a monthly and annual basis in acre-feet; summary of all water level data;*
3. *Identification of trends that indicate potential for off-site wells to experience decline of water level;*
4. *Identification of all sources of water by type (i.e., groundwater, surface water, municipal water) and well/location used on the Project site;*
5. *Water level monitoring data (trend analyses) from all pumping and monitoring wells.*

*Based on the results of the quarterly reports, the Project Owner and County shall determine if the Project's pumping activities have resulted in water level declines in the baseline at any of the monitoring wells, including nearby operating private wells, if any. If, due to Project activities, significant drawdown occurs at active off-site groundwater supply*

wells (e.g., such that the production rate of these wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted as of the date of certification of this EIR), the Project Owner shall: 1) immediately reduce groundwater pumping until water levels stabilize or recover to a reasonable level, and 2) establish an alternative source of water (e.g., those identified by Aspen [2014]) for the remaining construction and/or operations needs of the Project, beyond that which can be sustainably produced from the Project well(s) (i.e., such that active off-site wells are not affected, as described above).

#### 1.4.8 Noise Impacts:

##### **Impact 4.14-1: Operation and maintenance of the Solar Facility could result in exposure of persons to noise levels in excess of standards and limits established by Fresno County.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measure, which will reduce the effects to a less-than-significant level. Noise associated with substation operation (DEIR p. 4.14-3) could expose persons to noise levels in excess of standards and limits established by the County. In order to reduce this impact to a less-than-significant level, the Project includes both design features and mitigation measures that will minimize noise. Implementation of the mitigation measure listed below is recommended to reduce the potential significant impacts to a less-than-significant level.

##### **Mitigation Measure 4.14-1: Substation Noise Control.**

*The Applicant shall ensure that the combined noise levels associated with the substations at the Solar Facility site do not exceed the Fresno County exterior noise standards or the Fresno County substation noise limit at the on-site residence location expected to be inhabited at the start of construction (Appendix L). Noise control techniques may include, but not be limited to: locating the transformers with as much setback from the existing residential properties as possible, use of noise walls or equivalent sound attenuation devices, and the use of a transformer with special noise control specifications designed in a way to specifically achieve acceptable regulatory noise standards.*

*Prior to the installation of the substations and associated transformers, the Applicant shall submit to the County, for review and approval, a plan that describes the specific measures that will be taken to ensure compliance with the County's noise standards and limits.*

##### **Impact 4.14-3: Solar Facility operation and maintenance activities would result in a long-term increase in local ambient noise levels.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The County adopts the following mitigation measures that will reduce the effects to a less-than-significant level. Project-related operation and maintenance noise levels could result in a long-term increase in local ambient noise levels.

Combined maximum Project-related operation and maintenance noise levels at the on-site residence would be up to 61 dBA. Ambient daytime noise levels in the vicinity of this residence have been measured to be approximately 45 dBA (DEIR Table 4.14-1). This represents a 16 dBA increase compared to ambient levels without the Solar Facility, which would exceed the 5 dBA increase in ambient levels significance criterion, and would result in a significant impact. Implementation of Mitigation Measure 4.14-1 would ensure that combined substation transformer noise levels would not exceed 50 dBA at the on-site residence. This would reduce the noise increase to 5 dBA compared to ambient conditions, which would reduce the significance of this impact to a less-than-significant level.

**Mitigation Measures:**

- Mitigation Measure 4.14-1: Substation Noise Control.

### 1.4.9 Cumulative Impacts:

#### *Cumulative Aesthetics Resources*

**Cumulative Aesthetics Resources Impacts:** The Project could cause or contribute to a significant adverse cumulative effect on visual resources for as long as the Solar Facility contributes to visual changes to the landscape that are visible or perceived by the public, either within the same viewpoints, or as a noticeable element in a cumulative viewing experience.

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

However, specific economic, legal, social, technological, or other considerations as specified in Section 2 of these findings make infeasible the mitigation measures or alternatives identified in the EIR (Pub. Res. Code §21081(a)(3); 14 Cal. Code Regs. §15091(a)(3)).

**Facts in Support of Finding:** The County finds that the Solar Facility's incremental impact would be cumulatively considerable as part of the proposed conversion of hundreds of acres of rural agricultural land to a solar energy production use. Mitigation measures recommended for this and other renewable energy projects would have a limited ability to appreciably reduce visual impacts from highly exposed areas, such as Interstate 5 and State Route 33. The potential impacts cannot be mitigated to a level below established thresholds of significance, and so the impact would remain significant and unavoidable.

#### *Cumulative Air Quality*

**Cumulative Air Quality Impacts:** Emissions during construction of the Solar Facility would exceed the SJVAPCD threshold of 10 tons per year for ROG and NO<sub>x</sub> (ozone precursors) and therefore contribute to a cumulative impact regarding ROG and NO<sub>x</sub>.

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).



However, specific economic, legal, social, technological, or other considerations as specified in Section 2 of these findings make infeasible the mitigation measures or alternatives identified in the EIR (Pub. Res. Code §21081(a)(3); 14 Cal. Code Regs. §15091(a)(3)).

**Facts in Support of Finding:** The County finds that construction of the Solar Facility could contribute to cumulatively considerable impacts regarding PM<sub>10</sub> and PM<sub>2.5</sub>. Decommissioning of the Solar Facility could contribute to cumulative impacts regarding PM<sub>10</sub>. These pollutants have similar cumulative regional emphasis because particles can be entrained into the atmosphere and contribute to unhealthful levels over time. PM<sub>10</sub> and PM<sub>2.5</sub> also have the potential to cause significant impacts at a local scale if several grading or earth moving projects are underway simultaneously at nearby sites. As shown in DEIR Figure 4.1-1, numerous projects are proposed in the vicinity of the Project site. These projects include one solar project in close proximity to the Project site: the Giffen Solar Park LLC Project. If grading and earth moving activities associated with this project would overlap with activities associated with construction of the Solar Facility, cumulative local impacts to PM<sub>10</sub> and PM<sub>2.5</sub> levels would be potentially significant. The County adopts Mitigation Measure 4.4-1a; however, the Solar Facility's contribution to a PM<sub>10</sub>- or PM<sub>2.5</sub>-related significant cumulative impact would be cumulatively considerable.

**Mitigation Measure 4.4-1a: Solar Facility Fugitive Dust Control Measures:**

*Prior to grading on site, the Applicants shall submit a Solar Facility Fugitive Dust Control Plan to the SJVAPCD for review and approval. The Fugitive Dust Control Plan shall be applicable to only the construction and decommissioning phases and shall meet the requirements in Table 8021-1 and incorporate the Regulation VIII recommended fugitive dust control measures to reduce PM<sub>10</sub> emissions to the extent practical, including but not limited to:*

- *All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.*
- *Stockpiles of excavated soils on the Solar Facility site shall be wetted during daily construction activities and shall be covered at the end of each workday, during weekends, and periods of extended storage.*
- *All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.*
- *All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water, dust palliatives, or by presoaking.*
- *When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.*
- *All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.*

- *Use of blower devices is expressly forbidden.*
- *Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.*
- *Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.*
- *Limit traffic speeds on unpaved roads to 15 mph.*
- *Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope toward the road of greater than one percent.*
- *Install wind screens (fabric incorporated into fencing) at the windward side of active construction areas.*
- *Suspend excavation and grading activity if dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or off-site property.*
- *After active clearing, grading, and earth moving is completed within any portion of the site, the following dust control practices shall be implemented:*
  - *Once initial leveling and vegetation removal has been completed within a given area, that portion of the site shall be immediately treated with a dust suppressant (water or palliative).*
  - *Dependent on specific site conditions (season and wind conditions), revegetation shall occur in those areas where planned as soon as practical.*
  - *All unpaved road areas shall be treated with a dust suppressant or graveled as soon as possible to prevent excessive dust.*

### **Cumulative Biological Resources**

**Impact 4.5-8: The Project could cause a cumulatively considerable contribution to a significant cumulative effect to migratory birds related to the introduction of potential collision hazards.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effects of the Solar Facility on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** The project would not contribute to a cumulative impact to the San Joaquin kit fox, burrowing owl, Swainson's hawk or other raptors, or to nesting birds. The Solar Facility could cause impacts to migratory birds including injury and mortality associated with panel collisions. Cumulative projects that include the application of pesticides, construction of new buildings or power lines, or the introduction of vehicles or cats also have the potential to cause injury or mortality related impacts to migratory birds. To further reduce the incremental contribution of the Project and alternatives to this cumulative regional population impact the County adopts Mitigation Measure 4.5-8, Off-site Avian Predation Reduction. Funding from this mitigation measure could reduce current and future feral cat populations in and around the Mendota Wildlife Area and accordingly reduce bird mortality in the affected region. Such funding would off-set

potential incremental Project or alternative-related impacts to migratory birds and, thereby, reduce the contribution of the Solar Facility and alternatives to less than cumulatively considerable.

**Mitigation Measure 4.5-8, Off-site Avian Predation Reduction:**

*The Project Owner shall partner with CDFW, the Rabies and Animal Control Program of the Environmental Health Division in Fresno County, and/or a similar program to fund existing feral cat control programs to be targeted within 10 miles of the Mendota Wildlife Area. The first project owner to be issued a notice to proceed shall fund the program in the amount of \$25,000 within 6 months of the notice to proceed. The obligation set forth in this measure shall not apply to the PG&E Switching Station.*

**Cumulative Hydrology and Water Quality Impacts:**

**Impact 4.11-6: Construction and operation and maintenance of the Solar Facility, the Phased Decommissioning Alternative, or the Reduced Acreage Alternative could cause a cumulatively considerable contribution to a significant adverse over-draft condition in the Westside Basin.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that substantially lessen the significant effects on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

However, specific economic, legal, social, technological, or other considerations as specified in Section 2 of these findings make infeasible the mitigation measures or alternatives identified in the EIR (Pub. Res. Code §21081(a)(3); 14 Cal. Code Regs. §15091(a)(3)).

**Facts in Support of Finding:** The project would result in less than significant impacts to surface water quality. The Solar Facility could result in a cumulative effect on hydrological resources for as long it contributes to an average annual net deficit in the aquifer volume. The County finds that the Solar Facility's incremental impact would be cumulatively considerable as a result of its contribution to the average annual net deficit in the aquifer volume, and subsequently to the exacerbation of local subsidence issues, even with the implementation of Mitigation Measure 4.11-2, Groundwater Monitoring and Mitigation Plan. This potential impact cannot be mitigated to a degree that it no longer would be significant and unavoidable.

**Cumulative Transportation and Traffic Impacts:**

**Impact 4.18-1: Construction traffic associated with the Solar Facility, Phased Decommissioning Alternative, or Reduced Acreage Alternative, when combined with traffic generated by other projects anticipated to use SR 33, could combine to cause a significant adverse cumulative impact relating to traffic flow (LOS) conditions on SR 33.**

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that substantially lessen the significant effects on the environment (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs. §15091(a)(1)).

**Facts in Support of Finding:** To avoid a potential significant adverse cumulative impact relating to traffic flow (LOS) conditions on SR 33 the County adopts Mitigation Measure 4.18-1, which would require the Project Owner to prepare a Construction Traffic Control Plan that assures that the necessary permitting of any oversize vehicles used on public roadways during construction would occur, and that the County has sufficient information about anticipated Project construction delivery times and vehicle travel routes in advance to work with other project owners to minimize construction traffic during peak a.m. and p.m. hours and to coordinate as necessary with emergency services provides to assure adequate access on shared roads.

**Mitigation Measure 4.18-1:**

*Prior to the issuance of construction or building permits, the Solar Facility sponsor and/or its construction contractor shall:*

- *Prepare and submit a Construction Traffic Control Plan to Fresno County Divisions of Public Works and Planning and the California Department of Transportation District 6 office for approval. The Construction Traffic Control Plan must be prepared in accordance with current Caltrans standard plans, and both the California Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following issues:*
  - *Timing of deliveries of heavy equipment and building materials;*
  - *Directing construction traffic with a flagger;*
  - *Placing temporary signing, lighting, and traffic control devices if required, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic;*
  - *Ensuring access for emergency vehicles to the project sites;*
  - *Temporarily closing travel lanes or delaying traffic during materials delivery, transmission line stringing activities, or any other utility connections;*
  - *Maintaining access to adjacent property;*
  - *Specifying both construction-related vehicle travel and oversize load haul routes, minimizing construction traffic during the a.m. and p.m. peak hour, distributing construction traffic flow across alternative routes to access the project sites, and avoiding residential neighborhoods to the maximum extent feasible.*
- *Obtain all necessary permits for the work within the road right of way or use of oversized/overweight vehicles that would utilize county-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Fresno County Divisions of Public Works and Planning.*
- *Prior to the start of construction, enter into a secured agreement with Fresno County to ensure that any county roads that are demonstrably damaged by project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the state and/or Fresno County.*

- *Any work for the proposed intersection improvements on Manning Avenue at the Ohio and Monterey alignments first shall require that plans for the improvements be submitted to Road Maintenance & Operations Division (RMO) for review and approval prior to issuance of any encroachment or road improvement permit for the work.*
- *The improvements for these new access roads shall include a requirement that they be paved with asphalt concrete surfacing for a minimum distance of 100 feet from the edge of the Fresno County road right of way to help ensure that no sediment track-out is carried onto the Fresno County road from construction activities. The paved width of this access road shall be a minimum of 24 feet. Any material that is deposited onto the Fresno County-maintained roadway shall be swept clean as soon as possible and at least prior to the end of each working day.*
- *Maintenance of these new access roads shall be the sole responsibility of the Applicant.*
- *The scope of any necessary repair work shall be mutually agreed upon by the Applicant and Fresno County prior to performance of the repair work.*
- *Obtainment of any access easements from private property owners necessary to perform required repair work shall be the sole responsibility of the Applicant.*
- *If the County intends to hire a firm to perform mitigation monitoring, that firm shall be under contract and the Applicant shall have a cost recovery agreement in place prior to the start of construction activities so that "before" and "after" construction conditions for the Fresno County roads can be documented.*
- *Submit documentation that identifies the public roads to be used during construction. The project operator shall be responsible for repairing any damage to non-county maintained roads that may result from construction activities. The project operator shall submit a preconstruction video log and inspection report regarding roadway conditions for roads used during construction to the Fresno County Divisions of Public Works and Planning.*
- *Subsequent to completion of construction, submit a post-construction video log and inspection report to the County. This information shall be submitted in DVD format. The County, in consultation with the project operator's engineer, shall determine the extent of remediation required, if any.*

#### **1.4.10 Growth Inducing Impacts**

CEQA Guidelines Section 15126.2(d) requires an evaluation of growth inducing impacts that may result from a proposed project and provides the following guidance regarding growth-inducing impacts: A project is identified as growth inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment.

Growth inducement can be a result of new development that increases employment levels, removes barriers to development, or provides resources that lead to secondary growth. With respect to employment, the Project would require up to 256 people at the peak of construction.

The existing construction labor pool in Fresno County is sufficient for meeting Project needs. Following construction, up to 40 temporary staff and 10 permanent staff could be on the site at any one time. Decommissioning activities are expected to require a workforce of approximately 100 workers, and would take approximately 12 months to complete. Because the construction and decommissioning phases of the Project are temporary, the Project is unlikely to cause substantial numbers of people to relocate to Fresno County. Therefore, this Project would not result in a large increase in employment levels that would significantly induce growth.

While it is expected that construction workers would commute to the Project site instead of relocating to Fresno County, even if all workers were to migrate into Fresno County, the existing available housing supply could accommodate them without requiring new construction. Therefore, the Project (including the Solar Facility and the Switching Station) is not expected to induce population growth, the housing and provision of services for which could cause significant adverse environmental impacts.

Although the Project would contribute to the energy supply, which supports growth, the development of power infrastructure is a response to increased market demand, and the availability of electrical capacity by itself does not ensure or encourage growth within a particular area. Other factors such as economic conditions, land availability, population trends, availability of water supply or sewer services and local planning policies have a more direct effect on growth.

#### **1.4.11 Significant Irreversible Environmental Changes That Would Be Involved If the Project Is Implemented**

Section 15126.2(c) of the CEQA Guidelines defines an irreversible impact as an impact that uses nonrenewable resources during the initial and continuing phases of the project. Irreversible impacts also can result from damage caused by environmental accidents associated with a project. Irretrievable commitments of resources are evaluated to ensure that such consumption is justified.

Buildout of the Project would commit nonrenewable resources during construction and ongoing utility services during the operation and maintenance phase. During operations, oil, gas, and other fossil fuels and nonrenewable resources would be consumed and irreversible commitments of small quantities of nonrenewable resources would occur as a result of long-term project operations. However, once operational, the Project would result in a substantial net benefit with respect to nonrenewable resources as a result of the large amounts of renewable energy that would be generated (DEIR p. ES-8).

### **1.5 Mitigation Monitoring Program**

Public Resources Code Section 21081.6(a)(1) states:

- (a) When making the findings required by paragraph (1) of subdivision (a) of Section 21081 [that changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment]. . . . [1] The public agency shall adopt a reporting or monitoring program for the*

*changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment...*

The County will use the Mitigation Monitoring and Reporting Program (MMRP) included in the Mitigation Monitoring and Conditions Compliance Program to track Project compliance with required mitigation measures. The Final Mitigation Monitoring and Conditions Compliance Program is attached to and incorporated into the environmental document approval resolution and is approved in conjunction with certification of the EIR and adoption of these Findings of Fact.

## 1.6 Recirculation of DEIR is Not Required

CEQA Guidelines Section 15088.5 requires a lead agency to recirculate an EIR for further review and comment when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR but before certification of the Final EIR. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project proponent declines to implement. The CEQA Guidelines provide the following examples of significant new information under this standard:

A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

A substantial increase in the severity of an environmental impact would result unless mitigation are adopted that reduce the impact to a level of insignificance.

A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (CEQA Guidelines §150885(a); *Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043).

Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. The above standard is "not intend[ed] to promote endless rounds of revision and recirculation of EIRs." *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1993) 6 Cal. 4th 1112, 1132. "Recirculation was intended to be an exception, rather than the general rule." *Id.*

The County recognizes that the FEIR incorporates information obtained by the County since the DEIR was completed, and contains several clarifications. For instance, as a result of changes to Power Block boundaries received from the Applicant following publication of the DEIR, which resulted in associated changes in the UCUP boundaries prepared by the County, numerous text changes were made in the DEIR, including revision to figures showing the Solar Facility layout. See generally, FEIR p. 2-73 (Letter N and responses to the comments therein). None of the changes between the DEIR and FEIR involve "significant new information" triggering recirculation because the additional information did not result in any new significant environmental effects, nor any

substantial increase in the severity of any previously identified significant effects, and otherwise do not trigger recirculation.

## 1.7 Findings Regarding Project Alternatives

Where a lead agency has determined that, even after the adoption of all feasible mitigation measures, a project as proposed will still cause one or more significant environmental effects that cannot be substantially lessened or avoided, the agency, prior to approving the project as mitigated, must first determine whether, with respect to such impacts, there remain any alternatives that are both environmentally superior and feasible within the meaning of CEQA. (See, e.g., *Citizens for Quality Growth v. City of Mt. Shasta* (1988) 198 Cal.App.3d 433, 445.)

Public Resources Code Section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would *substantially lessen* the significant environmental effects of such project" (Pub. Res. Code §21002, italics added.) Section 21002 further states that "in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects."

CEQA defines "feasible" to mean capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal and technological factors (Pub. Res. Code §21061.1; CEQA Guidelines §15364). Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (CEQA Guidelines §15126.6(f)(1)). The concept of "feasibility" also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410,417).

Where the significant impact can be substantially lessened (i.e., mitigated to an "acceptable level") solely by the adoption of mitigation measures, the lead agency, in drafting its findings, has no obligation to consider the feasibility of alternatives with respect to that impact, even if the alternative would mitigate the impact to a greater degree than the project (Pub. Res. Code §21002; *Laurel Hills Homeowners Ass'n v. City Council* (1978) 83 Cal.App.3d 515,521; *Laurel Heights Improvement Ass'n of San Francisco v. Regents of the Univ. of California* (1988) 47 Cal.3d 376,400-403). Thus, CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that otherwise would occur. Project alternatives are not required, however, where such changes are infeasible (CEQA Guidelines §15091).

As noted in the preceding discussion regarding Project impacts, the County finds that the Switching Station would have less-than-significant impacts on all environmental resources (and so requires no mitigation measures) and that most of the potential Solar Facility impacts either would be avoided or reduced to less-than-significant levels as a result of the incorporation of BMPs into the Project



design or through the implementation of feasible mitigation measures recommended in the FEIR. In limited circumstances, even with the implementation of all feasible mitigation measures, the FEIR discloses that some impacts of the Solar Facility may not be reduced to a less-than-significant level relative to the significance thresholds relied upon in the FEIR. The Solar Facility would cause or contribute to significant and unavoidable impacts at the Project level to: visual resources from substantial degradation of existing visual character, hydrology and water quality from depletion of groundwater supplies affecting groundwater recharge and air quality from violation of an air quality standard or a substantial contribution to an existing or projected air quality violation. Cumulatively, the Solar Facility would cause or contribute to a significant unavoidable impact related to its cumulative considerable contribution to impacts on visual character and quality, air quality impacts from criteria pollutants for which the project region is in non-attainment under applicable federal and state ambient air quality standards; and hydrology and water quality from significant adverse over-draft conditions of the Westside Basin. Thus, as a legal matter, the County, in considering alternatives in these findings, need only determine whether any alternatives are environmentally superior with respect to those significant and unavoidable impacts to agricultural land, air, and traffic. If any alternatives are in fact superior with respect to those impacts, the County is then required to determine whether the alternatives are feasible. If the County determines that no alternative is both feasible and environmentally superior with respect to the unavoidable significant impacts identified in the EIR, the County may approve the Project as mitigated, after adopting a statement of overriding considerations.

CEQA does not require an evaluation of all possible alternatives, only an evaluation of "a range of feasible alternatives" so as to encourage both meaningful public participation and informed decision making (CEQA Guidelines §15126.6(a)). "The discussion of alternatives need not be exhaustive, and the requirement as to the discussion of alternatives is subject to a construction of reasonableness" (*Residents Ad Hoc Stadium Committee v. Board of Trustees* (1979) Cal.App.3d 274,286-287).

The Planning Commission has considered the alternatives presented and analyzed in the EIR and presented during the comment period and public hearing process. In considering the Project alternatives, the Planning Commission considered not only the relative environmental impacts and the feasibility of the alternatives, but also the ability of the alternatives to achieve most of the basic stated objectives of the Project.<sup>4</sup> The potential direct, indirect, and cumulative impacts of the Alternatives are analyzed on a resource-by-resource basis throughout DEIR Chapter 4 and then compared in DEIR Chapter 5. The alternatives evaluated in detail in the EIR are (DEIR p. 3-8 et seq.; FEIR p. 3-19):

Phased Decommissioning Alternative

Reduced Acreage Alternative

No Project Alternative

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<sup>4</sup> The Project has eight distinct objectives, which are listed at page 4 of these findings.

It is the Finding of the Planning Commission that there is no feasible environmentally superior alternative to the Project. Thus, the Project may be approved as mitigated, along with a Statement of Overriding Considerations (see Section 2.)

### **1.7.1 Alternatives Considered and Rejected From Detailed Evaluation**

As noted above, potential alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects (14 Cal. Code Regs. §15126.6(c)). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, also do not require consideration (14 Cal. Code Regs. §15126(f)(2)). The County considered several potential alternatives to determine whether they could reduce impacts to air quality, noise, and utilities and public services. Per CEQA, the lead agency may make an initial determination as to which alternatives are feasible and warrant further consideration and which are infeasible. The following potential alternatives initially were considered but then eliminated from further consideration based on the screening criteria described in DEIR Section 3.2 (DEIR p. 3-3):

- An alternative configuration.
- Alternative locations: Other potential candidate sites initially identified by the Applicant, degraded agricultural lands, and impaired or underutilized lands.
- Alternative solar technology: Concentrated solar.
- Two alternative approaches to the proposed generation of solar energy: conservation and demand side management and distributed generation solar.

Each of these alternatives is summarized below, including the rationale for not carrying it forward for more detailed environmental review.

#### ***Alternative Configuration***

As requested during scoping by the owner of property adjacent to the proposed site, the County evaluated the possibility of including an additional parcel (APN 038-08-004S), located at the southwest corner of West Floral Avenue and South San Benito Avenue (DEIR Figure 2-2), into the Project boundary. However, including the parcel in the footprint of the Project would not reduce any of the significant impacts of the Project, could introduce new significant environmental impacts, and would involve risks and costs unique to the parcel that could have detrimental impacts on the development and financing of the Project.

The parcel exhibits extreme variability in topography due to its previous use as a series of water retention basins. The variability in topography **would add significant additional costs** for constructing the Project in order to produce a generally flat site appropriate for a solar facility. Fill material would need to be imported, which would also increase environmental impacts related to **air emissions, traffic, and noise**.

The parcel also is subject to a contract under the California Land Conservation Act (commonly known as the Williamson Act). Solar facilities are not considered a compatible use on Williamson

Act contracted land in Fresno County. Therefore, contract cancellation would be required before a solar facility could be constructed. Cancellation of a contract includes a substantial financial penalty and an additional approval from the County that would add risk to the Project. In addition, cancellation of the existing Williamson Act contract would result in a potentially significant impact on agricultural resources.

While this alternative configuration of the Project would meet most of the Project's objectives, it would not decrease significant impacts of the Project. To the contrary, it would introduce new significant impacts. Further, a potential alternative that included the proposed parcel is considered by the Applicant to be potentially infeasible from an economic perspective. Therefore, this alternative was not carried forward for detailed consideration.

### **Alternative Sites**

#### **Other Potential Candidate Sites Initially Identified by the Applicant**

During the initial phases of Project planning, the Applicant considered the suitability of numerous privately-owned and water district-owned candidate sites in four counties based on their solar insolation potential. The Applicant's initial screening criteria included a preference for contiguous sites with one or a limited number of owners and generally flat topography where the land area was large enough to accommodate a solar generating facility meeting key Project objectives, avoiding pristine and biologically sensitive areas, and favoring proximity to existing transmission facilities with suitable interconnection locations. Based on these screening criteria, candidate sites in Tulare, Kings, and Kern counties were eliminated from further consideration. The Applicant then determined whether candidate sites were available for sale or lease at a reasonable cost. Many sites clearly did not meet the Project objectives, were technically infeasible, or would have presented significant environmental challenges. The Applicants eliminated these potential sites from further consideration before filing permit applications for the proposed site with the County.

#### **Other Degraded Agricultural Lands**

Fresno County actively participated in the Central Valley Renewable Energy Project, which identified opportunities and constraints for renewable energy development in Fresno County and elsewhere in the southern San Joaquin Valley to focus the siting of new renewable energy projects in low-conflict or impaired areas, or on degraded agricultural lands to accelerate renewable energy development while protecting natural resources. Defenders of Wildlife synthesized input received from the County and other government agencies, renewable energy developers, agricultural interests, the conservation community, and others resulted in a report called *Smart From the Start: Responsible Renewable Energy Development in the Southern San Joaquin Valley*. One key recommendation of the report is that renewable energy development be focused on impaired or degraded lands, such as agricultural lands that are demonstrably chemically or physically impaired. The report describes Westlands Water District lands, which include the Project site, as an example of smart-from-the-start renewable energy project siting. Because the Project is proposed on a site expressly recommended in the report, the County did not consider other degraded agricultural lands within the County as potential alternative sites.

### **Impaired or Underutilized Lands**

A second key recommendation made in *Smart From the Start: Responsible Renewable Energy Development in the Southern San Joaquin Valley* is that renewable energy development be focused on brownfields, closed landfills, Superfund sites, Resource Conservation and Recovery Act and closed mine lands. The EIR preparers (DEIR p. 6-1 et seq.) researched potentially contaminated and underutilized sites identified as appropriate for solar-PV projects as part of the United States Environmental Protection Agency's 2009 Re-Power America's Lands Project and considered the qualitative assessment tool. The EIR preparers then used spatial data provided by the RE-Powering America's Land Initiative to identify potential renewable solar energy sites in Fresno County that were located on existing contaminated lands, landfills, or mines. The search generated 27 sites that were identified as being suitable for utility scale solar development. Of these 27 sites, 18 sites are under 500 acres in size with an estimated solar PV capacity potential below 65 MW per site. These sites were eliminated from further consideration as inadequately sized to meet the Project objective of establishing a solar PV energy-generating facility of a sufficient size and configuration to produce up to 400 MW of electricity in a cost competitive manner. Of the remaining nine sites, seven are between 500 and 1,000 acres in size with an estimated solar PV capacity potential below 300 MW and were similarly eliminated from further consideration. The two remaining sites are the Fresno Air Terminal/Old Hammer Field located at Mckinley (Site Id No. 10450005) and Clovis Avenues and the Mount Owen Rifle Range (Site Id No. 71000033), located approximately 6 miles northeast of Clovis. Both these sites are over 1,000 acres in size. However, the Repowering Initiative identified the power generation capacity of each site as a maximum of 300 megawatts. Accordingly, these sites could not meet the Project objective for power generation, and so were eliminated from further consideration.

### ***Alternative Solar Technology: Concentrated Solar***

Concentrated solar power systems (parabolic trough or power tower) were considered as potential alternatives to the Project. However, for the reasons discussed below, these types of systems were not carried forward for detailed consideration. Concentrated solar power systems use reflective surfaces in large arrays to focus the sun's energy on a fixed point to produce intense heat from which electricity can be generated. Parabolic troughs concentrate sunlight onto individual units, each of which is equipped with receiver tubes filled with a heat transfer fluid. Power towers focus sunlight onto a single receiver – the tower. For both of these concentrated solar technologies, the transfer fluid is super-heated before being pumped to heat exchangers that transfer the heat to boil water and run a conventional steam turbine to produce electricity. Although concentrated solar power systems can store heated fluids to deliver electricity even when the sun is not shining, these systems can cause environmental issues related to reflectivity and thermal plumes, and radar interference.

The land required to develop a concentrated solar energy facility is comparable to that required for a PV project – approximately 3.5 acres per GWh per year for solar thermal, approximately 3.6 acres per GWh per year for PV. Use of a concentrated solar technology would meet most of the basic Project objectives; however, use of this technology would not avoid or substantially lessen any of the potential significant effects of the Project and could generate new significant impacts such as those associated with the use, transport, disposal of hazardous materials (the heat

transfer fluid), as a result of the use of reflective surfaces of the solar thermal arrays (as compared to the non-reflective surfaces of solar panels) causing or contributing to substantial glint or glare related impacts. Accordingly, a concentrated solar power system alternative was not considered further.

### ***Alternative Approaches***

The County considered whether conservation and demand side management, distributed generation solar, or a phased construction alternative could provide a reasonable feasible alternative to the Project and elected not to carry them forward for further consideration. Briefly, and as described in more detail below, conservation and demand side management, and distributed generation alternatives are clearly part of a sustainable energy future; however, these methods alone will not meet the State's renewable energy goals. Therefore, it is critical for PG&E and other utilities to supplement these methods by considering renewable energy resources in planning for future energy needs.

### **Conservation and Demand Side Management**

Conservation and demand side management consists of a variety of approaches to reduce electricity use. It includes increased energy efficiency and conservation, building and appliance standards, and load management. Implementation of conservation and demand side management techniques could result in a reduction in demand thus reducing the need for new generation, and thereby serve the region's growing demand for power. However, this alternative would not meet the Project objectives. Unmet Project objectives include: constructing a PV solar energy facility on a previously-disturbed site within close proximity to existing transmission lines and assisting California utilities in meeting renewable energy and GHG emissions reduction goals.

PG&E has a conservation and demand side management program in place that provides information to the public regarding energy efficiency, free energy surveys, and rebate programs for residential, commercial, and other customers. In addition, the population is projected to increase within Fresno County every year that the Project would be in service. Consequently, reliance on conservation and demand side management alone would be a technically infeasible alternative to the Project.

The CPUC regulates distributed generation policies and programs on both the customer and utility (wholesale) sides of the electric meter. Customer-side programs include the California Solar Initiative and the Self-Generation Incentive Program. These programs require customers to proactively install solar electric systems on homes, businesses and other sites; solar thermal (also known as "solar hot water") systems; or eligible distributed energy resources such as energy storage devices, wind turbines, and fuel cells. Rooftop systems already are prevalent in the region: the City of Fresno ranks third in the state (behind San Diego and Bakersfield) in terms of the number of residential rooftop solar projects, Clovis ranks seventh, and Visalia ranks 20th. Utility-side procurement programs encourage net export onto the electrical system side of the customer's electrical meter and include programs implemented under the Renewable Portfolio Standard as well as programs whereby utilities such as PG&E can purchase PV generated power pursuant to a power purchase agreement such as the one being negotiated for this Project.

### **Distributed Generation**

A distributed generation solar alternative could result in the installation of additional PV systems on public and private residential, commercial, or industrial rooftops; commercial and public parking facilities; and/or shade structures in playgrounds and parks throughout PG&E's service area in Fresno County. However, distributed solar energy generation would not meet Project Objectives relating to the location of PV solar plant facilities capable of generating up to 400 MW as near as possible to existing electrical sub-transmission and distribution facilities, or accommodate an economically viable mix of agricultural and non-agricultural uses of the proposed site that includes solar power generation. In addition, distributed solar would be an infeasible alternative to the Project because the Applicant does not own or have a right to use the many sites that would be required to generate a comparable amount of solar-generated energy as the Project.

### **Phased Construction Alternative**

The County considered, but rejected from more detailed consideration, the possibility that the proposed construction period could be phased to preclude overlapping activities as necessary for construction-related air emissions to remain below established significance thresholds and, thereby, to avoid some of the Project's significant unavoidable construction emissions; however, such permutations resulted in extremely long construction periods. The County determined that a phased construction approach would not meet feasibility criteria due to unpredictable contractor availability and field conditions as well as potential technical and economic constraints.

## **1.7.2 Alternatives Considered for Detailed Evaluation**

The Phased Decommissioning Alternative and the Reduced Acreage Alternative were selected through the screening process described above; the No Project alternative also is included as required by CEQA. The Phased Decommissioning Alternative would meet most of the basic Project objectives, would be feasible, and would avoid or reduce potential environmental effects of the Project related to decommissioning-related air emissions. The Reduced Acreage Alternative would similarly meet most of the Project objectives, while reducing potential environmental impacts associated with air quality, biology, hydrology and aesthetics.

### ***Phased Decommissioning Alternative***

#### **Description**

Under the Phased Decommissioning Alternative, all aspects of the Project would remain as described in DEIR (p. 3-8), except for the decommissioning schedule, which would be extended from 1 year to 3 years, and the decommissioning of the Switching Station, which would not be undertaken as part of the Project. Following the completion of construction the Switching Station would be owned and operated by PG&E under the regulation of the CPUC. Any decision to decommission the Switching Station would be made by PG&E independent of the Project. This alternative would meet most of the basic Project objectives; would meet all legal, regulatory, and technical feasibility criteria; and would reduce some of the Project's significant unavoidable air quality impacts. By extending the duration of Project decommissioning activities, direct emissions of PM<sub>10</sub> during decommissioning would be below annual significance thresholds.

Under this Alternative the incremental contribution to significant cumulative effects relating to PM<sub>10</sub> would be similarly reduced to below established thresholds.

### **Impacts**

**Aesthetics:** Under the Phased Decommissioning Alternative, all aspects of the Project would remain, except for the decommissioning schedule, which would be extended. The extension of the decommissioning phase would incrementally increase the duration of decommissioning-related impacts to Aesthetics, but not sufficiently to affect the impact conclusions. Accordingly, impacts associated with the Phased Decommissioning Alternative would be the same as for the Project during all phases.

**Agriculture and Forestry Resources:** The Phased Decommissioning Alternative would affect the timing of development but not the number of acres to be developed or the activities that would occur on the land. Therefore, like the Project, the Phased Decommissioning Alternative would cause no impact to Agriculture and Forestry resources.

**Air Quality:** Under the Phased Decommissioning Alternative, decommissioning would be phased over 3 years in order to reduce air quality impacts. Emissions associated with construction and operation of the Phased Decommissioning Alternative would be the same as described for the Solar Facility; construction emissions would be significant and unavoidable even with the implementation of mitigation. PM<sub>10</sub> emissions would be reduced compared to the Solar Facility by extending the duration of decommissioning activities over three years instead of one, which would reduce decommissioning PM<sub>10</sub> emissions to below established thresholds and result in a less than significant impact.

**Biological Resources:** The Phased Decommissioning Alternative would result in similar impacts to the Project with respect to Biological Resources but could result in additional impacts to special-status biological resources due to the extension of decommissioning activities into multiple breeding seasons or migration periods for several special-status species (e.g., San Joaquin kit fox; raptors including Swainson's hawk, burrowing owl, red-tailed hawk, and American kestrel; and migratory birds including loggerhead shrike, mourning dove, and Brewer's blackbird). A longer duration for decommissioning could also increase the risk of impacts on any special-status species or other wildlife present on or near the site due to construction activity-related mortality or injury. Although potential construction related impacts would be incrementally greater as a result of the extended decommissioning period required for this Alternative, the implementation of pre-construction wildlife surveys, environmental training, and wildlife avoidance and protection measures would be effective in reducing the significance of impacts from year to year. Accordingly, although the intensity of individual impacts may vary slightly as a result of the duration of the decommissioning period between the Project and the Phased Decommissioning Alternative, the variation would not be sufficient in any instance to change the significance conclusions. Therefore, the Phased Decommissioning Alternative would have the same potential impacts as those described for the Project, including less than significant impacts to migratory birds.

**Cultural and Paleontological Resources:** Under the Phased Decommissioning Alternative, the Project would not change, except for the Solar Facility decommissioning schedule. Because the

area of ground disturbance would not change from the Project, impacts to historical and unique archaeological resources, paleontological resources, and human remains as a result of construction, operation and maintenance, and decommissioning of the Phased Decommissioning Alternative would be the same as for the Project Energy Conservation: The Phased Decommissioning Alternative would affect the timing of Project development but not the amount of energy that would be consumed or generated by it. The Phased Decommissioning Alternative, like the Project, would be a net producer of renewable energy.

**Geology and Soils:** If the Phased Decommissioning Alternative is implemented, all aspects of the Project would remain the same as described in Chapter 2, Project Description, except for the decommissioning schedule. An expanded decommissioning schedule would not substantially affect potential impacts to Geology and Soils relative to the Project with the exception of potential impacts related to soil erosion. Decommissioning phasing generally reduces the overall amount of soil eroded because a smaller area of soil is cleared and disturbed at any one time during the process. The Phased Decommissioning Alternative therefore could result in less total soil loss than the Project but would otherwise have the same impacts. Although less total soil loss would occur under the Phased Decommissioning Alternative than the Project, the conclusion about the significance of the impact would not change. Like the Project, the Phased Decommissioning Alternative would have a less than significant impact.

**Greenhouse Gas Emissions:** Under this alternative, the Project would be decommissioned on an extended schedule but all the Project components would remain the same. Changing the timing of decommissioning would not alter the total GHG emissions associated with Project construction, operation and maintenance, or decommissioning. Impacts associated with GHG emissions under this alternative would be similar as those described for the Project.

**Hazards and Hazardous Materials:** The Phased Decommissioning Alternative would have similar hazards and hazardous materials impacts as the Project. If this alternative is implemented, all aspects of the Project would remain the same except for the decommissioning schedule, which would not affect the hazards or hazardous materials associated with the Project.

**Hydrology and Water Quality:** The Phased Decommissioning Alternative would have similar Hydrology and Water Quality impacts as the Project. If this alternative is implemented, all aspects of the Project would remain the same except for the decommissioning schedule. Of the Hydrology and Water Quality impacts associated with the Project, an extended decommissioning schedule would only change impacts related to soil erosion and groundwater hydrology. Decommissioning phasing generally reduces the amount of soil eroded because a smaller area of soil is cleared and disturbed at any one time during the process. Otherwise, the Phased Decommissioning Alternative would have the same impacts as the Project.

**Land Use and Planning:** The Phased Decommissioning Alternative would affect the decommissioning schedule of the Project, but all other aspects would remain the same as the Project. Therefore, similar to the Project, there would be no impacts to Land Use and Planning under the Phased Decommissioning Alternative.



**Mineral Resources:** The Phased Decommissioning Alternative would affect the timing of development but not the location or extent of proposed development. Therefore, the Phased Decommissioning Alternative would have the same mineral resource impacts as the Project: a less than significant impact related to the loss of availability of a mineral resource of state or regional significance and no impact relating to the loss of availability of a locally-important mineral resource recovery site.

**Noise:** Under this alternative, the Project would be decommissioned on an extended schedule but all the Project components would remain the same. Impacts conclusions related to Noise generated by this alternative would be the same as those that would occur under the Project.

**Population and Housing:** Similar to the Project, the Phased Decommissioning Alternative would have a less than significant impact on population and housing. If this alternative is implemented, all aspects of the Project would remain, except for the decommissioning schedule, which not affect potential impacts to population and housing.

**Public Services:** Similar to the Project, the Phased Decommissioning Alternative would have no impact to Public Services. If this alternative is implemented, all aspects of the Project would remain, except for the decommissioning schedule, which would not have an impact to Public Services.

**Recreation:** Similar to the Project, the Phased Decommissioning Alternative would have no impact on Recreation. If this alternative is implemented, all aspects of the Project would remain, except for the decommissioning schedule, which would not affect the potential for impacts on Recreation.

**Transportation and Traffic:** If the Phased Decommissioning Alternative is implemented, all aspects of the Project would remain, except for the decommissioning schedule. Impacts would be the same as those that occur under the Project.

**Utilities and Service Systems:** Under the Phased Decommissioning Alternative, all aspects of the Project would remain, except for the decommissioning schedule, which would be extended. Therefore, like the Project, the Phased Decommissioning Alternative would cause no impact related to wastewater treatment requirements, water and wastewater treatment facilities, wastewater treatment capacity and solid waste regulations, and, similar to the Project, would have a less than significant impact to stormwater facilities and landfill capacities.

### **Findings**

Based on the whole record, the County finds that the Phased Decommissioning Alternative would result in fewer environmental impacts than under the Project and is considered the environmentally superior alternative.

**Reduced Acreage Alternative:****Description**

The Reduced Acreage Alternative would be similar to the Project in all aspects except that, under this Alternative, construction of the Solar Facility east of State Route 33 (Power Blocks 4, 5, 6, 7 and 8) would not be undertaken. The total 400 MW capacity at the Project site would be reduced by 230 MW to 170 MW, and the Project footprint would be reduced by 1,433 acres to a total of approximately 2,299 acres. This alternative would reduce but not eliminate significant and unavoidable impacts associated with aesthetics, air quality, and hydrology.

**Impacts**

**Aesthetics:** Under the Reduced Acreage Alternative, all aspects of the Project would remain as described in Chapter 2, Project Description, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. By not constructing and operating these Power Blocks, the significant and unavoidable impact to existing visual character as viewed from KOP 2 along State Highway 33 that would occur under the Project would no longer occur because no construction would be undertaken east of State Highway 33. All other impacts of this alternative on Aesthetics would be the same as those that would occur under the Project.

**Agriculture and Forestry Resources:** Under the Reduced Acreage Alternative, all aspects of the Project would remain as described in Chapter 2, Project Description, except for the exclusion of RE Tranquillity 4, 5, 6, 7 and 8 LLC's Power Blocks (Power Blocks 4, 5, 6, 7 and 8) (DEIR Figure 3-1). The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Similar to the Project, the Reduced Acreage Alternative would not result in any impacts on Agriculture and Forestry Resources and no mitigation measures would be required.

**Air Quality:** Under the Reduced Acreage Alternative, all aspects of the Project would remain as described in Chapter 2, Project Description, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The footprint of this Alternative would be approximately 2,299 acres. No construction would occur east of State Highway 33.

Construction emissions from the Reduced Acreage Alternative were calculated by scaling the emissions calculations based on MW. This alternative would eliminate just under half of the MW capacity included in the Project. It is therefore estimated that emissions would be just under 50 percent of those calculated for the Project. Emissions calculated for the Switching Station would not differ from those described for the Project, above, and are not included in this section. Emissions associated with construction of the Reduced Acreage Alternative are summarized in the DEIR on pages 4.4-21 through 4.4-23.

The extent to which estimated emissions during construction of the Reduced Acreage Alternative exceed SJVAPCD thresholds differ from those calculated for the Project. In year 1, ROG emissions would not exceed SJVAPCD thresholds under the Reduced Acreage Alternative, these thresholds would be exceeded under the Project. In year 2, NOx emissions from the Reduced Acreage Alternative would not exceed SJVAPCD thresholds.

On-site and off-site emissions of criteria pollutants associated with operation of the Reduced Acreage Alternative would be similar to but less than those associated with the Project because the reduced total area of the Solar Facility would shorten the travel distance necessary to maintain and wash panels. The number of workers commuting to the site would also likely decrease with the smaller acreage, lowering the emissions generated by worker commute vehicles. None of the SJVAPCD thresholds would be exceeded by the Reduced Acreage Alternative, similar to the Project.

While emissions of criteria pollutants associated with decommissioning of the Reduced Acreage Alternative would also be approximately half of those estimated for the Project, PM<sub>10</sub> emissions associated with decommissioning would remain above the SJVAPCD threshold.

In summary, while the emissions of criteria pollutants associated with the Reduced Acreage Alternative are lower than those estimated for the Project, they remain above established thresholds for NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> during construction, and for PM<sub>10</sub> during decommissioning and therefore impacts to air quality would be the same as described for the Project.

**Biological Resources:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8 (DEIR Figure 3-1). The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway. As a result of the reduction in project size, impacts to Biological Resources from the Reduced Acreage Alternative would be similar but less when compared to impacts resulting from the Project.

**Cultural and Paleontological Resources:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project Site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Because the area of ground disturbance under this Alternative would be smaller than that which would result from the Project, impacts of the Reduced Acreage Alternative would be similar but slightly reduced as compared to the Project.

**Energy Conservation:** Under the Reduced Acreage Alternative, all aspects of the Project would remain as described in Chapter 2, *Project Description*, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. No construction would occur east of State Highway 33. The total energy generating capacity of the Reduced Acreage Alternative would be a maximum of 170MW instead of the 400MW that would be generated by the Project. The amount of petroleum fuel used for construction would be reduced compared with the fuel usage estimated for the Project. However, under the Reduced Acreage Alternative the amount of energy supplied to the grid also would be reduced compared to the Project, though there would still be a substantial net gain for regional renewable energy supplies.

**Geology and Soils:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Impacts related to geology and soils would be the similar to those discussed for the Project. The area of the Project site subject to erosion would be reduced

under the Reduced Acreage Alternative; this would not affect the impact significance conclusion, which would remain less than significant.

**Greenhouse Gas Emissions:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project Site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Total capacity of the Reduced Acreage Alternative would be up to 170MW instead of the 400MW proposed for the Project. The construction and decommissioning efforts would reduce construction GHG emissions to just under 36,170 metric tons instead of the Project's 72,340 metric tons. The amount of carbon-based energy production offset by the Reduced Acreage Alternative also would decrease just under half; just under 167,350 metric tons of annual CO<sub>2</sub>e would be offset annually by the Reduced Acreage Alternative.

As described in Section 4.9.1.2, Regulatory Setting, the SJVAPCD considers a project not to have a significant impact on GHG emissions if the project would emit GHGs in an amount 29 percent (or more) lower than would be emitted in the business-as-usual scenario. Assumptions for the business-as-usual scenario are described in the discussion of Impact 4.9-1, above. Similar to the Project, the Reduced Acreage Alternative would reduce GHG emissions by 99.5 percent compared to the business-as-usual scenario, and thus impacts associated with GHG emissions would be less than significant.

**Hazards and Hazardous Materials:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except that Power Blocks 4, 5, 6, 7 and 8 would not be constructed (DEIR Figure 3-1). The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Less equipment requiring the storage and use of hazardous materials would be used for the Reduced Acreage Alternative; likewise, fewer solar panels would be installed than are proposed for the Project. While smaller quantities of hazardous materials or structures would be used, the impacts of the Reduced Acreage Alternative would be reduced but otherwise similar in nature and type to those of the Project.

**Hydrology and Water Quality:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8 (DEIR Figure 3-1). The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Both the total amount of soil eroded during construction and operation of the Reduced Acreage Alternative and the extent of alteration of site drainage would be smaller than that anticipated for the Project due to the smaller area of ground surface disturbance. If used, groundwater needs would be approximately half of that used for the Project. This alternative would have similar but reduced Hydrology and Water Quality impacts as the Project.

**Land Use and Planning:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project would decrease from approximately 3,732 acres to approximately 2,299 acres, and no construction would occur east of State Highway 33. The Reduced Acreage Alternative would be

constructed within the Project site. Similar to the Project, this alternative would have no impacts on Land Use and Planning.

**Mineral Resources:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Impacts on Mineral Resources would be similar to those associated with the Project.

**Noise:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Noise generated during construction, operation and decommissioning would be similar but slightly less than that associated with the Project as a result of a reduced project area and one fewer substation. Impact conclusions associated with this alternative would be the same as those that would occur under the Project.

**Population and Housing:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. The Reduced Acreage Alternative would require a lower number of construction and operational workers in comparison to the Project. It would include the same existing residence within the site footprint that would be included in the Project site. This Alternative would result in similar but slightly reduced impacts to Population and Housing in comparison to the Project.

**Public Services:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Similar to the Project, this alternative would not impact public services.

**Recreation:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Similar to the Project, this alternative would not impact recreational resources in the area.

**Transportation and Traffic:** Under the Reduced Acreage Alternative, all aspects of the Project would remain as described in Chapter 2, *Project Description*, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Due to the reduced size of this alternative, traffic volumes generated by its construction would be smaller than the traffic generated by the Project. Impacts associated with the Reduced Acreage Alternative would be similar but slightly less than those associated with the Project.

**Utilities and Service Systems:** Under the Reduced Acreage Alternative, all aspects of the Project would remain, except for the exclusion of Power Blocks 4, 5, 6, 7 and 8. The area of the Project site would decrease from approximately 3,732 acres to approximately 2,299 acres. No construction would occur east of State Highway 33. Because of the reduced size of this Alternative, construction and operation would require just under half the water needed for the Project, just under 500 acre feet annually for construction and just under 10 acre-feet annually for operation. This would result in similar but lesser impacts on water supplies compared to the Project. The substantial reduction in the size project site also would reduce the Reduced Acreage Alternative's impact related to landfill capacity compared to the Project. Impacts would be less than significant.

### **Findings**

Based on the whole record, the County finds that the Reduced Acreage Alternative would result in fewer environmental impacts than under the Project. The Reduced Acreage Alternative would reduce the significant and unavoidable impacts of the Project with respect to air quality and aesthetics during construction. This alternative also would produce less solar energy than the Project, making a lower contribution to energy conservation and, halving the reduction in GHG that would result from the operation of the Project. Therefore, as compared to the Project, the Reduced Acreage Alternative is considered the environmentally superior alternative with respect to aesthetics and air quality. With respect to GHG and Energy Conservation, the Project would be environmentally superior.

### ***No Project Alternative:***

#### **Description**

If the No Project Alternative is implemented, the Project site would continue to be used for dry-farmed agriculture and/or left fallow. The Project site is designated "Agriculture" pursuant to the Fresno County General Plan and is zoned A-2 (General Agricultural) with a 40 acre minimum parcel size. If the Project were not approved, then other uses consistent with the A-2 zoning designation could be made of one or more of the parcels that comprise the Project site. Uses (among others) that are allowed by right without a permit relate to livestock, poultry, and crops; apiaries and honey extraction; single-family dwellings, accessory buildings, and farm buildings; certain home occupations; the use, storage, repair and maintenance of certain agricultural equipment; and moderate intensity parks and golf courses (Fresno County Ordinance Code §819). No such competing proposals for site use are before the County. Accordingly, rather than speculate as to possible other uses, the analysis of the No Project Alternative in this Draft EIR assumes a no-development/no Project scenario where the existing agricultural use is continued as it exists under pre-Project conditions.

Under a no-development scenario, the property would continue in agricultural use and the existing environmental setting would be maintained. Changes to that setting, including changes to the landscape (visual resources, habitat, and land use/agriculture); Project-related construction-related noise, traffic, and air emissions would not occur; and environmental benefits relating to renewable energy would not be realized from solar development of the site. Existing housing and

electrical infrastructure would remain in place, and public and utility services would continue to be provided or available to the site and its occupants as they are now.

### **Impacts**

**Aesthetics:** Under the No Project Alternative, the Project would not be constructed and the Project site would remain in use for dry-farmed agriculture. Therefore, the No Project Alternative would create no impact related to Aesthetics.

**Agriculture and Forestry Resources:** If the No Project Alternative is implemented, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture. Consequently, this alternative would result in no conversion of Farmland, no conflicts with existing zoning or Williamson Act contracts, and no physical changes in the environment that could result in the conversion of Farmland to non-agricultural use.

**Air Quality:** Under the No Project Alternative, the Project would not be constructed, operated and maintained, or decommissioned and the Project site would continue to be used for dry-farmed agriculture. Therefore, the No Project Alternative would have no impact on Air Quality.

**Biological Resources:** Under the No Project Alternative, the Project would not be constructed, operated, or decommissioned, and the Project site would continue to be used for dry-farmed agriculture. Therefore, the No Project Alternative would cause no impacts to Biological Resources.

**Cultural and Paleontological Resources:** Under the No Project Alternative, the Project would not be constructed, operated and maintained, or decommissioned and the Project site would continue to be used for dry-farmed agriculture. Therefore, the No Project Alternative would have no impact on Cultural or Paleontological Resources and Mitigation Measures 4.6-1 through 4.6-5 would not be applicable.

**Energy Conservation:** The No Project Alternative would have no effect on the goal of conserving energy.

**Geology and Soils:** If the No Project Alternative is implemented, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact related to Geology and Soils.

**Greenhouse Gas Emissions:** If the No Project Alternative is implemented, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture. The No Project Alternative would result in the continued long-term adverse impact associated with annual GHG emissions compared to implementation of the Project.

**Hazards and Hazardous Materials:** If the No Project Alternative is implemented, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact related to hazards or hazardous materials.

**Hydrology and Water Quality:** If the No Project Alternative is implemented, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact to Hydrology and Water Quality. No mitigation would be required.

**Land Use and Planning:** Under the No Project Alternative, the Project would not be constructed and the Project site would continue to be used for dry-farmed agriculture. No change to existing land uses, and no impact to land use and planning, would occur. There would be no effect on existing established communities, no impact on applicable planning documents, and no impact to adopted Habitat Conservation Plans or Natural Community Conservation Plans.

**Mineral Resources:** Under the No Project Alternative, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact to mineral resources.

**Noise:** Under the No Project Alternative, the Project would not be constructed, operated and maintained, or decommissioned and the Project site would continue to be used for dry-farmed agriculture. The existing on-site residence would remain in residential use. Therefore, the No Project Alternative would have no impact associated with Noise.

**Population and Housing:** Under the No Project Alternative, the Project would not be constructed, operated and maintained, or decommissioned and the Project site would continue to be used for dry-farmed agriculture. The existing onsite residence would remain in residential use. Therefore, the No Project Alternative would have no impact on population and housing.

**Public Services:** If the No Project Alternative is implemented, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact related to public services.

**Recreation:** Under the No Project Alternative, the Project would not be constructed or operated, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact to Recreation.

**Transportation and Traffic:** Under the No Project Alternative, the Project would not be constructed, operated and maintained, or decommissioned, and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact related to transportation.

**Utilities and Service Systems:** Under the No Project Alternative, the Project would not be constructed, operated, maintained, or decommissioned; and the Project site would continue to be used for dry-farmed agriculture; therefore, there would be no impact related to Utilities and Service Systems.

### **Findings**

Based on the whole record, the County finds that the No Project Alternative would result in fewer environmental impacts than the Project. The County also finds that the No Project Alternative would not meet any of the Project objectives; as such, it is not a feasible alternative.



## Conclusions Regarding the Evaluated Alternatives:

**Table 5-1** compares the conclusions of the impact analyses for both alternatives against the conclusions for the Project (DEIR Table 5-1).

## The Environmentally Superior Alternative is the Reduced Acreage Alternative:

CEQA Guidelines §15126.6(e)(2) requires an EIR to identify an environmentally superior alternative. If the environmentally superior alternative is the No Project Alternative, the EIR also must identify an environmentally superior alternative from among the other alternatives. In general, the environmentally superior alternative is defined as that alternative with the least adverse impacts to the project area and its surrounding environment. CEQA Guidelines Section 15126.6(a) places emphasis on alternatives that “avoid or substantially lessen the significant effects” of a project; distinctions between impacts that are less than significant or are mitigated to less than significant are typically not considered when selecting an environmentally superior alternative.

The No Project Alternative would avoid all impacts of the Project and would not create any new significant impacts of its own. However, as noted in EIR Section 4.9, Greenhouse Gas Emissions, the No Project Alternative would not result in the GHG emissions reductions benefits that would result from the Project. The No Project Alternative also would fail to meet any of the basic Project Objectives, including assisting California utilities in meeting their obligations under California’s RPS Program.

The second alternative, the Phased Decommissioning Alternative, would reduce the significant unavoidable decommissioning-related impacts of the Project to air quality. Therefore, as compared with the Project, the Phased Decommissioning Alternative is considered the environmentally superior alternative.

The Reduced Acreage Alternative would reduce the significant and unavoidable impacts of the Project with respect to air quality and aesthetics during construction. This alternative also would produce less solar energy than the Project, making a lower contribution to energy conservation and, halving the reduction in GHG that would result from the operation of the Project. Therefore, as compared to the Project, the Reduced Acreage Alternative is considered the environmentally superior alternative with respect to aesthetics and air quality. With respect to GHG and Energy Conservation, the Project would be environmentally superior.

## Finding:

The County finds that the Reduced Acreage Alternative is the environmentally superior alternative, other than the No Project Alternative.

**DEIR TABLE 5-1  
PROJECT VERSUS PHASED DECOMMISSIONING AND REDUCED ACREAGE ALTERNATIVES  
SUMMARY OF ENVIRONMENTAL IMPACT CONCLUSIONS**

Resource Area	Proposed Project	Phased Decommissioning Alternative	Reduced Acreage Alternative
Aesthetics, Visual Quality, and Light and Glare	Significant and Unavoidable Impacts with Mitigation Incorporated. <b>No Preference</b>	Impacts would be the same as the Project. <b>No Preference</b>	Impacts would be similar but reduced compared to the Project; this would generally not affect significance determinations, which would remain the same as for the Project. One visual impact would be reduced from Significant and Unavoidable to Less than Significant with Mitigation Incorporated <b>Environmentally Preferred</b>
Agriculture and Forest Resources	No Impacts. <b>No Preference</b>	No Impacts. <b>No Preference</b>	No Impacts. <b>No Preference</b>
Air Quality	Significant and Unavoidable Impacts during construction and decommissioning with Mitigation Incorporated. <b>No Preference</b>	Significant and Unavoidable Impacts during construction with Mitigation Incorporated. Decommissioning impacts would be Less than Significant with Mitigation Incorporated. <b>Environmentally Preferred</b>	Some construction and decommissioning impacts would be Less than Significant with Mitigation Incorporated. <b>Environmentally Preferred</b>
Biological Resources	Impacts determined to be Less than Significant with Mitigation Incorporated. <b>No Preference</b>	Impacts would be similar to the Project. <b>No Preference</b>	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. <b>No Preference</b>
Cultural and Paleontological Resources	Impacts determined to be Less than Significant with Mitigation Incorporated. <b>No Preference</b>	Impacts would be the same as the Project. <b>No Preference</b>	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. <b>No Preference</b>
Energy Conservation	Impacts determined to be Less than Significant; beneficial contribution resulting from generation of renewable energy. <b>Environmentally Preferred</b>	Impacts would be the same as the Project. <b>No Preference</b>	Impacts (including beneficial contribution to energy supply) would be similar to the Project but reduced. <b>No Preference</b>
Geology and Soils	Impacts determined to be Less than Significant. <b>No Preference</b>	Impacts would be the same as the Project. <b>No Preference</b>	Impacts would be similar but reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. <b>No Preference</b>
Greenhouse Gas (GHG) Emissions	Impacts determined to be Less than Significant with Mitigation Incorporated; overall beneficial impact from net GHG reduction. <b>Environmentally Preferred</b>	Impacts would be the same as the Project. <b>No Preference</b>	Impacts would be the same as the Project, overall beneficial impact from net GHG reduction would be reduced in comparison to the Project. <b>No Preference</b>

Exhibit 4 - Page 250

## 2.0 Statement of Overriding Considerations

This section of the findings addresses CEQA Guidelines Section 15093 requiring the lead agency "to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered 'acceptable.'" This is known as a Statement of Overriding Considerations.

This Commission hereby determines that specific economic, legal, social, technological, and other benefits of the proposed project outweigh the unavoidable adverse environmental effects identified in the EIR, including any effects not mitigated because of the infeasibility of mitigation measures and/or alternatives and that the adverse environmental effects are considered acceptable. This statement of overriding considerations is adopted by the County for the benefits listed in Section 2.1 (below) that warrant Project approval as provided in CEQA Guidelines section 15093. This Statement of Overriding Considerations warrants rejection of Project alternatives, including the No Project Alternative, set forth in the EIR, and for finding the significant adverse environmental effects of the Project acceptable that cannot be avoided or substantially lessened.

The County further determines that, based on the findings herein and the evidence in the record, the benefits identified are each one in and of themselves sufficient to make a determination that the adverse Project-level and cumulative environmental effects are acceptable and that, having balanced the adverse environmental effects of the Project that cannot be avoided or substantially lessened against each of the benefits, hereby adopts this Statement of Overriding Considerations based upon each of the benefits individually as stated herein.

### 2.1 Project Benefits

The County finds that approving the Tranquillity Solar Generating Facility Project will provide the following benefits:

1. Assist California utilities in meeting their obligations under California's Renewable Portfolio Standard (RPS) Program, including 25 percent of retail sales from renewable sources by the end of 2016 and 33 percent by the end of 2020.

California's RPS was established in 2002 by Senate Bill (SB) 1078, accelerated in 2006 under SB 107 and expanded in April 2011 under SB 2. The RPS program currently requires investor-owned utilities, electric service providers, and community choice aggregators to procure 33 percent of electricity from eligible renewable energy resources by 2020. The program is jointly implemented by the CPUC and the California Energy Commission (CEC).

The Solar Facility would contribute toward meeting the state's requirements under the RPS. The RPS promotes multiple objectives, including diversifying the electricity supply. Increasing the RPS to 33 percent is designed to accelerate the transformation of the

electricity sector, including investment in the transmission infrastructure and system changes to allow integration of large quantities of intermittent solar and wind generation. The Project would add up to 400 MW of renewable solar-generated energy to the electricity supply; therefore, the Project would be consistent with this recommended action.

2. Assist California utilities in meeting their obligations under the CPUC's Energy Storage Framework and Design Program, including procurement targets of 470 MWs by 2016 and 1,325 MWs by 2020, by providing up to 200 MW of storage capacity.
3. Facilitate grid integration of intermittent and variable PV generation and minimize line losses associated with off-site storage by collocating battery storage at the PV facility site.
4. Assist California in meeting the GHG emissions reduction goal by 2020 as required by the California Global Warming Solutions Act (AB 32).

The Solar Facility would use a reliable and proven solar technology (PV) with minimal disturbance to or depletion of natural resources as compared to alternative types of development (including solar thermal trough, which would require extensive grading). Once operational, PV solar panels use no fuel source other than the energy from the sun, as opposed to natural gas or coal.

The production of energy from solar facilities like the Tranquillity Solar Generating Facility Project has the added benefit of reducing air quality impacts and GHG emissions that would be produced by fossil-fuel based generation facilities.

5. Stimulating the County's Economy/Job Creation

Construction of the Solar Facility would require between 80 and 256 construction workers at any given time. Once operational, up to 10 permanent staff could be on the site at any one time for ongoing facility maintenance and repairs if the entire site is operated as a single unit. Alternatively, approximately 2 permanent staff and 8 Project operators would be located off-site who would be on call to respond to alerts generated by the monitoring equipment at the Project site. The maximum number of staff onsite at any time during the operation and maintenance period would be 50 (40 temporary staff and 10 permanent staff).

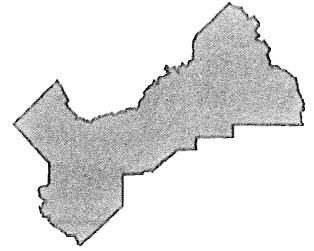
The Tranquillity Solar Generating Facility Project would provide other important benefits to the local and regional economy from the purchase of equipment and supplies, increased sales tax revenue, and property taxes.

6. Increased Tax Revenue for Fresno County.

The Tranquillity Solar Generating Facility Project will increase tax revenue for Fresno County, both in terms of sales tax through the sale of electricity, and real property taxes because the property value over the next several decades as a solar facility is significantly greater than the property value as unirrigated agricultural land.

7. The Tranquillity Solar Generating Facility Project optimizes the use of the site, which possesses characteristics ideal for locating a solar energy facility. These characteristics include, but are not limited to, proximity to the electrical grid and minimal conflicts with surrounding land uses.
8. The Project owner would post or establish financial assurances related to the decommissioning and restoration of the site should the solar facility become inoperable

Fresno County  
**Farm Bureau**  
*Serving agriculture since 1917*



October 1, 2014

Fresno County Planning Commission  
2220 Tulare Street, 6<sup>th</sup> Floor  
Fresno, CA 93721

Re: Tranquillity Solar Generating Facility

Fresno County Planning Commission Members:

On behalf of the Fresno County Farm Bureau (FCFB), I want to express our support for the Tranquillity Solar Generating Facility (TSGF).

The proposed TSGF is located within Westland's Water District on "retired" farmland. FCFB believes the site represents the type of responsible solar development that should be pursued in the region. The retired land has no agricultural viability – it is no longer productive and does not have a contract for surface water. The TSGF project represents the best use of the land.

This project represents the right opportunity for Fresno County to add renewable energy in a responsible manner. Thus, FCFB supports the TSGF.

Sincerely,

A large, stylized handwritten signature in black ink, appearing to read "Ryan Jacobsen".

Ryan Jacobsen  
CEO



within the anticipated lifespan of the project or at the end of the permit period (anticipated to be approximately 30 years) in order to ensure the maintenance of the health, safety, and welfare of the County's citizens. To the extent the solar equipment is removed, the land will be available for other uses consistent with applicable land use regulations.

## EXHIBIT 5



August 1, 2016

Chris Motta, Principal Planner  
Fresno County, Department of Public Works & Planning  
Development Services Division  
2220 Tulare Street, 6<sup>th</sup> Floor  
Fresno, CA 93721

**RE: Request for Time Extension to reach Substantial Development for CUPs 3452, 3453, 3454, 3455, 3456, 3457, and 3458**

Dear Mr. Motta:

RE Tranquillity 2 LLC, RE Tranquillity 3 LLC, RE Tranquillity 4 LLC, RE Tranquillity 5 LLC, RE Tranquillity 6 LLC, RE Tranquillity 7 LLC, and RE Tranquillity 8 ("Applicant," collectively) hereby formally request a time extension to achieve substantial development for CUPs 3452, 3453, 3454, 3455, 3456, 3457, and 3458, each by one year. This request would extend the expiration date until October 9, 2017, for each CUP. Please also find enclosed seven checks, each in the amount of \$2,280.75 to cover processing fees.

As of the present time, Applicant plans to commence construction of solar facilities on the land covered by these CUPs in January, 2017. As you are aware, RE Tranquillity LLC has completed construction of the first phase of the Tranquillity Solar Generating Facility at a capacity of 200 megawatts ("MW") just this summer. The first phase of the project created 500 peak construction jobs, infused over \$15 million into the Fresno County economy, and is currently generating sufficient electricity to power 55,000 California homes. The second phase of the project is fully permitted and will be equally beneficial for the local economy.

Physical construction has not yet commenced on these solar facilities for the above referenced CUPs for a number of factors, including but not limited to:

1. The power marketing process is cyclical in nature; accordingly, contracting the energy output of the remaining 200 MW of capacity to multiple major offtakers has been highly successful but has taken two years in and of itself.
2. The California Independent System Operator ("CAISO") studied the two 200 MW project phases separately, resulting in an interconnection agreement for the first phase significantly in advance of the second phase.
3. Raising sufficient debt and equity financing to cover the high costs of constructing a major power plant is best done incrementally, with investor confidence being gained as initial project phases are completed.

Simultaneously, major development activities have been achieved, in the form of two executed Power Purchase Agreements, an executed interconnection agreement, an Engineer-Procure-Construct (“EPC”) contract award to a major construction firm, EPC draft project designs for building permit application submittals, and land closing notices.

While none of these above development activities are physical and cannot be witnessed at the actual project site, these achievements represent enormous contractual, project development, and financing milestones. In terms of physical developments, Applicant has already constructed the PG&E Switching Station for the interconnection of the project under the authorization granted by CUP 3451, representing an investment of tens of millions of dollars toward CUPs 3452-3458.

By approving this time extension request, Fresno County will maintain its record of supporting economic development for the benefit of Fresno County and its residents, all the while helping the State of California achieve its sustainability and greenhouse gas emissions reduction goals.

In light of the aforementioned body of facts, Applicant requests that the Fresno County Planning Commission favorably consider this formal request for a time extension of CUPs 3452, 3453, 3454, 3455, 3456, 3457, and 3458.

Thank you,

A handwritten signature in black ink that reads "Seth M. Israel". The signature is written in a cursive, flowing style.

Seth M. Israel  
Attorney-in-Fact  
[Seth.Israel@RecurrentEnergy.com](mailto:Seth.Israel@RecurrentEnergy.com)  
415-501-9406



# RE TRANQUILLITY CUP BOUNDARIES

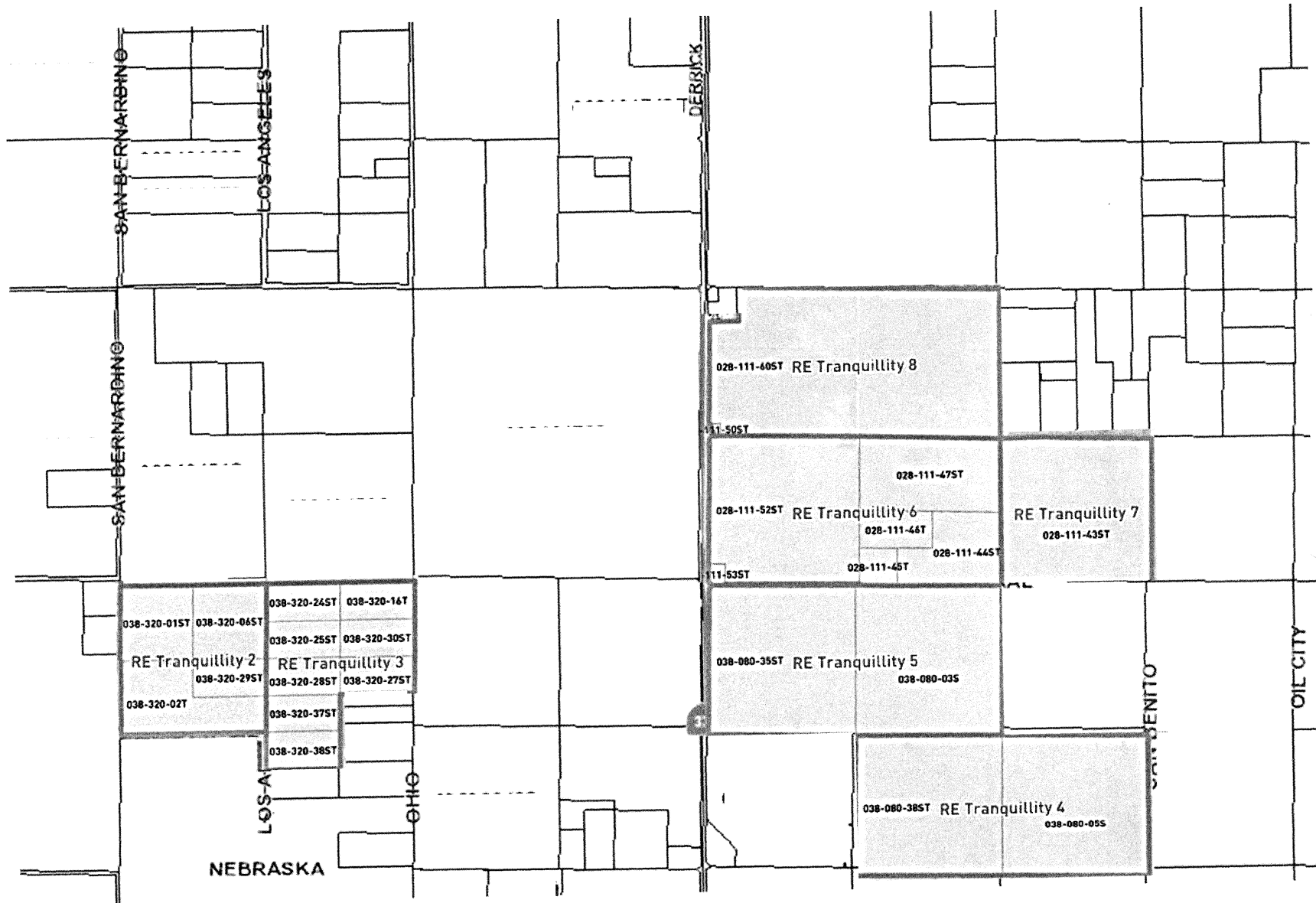


EXHIBIT 6