

County of Fresno

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

Planning Commission Staff Report Agenda Item No. 5 September 9, 2021

SUBJECT:

Unclassified Conditional Use Permit (CUP) Application No. 3555 and associated Environmental Impact Report No. 7230.

Proposing a 4,089-acre project site in the AE-20 (Exclusive Agriculture; 20-acre minimum parcel size) Zone District for the construction, operation, maintenance, and ultimate decommissioning of:

- 3,500 acre 400-megawatt (MW) solar photovoltaic (PV) electricity generating facility,
- 10-acre 400 MW energy storage system,
- Related improvements such as a maintenance and operations buildings, telecommunications tower etc.,
- Two substations on approximately 5-acres each,
- Onsite switchyard on approximately 5-acres,
- Approximately 3.1 miles of onsite 230 kilovolt (kV) transmission line connecting to PG&E Facilities
- Expansion of PG&E electrical infrastructure would include 3-Acre expansion of the Tranquillity Switching Station to the north including approximately 1,900 feet of 230 kilovolt (kV) transmission line to connect to the expanded facility.

The project is identified as the Scarlet Solar Energy Project.

LOCATION:

The project site is located in unincorporated Fresno County, approximately:

- 3.5 miles west-southwest of the community of Tranquility
- 6.5 miles east of Interstate 5 (I-5)
- south of W. South Avenue
- north of W. Dinuba Avenue
- east of State Route 33 (S. Derrick Ave.)
- west of S. San Mateo Avenue)

Northeast of and adjacent to the Great Valley Solar Facility (previously the Tranquility Solar Facility) and would encompasses up to 33 parcels (total 4,089 acres).

APNs: 028-071-34 028-071-39 028-071-40 028-071-41 028-071-43 028-071-44 028-071-45 028-071-47 028-071-48 028-071-49 028-081-66 028-111-01 028-111-02 028-111-04 028-111-06 028-111-07 028-111-09 028-111-10 028-111-12 028-111-13 028-111-14 028-111-15 028-111-16 028-111-17 028-111-19 028-111-20 028-121-61 028-120-62 028-101-74 028-101-72 028-101-82, 028-101-81 028-101-75 (Sup. Dist.1).

OWNER: Westlands Water District

APPLICANT: RE Scarlet, LLC, a wholly owned subsidiary of EDP Renewables North

America LLC (EDPR NA). (Recurrent Energy was the previous project

applicant)

STAFF CONTACT: Ejaz Ahmad, Planner

(559) 600-4204

David Randall, Senior Planner

(559) 600-4052

RECOMMENDATION:

1. Move to:

- Determine the Final EIR (FEIR) was presented to, reviewed and considered by the Planning Commission;
- Determine the certification of the FEIR reflects the Planning Commission's independent judgement;
- Adopt the California Environmental Quality Act (CEQA) Findings of Fact and certify
 that the Environmental Impact Report (EIR) No. 7230 prepared for the Scarlet Solar
 Energy Project processed under Unclassified Conditional Use Permit No. 3555 as
 complete and adequate in conformance with the California Environmental Quality Act
 (CEQA); and
- 2. Move to determine the required Findings can be made and move to approve Unclassified CUP Application Nos. 3555, subject to the Mitigation Measures, Conditions of Approval and Project Notes listed in Exhibit 1; and
- 3. Direct the Secretary to prepare a Resolution documenting the Commission's action.

EXHIBITS:

- 1. Mitigation Monitoring and Reporting Program, Conditions of Approval and Project Notes (Mandatory Requirements)
- 2. Location Map
- 3. Zoning Map
- 4. Land Use Map
- 5. Site Plans, Floor Plan, Elevations
- 6. Project Description & Operational Statement
- 7. CEQA Findings of Fact
- 8. Draft Reclamation Plan
- 9. Draft Environmental Impact Report (DEIR)
- 10. Compiled Appendices A-N
- 11. Final Environmental Impact Report (FEIR)

NOTE: Exhibits 9 and 10 were previously distributed to members of the Planning Commission as part of Advance Agenda Item Material on July 8, 2021. The exhibits consisting of the Draft EIR, Appendices, and Final EIR, as well as all other related documents, for the Scarlet Solar Energy Project are available at the following link: http://www.co.fresno.ca.us/EIR

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

Criteria	Existing		Proposed
Parcel Size	(APN 028-071-48T) (APN 028-071-49T) (APN 028-081-66ST) (APN 028-111-01ST) (APN 028-111-02ST) (APN 028-111-04ST) (APN 028-111-06ST) (APN 028-111-07ST) (APN 028-111-09ST) (APN 028-111-10T) (APN 028-111-12)	80 acres 20 acres 140 acres 20 acres 60 acres 157 acres 80 acres 77 acres 634 acres 562 acres 20 acres 20 acres 157 acres 157 acres 20 acres 140 acres 140 acres 157 acres 166 acres 25 acres 166 acres 7 acres	
Project Site	the past 10 years, the Fintermittently has been agricultural production (seeded, and harvested wheat); intermittently irror sprinkler) and harves alfalfa seed or other crodisked twice a year and The site is subject to his selenium and a water to does not provide for sufferinge for most commirrigated crops. For the the Project site that is c	Primarily dry-farmed agriculture. For the past 10 years, the Project site intermittently has been in low-yield agricultural production (tilled, seeded, and harvested for winter wheat); intermittently irrigated (drip or sprinkler) and harvested for alfalfa seed or other crops; or disked twice a year and left fallow. The site is subject to high levels of selenium and a water table that does not provide for sufficient drainage for most commercially irrigated crops. For the portion of the Project site that is cultivated without the benefit of irrigation, the	

Criteria	Existing	Proposed
	productivity of these crops depends entirely on rainfall. When the unirrigated crops fail to mature to harvest, the land is grazed as rangeland grasses. All the Solar Facility parcels are part of Westlands Water District settlements that require a non-irrigation covenant upon transfer of ownership. The existing Tranquility Switching Station is also included in the Project site.	
Structural Improvements	Tranquillity Switching Station, transmission lines, utility lines	The Solar Facility: solar PV modules, support structures, electrical inverters, and intermediate voltage transformers in addition to two substations with high voltage transformers.
		Each substation area would include an electrical control building.
		Other infrastructure: one permanent O&M building, a supervisory control and data acquisition (SCADA) system, up to 400 MW of on-site energy storage, meteorological data system, telecommunications infrastructure, access roads, and security fencing.
		PG&E Improvements: expansion of the existing Tranquillity Switching Station and construction of a new 230 kV transmission line to connect to the Tranquility Switching Station.
Nearest Residence	Approximately 125 feet and 365 feet south of the project site	No Change
Surrounding Development	Solar energy-related uses, agricultural production, scattered rural farm residences	No Change

Criteria	Existing	Proposed
Operational Features	N/A	See above "Project Site"
Employees	No permanent employees. Sporadic farm labor employed during intermittent farming operations.	During construction and decommissioning, there would be a maximum work force of 974 personnel. Operations would require approximately eight (8) permanent staff, but could require up to 48 personnel during periodic, routine maintenance events.
Customers	N/A	None
Traffic Trips	N/A	A Traffic Impact Study was prepared for this project by Peters Engineering Group dated March 24, 2020.
Vehicle Miles Traveled	None	Construction and decommissioning would temporarily generate between 132,000 and 974,000 vehicle miles traveled (VMT) per day during the construction and decommissioning periods. The Project would not
		generate a substantial number of permanent trips during operations and maintenance (O&M).
Lighting	None	Motion sensitive directional lights would be installed to provide security and approach lighting for the substation areas, the O&M building, each inverter-transformer station, 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.
Hours of Operation	N/A	The solar modules at the site would operate during daylight 7 days per week,

Criteria	Existing	Proposed
		365 days per year. Operational and maintenance staff would typically work during regular business hours Monday through Friday. Non-routine (emergency) maintenance or major repairs could require additional workers and may also require work to occur at night when the Project is not generating power to the grid.

EXISTING VIOLATION AND NATURE OF VIOLATION: None

ENVIRONMENTAL ANALYSIS:

As stated in CEQA Guidelines §15121(a), an 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:

- Contain a table of contents/index and project summary;
- 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

Staff Report – Page 7

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."

An Unclassified CUP application for the Project was submitted to Fresno County on November 9, 2016 (Scarlet Solar Energy Project, CUP No. 3555). The EIR prepared for this CUP is in compliance with CEQA (Pub. Res. Code §21000 et seq.) and the CEQA Guidelines (14 Cal. Code Regs. §15000 et seq.). Technical analysis was 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 (NOP) was prepared for the Project and circulated to all trustee agencies, responsible agencies, and interested parties beginning on September 12, 2018, for a 30-day review period ending on October 15, 2018.
- On October 11, 2018, the County Department of Public Works and Planning, Development Services and Capital Projects Division, hosted an agency and public scoping meeting at the Mendota Library, Mendota, California, to discuss the scope of the analysis to be conducted for the EIR.
- A Notice of Completion (NOC) for the Draft EIR was filed with the State of California Clearinghouse on May 5, 2021.
- A Notice of Availability (NOA) for the Draft EIR was filed with the State of California Clearinghouse on May 5, 2021.
- A Notice of Availability of the Draft EIR was published in the Business Journal on May 7, 2021 and posted on the County's website (http://www.co.fresno.ca.us/EIR) on May 6, 2021; and notification of the document's availability was mailed to the Project's distribution list to inform individuals, organizations, and agencies that previously expressed interest in the Project.
- The Draft EIR was released for public and agency review on May 7, 2021, with a 45-day review period ending on June 22, 2021; however, comments on the Draft EIR were accepted through June 29, 2021.
- The Draft EIR was made available for public review at County's website, County office (Department of Public Works and Planning) and at County libraries (Fresno County Main Library, Fresno County Mendota Branch Library and Fresno County San Joaquin Branch Library).
- Copies of the Draft EIR were provided 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 activities.

- On August 20, 2021, the Final EIR, which included responses to comments on the Draft EIR, NOA for Final EIR, and Notice of Public Hearing (NPH) were made available in electronic form via the County's website. A printed copy of NOA, Final EIR and a CD also were made available for public review at Fresno County Public Works and Planning Department, 2220 Tulare Street, Suite A, Street Level.
- On August 20, 2021, NOA for Final EIR, and Notice of Public Hearing (NPH) were provided via postal service to agencies, organizations, and members of the public who were included on the Project's distribution list and those who had specifically requested notice.

The EIR found that the Project would have:

No impact regarding;

- Forestry Resources
- Mineral Resource
- Population and Housing

Less-than-significant impact regarding;

- Aesthetics
- Agricultural and forestry Resources
- Energy
- Greenhouse Gas Emissions

- Public Services
- Recreation
- Tribal Cultural Resources
- Land use and Planning
- Noise
- Transportation
- Utilities and Service Systems

<u>Less-than-significant impact with the implementation of recommended Mitigation Measures</u> regarding;

- Air Quality
- Biological Resources
- Cultural Resources

- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality

The Project would have no significant and unavoidable impacts.

Documents associated with the EIR, including the Draft EIR may be viewed at the following link: http://www.co.fresno.ca.us/EIR.

PUBLIC NOTICE:

Consistent with County's operating policies, notices of this public hearing were sent to 25 property owners within one mile of the subject parcels, exceeding the 300-foot minimum notification requirements prescribed by California Government Code Section 65091 and the County Zoning Ordinance. Notices were also sent to 40 other interested parties.

PROCEDURAL CONSIDERATIONS:

In order for the project to be approved the EIR must first be certified as complete and adequate in conformance with the California Environmental Quality Act (CEQA).

An Unclassified Conditional Use Permit may be approved only if five findings specified in the Fresno County Zoning Ordinance, Section 873-F are made by the Planning Commission.

The decision of the Planning Commission on a CUP Application is final, unless appealed to the Board of Supervisors within 15 days of the Commission's action.

BACKGROUND INFORMATION:

On November 9, 2016, the Applicant submitted an application for an Unclassified Conditional Use Permit No. 3555 to the County to allow the construction, operation, maintenance, and ultimate decommissioning of the Scarlet Solar Energy Project.

The 4,089-acre project site would be comprised of two major components:

- 1. The Solar Facility (approximately 3,500 acres) would include:
 - Solar PV modules
 - Support structures
 - Electrical inverters
 - Intermediate voltage transformers
 - Two electrical substations (approximately 5-acres in size) which would receive consolidated intermediate voltage cables from the collector system and step the voltage up to 230 kV via high voltage transformers located in the individual PV substation or shared facilities. Each substation area would include an electrical control building.
 - Onsite switchyard on approximately 5-acres
 - Other necessary infrastructure would include permanent operation and maintenance buildings, and SCADA systems
 - 400 MW of on-site energy storage (approximately 10 acres total in size)
 - Meteorological data system, access roads, and security fencing.
 - The proposed substations would tie into PG&E's high-voltage 230 kV Tranquillity Switching Station, via an onsite switching yard and new transmission line.
 - The remaining acreage of the 4,089-acre project site will be utilized for internal circulation, drainage, parking, and other support functions and facilities.

2. PG&E Improvements:

To accommodate the Solar Facility and interconnect the Project's proposed 230 kV gentie line to the PG&E Switching Station, PG&E would complete improvements to its electrical facilities, including expansion of the existing Tranquillity Switching Station and construction of a new 230 kV transmission line. The Tranquillity Switching Station would be expanded to the north approximately 200 feet, increasing the size of the switching station by approximately 3 acres, to accommodate the switching station's ultimate configuration. The switching station's electrical busbar (a conducting bar that carries heavy currents to supply several electric circuits) would not increase in size. The new 230 kV transmission line would extend from the Tranquillity Switching Station to a point located just east of the Great Valley Solar Project boundary. The PG&E transmission line would include approximately 1,900 feet of 230 kV conductor strung on approximately six new or existing tubular steel poles that would be approximately 150 feet high. The height of the transmission line (GenTie) and communication poles/towers are not limited to the build height limitations of zone districts. The improvements would only serve the proposed Solar Facility.

The Project is anticipated to be constructed in continuous phases, with the first phase anticipated to start in 2022. Upon commissioning, the Project would enter the operational phase. The solar modules at the site would operate during daylight seven days per week, 365 days per year to generate solar electricity during daylight hours and store and dispatch power to the energy storage system during both daylight and non-daylight hours. O&M activities at the Project site would include solar module washing; vegetation, weed, and pest management;

security; responding to automated electronic alerts 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. The Project is anticipated to have an operating life of up to 35 years. After this period, the facility would be decommissioned, and site reclamation would occur.

Westlands Water District currently owns the proposed site, which is zoned AE-20 (Exclusive Agricultural, 20-acre minimum parcel size). The existing land use at the Project site is primarily dry-farmed agriculture with a small portion that has been intermittently irrigated. For the portion of the Project site that is cultivated without the benefit of irrigation, the productivity of these crops depends entirely on rainfall. When the unirrigated crops fail to mature to harvest, the land is grazed as rangeland grasses. For the past 10 years, parcels within the Project site have been periodically in low-yield agricultural production (tilled, seeded, and harvested for winter wheat); occasionally irrigated (drip or sprinkler) and harvested for alfalfa seed or other crops; or disked twice a year and left fallow. Furthermore, all the parcels in the project footprint are part of Westlands Water District settlements that require a non-irrigation covenant upon transfer of ownership.

The Project would include improvements to infrastructure related to the existing Tranquillity Switching Station. Two existing overhead PG&E transmission lines are located on the north side of Dinuba Avenue, along the southern portion of the Project site. There also are existing PG&E utility lines within the site. These would remain in place with an easement granted to PG&E for access. Additionally, approximately 76 acres of federally owned land are surrounded by the Project site but are not proposed as part of the Project. This land would not be contained within the Project security fence, and the existing legal access would be retained. It is anticipated that the existing use of this land for occasional dry farming followed by periods of fallow use would continue if the Project is approved.

REQUIRED CUP FINDINGS:

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

	Current Standard:	Proposed Operation:	Is Standard Met (y/n)
Setbacks	Front: 35 feet Side: 20 feet Rear: 20 feet	Project infrastructures to be set back at least 50 feet from the property lines (excluding fencing)	Yes
Parking	One parking space for every two employees on site; one of which shall be an Americans with Disabilities Act-compliant (ADA) parking stall (van accessible) located as close as possible to the main entrance of the main building	Four parking stalls total (one of which to be ADA accessible) to be installed	Yes

	Current Standard:	Proposed Operation:	Is Standard Met (y/n)
Lot Coverage	No requirement	N/A	N/A
Space Between Buildings	40 feet between animal shelter and building for human occupancy	N/A	N/A
Wall Requirements	Per Section 855-H.2 of the County Ordinance Code	The project site will be secured by a 8-foot-high chain-link perimeter fences, topped with three-strand barbed wire	N/A
Septic Replacement Area	100 percent for existing system	Development of any future septic system would be in compliance with the Local Area Management Plan (LAMP)	Yes
Water Well Separation	 Building sewer/septic tank: 50 feet Disposal field: 100 feet Seepage pit/cesspool: 150 feet 	No wells to be drilled on the property	N/A

Reviewing Agency/Department Comments:

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

Analysis Finding 1:

The "Solar Facility Guidelines" approved by the Fresno County Board of Supervisors on May 3, 2011 and amended on March 13, 2012, May 21, 2013 and December 12, 2017 require a buffer between proposed solar facilities and adjacent agricultural operations, including a 50-foot setback between proposed solar facility improvements from the edges of the property boundaries to the closest structural improvements or equipment. The Project modules and electrical infrastructure would be set back from the surrounding property lines by a minimum of 50 feet. The Project modules and electrical infrastructure would also be set back from the existing State Route SR 33 by a minimum of 50 feet plus additional clearance for any deed restrictions and the future right-of-way. The boundary of the Solar Facility would be secured by a chain-link perimeter fences, topped with three-strand barbed wire. Confirmation of setbacks will be reviewed as part of the Site Plan Review (SPR) process, proposed as a Condition of Approval.

The Zoning Ordinance Section 816.5.D requires that no structure shall exceed 35 feet in the Exclusive Agricultural Zone District; however, project building heights would be less than 15

feet, and communication towers and transmission lines are not restricted by this height limit. Therefore, a variance was not required to accommodate these proposed improvements. Portable restrooms will be provided for construction and decommissioning activities. A septic system and leach field would be installed adjacent to the O&M building to support the restroom facilities and sewage needs of the eight permanent staff working eight hours per day at the O&M building during operation. The septic system design would adhere to the California Plumbing Code and the Fresno County LAMP.

The County's review and approval of the Site Plan Review included as a Condition of Approval would ensure compliance with the setback requirements and other design standards. Conditions of the Site Plan review may include, but are not limited to, design of parking and circulation areas, access, onsite grading and drainage, fire protection, landscaping, signage, and lighting.

Recommended Conditions of Approval:

See Mitigation Measures and recommended Conditions of Approval attached as Exhibit 1.

Conclusion Finding 1:

Based on the above information, and with adherence to the Mitigation Measures and Conditions of Approval, the site is adequate in size and shape to accommodate the proposal.

<u>Finding 2</u>: 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
Private Road	Yes	Numerous private dirt and paved roads provide access between parcels throughout the Project site.	The Project would include private on-site access roads and perimeter roads (20-30 feet wide), and internal roads (12-20 feet wide) for construction and operation.
Public Road Frontage	Yes	 State Route (SR) 33 (AKA Derrick Avenue) W. Dinuba Avenue S. San Mateo Avenue W. South Avenue Manning Avenue 	No change
Direct Access to Public Road	Yes	 SR 33 W. Dinuba Avenue S. San Mateo Avenue W. South Avenue Manning Avenue 	Primary access to the Solar Facility would be provided via W. Manning Avenue at S. Monterey Avenue and W. Manning Avenue at San Benito Avenue. Multiple points of ingress/egress for emergency access would be provided. Primary access to

	Existing Conditions	Proposed Operation
		the Tranquillity Switching Station would be via existing access gates at either S. Ohio Avenue or W. Dinuba Avenue.
Road Average Daily Traffic (ADT)	 SR 33 - Unknown W. Dinuba Avenue-Unknown S. San Mateo Avenue - Unknown W. South Avenue - Unknown Manning Avenue - 600 	The Project would not generate a substantial number of trips due to the limited periodic routine operation and maintenance events.
Road Classification	 SR 33: Expressway W. Dinuba Avenue: Local San Mateo Avenue: Private W. South Avenue: Local Manning Avenue: Expressway 	No change
Road Width	 SR 33: two, 12-foot-wide travel lanes and gravel shoulders W. Dinuba Avenue: 15-20 feet S. San Mateo Avenue: 15-20 feet W. South Avenue: 15-20 feet Manning Avenue: two, 12-foot-wide travel lanes and gravel shoulders 	No change.
Road Surface	 SR 33: Paved West Dinuba Avenue: Dirt South San Mateo Avenue: Dirt West South Avenue: Dirt Manning Avenue: Paved 	No change

		Existing Conditions	Proposed Operation
Traffic Trips		Seasonal trips associated with harvesting	Project construction and decommissioning would temporarily generate a maximum of 2,001 daily trips during the construction and decommissioning periods. The Project would require eight (8) permanent employees and would not generate a substantial, permanent number of trips during periodic, routine maintenance and operation.
Traffic Impact Study (TIS) Prepared	Yes	N/A	A Traffic Impact Study was prepared for this project by Peters Engineering Group dated March 24, 2020.
Road Improvements Required	,	N/A	No off-site road improvements would be required; There would be a requirement to repair County roads which are demonstrably damaged by Project Construction & Decommissioning traffic.

Reviewing Agency/Department Comments:

California Department of Transportation (Caltrans): A Construction Traffic Management Plan shall be prepared and submitted to Caltrans for approval. As per the Caltrans' Transportation Concept Report for SR 33, the ultimate ROW for SR 33 is 110 feet. As there exists 100 feet of Right of Way (ROW), an additional five feet of ROW is required for the project to provide 53 feet right of way east of section line. These requirements have been included as Conditions of Approval.

No other comments specific to the adequacy of streets and highways were expressed by reviewing Agencies or Departments. Various comments received from department/agencies regarding regulatory requirements has been included as Project Notes in Exhibit 1 of this report to make the applicant aware of and to comply with those requirements.

Analysis Finding 2:

Primary access to the Solar Facility would be via W. Manning Avenue at S. Monterey Avenue and W. Manning Avenue at San Benito Avenue. Primary access to the Switching Station would be via existing gates at either S. Ohio Avenue or W. Dinuba Avenue. All access points would

meet applicable County standards. No driveways onto State Route (SR 33) are proposed or are permitted by California Department of Transportation.

The project would avoid Caltrans' future right-of-way (total 53 feet east of section line) adjacent to SR 33. The Project modules and electrical infrastructure would be set back from the existing SR 33 highway by a minimum of 50 feet plus additional clearance for any deed restrictions and the future right-of-way. Project infrastructure would be set back at least 50 feet from all property lines. An Encroachment Permit will be required for any improvements within the County right-of-way prior to commencement of construction.

The Project on-site roadway system would include a perimeter road, access roads, and internal roads. 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. 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. Temporary driveway aprons to points of ingress/egress during construction and decommissioning, such as along W. Manning Avenue to S. Monterey Avenue, may be up to 80 feet wide to accommodate construction traffic; however, permanent driveway aprons would be built according to Fresno County Improvement Standards.

Results of the Project-specific Traffic Impact Study (Peters Engineering Group, March 24, 2020) indicate that the total number of construction workers at any given time during Project construction and decommissioning would range between 132 and 974 with an average round-trip commute of 100 miles. Therefore, Project construction and decommissioning would generate between 132,000 and 974,000 vehicle miles traveled (VMT) per day during the construction and decommissioning periods. Based on the screening criteria of 110 trips per day discussed in Section 4.13.2.1 of the Draft EIR, this VMT would be temporary, would cease upon completion of construction and decommissioning, and would not contribute to permanent percapita VMT. Operation of the proposed Solar Facility would require a workforce of approximately eight permanent staff, and the PG&E Improvements would require no additional staff, which would result in negligible impacts to VMT. Therefore, Project construction, operation, and decommissioning would not result in a substantial increase in VMT that would conflict or be inconsistent with State CEQA Guidelines Section 15074.3(b).

As discussed in the Traffic Impact Study, the maximum (worst-case) daily trips would be 2,001 trips during a two-month period of construction, with 1,011 trips entering the site and 990 trips leaving the site. The Project would cause the intersections of Manning Avenue/James Avenue and SR 180/James Avenue to operate at unacceptable levels of service from construction traffic. The County and Caltrans require as a Condition of Approval the implementation of a Construction Traffic Management Plan, which would include but not be limited to provisions for the timing of deliveries, a flagger directing construction traffic, and ensuring emergency access. According to the Traffic Impact Study, this Condition of Approval would ensure LOS (Level of Service) at area intersections would not exceed standards during construction. The Project would not generate a substantial number of trips during operation would therefore not impact LOS at area intersections and roadways.

Additionally, a Condition of Approval would require that the developer enter into an agreement to ensure that any County roads which are demonstrably damaged by project traffic are repaired, paved, and/or slurry-sealed, as is necessary.

Recommended Conditions of Approval:

See Mitigation Measures and recommended Conditions of Approval attached as Exhibit 1.

Conclusion Finding 2:

Based on the above information, and with adherence to Mitigation Measures and recommended Conditions of Approval attached as Exhibit 1, the surrounding streets and highways serving the Project site will remain adequate to accommodate the proposed use. 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.

	Use:	Zoning:	Nearest Residence
North	Non-irrigated agricultural land (owned by Westlands Water District)	AE-20 (all)	None
South	Agricultural land Solar facilities	AE-20 (all)	Two rural residences; approximately 125 and 365 feet south of the Project site, respectively
East	Non-irrigated agricultural land (owned by Westlands Water District)	AE-20 (all)	None
West	Non-irrigated agricultural land (owned by Westlands Water District) Agricultural land Solar facilities	AE-20 (all)	None

Reviewing Agency/Department Comments:

Fresno County Department of Agriculture: The Applicant has presented a Decommissioning and Reclamation Plan, has presented, and recognized the need for a weed and pest management plan and will need to acknowledge and comply with the Fresno County "Right-to-Farm" Ordinances 17.04.100 and 17.72.075. This requirement will be included as a Condition of Approval.

Site Plan Review Section: A dust palliative shall be required during construction and decommissioning on all unpaved parking and circulation areas. This requirement will be included as a Condition of Approval.

Various comments were received from department/agencies regarding regulatory requirements. The project will comply with those requirements and has been included as Project Notes in Exhibit 1 of this report to make the applicant aware of those requirements.

Analysis Finding 3:

The Project site is located approximately 3.5 miles west-southwest of the community of Tranquillity and approximately 6.5 miles east of Interstate 5 (I-5). The site has historically been

used for agricultural production, and in recent years, is primarily dry farmed. For the past 10 years, the Project site intermittently has been in low-yield agricultural production (tilled, seeded, and harvested for winter wheat); intermittently irrigated (drip or sprinkler) and harvested for alfalfa seed or other crops; or disked twice a year and left fallow. Existing land uses surrounding the Project site consist of agriculture, solar development, and two rural residences (located approximately 125 and 365 feet south of the Project site). Non-irrigated agricultural land surrounds the Project site to the north, east, and west. These lands are owned mostly by Westlands Water District, which keeps them in various states of low-value agricultural production. The Great Valley Solar Facility and two rural residences also border the Project site to the south. The Adams East Solar Facility is located approximately 0.4-mile northwest of the Project site.

The Solar Facility would not include driveways accessing off-site areas, construct new roadways through adjacent properties, or induce indirect growth (e.g., housing, commercial) in the vicinity of the Project site, that would preclude agricultural uses in off-site Farmlands. In addition, the physical buffer between the proposed development on the Solar Facility site and the property boundary, and designated access to the Solar Facility site would avoid indirect impacts that could affect surrounding agricultural land uses.

As detailed in Section 2.14, Other Req implemented which would manage the introduction or establishment of pests and weeds during the Project's construction, operation, and maintenance, and decommissioning and site restoration. Motion sensitive directional lights would be installed to provide security and approach lighting for the substation areas, the O&M building, each inverter-transformer station, 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. Additionally, due to the orientation of the panels and the low visual profile of the Project, there would be a relatively low intensity and short duration of Project-caused glare.

A Draft Reclamation Plan (Exhibit 8, Draft EIR Appendix B), detailing the time frame and approach to restoration of the site to agricultural use was prepared by the Applicant. This plan will ensure that all project materials are removed from the site following the life of the project, and that specific measures are taken to return the site to its previous agricultural capability. The visual impact of installing solar panels in this area was also considered. In general, this area is not considered to have high visual sensitivity because most viewers are motorists traveling along SR 33. Due to the limited time that motorists will be within sight of the project, and low-profile nature of the solar facilities, no adverse impacts to the aesthetic quality of the area would occur, Ongoing maintenance and cleaning will be required, ensuring that panels will generally be in good working order, thereby also keeping them from becoming unsightly.

Comments from CDFW recommended the preparation of a habitat assessment and included recommendations to mitigate or avoid impacts to special-status species which had the potential to be present on the project site. A Biological Technical Report was prepared for the Project (Appendix E1, Draft EIR). Based on the results of the survey, impacts to special-status species could have been significant and therefore, Mitigation Measures BIO-1(a) through BIO-1(u), BIO-3(a), and BIO-3(b) were proposed to reduce the severity of impacts. These measures generally implement the recommendations from CDFW and published avoidance and minimization guidelines, as well as requirements for preconstruction measures. Preconstruction surveys will establish if special-status species are present and if so, appropriate avoidance and minimization actions are required as Mitigation Measures.

To evaluate the potential impacts to cultural resources consultation under the provisions of Assembly Bill 52 was sought but did not identify any resources or features on or near the

Project site. Per the requirements of Mitigation Measures CR-1(a) through CR-1(c), a qualified archeologist shall be retained to carry out all mitigation related to archaeological and historical resources and all on-site personnel will receive Cultural Resource Awareness Training prior to start of construction on how to recognize cultural resources. If such resources are encountered during construction, the developer will stop all work and the qualified archaeologist will inspect the findings and report the results of the inspection to the developer and the County. The Project would have no impact to mineral resources, population and housing, public services, recreation, and tribal cultural resources.

The EIR concludes that the Project would have a less-than-significant impact, or a less-than-significant impact with the implementation of recommended Mitigation Measures. The Project would have no significant and unavoidable impacts.

Recommended Conditions of Approval:

See Mitigation Measures and recommended Conditions of Approval attached as Exhibit 1. Conclusion finding 3:

Based on the above information and with adherence to Mitigation Measures and recommended Conditions of Approval attached as Exhibit 1, staff believes the proposal will not have an adverse effect upon surrounding properties. Finding 3 can be made.

<u>Finding 4</u>: That the proposed development is consistent with the General Plan

Relevant Policies:	Consistency/Considerations:
Policy LU-A.1: The County shall maintain agriculturally designated areas for agriculture use and shall direct urban growth away from valuable agricultural lands to cities, unincorporated communities, and other areas planned for such development where public facilities and infrastructure are available.	The proposed project is not an urban growth. The project site is designated Agriculture in the county General Plan which allows for certain non-agricultural activities, including electrical substations and is zoned AE-20 (Exclusive Agricultural) in the County Ordinance which permits electrical transmission and distribution substations in the AE District. The project is consistent with this policy.
General Plan Policy LU-A.3: The County may allow by discretionary permit in areas designated Agriculture, special agricultural uses and agriculturally related activities, including value-added processing facilities, and certain non-agricultural uses listed in Table LU-3. Approval of these and similar uses in areas designated Agriculture shall be subject to the following applicable criteria: a) The use shall provide a needed service to the surrounding agricultural area which cannot be provided more efficiently within urban areas or which requires location in a	The project is consistent with this policy as follows: Criteria-a. The project will produce electricity to help California utilities meet their renewable energy requirements and 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. Criteria-b. The Project site is part of Westlands Water District settlements that require non-irrigation covenants upon transfer of ownership and the productivity of future crops on the site is unreliable due to it entirely

Re	levant Policies:	Consistency/Considerations:				
b)	non-urban area because of unusual site requirements or operational characteristics. The use should not be sited on productive	dependent on rainfall. Accordingly, the site's temporary non-agricultural use would not substantially affect overall agricultural productiveness of in the region.				
c)	agricultural lands if less productive land is available in the vicinity. The operational or physical characteristics	Criteria-c. The EIR found available water supplies to satisfy the water demands of the				
	of the use shall not have a detrimental impact on water resources or the use or management of surrounding properties	project while still meeting other existing and planned future uses. Criteria-d. Based on demographics and				
	within at least one quarter (1/4)-mile radius.					
d)	A probable workforce should be located nearby or be readily available.	work force is expected to come from the Fresno Regional area				
see	neral Plan Policy LU-A.12: County shall ek to protect agricultural activities from croachment of incompatible land uses.	The proposed solar facility will be located on non-irrigated farmland. Additionally, the solar parcels will maintain a 50-foot setback from adjacent agricultural fields and weed and rodent control plans will be implemented during the life of the project to reduce weed and rodent impacts to adjacent farmland.				
pro bet	neral Plan Policy LU-A.13: County shall offect agricultural uses by requiring buffers ween proposed non-agricultural uses and acent 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. Also, as illustrated on Site Plan and noted in the Operational Statement letter, the project will have an at least 50-foot-wide buffer between the proposed use and adjacent operations. Furthermore, the project would require recordation of a Right-to-Farm Notice, indicating that the Project Applicant is prepared to accept the adjacent normal agricultural operations during operation of the Solar Facility.				
review project proposals to identify potential fire hazards and to evaluate the effectiveness of preventive measures to reduce the risk to life and property.		The project was routed to the Fresno County Fire Protection District for review. They did not provide any preliminary comments; however, the developer will be required to obtain Fire District approval prior to construction, in accordance with Fresno County development regulations.				
ens infr	neral Plan Policy HS-E.2: The County shall sure that new development, including public astructure projects, does not create safety zards such as glare from direct or reflective	Environmental Impact Report No. 7230 considered the increased risk due to this project of public safety hazards from glare and hazardous chemicals. Development is required				

Relevant Policies:	Consistency/Considerations:
sources, smoke, electrical interference, hazardous chemicals, or fuel storage in violation of adopted safety standards.	to adhere to existing safety standards, including those related to electrical conduction and hazardous materials handling.
General Plan Policy HS-G.1: The County shall require that all proposed development incorporate design elements necessary to minimize adverse noise impacts on surrounding land uses.	Both stationary and mobile noise impacts from the project construction and operations were analyzed in Section 4.12 of the EIR. The project would not result in the generation of a substantial temporary or permanent increase in noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Impacts would be less than significant.
General Plan Policy HS-F.1: The County shall require that facilities that handle hazardous materials or hazardous wastes be designed, constructed, and operated in accordance with applicable hazardous materials and waste management laws and regulations.	The project design and operations would not be in conflict with the existing regulations relating to hazardous materials and waste management. Any impacts relating to valley fever due to earthmoving activities or encountering of asbestos containing materials will be less than significant with Mitigation Measures incorporated.
PolicyOS-E.1: The County shall support efforts to avoid the "net" loss of important wildlife habitat where practicable. In cases where habitat loss cannot be avoided, the County shall impose adequate mitigation for the loss of wildlife habitat that is critical to supporting special-status species and/or other valuable or unique wildlife resources. Mitigation shall be at sufficient ratios to replace the function, and value of the habitat that was removed or degraded. Mitigation may be achieved through any combination of creation, restoration, conservation easements, and/or mitigation banking. Conservation easements should include provisions for maintenance and management in perpetuity. The County shall recommend coordination with the U.S. Fish and Wildlife Service and the California Department of Fish and Game to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed. Important habitat and habitat components include nesting, breeding, and foraging areas, important spawning grounds, migratory routes, migratory stopover	As discussed in Section 4.4 of the EIR, the project site is currently in agricultural production and highly disturbed with agricultural activities, it does not provide habitat for fish species, plants or other wildlife species compared to that of the region. Therefore, the Project would not substantially reduce habitat.

Relevant Policies:	Consistency/Considerations:
areas, oak woodlands, vernal pools, wildlife movement corridors, and other unique wildlife habitats (e.g., alkali scrub) critical to protecting and sustaining wildlife populations.	
Policy OS-E.2: The County shall require adequate buffer zones between construction activities and significant wildlife resources, including both on-site habitats that are purposely avoided and significant habitats that are adjacent to the project site, in order to avoid the degradation and disruption of critical life cycle activities such as breeding and feeding. The width of the buffer zone should vary depending on the location, species, etc. A final determination shall be made based on informal consultation with the U.S. Fish and Wildlife Service and/or the California Department of Fish and Game.	Several special-status species such as San Joaquin kit fox, burrowing owl, northern harrier, California horned lark, and loggerhead shrike have the potential to utilize habitat on the project site. Implementation of Mitigation Measures would require avoidance buffers established to mitigate construction impacts on sensitive species.
Policy OS-E.9: Prior to approval of discretionary development permits, the County shall require, as part of any required environmental review process, a biological resources evaluation of the project site by a qualified biologist. The evaluation shall be based upon field reconnaissance performed at the appropriate time of year to determine the presence or absence of significant resources and/or special-status plants or animals. Such evaluation will consider the potential for significant impact on these resources and will either identify feasible mitigation measures or indicate why mitigation is not feasible.	A project-specific Biological Resources Technical Report and Biological Resources Evaluation Letter Report were prepared for the project. The reports were based on field reconnaissance performed by qualified biologists and evaluated potential impacts to biological resources. Mitigation measures would reduce impacts to less-than significant levels
General Plan Policy TRA-A.3: The County shall require that new or modified access to property abutting a roadway and to intersecting roads conform to access specifications in the Circulation Diagram and Standards section.	Prior to the start of the project construction, this project is required to prepare a Construction Traffic Management Plan which will include conformance with access specifications in the Circulation Diagrams and Standards Section of the Fresno County General Plan.

Reviewing Agency/Department Comments:

Policy Planning Section of the Fresno County Department of Public Works and Planning: The project site is not considered productive farmland and the conversion of the project site to a solar power generation facility does not appear to be inconsistent with the Land Use and Agricultural Element policies of the General Plan.

Analysis Finding 4:

This proposal is consistent with the General Plan Policies applicable to the Project as discussed in the above Table. The proposed solar facility 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 Pest Management 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. The Project site does not currently receive irrigation water from Westlands Water District and is not likely to receive an allotment in the future due to its status as retired farmland. A portion of the Project site contains Farmland of Statewide Importance, the estimated operational life of the Solar Facility is approximately 35 years, at which time the site would be decommissioned and restored to current agricultural conditions to allow for resumed agricultural use after project completion as required by a Reclamation Agreement. Further, none of the site's acreage is enrolled under a Williamson Act Contract.

Large solar facilities, such as this application, require placement outside of urban areas to take advantage of the large stretches of flatland where panels may be constructed. Further, this project site has been identified as a preferable location for solar power because it has been retired from Westlands Water District service due to poor soil quality. Alternative uses for this retired farmland discourage the placement of similar facilities on more productive land, which General Plan Policies have been designed to protect.

The Fresno County General Plan contains seven elements that guide physical development within the County which relate to air quality management, protection of special status wildlife species, cultural and paleontological resource protection, liquefaction risk and avoidance, hydrology, and hazardous materials exposure and handling, the EIR prepared for this project identified that project activities could have potentially significant impacts, but are reduced to a level of less than significant through mitigation measures. Adoption of the proposed Mitigation Measures and implementation of the Conditions of Approval (Exhibit 1) will ensure that this project is consistent with all General Plan policies.

On May 3, 2011, the Fresno County Board of Supervisors acted 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 and May 21, 2013 to include historical information on the agricultural use of the property, crop yield information, the source of water, 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. Required supplemental application information includes historical information on the agricultural use. The most recent amendment (December 12, 2017) required solar applicants to commit to make all reasonable efforts to establish a point of sale in Fresno County for equipment and construction-related items necessary for the project and to hire employees from the local workforce. They also require the developer to make all reasonable efforts to purchase products and equipment from local (Fresno County) manufacturing facilities and venders.

For this Project, the Applicant has also provided information in the form of Hydrology and Water Quality Studies (Appendix K of the Draft EIR), which indicate that the site has not been irrigated for the last 10 years, and sufficient water supply is available to serve the Project.

Acknowledgment of the Right to Farm Ordinance has been made a Condition of Approval to this project. The final Pest Control and Reclamation Plans will be reviewed and deemed sufficient by the Department of Public Works and Planning prior to permit issuance.

Recommended Conditions of Approval:

See Mitigation Measures and recommended Conditions of Approval attached as Exhibit 1.

Conclusion finding 4:

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

<u>Finding 5</u>: That the conditions stated in the resolution are deemed necessary to protect the public health, safety and general welfare.

Reviewing Agency Comments:

Refer to comments under Findings 1 through 4 of this report.

Analysis Finding 5:

Per Section 873-F of the Zoning Ordinance, Finding 5 addresses the question of whether the included Conditions can be deemed necessary to protect the public health, safety and general welfare of the public and other such conditions as will make possible the development of the County in an orderly and efficient manner and in conformity with the intent and purposes set forth in this Division. The environmental mitigation measures, conditions of approval and project notes are listed in Exhibit 1.

The mitigation measures are also listed in the Mitigation Monitoring & Reporting Program prepared in conjunction with Environmental Impact Report No. 7230 which was required to be prepared for the project under CEQA. The mitigation measures proposed for this project are required to reduce the identified adverse impacts to a level that can be considered to be "less than significant". Specific details regarding the need for mitigation measures are discussed in the EIR. The Conditions of Approval are necessary to make the project consistent with the County's policies, regulations and standards. The conditions for the project will be implemented and further augmented through the Site Plan Review process required for this project. The Site Plan Review process and requirements are contained in Section 874 of the Fresno County Zoning Ordinance.

The Project Notes listed in Exhibit 1 represent existing regulations to which the Project is subject and are provided to aid the Applicant/Developer during construction and/or operation.

Conclusion Finding 5:

The required conditions reflect CEQA regulation and the County's policies, regulations, and standards necessary to protect the public. Hence, Finding 5 can be made.

PUBLIC COMMENT:

No comments from members of the public were received in response to the NOP or Draft EIR. All comments received were from agencies. The comments from agencies on the Draft EIR are specifically responded to in the Final EIR Document.

SUMMARY CONCLUSION:

Based on the factors cited in the analysis, staff believes the required Findings for granting the Unclassified Conditional Use Permits can be made. Staff therefore recommends approval of Unclassified Conditional Use Permit No. 3555 subject to the Mitigation Measures and recommended Conditions of Approval.

PLANNING COMMISSION MOTIONS:

Recommended Motion (Approval Action)

- 1. Determine the Final EIR (FEIR) was presented to, reviewed and considered by the Planning Commission, and represents their independent judgement;
- Move to adopt the California Environmental Quality Act (CEQA) Findings of Fact and certify that Environmental Impact Report (EIR) No. 7230 prepared for the Scarlet Solar Energy Project (Project), consisting of Unclassified Conditional Use Permit (CUP) No. 3555, as complete and adequate in conformance with California Environmental Quality Act (CEQA);
- 3. Move to determine the required Findings can be made and move to approve the Unclassified CUP No. 3555, subject to the Mitigation Measures, Conditions of Approval, and Project Notes listed in Exhibit 1;
- 4. Direct the Secretary to prepare a Resolution documenting the Commission's action and direct staff to file a Notice of Determination for the Project.

<u>Alternative Motion</u> (Denial Action)

- 1. Determine the Final EIR (FEIR) was presented to, reviewed and considered by the Planning Commission, and represents their independent judgement.
- 2. Move to not certify the Environmental Impact Report (EIR) No. 7230 prepared for the Project.
- 3. Move to determine that the required Findings cannot be made (state basis for not making the Findings) and move to deny Unclassified CUP No. 3555; and
- 4. Direct the Secretary to prepare a Resolution documenting the Commission's action.

Mitigation Measures, Recommended Conditions of Approval and Project Notes:

See Mitigation Measures and Recommended Conditions of Approval attached as Exhibit 1.

EA:in

G:\u00e4360Devs&PIn\PROJSEC\PROJDOCS\Environmental\EIR - EIS\. 7230 Scarlet (Recurrent Energy) EIR\Planning Commission & Staff Report\SR\CUP 3555 Staff Report Final Edfits 9.2.31.docx

EXHIBIT 1

EXHIBIT 1 Mitigation Monitoring and Reporting Program Scarlet Solar Energy Project EIR No. 7230 Conditions of Approval CUP No. 3555

	Mitigation Measures						
Mitigation Measure No.*	Impact	Mitigation Measure Language	Implementation Responsibility	Monitoring Responsibility	Time Span		
*1.	Air Quality	 MM AQ-1: Air Quality Best Management Practices (BMPs). During construction and decommissioning of the Project, the following measures shall be implemented: 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. Construction equipment will use only California-certified diesel or gasoline fuels The Applicant will use construction equipment that is at the Tier 4 interim emission level for equipment less than or equal to 81 horsepower and Tier 3 engines for all other equipment. 	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	During construction and decommissioning		
*2.	Air Quality	MM AQ-2: Further Reduction of NOX, PM10, and PM2.5 Emissions During Construction and Decommissioning, and PM10 Emissions During Operation and Maintenance. Prior to issuance of construction/grading permits for the Project, the Project Applicant shall enter into a Voluntary Emission Reduction Agreement (VERA) with the San Joaquin Valley Air Pollution Control District (SJVAPCD) to mitigate or reduce Project construction emissions of NO _x , PM ₁₀ , and PM _{2.5} , and Project operation and maintenance emissions of PM ₁₀ beyond the requirements of Rule 9510 through the payment of fees (on a per-ton basis) to the SJVAPCD. The payment of fees shall be made to the SJVAPCD based on the fee schedule in the development mitigation contract and the amount of reduction necessary to offset project emissions below the SJVAPCD's thresholds. Prior to the issuance of construction/grading permits for the Project, the Project Applicant shall provide evidence to the County of a fully-executed VERA.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Prior to issuance of County permits for construction and decommissioning		

			Twelve months prior to initiation of decommissioning activities, the Project Applicant shall provide evidence, consisting of an air quality analysis based on final decommissioning plans and prepared by an air quality specialist, to the County demonstrating that Project decommissioning emissions would not exceed the SJVAPCD PM ₁₀ significance thresholds of 15 tons per year. If the PM ₁₀ emissions will exceed the SJVAPCD thresholds of significance of 15 tons per year, the Project Applicant shall enter into a new VERA with the SJVAPCD to offset the decommissioning emissions below the thresholds of significance. Prior to the issuance of permits for decommissioning activities, the Project Applicant shall provide evidence to the County of the new fully-executed VERA, should one be required.			
EXHIBIT 1 - Page 2	*3.	Biological Resources	MM BIO-1(a) Worker Environmental Awareness Program. Prior to initiation of construction activities (including staging and mobilization), operation and maintenance activities, and decommissioning, all personnel associated with Project construction shall attend Worker Environmental Awareness Program training, conducted by a qualified biologist, to aid workers in recognizing special-status resources that may occur in the Project area. The specifics of this program shall include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information shall be prepared for distribution to all contractors, their employers, and other personnel involved with construction of the Project. All employees shall sign a form provided by the trainer documenting they have attended the training and understand the information presented to them.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Prior to construction, operation and maintenance, and decommissioning
	*4.	Biological Resources	MM BIO-1(b) Pre-Construction Nesting Bird Surveys and Impact Avoidance. If Project activities are scheduled to take place between September 16 through January 31, which is outside of the avian nesting season, no action would be required to protect nesting birds. If Project activities have been continuous since prior to February 1, no action would be required to protect nesting birds. If any Project activities that could harm birds or their nests (e.g., clearing temporary workspaces; staging or stockpiling machinery or supplies; parking vehicles, equipment, or trailers; grading or leveling; creating stockpiles of dirt or gravel; or any activity that could	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	14 days prior to ground disturbing activities associated with construction or decommissioning

*5	Piological	cover or remove existing habitat or disrupt surface soils) commence during the typical avian nesting season (February 1 through September 15), the following measures shall be implemented to avoid impacts on nesting raptors and other protected and common birds. a No more than 14 days prior to initiation of such activities, a qualified biologist shall conduct a pre-construction survey to determine if birds or nests are present. The survey area shall include suitable nesting habitat within 300 feet of the Project boundary (inaccessible areas outside of the Project site can be surveyed from the site or from public roads using binoculars or spotting scopes). Surveys may be phased as construction is phased, so that each section is surveyed no more than 14 days prior to the start of construction in that area. If no active nests are identified, no further mitigation is required. b If active nests are identified, a qualified biologist shall establish a no-disturbance buffer around the nests and no construction within the buffer shall be allowed until a qualified biologist determines that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest, or the nest has failed). The avoidance buffer size shall be determined based on species that is nesting, the status of the nest, site conditions, and level of anticipated Project activity in the vicinity of the nest. Encroachment into the buffer may occur at the discretion of a qualified biologist. Any encroachment into the buffer shall be monitored by a qualified biologist to determine whether nesting birds exhibit any negative responses to the activity. The biologist shall have the authority to halt or redirect construction activities in order to protect nesting birds and to help ensure an impact to nesting birds is avoided.		Eroono County	During
*5.	Biological Resources	MM BIO-1(c) Cap Hollow Tubes and Poles. Any vertical tubes (e.g., solar mount poles, chain link fencing poles, or any other hollow tubes or poles) used on the Project site shall be capped immediately after installation to avoid entrapment of birds.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	During construction
*6.	Biological Resources	MM BIO-1(d) Avoid Construction and Decommissioning Activities During the Burrowing Owl Nesting Season.	Applicant and/or their designee to implement	Fresno County Department of Public Works and	Prior to and during

		Ground-disturbance activities associated with construction and decommissioning of the Project shall begin outside of the burrowing owl nesting season (February 1 through September 15), unless reasonably necessary to stay on schedule. The site shall be maintained in a manner inhospitable to burrowing owl, such as keeping the site free of vegetation and maintaining regular site disturbance by construction equipment and personnel.	measure as defined	Planning, Development Services and Capital Projects Division, and/or its designee	construction and decommissioning
*7.	Biological Resources	MM BIO-1(e) Burrowing Owl Take Avoidance Survey. No more than 14 days prior to initiation of ground-disturbing activities associated with construction and decommissioning, a qualified biologist shall conduct a take avoidance survey of the Project site and surrounding areas to a distance of 150 meters, in accordance with the methods outlined in the CDFG Staff Report on Burrowing Owl Mitigation (CDFG 2012). The preconstruction survey will cover all areas within 150 meters of the portion of the site in which construction/decommissioning is scheduled to start. Surveys will be phased, based on the construction/ decommissioning schedule, such that they are conducted no more than 14 days before the start of ground disturbance in new areas. If construction/decommissioning activities in portions of the site cease for a period of 14 days, those portions of the site will be resurveyed for burrowing owls prior to the resumption of construction. If no occupied (breeding or wintering) burrowing owl burrows are identified, no further mitigation will be required.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	14 days prior to ground disturbing activities associated with construction or decommissioning Prior to resuming work if construction has ceased for more than 14 days
*8.	Biological Resources	MM BIO-1(f) Burrowing Owl Burrow Avoidance or Passive Relocation. If occupied burrows are identified on the site or within 150 meters of the Project disturbance area, one of the following actions shall be taken: 1) permanent avoidance of the burrow or 2) establishment of a temporary avoidance buffer followed by passive relocation and compensatory mitigation for loss of habitat in conjunction with the measures below: a Site-specific, no-disturbance buffer zones shall be established and maintained between Project activities and occupied burrows, using the distances recommended in the CDFW guidelines (CDFG 2012) or as otherwise	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee; California Department of Fish and Wildlife	Prior to and during construction and decommissioning

- determined appropriate by the qualified biologist in consultation with CDFW.
- b Avoidance of active burrows is preferrable, however, if an occupied burrow cannot be avoided, and the burrow is not actively in use as a nest, the burrowing owls can be excluded from burrows in accordance with an approved Burrowing Owl Exclusion Plan, which shall be prepared and submitted for approval by CDFW prior to passive relocation of any burrowing owls. The Burrowing Owl Exclusion Plan shall be based on the recommendations made in the Staff Report on Burrowing Owl Mitigation and shall include the following information for each proposed passive relocation:
- i. Confirmation by site surveillance that the burrow(s) is empty of burrowing owls and other species;
- ii. Identification of type of scope to be used and appropriate timing of scoping;
- Occupancy factors to look for and what shall guide determination of vacancy and excavation timing;
- iv. Methods for burrow excavation;
- v. Removal of other potential owl burrow surrogates or refugia on site;
- vi. Methods for photographic documentation of the excavation and closure of the burrow;
- vii. Monitoring of the site to evaluate success and, if needed, to implement remedial measures to prevent subsequent owl use to avoid take; h. Methods for assuring the impacted site shall continually be made inhospitable to burrowing owls and fossorial mammals; and
- viii. Method for compensatory mitigation for burrow loss.

If burrowing owls cannot be excluded from an off-site burrow and it is not feasible to maintain an avoidance buffer as stated above, coordination shall be conducted with CDFW to determine and implement appropriate measures to minimize impacts to off-site burrowing owls. Such measures could include, but are not limited to: 1) installation of barriers between the construction area and the occupied burrows to block noise and views of construction equipment and personnel, and 2) regular monitoring by a qualified biologist to determine if construction is resulting in disturbance of the owls that could

lead to nest abandonment or harm to adult owls or their young. If such disturbance was occurring, the biological monitor would have the authority to halt construction until further modifications could be made to avoid disturbance of the owls. *9. Biological Fresno County Durina MM BIO-1(g) Management of Permanent Avoidance Applicant and/or Department of Resources construction. Buffers. If permanent avoidance buffers are established on the their designee to Public Works and operation and project site to protect burrowing owls, such areas shall be implement Planning, measure as maintenance, managed for the duration of the Project through decommissioning to preserve current values as foraging habitat Development and defined for burrowing owl. Management shall include: 1) exclusion of all Services and decommissioning Capital Projects Project activities throughout the construction, operation, and Division, and/or decommissioning phases, including staging, parking, driving, or its designee dumping; 2) vegetation management by grazing or mowing to preserve open, low-growing vegetation; 3) fencing to discourage human incursion; and 4) signing identifying the area as a biologically sensitive area managed for burrowing owl. *10. Biological Fresno County Prior to and Applicant and/or MM BIO-1(h) Swainson's Hawk and General Raptor Resources Department of during Avoidance and Minimization. If Project construction or their designee to Public Works and construction and decommissioning is initiated during the Swainson's hawk implement nesting season (March 1 through September 15), a qualified Planning, decommissioning measure as Development biologist shall conduct a pre-construction Swainson's hawk and defined general raptor nest survey of all potential nesting habitat within Services and Capital Projects 0.5-mile of the Project site. The survey shall be conducted Division, and/or according to current Swainson's hawk protocol (Swainson's its designee; Hawk Technical Advisory Committee 2000). If no active nests California are identified, no further mitigation would be required. If active Department of Swainson's hawk nests are identified an avoidance buffer of Fish and Wildlife 0.25 mile shall be established around active nests consistent with the CDFW Staff Report (California Department of Fish and Game 1994). If active nests of non-listed raptors are identified an appropriate avoidance buffer, as determined by the qualified biologist, shall be established. No construction within avoidance buffers shall be 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). If it is not feasible to maintain a 0.25-mile buffer for an active Swainson's hawk nest to reasonably accommodate construction, maintenance, or decommissioning activities, the established buffer distance may be reduced through coordination with CDFW. Project activities within the reduced buffer shall be monitored at the discretion of a qualified biologist and based on coordination with CDFW.

*11.	Biological Resources	MM BIO-1(i) Pre-Construction Survey for San Joaquin Kit Fox. A qualified biologist shall conduct a preconstruction survey no more than 14 days prior to the beginning of ground disturbance and/or construction or decommissioning activities, or any other Project activity likely to impact San Joaquin kit fox. This is to determine if San Joaquin kit fox dens are present in or within 500 feet of the Project site (inaccessible areas outside of the Project site can be surveyed using binoculars or spotting scopes from public roads). The surveys shall be conducted in all areas of suitable habitat for San Joaquin kit fox. Surveys shall be phased so that surveys occur within 14 days prior to disturbance of any portion of the site.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	14 days prior to ground disturbing activities associated with construction or decommissioning Surveys shall be phased so that surveys occur within 14 days prior to disturbance of any portion of the site.
*12.	Biological Resources	MM BIO-1(j) San Joaquin Kit Fox Den Avoidance. If potential dens are observed and avoidance of the dens is determined to be feasible by a qualified biologist in consultation with the Project Applicant and CDFW, the following minimum buffer distances shall be established prior to construction activities (consistent with USFWS standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance [USFWS 2011]): c Potential den: 50 feet d Atypical den: 50 feet f Natal/pupping den: at least 500 feet -USFWS must be contacted If occupied San Joaquin kit fox dens are observed on the site, USFWS must be contacted. If avoidance of potential dens is not feasible, the following measures are required to avoid potential adverse effects to the San Joaquin kit fox: a If the qualified biologist determines that potential dens are inactive after monitoring the den per the USFWS Standard Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 2011), the biologist shall excavate these dens by hand with a shovel to prevent foxes from re-using them during construction. b If the qualified biologist determines that a potential nonnatal 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	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee; United States Fish and Wildlife Service	Prior to and during construction and decommissioning

		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 with prior concurrence from USFWS.			
*13.	Biological Resources	MM BIO-1(k) Vehicle Speed Limits. On-site vehicles shall observe a daytime speed limit of 20 mph and a nighttime speed limit of 10 mph throughout the Project site, except on County roads and state and federal highways. Off-road traffic shall be prohibited outside of designated Project areas.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	During construction, operation and maintenance, and decommissioning
*14.	Biological Resources	MM BIO-1(I) Hole and Trench Covering and Inspection for Kit Fox. To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of the Project, all excavated, steep-walled holes or trenches more than 2-feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the USFWS and the CDFW shall be contacted.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee; United States Fish and Wildlife Service; California Department of Fish and Wildlife	During construction
*15.	Biological Resources	MM BIO-1(m) Construction Pipe and Culvert Inspections for Kit Fox. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe shall not be moved until the USFWS has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee; United States	During construction

m
E E
Ĭ
_
² age
9

				Fish and Wildlife Service	
*16.	Biological Resources	MM BIO-1(n) Trash Disposal. During construction, operations, and decommissioning, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers and removed at least once a week from the construction site or Project site.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	During construction, operation, and decommissioning
*17.	Biological Resources	MM BIO-1(o) Firearm Restrictions. No firearms shall be allowed on the Project site during construction, operations, and decommissioning.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	During construction, operation, and decommissioning
*18.	Biological Resources	MM BIO-1(q) Rodenticide and Herbicide Restrictions. During construction, operations, and decommissioning, use of rodenticides and herbicides in Project areas shall be in compliance with the approved pest and weed management plan.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	During construction, operation, and decommissioning
*19.	Biological Resources	MM BIO-1(r) Notification of Kill or Injury of Kit Fox. During construction, operations, and decommissioning, a representative shall be appointed by the Project Applicant who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured, or entrapped kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the Service. Any contractor, employee, or military or agency personnel responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFW immediately in the case of a dead, injured, or entrapped kit fox. The CDFW	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee; California Department of Fish and Wildlife	During construction, operation, and decommissioning

EXHIBIT 1 - Page 10			contact for immediate assistance is State Dispatch at (916) 445-0045. They will contact the local warden or the wildlife biologist at (530) 934-9309. The USFWS shall be contacted at Endangered Species Division, 2800 Cottage Way, Suite W2605, Sacramento, CA 95825, (916) 414-6620 or (916) 414-6600. The Sacramento Fish and Wildlife Office and CDFW shall be notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during Project related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information.			
	*20.	Biological Resources	MM BIO-1(s) Reporting of Kit Fox Sighting. During construction, operations, and decommissioning, new sightings of kit fox shall be reported to the CNDDB. A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the USFWS.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	During construction, operation, and decommissioning
	*21.	Biological Resources	MM BIO-1(t) Site Restoration. Upon completion of the Project and decommissioning, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. shall be re-contoured if necessary, and revegetated to promote restoration of the area to pre-Project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the Project, but after Project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas shall be in compliance with the approved Reclamation Plan.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Project completion, decommissioning
	*22.	Biological Resources	MM BIO-1(u) Wildlife Fencing. Fencing of the Solar Facility Project site shall incorporate wildlife-friendly fencing design. Fencing plans may use one of several potential designs that would allow kit foxes to pass through the fence while still providing for Project security and exclusion of other unwanted species (e.g., domestic dogs and coyotes). Raised fences or fences with entry/exit points of at least 6 inches in diameter	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects	Prior to issuance of grading permit, construction, and operation

_	_	
\	T ×	
2	Ι	
Ī	T	J
-	^	
-		
-	_	
_	' T	
-	י ע	J
-	יעע	ן
200	י לטבעם	,
-	י דשמם	֡
200	י לאכם '	<u>_</u>
200	י דשמם ר	ָ ֝

		spaced along the bottom of the fence to allow species such as San Joaquin kit fox access into and through the Project site would be appropriate designs.		Division, and/or its designee	
*23.	Biological Resources	MM BIO-3(a) Avian/Power Line Collision Avoidance and Minimization. Construction of the gen-tie transmission line shall include installation of bird flight diverters, in accordance with the applicable measures of the most recent Avian Power Line Interaction Committee (APLIC) guidelines for minimizing avian collisions (Reducing Avian Collisions with Power Lines; APLIC 2012). Details of design components shall be indicated on all construction plans and be provided and approved by the County prior to construction. The applicant shall monitor for new versions of the APLIC collision guidelines and update designs or implement new measures as needed during Project construction, provided these actions do not require the purchase of previously ordered transmission line structures. Once constructed, all bird flight diverters shall be maintained for the duration of construction and operation.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Prior to issuance of grading permit, construction, and operation
*24.	Biological Resources	MM BIO-3(b) Avian Electrocution Avoidance and Minimization. The applicant shall design, construct, and maintain all transmission facilities, towers, poles, and lines in accordance with applicable policies set forth in the most recent APLIC Avian Protection Plan Guidelines for minimizing avian electrocutions (APLIC 2006). Details of design components shall be indicated on all construction plans and shall be provided and approved by County prior to construction. The Applicant shall monitor for new versions of the APLIC guidelines and update designs or implement new measures as needed during Project construction.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Prior to issuance of grading permit, construction, and operation
*25.	Cultural Resources	MM CR-1(a) Retain a Qualified Archaeologist. Prior to the issuance of construction/grading permits, the Applicant shall retain a Registered Professional Archaeologist or a monitor under their direction (qualified archaeologist) to carry out all mitigation measures related to archaeological and historical resources.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Prior to issuance of construction/grad ing permit

	*26.	Cultural Resources	MM CR-1(b) Cultural Resources Awareness Program. Prior to the commencement of construction/grading activities, the Applicant shall ensure that the qualified archaeologist has conducted a Cultural Resources Awareness Training for the general contractor, subcontractor(s), and all construction workers participating in earth disturbing activities. The training shall describe the potential of exposing archaeological resources, the types of cultural materials that may be encountered, and directions on the steps that shall be taken if such a find is encountered. This training may be presented alongside other environmental training programs required prior to construction. A training acknowledgment form must be signed by all workers who receive the training and retained. Additional trainings shall be conducted for all new construction personnel participating in earth disturbing activities throughout construction.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Prior to and during construction
EXHIBIT 1 - Page 12	*27.	Cultural Resources	 MM CR-1(c) Accidental Discovery Procedures. In the event unanticipated archaeological resources are encountered during earth disturbing activities, compliance with federal and state regulations and guidelines regarding the treatment of cultural resources and/or human remains shall be required. a All construction activities within 50 feet shall halt and the County shall be notified. b A qualified archaeologist, defined as one meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology, shall inspect the findings and report the results of the inspection to the developer and the County. c In the event that the identified archaeological resource is determined to be prehistoric, the County and qualified archaeologist will coordinate with and solicit input from the appropriate Native American Tribal Representatives regarding significance and treatment of the resource as a tribal cultural resource. Any cultural resource of Native American origin discovered during Project work shall be treated in consultation with the tribe, with the goal of preserving in place with proper treatment. If the County determines that the resource qualifies as a significant archaeological resource (as defined pursuant to the CEQA Guidelines) and that the Project has potential to damage or destroy the resource, mitigation shall be implemented in accordance with PRC Section 21083.2 and CEQA Guidelines Section 15126.4. Consistent with CEQA Guidelines Section 15126.4. Discource of the proper treatment. 	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	During construction

			preservation in place or, if preservation in place is not feasible, data recovery through excavation conducted by a qualified archaeologist implementing a detailed archaeological treatment plan.			
	*28.	Geology and Soils	MM GEO-2 Reduction of Liquefaction Potential. Prior to issuance of a grading permit, the applicant shall submit to the County Department of Public Works and Planning for review and approval, a ground improvement program prescribed by a qualified engineer to minimize liquefaction potential on the site. Measures to reduce liquefaction impacts could include, but may not be limited to, site preparation measures, foundation design measures such as removal and replacement of liquefiable soils, or others recommended by a structural engineer.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Prior to issuance of grading permits
EVUIRIT 1 Page 13	*29.	Geology and Soils	MM GEO-6(a) Retention of Qualified Paleontologist. Prior to initial ground disturbance, the Applicant shall retain a Qualified Paleontologist, defined as a paleontologist who meets the Society of Vertebrate Paleontology's (SVP) standards (SVP 2010), to direct the implementation of Mitigation Measures GEO-6(b) through 6(d). A Qualified Paleontologist (Principal Paleontologist) is defined by the SVP standards as an individual with an MS or PhD in paleontology or geology experienced with paleontological procedures and techniques, knowledgeable in the geology of California and the San Joaquin Valley, and who has worked as a paleontological mitigation project supervisor for a least one year.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Prior to issuance of grading permits
	*30.	Geology and Soils	MM GEO-6(b) Paleontological Mitigation and Monitoring Program. Prior to construction activity the Qualified Paleontologist shall prepare a Paleontological Mitigation and Monitoring Program to be implemented during ground-disturbance activity for the proposed Project. This program shall outline the procedures for construction staff WEAP training, paleontological monitoring extent and duration, salvage and preparation of fossils, the final mitigation and monitoring report, and paleontological staff qualifications.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Prior to issuance of grading permits
•	*31.	Geology and Soils	MM GEO-6(c) Paleontological Worker Environmental Program. Prior to the start of construction, the Qualified Paleontologist or his or her designee, shall conduct WEAP training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The WEAP	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and	Prior to and during construction

		shall be conducted at a preconstruction meeting when the Qualified Paleontologist is present. In the event of a fossil discovery by construction personnel, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find before restarting work in the area. If it is determined the fossil(s) is(are) scientifically significant, the qualified paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources.		Capital Projects Division, and/or its designee	
*32.	Geology and Soils	MM GEO-6(d) Paleontological Monitoring and Reporting. Prior to the start of construction activity, the Qualified Paleontologist retained under Mitigation Measure GEO-6(a) shall implement the Paleontological Mitigation and Monitoring Program as follows: 1. Paleontological Monitoring. Ground disturbing construction activities (including grading, trenching, foundation work and other excavations) exceeding 5 feet in depth shall be monitored on a full-time basis by a qualified paleontological monitor during initial ground disturbance. Implementation of the Paleontological Mitigation and Monitoring Program shall be supervised by the Qualified Paleontologist. Monitoring shall be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources. The duration and timing of the monitoring will be determined by the Qualified Paleontologist. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, he or she may authorize, after approval of the County, that monitoring be reduced to periodic spot-checking or ceased entirely. Monitoring shall be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension would need to be reconsidered by the Qualified Paleontologist. Ground disturbing activity that does not exceed 5 feet in depth shall not require paleontological monitoring. 2. Salvage of Fossils. If fossils are discovered, the Qualified Paleontologist or paleontological monitor shall recover them. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case the paleontologist shall have the authority to temporarily direct,	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Prior to and during construction

EXHIBIT 1 - Page 1			divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. 3. Preparation and Curation of Recovered Fossils. Once salvaged, significant fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology), along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the Qualified Paleontologist. 4. Final Paleontological Mitigation Report. Upon completion of ground disturbing activity (and curation of fossils if necessary), the Qualified Paleontologist shall prepare a final mitigation and monitoring report outlining the results of the mitigation and monitoring program. The report shall include discussion of the location, duration and methods of the monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils, and where fossils were curated.			
15	*33.	Hazards and Hazardous Materials	 MM HAZ-3(a) Valley Fever Management Plan. The Project applicant shall consult with the County, San Joaquin Valley Air Pollution Control District, and Cal/OSHA to develop a Valley Fever Management Plan that includes specific measures to reduce the potential for exposure to Valley Fever. Before grading permits can be issued, the applicant shall submit the Valley Fever Management Plan to the County for review and approval. The Valley Fever Management Plan shall include a program to evaluate the potential for exposure to Valley Fever from construction activities and to identify appropriate dust management and safety procedures that shall be implemented, as needed, to minimize personnel and public exposure to potential Valley Fever-containing dust. Measures in the Valley Fever Management Plan, which shall be implemented as applicable, may include the following: d Provide High Efficiency Particulate Air (HEPA)-filtered airconditioned enclosed cabs on heavy equipment. Train workers on proper use of cabs, such as turning on air conditioning prior to using the equipment. e Provide communication methods, such as two-way radios, for use in enclosed cabs. f Provide National Institute for Occupational Safety and Health-approved respirators for workers. 	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee; San Joaquin Valley Air Pollution Control District; Cal/OSHA	Prior to issuance of grading permits

EXHIBIT 1 -	
Page 16	•

Hazards and Hazardous Materials	implement a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Protection Standard (8 CCR 5144). k Provide separate, clean eating areas with handwashing facilities. l Thoroughly clean construction tools, equipment, and vehicles with water before they are moved off-site to other work locations. m Wheel-washing facilities with water-recycling systems shall be provided at all site egress points. Vehicles leaving the site on a daily basis shall utilize wheel-washing facilities in order to reduce dust migration off the Project site. n On-site workers shall be required to change clothes after work every day before leaving the work site, to prevent distribution of Coccidioides to non-endemic areas. As an alternative, disposable Tyvek® or equivalent work suits and work boots for use on-site shall be provided for workers. o Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever. Reporting of symptoms of Valley Fever and diagnosed cases of Valley Fever must occur consistent with Cal/OSHA requirements. MM HAZ-3(b) Valley Fever Dust Suppression Measures. If wind speeds exceed 15 miles per hour or temperatures exceed 95 degrees Fahrenheit for three consecutive days, additional dust suppression measures (such as additional water or the application of additional soil stabilizer) shall be implemented prior to and immediately following ground disturbing activities. The additional dust suppression shall continue until winds are	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or	Prior to issuance of grading permits, during construction
	 Cal/OSHA regulations for any worker that will be exposed to dust. h Require half-face respirators equipped with N-100 or P-100 filters to be used during digging if determined to be warranted after conducting a job hazard analysis. i Require employees to wear respirators when working near earthmoving machinery if determined to be warranted after conducting a job hazard analysis. j Require employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and 			
	and Hazardous	Cal/OSHA regulations for any worker that will be exposed to dust. h Require half-face respirators equipped with N-100 or P-100 filters to be used during digging if determined to be warranted after conducting a job hazard analysis. i Require employees to wear respirators when working near earthmoving machinery if determined to be warranted after conducting a job hazard analysis. j Require employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Protection Standard (8 CCR 5144). k Provide separate, clean eating areas with handwashing facilities. I Thoroughly clean construction tools, equipment, and vehicles with water before they are moved off-site to other work locations. m Wheel-washing facilities with water-recycling systems shall be provided at all site egress points. Vehicles leaving the site on a daily basis shall utilize wheel-washing facilities in order to reduce dust migration off the Project site. n On-site workers shall be required to change clothes after work every day before leaving the work site, to prevent distribution of Coccidioides to non-endemic areas. As an alternative, disposable Tyvek® or equivalent work suits and work boots for use on-site shall be provided for workers. o Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever. Reporting of symptoms of Valley Fever and diagnosed cases of Valley Fever must occur consistent with Cal/OSHA requirements. MM HAZ-3(b) Valley Fever Dust Suppression Measures. If wind speeds exceed 15 miles per hour or temperatures exceed 95 degrees Fahrenheit for three consecutive days, additional dust suppression measures (such as additional water or the application of additional soil stabilizer) shall be implemented prior to and immediately following ground disturbing activities.	Call/OSHA regulations for any worker that will be exposed to dust. h Require half-face respirators equipped with N-100 or P-100 filters to be used during digging if determined to be warranted after conducting a job hazard analysis. i Require employees to wear respirators when working near earthmoving machinery if determined to be warranted after conducting a job hazard analysis. j Require employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Protection Standard (8 CCR 5144). k Provide separate, clean eating areas with handwashing facilities. l Thoroughly clean construction tools, equipment, and vehicles with water before they are moved off-site to other work locations. m Wheel-washing facilities with water-recycling systems shall be provided at all site egress points. Vehicles leaving the site on a daily basis shall utilize wheel-washing facilities in order to reduce dust migration off the Project site. n On-site workers shall be required to change clothes after work every day before leaving the work site, to prevent distribution of Coccidioides to non-endemic areas. As an alternative, disposable Tyvek® or equivalent work suits and work boots for use on-site shall be provided for workers. o Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever and diagnosed cases of Valley Fever must occur consistent with Cal/OSHA requirements. Hazards and HAZ-3(b) Valley Fever Dust Suppression Measures. If wind speeds exceed 15 miles per hour or temperatures exceed 95 degrees Fahrenheit for three consecutive days, additional dust suppression measures (such as additional water or the application of additional soil stabilizer) shall be implemented prior to and immediately following ground disturbing activities.	Cal/OSHA regulations for any worker that will be exposed to dust. h Require half-face respirators equipped with N-100 or P-100 filters to be used during digging if determined to be warranted after conducting a job hazard analysis. i Require employees to wear respirators when working near earthmoving machinery if determined to be warranted after conducting a job hazard analysis. j Require employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Protection Standard (8 CCR 5144). k Provide separate, clean eating areas with handwashing facilities. I Thoroughly clean construction tools, equipment, and vehicles with water before they are moved off-site to other work locations. m Wheel-washing facilities with water-recycling systems shall be provided at all site egress points. Vehicles leaving the site on a daily basis shall utilize wheel-washing facilities in order to reduce dust migration off the Project site. On-site workers shall be required to change clothes after work every day before leaving the work site, to prevent distribution of Coccidioides to non-endemic areas. As an alternative, disposable Tyvek® or equivalent work suits and work boots for use on-site shall be provided for workers. O Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever. Reporting of symptoms of Valley Fever and diagnosed cases of Valley Fever must occur consistent with Cal/OSHA requirements. Hazards and Hazardous Materials MM HAZ-3(b) Valley Fever Dust Suppression Measures. If wind speeds exceed 15 miles per hour or temperatures exceed their designee to implement measure as defined work some measures (such as additional water or the application of additional soil stabilizer) shall be implemented prior to and immediately following ground disturbing activities. The additional dust suppression measures (such as a

		incorporated into the Final Construction Management Plan. The Final Construction Management Plan shall be submitted to the County for review and approval prior to the issuance of any grading permit.			
*35.	Hazards and Hazardous Materials	MM HAZ-3(c) Valley Fever Worker Training Program and Safety Measures. Prior to any Project grading activity, the primary construction contractor shall prepare and implement a worker training program that describes potential health hazards associated with Valley Fever, common symptoms, proper safety procedures to minimize health hazards, and notification procedures if suspected work-related symptoms are identified during construction. The objective of the training shall be to ensure that workers are aware of the dangers associated with Valley Fever. The worker training program shall be included in the standard in-person training for construction workers and shall identify safety measures to be implemented by construction contractors during construction, including all safety measures included in the Valley Fever Management Plan prepared pursuant to Mitigation Measure HAZ-3(a). Prior to initiating any grading, the Project applicant shall provide the County with copies of all educational training material for review and approval. No later than 30 days after any new employee(s) begin work, the Project applicant shall submit evidence to the County that each employee has acknowledged receipt of the training (e.g., sign-in sheets with a statement verifying receipt and understanding of the training).	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Prior to grading activity, during construction
*36.	Hazards and Hazardous Materials	MM HAZ-3(d) Valley Fever Information Handout. The Project applicant shall work with a medical professional, in consultation with the County, to develop an educational handout for on-site workers, and include the following information on Valley Fever: the potential sources/causes, the common symptoms, the options or remedies available should someone be experiencing these symptoms, and places where testing for exposure is available. Prior to construction permit issuance, this handout shall have been created by the applicant and reviewed by the County. A printed version of this handout shall be provided to all on-site workers on their first day at the Project site.	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Prior to issuance of grading permits
*37.	Hazards and Hazardous Materials	MM HAZ-4 Suspected Asbestos-Containing Materials. The Project proponent shall comply with the following mitigation in the event that materials suspected to contain asbestos are uncovered during construction activities:	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development	During construction

TRIHKA			 If suspected asbestos-containing materials are discovered during Project construction activities, work within a 100-foot distance of the discovery shall immediately halt and a California certified asbestos professional shall take samples for analysis of the suspect materials. All damaged asbestos-containing materials and asbestos-containing materials that would be disturbed by Project construction activities shall be removed in accordance with federal, state, and local laws and the National Emissions Standards for Hazardous Air Pollutants guidelines before work may recommence. All construction activities shall be undertaken in accordance with Cal/OSHA standards, as contained in Title 8 of the Cal. Code Regs., Section 1529, to protect workers from exposure to asbestos. Construction shall be performed in conformance with federal, state, and local laws and regulations so construction workers and/or the public avoid significant exposure to asbestos-containing materials. 		Services and Capital Projects Division, and/or its designee	
1 - Page 18	*38.	Hazards and Hazardous Materials	MM HAZ-5 Hazardous Materials Soil Sampling and Remediation. Prior to issuance of grading permits, for construction activities near the potential Recognized Environmental Concerns, additional soil samples testing for total petroleum hydrocarbons shall be performed near the onsite agricultural wells and pumps, fuel ASTs, turbine oil ASTs, diesel powered agricultural engines, and engine oil ASTs under the supervision of a professional geologist or professional engineer. The County shall review the results of the soil sampling to determine if any additional investigation or remedial activities are deemed necessary. No work shall resume in that area until the County has provided written authorization that the area does not warrant any additional action. If concentrations of contaminants are identified in areas of the Project site and are confirmed to pose a potential risk to human health and/or the environment by a qualified environmental specialist, contaminated materials shall be remediated either prior to or concurrent with construction. Remediation shall generally include a management plan which establishes design and implementation of remediation. Cleanup may include excavation, disposal, bio-remediation, and/or any other treatment of conditions subject to regulatory action. All necessary reports, regulations and permits shall be followed to	Applicant and/or their designee to implement measure as defined	Fresno County Department of Public Works and Planning, Development Services and Capital Projects Division, and/or its designee	Prior to issuance of grading permits

achieve cleanup of the site. The contaminated materials shall be remediated under the supervision of an environmental consultant licensed to oversee such remediation and under the direction of the lead oversight agency. The remediation program shall also be approved by the County. All proper waste handling and disposal procedures shall be followed. Upon completion of the remediation, the environmental consultant shall prepare a report summarizing the project, the remediation approach implemented, and the analytical results after completion of the remediation, including all waste disposal or treatment manifests. *39. Hydrology MM HWQ-4 Hazardous Materials Business Plan Inundation Fresno County Prior to and Applicant and/or and Water Measures. In addition to the HMBP requirements established Department of during operation their designee to Quality by California Health and Safety Code Section 25500 and the Public Works and implement Fresno County Division of Environmental Health, the Project's Planning. measure as HMBP shall include a flood inundation plan in the emergency Development defined Services and response plan section. Capital Projects **EXHIBIT 1 - Page** Division, and/or its designee **Conditions of Approval** Development and operation of the project shall be substantially in accordance with the Site Plan, Elevations, Operational Statement, Project Description, and Draft Reclamation Plan submitted to the Planning Commission. 2. The life of this Use Permit (CUP No. 3555) shall expire in 35-year after the issuance of any permits for development of the Project site. 3. Prior to issuance of building permit for the Use Permit (CUP 3555), a Site Plan Review (SPR) Application shall be submitted to and approved by the Director of the Department of Public Works and Planning in accordance with Section 874 of the Fresno County Zoning Ordinance. 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. 4. Site Plan Review (SPR) approval shall be required to ensure compliance with setback requirements, including a minimum 50-foot buffer from the edges of the project's property boundaries to the closest structural improvements or equipment (excluding fencing). A merger procedure shall be required to combine all affected parcels into one if: 1) any PV system or related equipment or structures would cross over individual property boundary lines, or if 2) minimum setback requirements are not met, and a Variance request has not been approved. 5. Prior to the County of Fresno's issuance of the grading or any development permit, the project developer must enter into a reclamation agreement with the County of Fresno on terms and conditions acceptable to the County of Fresno, which reclamation agreement will require the project owner to (1) decommission, dismantle, and remove the project and reclaim the site to its pre-project condition in accordance with the approved Reclamation Plan, and (2) maintain a financial assurance to the County of Fresno, to secure the project owner's obligations under the reclamation agreement, in an amount sufficient to cover the costs of performing such obligations, as

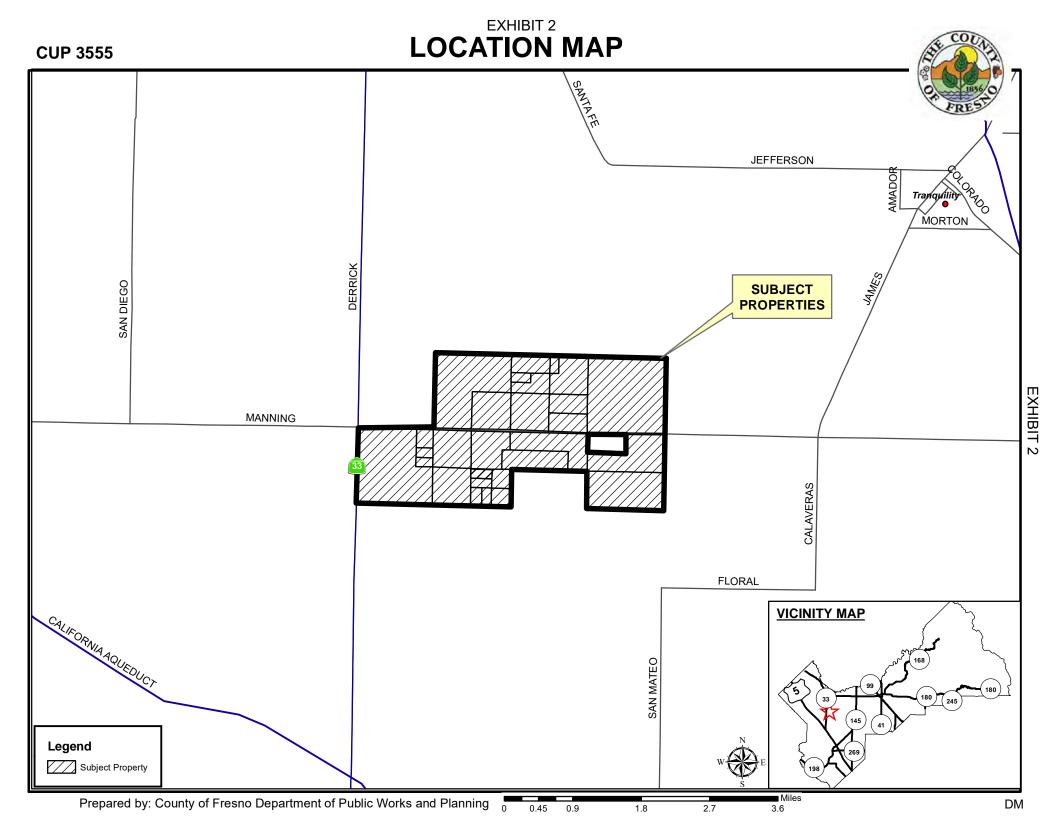
		provided herein. Such financial assurance shall be in the form of cash and maintained through an escrow arrangement or other form of security acceptable at the discretion of the Board of Supervisors.
		The amount of the financial assurance under the reclamation agreement shall (1) initially cover the project owner's cost of performing its obligations under the reclamation agreement, as stated above, based on the final County of Fresno-approved design of the project, which cost estimate shall be provided by the project owner to the County of Fresno, and be subject to approval by the County of Fresno, and (2) be automatically increased annually, due to increases in costs, using the Engineering News-Record construction cost index. This initial cost estimate will consider any project components, other than Improvements, that are expected to be left in place at the request of and for the benefit of the subsequent landowner as long as the improvements are directly supportive restoring the site to a viable agricultural use. (e.g., access roads, electrical lines, O&M building).
-	6.	The project shall substantially adhere to the provisions in the Draft Reclamation Plan as submitted to the Planning Commission and prepared for the decommissioning of the facility when operation ceases. Reasonable modifications may be made to the Plan to address changes of scope and configuration of the final Site Plan and improvements. The draft reclamation Plan shall be reviewed and approved as final by the County of Fresno, Department of Public Works and Planning prior to the issuance of any development permits.
EX	7.	The Reclamation Plan shall be revised to provide for an annual increase in costs at 3%, or tied to the Engineering News-Record construction cost index, or other mechanism acceptable to the Fresno County Department of Public Works and Planning.
EXHIBIT 1 -	8.	Prior to issuance of building permit for the Use Permit (CUP 3555), the developer shall submit to the County of Fresno for review and approval of a Pest and Weed Management Plan prepared for the project to control weeds and rodents on the property that may impact adjacent properties.
Page 20	9.	The County of Fresno shall enter into an agreement with a Consultant to act as a Third-Party Monitor and implement the Mitigation Monitoring and/or Reporting Program and Conditions Compliance Matrix 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 Program and Conditions of Approval, and the developer shall enter into an agreement with the County to pay all costs associated with the Consultant costs, Mitigation Monitoring expenses, and cost of County staff time related to implementation of mitigation measures and Conditions of Approvals.
-	10.	The project developer shall make all reasonable efforts to establish a point of sale in Fresno County for equipment and construction related items necessary for the project.
-	11.	The project developer shall make all reasonable efforts to conduct local recruitment efforts and/or coordinate with employment agencies in an attempt to hire from the local workforce
-	12.	The project developer shall make all reasonable efforts to purchase products and equipment from local (Fresno County) manufacturing facilities and/or vendors.
	13	Per the California Department of Transportation (Caltrans') Transportation Concept Report for SR 33, the ultimate right-of-way (ROW) is 110 feet. There exists 100 feet of Right of Way (ROW). Prior to approval of any construction permit, an additional five feet of ROW is required for the project to provide 53 feet right of way east of section line. Any proposed structure (s) or development shall be placed outside of Caltrans ultimate ROW for SR 33 and no direct access to SR 33 is allowed.

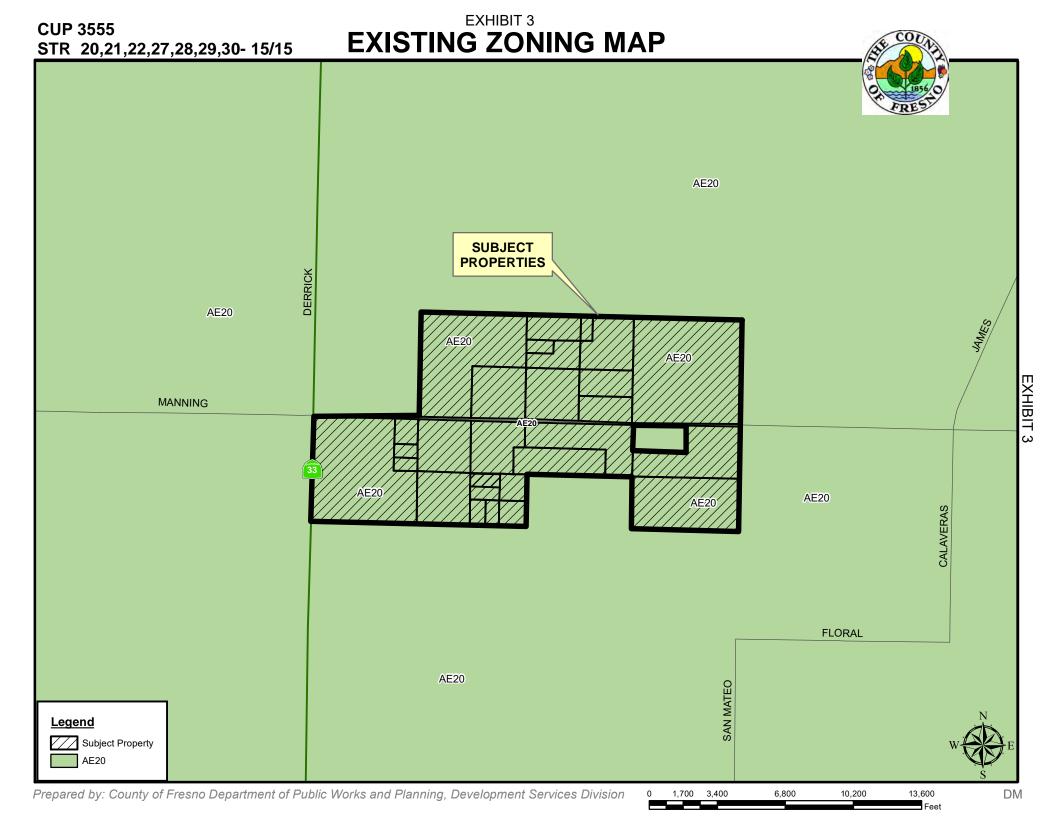
14	Prior to commencement of project construction, a Construction Traffic Management Plan shall be prepared for the project and submitted to the County and the California Department of Transportation for review and approval.
15.	A dust palliative shall be required on all unpaved parking and circulation areas during construction and decommissioning.
16.	Prior to granting occupancy to the use, the developer shall enter into a financially secured agreement to ensure that any County roads which are demonstrably damaged by project related traffic are repaired, paved, and/or slurry-sealed, as is determined by the Fresno County Public Works and Planning Department's Road Maintenance and Operations Division.
17.	During construction, operation, and decommissioning/reclamation, the site shall be operated and maintained in good working order, free of refuse, not unsightly, and in compliance with the approved pest and weed management plans approved for the project.
18.	Prior to granting any development permits, the developer shall record a document on the subject property incorporating the provisions of the County Right-To-Farm Notice (Fresno County Ordinance Code Section 17.04.100).

*MITIGATION MEASURE – Measure specifically applied to the project to mitigate potential adverse environmental effects identified in the environmental document. Conditions of Approval reference recommended Conditions for the project. The term Applicant is synonymous with the term developer.

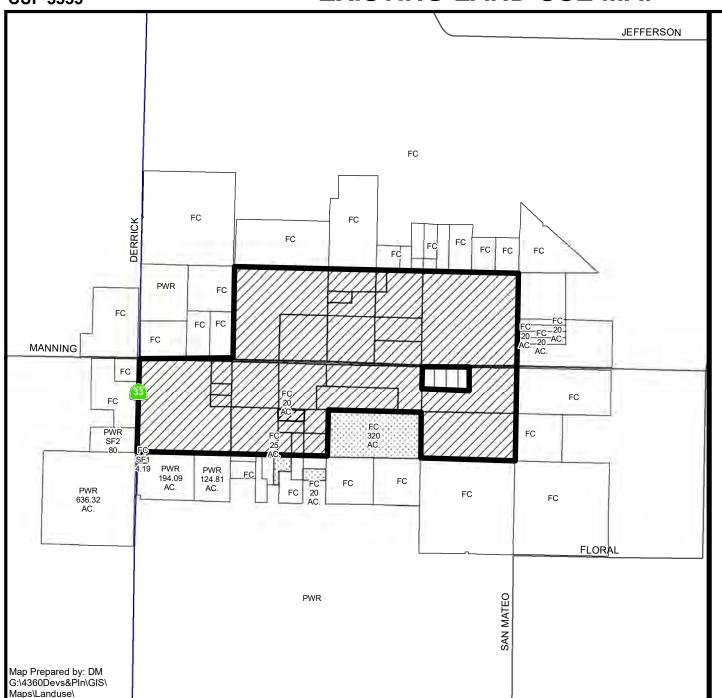
	Notes
The follow	ving Notes reference mandatory requirements of Fresno County or other Agencies and are provided as information to the project Developer.
1.	This Use Permit will become void unless there has been substantial development within two years of the effective date of this approval, or there has been a cessation of the use for a period more than two years.
2.	Construction plans, building permits and inspections are required for all proposed improvements on the property. Contact the Building and Safety Section of the Fresno County Department of Public Works and Planning at (559) 600-4540 for plans, permits and inspections.
3.	Prior to initiating construction, the developer shall be required to contact Underground Service Alert (811) to allow Westlands Water District staff to locate and mark its facilities prior to commencement of grading or construction activities.
4.	To address site development impacts resulting from the project, the Development Engineering Section of the Development Services and Capital Projects Division requires the following:
	 According to FEMA FIRM Panels 2500H and 2525H, the easterly portion of the area of the subject property is within the Special Flood Hazard Area, subject to flooding from the 100- year storm. Any development within the Special Flood Hazard Area shall conform to provisions established in Fresno County Ordinance Code Title 15, Chapter 15.48 Flood Hazard Areas. Any proposed structure in the Special Flood Hazard Area including any associated electrical equipment/electrical system components (e.g., service panels, meters, switches, outlets, electrical wiring, walk-in equipment cabinets, generators, bottom of the lowest edge of the solar array, pool-associated motors and water heater, receptacles, junction boxes, transformers, etc.) must comply with the FEMA flood elevation requirements. All electrical wiring below the flood elevation shall be in a watertight conduit or approved direct burial cable. Note that grading import is not allowed work within the flood zone. Any dirt material used for grading must be obtained within the designated flood area as to not cause an impact to the determined area of flooding. If the proposed work is near the flood zone, a certified Map of Survey/Map of Flood Hazard Area (MOS), stamped and signed by a Professional Land Surveyor or FEMA Elevation Certificate may be required.

		Notes
EXHIBIT 1 - Page 22		 If determination is made that the proposed structure is within the said flood zone, a completed FEMA Elevation Certificate shall be required. No permits will be issued until certified Map of Survey/Map of Flood Hazard Area and/or FEMA Elevation Certificate is reviewed and accepted by the Grading Engineer. The proposed photovoltaic solar farm must comply with Cal Fire Prevention Standard and Guidelines for clearance between property line/fence, clearance around any structure, clearance between photovoltaic arrays (walkway width), dead-end fire apparatus access road turnaround, minimum clear width and maximum grade of fire department access road, minimum turning radius, unobstructed vertical clearance, and the like. Any additional storm water runoff generated by the proposed development of this site cannot be drained across property lines, or into road right-of-way, and must be retained on-site, per County Standards. An Engineered Grading and Drainage Plan may be required to show how additional storm water run-off generated by the proposed development will be handled without adversely impacting adjacent properties. A grading permit or voucher is required for any grading proposed with this application. Any work done within the County road right-of-way to construct a new driveway or improve an existing driveway will require an Encroachment Permit from the Road Maintenance and Operations Division.
	5.	Continue Adding
	6.	To address site development impacts resulting from the project, the California Department of Transportation (Caltrans). requires the following:
		Oversized or heavy load vehicles used for the construction of this solar project may require a Transportation Permit Application from California Department of Transportation (Caltrans).
		 Any proposed structure (s) or development shall be placed outside of Caltrans ultimate ROW for SR 33 and no direct access to SR 33 is allowed. An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the
		State highway rights-of-way.
	7.	The project shall comply with California Code of Regulations Title 24– Fire Code and "Prior to receiving FCFPD conditions of approval for the project, the developer shall submit construction plans to the County of Fresno Public Works and Planning for review. The project may also be annexation into the Community Facilities District No. 2010-01 of the Fresno County Fire Protection District.
	8.	A National Pollutant Discharge Elimination System (NPDES) Construction Storm Water Permit shall be secured for the Project. Construction activities disturbing one acre or more of land are subject to the permitting requirements of the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (Construction General Permit) and must apply for Construction General Permit coverage.









LEGEND

FC - FIELD CROP PWR - POWER GENERATION SITE SF#- SINGLE FAMILY RESIDENCE V - VACANT

LEGEND:

Subject Property

Ag Contract Land



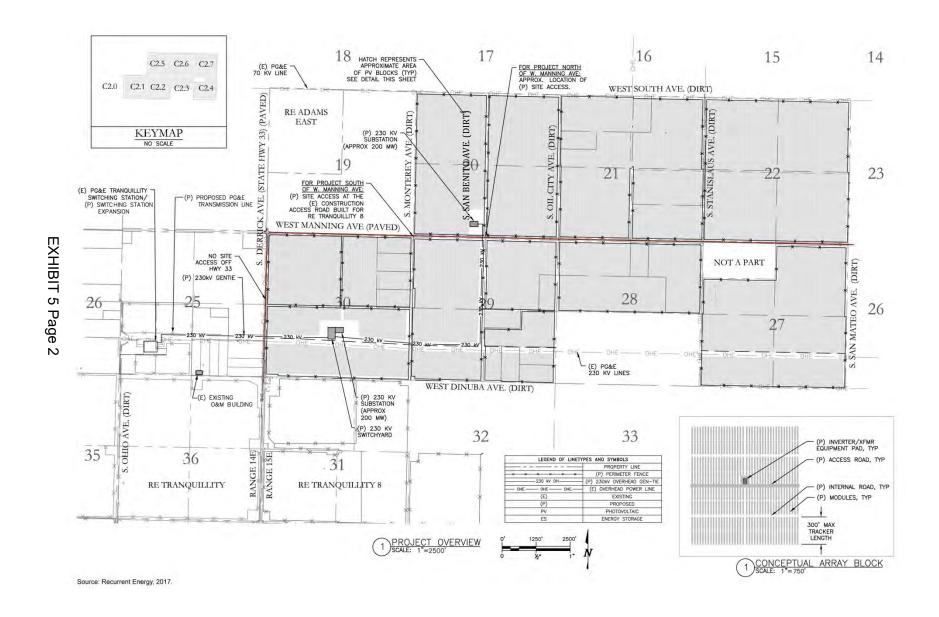
0 1,3752,750 11,000 8,250

Department of Public Works and Planning **Development Sevices Division**



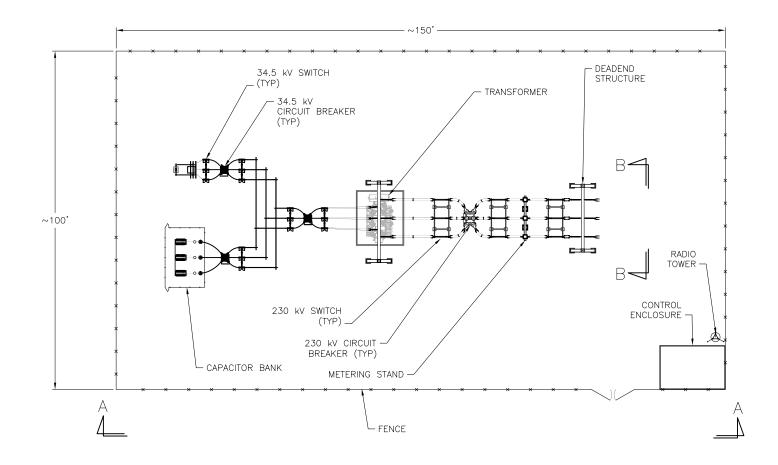
Figure 1. Site Location



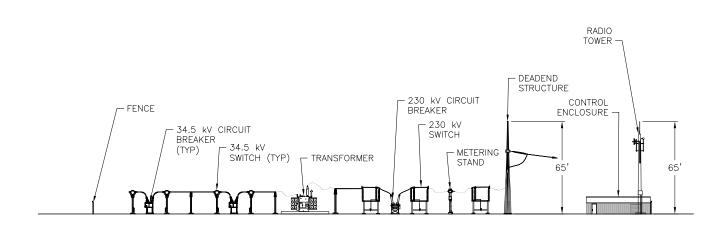


2016-06-02_RE SCARLET_SITE DETAILS.DWG

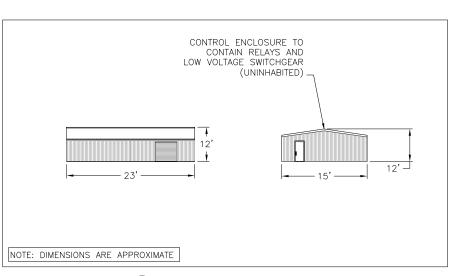
Figure 4. 230 kV Substation Plan and Elevations



230 kV SOLAR SUBSTATION PLAN scale: nts



DEAD END STRUCTURE



ENCLOSURE ELEVATIONS

NOTE: FINAL SUBSTATION TO BE DESIGNED BY EPC

EXHIBIT 5 Page 4

ELEVATION A-A scale: nts 6/2/2016 8:52 AM

RECURRENT ENERGY

ENGINEER'S STAMP SYSTEM

SOLAR SUBSTATION & ELEVATIONS

PHOTOVOLTAIC SCARLET LLC

PROPOSED F 230

DEV. ENG. M. BERGER

SHEET

2016-06-02_RE SCARLET_SUBSTATION DETAILS.DWG

PROJECT DESCRIPTION and OPERATIONAL STATEMENT

Table of Contents

2	Projec	ct Descrip	tion	1
	2.2	Lead Ag	ency	2
	2.3	Project .	Applicant	2
	2.4	Property	y Owner	2
	2.5	Project	Location	2
	2.6	-	Site Characteristics	
		2.6.1	Existing Land Use	
		2.6.2	Surrounding Land Uses	6
	2.7	Project	Background	7
	2.8	Project	Objectives	7
	2.9 Project Facilities			
		2.9.1	Photovoltaic Modules and Support Structures	8
		2.9.2	Inverters and Transformers	
		2.9.3	Project Substations and Gen-Tie Transmission Lines	11
		2.9.4	PG&E Transmission Line	13
		2.9.5	Other Infrastructure	13
		2.9.6	Solar Facility Site Safety and Security	15
		2.9.7	Site Buffers and Respect for Nearby Agricultural Operations	
	2.10	Water R	equirements and Waste Generation	
		2.10.1	Water and Wastewater	16
		2.10.2	Solid Waste	17
	2.11	Constru	ction	18
		2.11.1	Solar Facility Phase 1: Site Preparation	18
		2.11.2	Solar Facility Phase 2: Photovoltaic Module System	19
		2.11.3	Solar Facility Phase 3: Inverters, Transformers, Substation and Electrical	
			Collector System	20
		2.11.4	Construction Site Restoration and Revegetation	20
		2.11.5	Construction Schedule and Workforce	21
		2.11.6	Construction Access, Equipment, and Traffic	22
		2.11.7	Construction Personnel Training	25
	2.12	Operation	on and Maintenance	26
		2.12.1	Operation and Maintenance Workforce	26
		2.12.2	Automated Facility Control and Monitoring System	27
		2.12.3	Site Maintenance	27
		2.12.4	Operation Equipment	27
		2.12.5	Fire Suppression and Safety Training	28
	2.13	Decomr	nissioning and Site Reclamation	28
		2.13.1	Decommissioning of Equipment	28
		2.13.2	Site Reclamation	28
	2.14	Other R	equired Permits and Commitments	29

County of Fresno Scarlet Solar Energy Project

Tables

Table 2-1	Proposed Construction Phasing and Construction-related Employment	21
Table 2-2	Solar Facility On-site Equipment and Vehicle Use by Construction Phase	2 3
Table 2-3	Energy Storage System On-site Equipment and Vehicle Use	24
Table 2-4	Proposed Operations and Maintenance Equipment and Estimated Annual Usage	28
Figures		
Figure 2-1	Regional Location	3
Figure 2-2	Project Site Location	4
Figure 2-3	Site Plan	5
Figure 2-4	Tracker Elevation and Details	10
Figure 2-5	230 kV Solar Substation Plan and Elevations	12

2 Project Description

This section describes the proposed project, including the project applicant, the project site and surrounding land uses, major project characteristics, project objectives, and discretionary actions needed for approval.

2.1 Project Overview

The Scarlet Solar Energy Project is proposed by RE Scarlet LLC (Applicant), a wholly owned subsidiary of Recurrent Energy (RE) LLC. The Applicant has applied to the Fresno County Department of Public Works and Planning (the County) for an Unclassified Conditional Use Permit (UCUP) to construct, operate, maintain, and decommission a solar photovoltaic (PV) electricity generating and energy storage facility and associated infrastructure to be known as the Scarlet Solar Energy Project (Project). The Project would generate a total of up to 400 megawatts of alternating current (MW_{ac}) at the point of electrical grid interconnection on approximately 4,089 acres in unincorporated western Fresno County. The Project would provide solar power to utility customers by interconnecting to the regional electricity grid at Pacific Gas and Electric Company's (PG&E) existing Tranquillity Switching Station located just west of the Project site.

The Project would operate year-round to generate solar electricity during daylight hours, and would store and dispatch power at the energy storage system during both daylight and non-daylight hours. The Project is anticipated to be constructed in continuous phases, with the first phase beginning in mid-2020. The exact timing of the last phase is dependent on opportunities in the solar market, but it is currently anticipated to be online as early as late 2021.

Components of the Project would include:

- Groups of solar arrays (arrays include PV modules and steel support structures, electrical inverters, transformers, cabling, and other infrastructure)
- Two electrical substations
- The Project switchyard, including one high-voltage 230-kV utility switchyard, a 140-foot radio tower for telecommunications, and two 150-foot dead-end structures
- Approximately 3.1 miles of 230 kV generator intertie (gen-tie) transmission line (from the substations and the Project 230-kV switchyard) to connect to PG&E's Tranquillity Switching Station
- Approximately 2,000 feet of PG&E 230 kV transmission line to connect the Scarlet Solar Project 230 kV gen-tie line to PG&E's Tranquillity Switching Station
- A 400 MW energy storage system, consisting of battery or flywheel enclosures and electrical cabling
- Other necessary infrastructure, including one permanent operation and maintenance (O&M) building, a septic system and leach field, a supervisory control and data acquisition (SCADA)

Scarlet Solar Energy Project

system, a meteorological data system, buried conduit for electrical wires, overhead collector lines, on-site access roads, a shared busbar¹, and wildlife-friendly security fencing.

2.2 Lead Agency

County of Fresno
Department of Public Works and Planning
2220 Tulare Street, 6th Floor
Fresno, California 96721
Contact: Christina Monfette
(559) 600-4245

2.3 Project Applicant

RE Scarlet LLC 353 Sacramento Street San Francisco, California 94111 Contact: Christy Herron

2.4 Property Owner

Westlands Water District 3130 North Fresno Street Fresno, California 93703-6056

2.5 Project Location

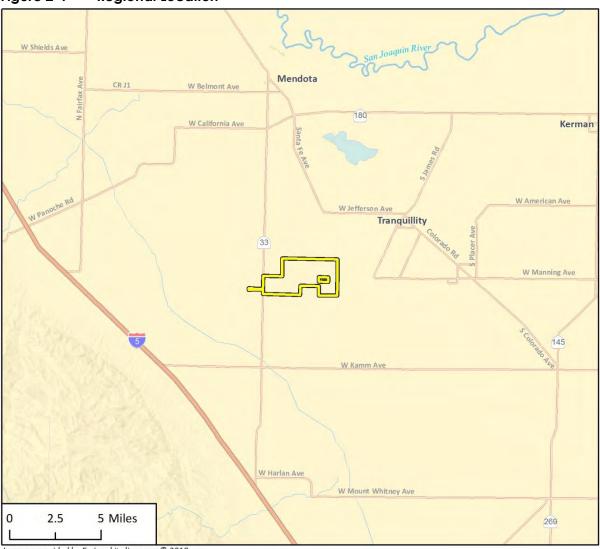
The Project site is located in unincorporated Fresno County, approximately 4.2 miles west-southwest of the community of Tranquillity and approximately 10 miles east of Interstate 5 (I-5). The Project site is located northeast of and adjacent to the Tranquillity Solar Generating Facility, which is currently under construction. The Project site would encompass up to 28 parcels² generally located south of West South Avenue, north of West Dinuba Avenue, east of State Route 33 (SR 33; South Derrick Avenue), and west of South San Mateo Avenue. Figure 2-1 and Figure 2-2 show the location of the Project site on a regional and local scale, respectively. The Project site would be arranged as shown in the preliminary site plan (Figure 2-3). As shown on Figure 2-2 and Figure 2-3, approximately 76 acres of federally owned land are surrounded by the Project site but are not proposed as part of the Project.³

¹ A busbar is a system of electrical conductors in a generating or receiving station on which power is concentrated for distribution to several electrical circuits.

² The project would be constructed on any or all of assessor parcels 028-07-134, 028-07-139, 028-07-140, 028-07-141, 028-07-143, 028-07-144, 028-07-145, 028-07-147, 028-07-148, 028-07-149, 028-08-166, 028-11-101, 028-11-102, 028-11-104, 028-11-106, 028-11-107, 028-11-109, 028-11-110, 028-11-112, 028-11-113, 028-11-114, 028-11-115, 028-11-116, 028-11-117, 028-11-119, 028-11-120, 028-12-061, 028-12-062.

³ The project site excludes assessor parcels 028-12-033, 028-12-035, 028-12-037, and 028-12-039.

Figure 2-1 Regional Location



Imagery provided by Esri and its licensors © 2018.





Weglawil Loanion

Figure 2-2 Project Site Location

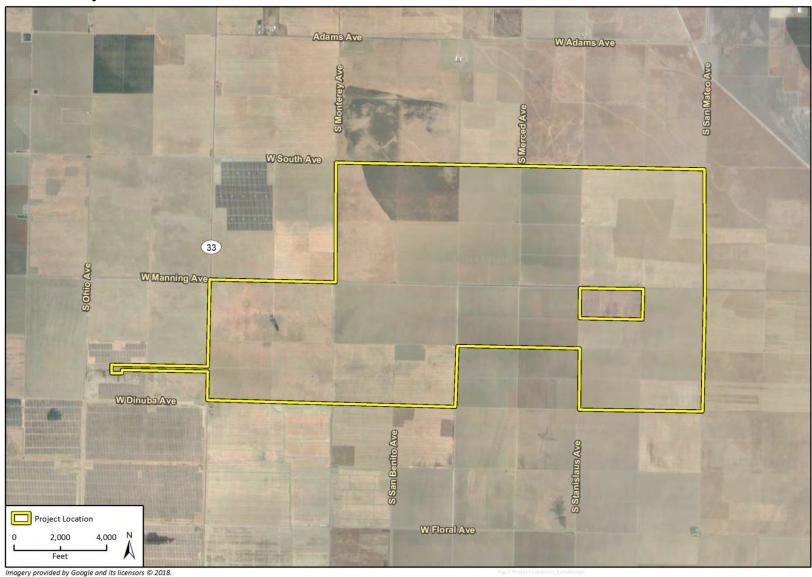
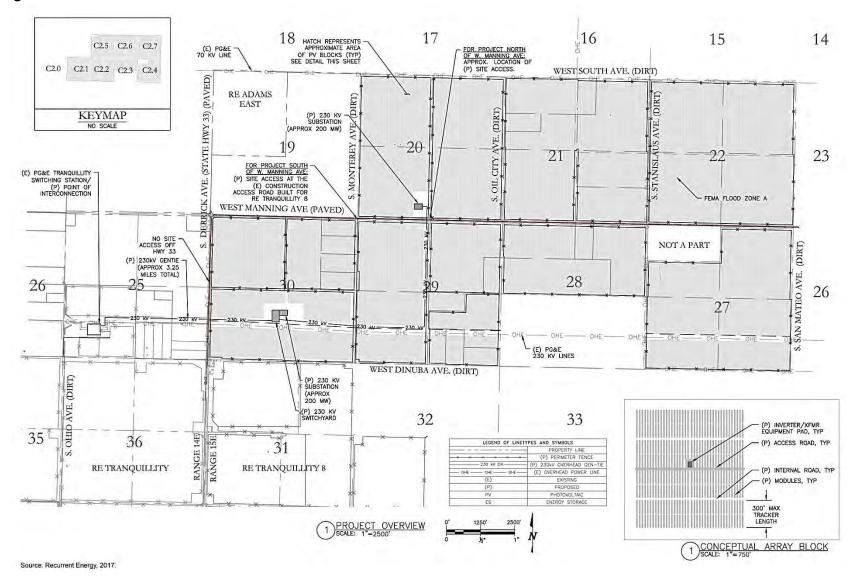


EXHIBIT 6 Page 6

Figure 2-3 Site Plan

EXHIBIT 6 Page



2.6 Existing Site Characteristics

2.6.1 Existing Land Use

The Project site is designated as Exclusive Agriculture in the Fresno County General Plan (2000) and is zoned AE20 (Exclusive Agriculture, 20-acre minimum required). The property is currently owned by Westlands Water District (WWD).⁴

The existing land use of the Project site is primarily dry-farmed agriculture that has been intermittently irrigated. For the past 10 years, the Project site intermittently has been in low-yield agricultural production (tilled, seeded, and harvested for winter wheat); intermittently irrigated (drip or sprinkler) and harvested for alfalfa seed or other crops; or disked twice a year and left fallow. The site is subject to high levels of selenium and a water table that does not provide for sufficient drainage for most commercially irrigated crops. Furthermore, the entire Project site is part of Westlands Water District settlements that require a non-irrigation covenant upon transfer of ownership. For the portion of the Project site that is cultivated without the benefit of irrigation, the productivity of these crops depends entirely on rainfall. When the unirrigated crops fail to mature to harvest, the land is grazed as rangeland grasses. There are no Williamson Act contracts binding any of the parcels.⁵

Two existing PG&E transmission lines are located on the north side of Dinuba Avenue, along the southern portion of the Project site (Figure 2-3). There also are existing PG&E utility lines within the site. These would remain in place with an easement granted to PG&E for access.

Approximately 76 acres of federally owned land are surrounded by the Project site but are not proposed as part of the Project. This land would not be contained within the Project security fence, and the existing legal access would be retained. It is anticipated that the existing use of this land for occasional dry farming followed by periods of fallow use would continue if the Project is approved. This parcel is not subject to a Williamson Act contract.

Roadways surrounding the Solar Facility site comprise of West Dinuba Avenue and State Route 33 (West Derrick Avenue), both of which are paved, as well as South San Mateo Avenue and West South Avenue, which are dirt. These roads range between 15-feet and 50-feet in width and provide a buffer between the Project site and the parcels to the north, west, south, and east.

2.6.2 Surrounding Land Uses

Existing land uses surrounding the Project site consist of agriculture, solar development, and two rural residences. Non-irrigated agricultural land surrounds the Project site to the north, east, and west. These lands are owned mostly by Westlands Water District, which keeps them in various states of low-value agricultural production. The Tranquillity Solar Generating Facility, which is under development, and two rural residences also borders the Project site to the south. The Adams East Solar Facility is located approximately 0.4 mile northwest of the project site.

⁴ The Westlands Water District acquired this property as part of the following settlements: (1) the September 3, 2002 settlement agreement reached among the United States, Westlands Water District, and others in the Sumner Peck Ranch et al. v. Bureau of Reclamation et al. lawsuit; (2) the Britz settlement (a separate action executed on September 3, 2002); and (3) the 2002 settlement agreement reached in the Sagouspe et al. v. Westlands Water District et al. lawsuit.

⁵ The Williamson Act (also known as the California Land Conservation Act of 1965) enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. The contracted land is then restricted to agricultural and compatible uses through a rolling-term, 10 year contract between the private land owner and the local government.

2.7 Project Background

The California Renewable Portfolio Standard (RPS) legislation enacted in 2002 (Senate Bill 1078) and accelerated in 2006 required retail sellers of electricity to obtain 20 percent of their supply of electricity from renewable energy sources, such as solar, by 2010. Subsequent recommendations advocated a goal of 33 percent by 2020, which Governor Arnold Schwarzenegger set as a statewide goal when he signed Executive Order S-14-08. The following year, Executive Order S-21-09 directed the California Air Resources Board, under its Assembly Bill 32 authority, to enact regulations to achieve the goal of 33 percent renewables by 2020 (California Energy Commission 2014). The 33 percent goal was enacted into law by Governor Brown on April 13, 2011 with his signing of Senate Bill 2X. The California Public Utilities Commission states that the state's investor-owned utilities (including PG&E, Southern California Edison, and San Diego Gas & Electric) collectively served 22.7 percent of their 2013 retail electricity sales with renewable energy sources, and that they have all exceeded the contractual requirements for reaching 33 percent by 2020 (California Public Utility Commission [CPUC] 2016). To set a higher goal, on October 7, 2015, Governor Brown signed Senate Bill 350, known as the Clean Energy and Pollution Reduction Act of 2015, which increased California's RPS to 50 percent by 2030.

Power generated by the Project would be delivered directly via the California Independent System Operator (CAISO) electrical transmission system pursuant to the terms of one or several power purchase agreements.

2.8 Project Objectives

The Applicant has identified the following objectives for the Project:

- Establish a solar photovoltaic power-generating facility of a sufficient size and configuration to produce up to 400 MW_{ac} of electricity at the Point of Interconnection in a cost competitive manner.
- Develop sites in close proximity to transmission infrastructure in order to minimize environmental impacts.
- Interconnect directly to the 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 33 percent of retail sales from renewable sources by the end of 2019 and 50 percent by the end of 2030.
- Assist California utilities in meeting their obligations under the CPUC's Energy Storage
 Framework and Design Program, including procurement targets of 1,325 MWs by 2020, by
 providing up to 400 MW of storage capacity.
- 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.
- Assist California in meeting the greenhouse gas (GHG) emissions reduction goals by 2020 and 2030 as required by the California Global Warming Solutions Act (Assembly Bill 32 and Senate Bill 32).

2.9 Project Facilities

The Project would comprise a new Solar Facility that includes solar PV modules (or modules), support structures, electrical inverters, and intermediate voltage transformers. The Solar Facility would include two substations which would receive consolidated intermediate voltage cables from the collector system and step the voltage up to 230 kV via high voltage transformers located in the individual PV substation or shared facilities (Figure 2-3). Each substation area would include an electrical control building. Other necessary infrastructure would include one permanent operation and maintenance building, a supervisory control and data acquisition (SCADA) system, up to 400 MW of on-site battery storage, meteorological data system, telecommunications infrastructure, access roads, and security fencing. The proposed substations would tie into PG&E's high-voltage 230 kV Tranquillity Switching Station, which would connect to PG&E's two existing 230 kV transmission lines located directly adjacent to the Switching Station. The components of the proposed facility are discussed below.

2.9.1 Photovoltaic Modules and Support Structures

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

Types of modules that may be installed include thin-film modules (including cadmium telluride [CdTe or "cad tel"] and copper indium gallium diselenide [CIGS] technologies), crystalline silicon modules, or any other commercially available PV technology. Solar thermal technology is not being considered. Module mounting systems that may be installed include either fixed-tilt or tracking technology, depending on the PV modules ultimately selected. Multiple types of modules 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. Modules would be arranged in strings with a maximum height of 12 feet. Module faces would be minimally reflective, dark in color, and highly absorptive of light.

Modules would be arranged on the site in solar arrays. For single-axis tracking systems, the length of each row of modules would be approximately 350 feet along the north/south axis. For fixed-tilt systems, a row consists of multiple tables (4 modules high by 10 modules wide, depending on design), each table approximately 65 feet along the east/west axis, with 1 foot spacing between each table. Spacing between each row would be a minimum of 4 feet. The solar module array would generate electricity directly from sunlight, collect it to a single point at one of the Project substations, and interconnect it to PG&E's transmission and distribution system.

Structures supporting the PV modules 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 typically would be 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, 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 modules to be secured directly to the torque

tubes using appropriate module clamps. For some single-axis tracking systems, and for all fixed-tilt systems, a galvanized metal racking system, which secures the PV modules to the installed foundations, would then be field-assembled and attached according to the manufacturer's guidelines.

Fixed-tilt arrays would be oriented along an east-west axis with modules facing generally south. Tracking arrays would be oriented along a north-south axis with modules tracking east to west to follow the movement of the sun. The total height of the module system measured from ground surface would be up to 12 feet. Figure 2-4 shows an elevation drawing of the solar modules and tracking system. For fixed-tilt systems, the modules would be fixed at an approximate 20- to 60-degree angle or as otherwise determined necessary during final Project design.

Where excavations are required, the majority of proposed construction activities would be limited to less than 6 feet in depth, however, some excavations, such as those undertaken for the installation of collector poles and dead-end structures (see 2.9.2 for details), may reach depths of 20 feet or more.

Per Fresno County policy, the solar modules would be setback a minimum of 50 feet from the property line and neighboring agricultural operations along SR 33 (South Derrick Avenue), South Monterey and South Stanislaus Avenue to the west; West South Avenue and West Manning Avenue to the north; South San Mateo Avenue and South Oil City Avenue to the east; and West Dinuba Avenue to the south.

2.9.2 Inverters and Transformers

The Solar Facility would be designed and laid out in approximately 2 MW increments which would include an inverter equipment area measuring approximately 40 feet by 25 feet. However, the final increment sizes ultimately would depend on available technology and market conditions. Each 2 MW increment would include an inverter-transformer station constructed on a concrete pad or steel skid, and centrally located within the PV arrays. Each inverter-transformer station would contain up to four inverters, a transformer, a battery enclosure, and a switchboard approximately 8 to 11 feet high. If required based on site meteorological conditions, an inverter shade structure would be installed at each pad. The shade structure would consist of wood or metal supports and a durable outdoor material shade structure (metal, vinyl, or similar). The shade structure would extend up to 10 feet above the top of the inverter pad.

Modules would be electrically connected into module strings using wiring secured to the module racking system. Underground cables, either rated for direct bury or installed in PVC conduit, would be installed to convey the direct current (DC) electricity from the modules via combiner boxes located throughout the PV arrays, to inverters to 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 shown in the diagram in Figure 2-4. 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.

PANEL AT 45° TILT 20' (MIN.) 10' (MIN.) SINGLE GATE 10' ON CENTER, TYP GALVANIZED STEEL POST FINSHED GRADE 5 GATE ELEVATION SCALE: NTS 1 EAST OR WEST — TYPICAL TRACKER ELEVATION 6 ENERGY STORAGE CONTAINER 2,000A SWITCHBOARD (2) EAST OR WEST - TYPICAL SITE PERIMETER ELEVATION 5' TO 7' (TYP) 15' TYPICAL SPACING 10' MIN CLEARANCE ELEVATION B 7 INVERTER/XFMR PAD SCALE: NTS 20' MIN CLEARANCE TO PANELS 3 NORTH OR SOUTH - TYPICAL TRACKER ELEVATION SURFACE TO MEET
FRESNO COUNTY
IMPROVEMENT
STANDARDS
REQUIREMENTS HEIGHT WARIES, MAX 150', (110' TYP) PANELS (BEYOND) / 3 STRANDS BARBED WIRE ACCESS & PERIMETER ROADS 230 kV CIRCUIT, -3-PHASES 20' MIN CLEARANCE TO PANELS MONOPOLE --DURABLE DUSTLESS SURFACE CHAIN LINK FENCING (E) GROUND 4 NORTH OR SOUTH - TYPICAL SITE PERIMETER ELEVATION SCALE: NTS

INTERNAL ROAD 8 ROAD DETAILS

9 230kV GEN-TIE POLE

Figure 2-4 **Tracker Elevation and Details**

Source: Recurrent Energy 2017

2.9.3 Project Substations and Gen-Tie Transmission Lines

The two substations would transform voltage from 34.5 kV to 230 kV. The area of each substation and associated equipment would be approximately 30,000 square feet (150 feet by 200 feet). Figure 2-3 shows the substation locations. Each substation would collect consolidated intermediate voltage cables from the PV collector system.

Structural components in each substation area would include:

- Power transformers (approximately 25 feet by 40 feet, and 25 feet high)
- Footings for power transformers
- Pre-fabricated control buildings (each approximately 23 feet by 15 feet, and 12 feet high) to enclose the protection and control equipment, including relays and low voltage switchgear
- Footings (up to 12 feet deep) for the control enclosure structure
- Metering stand and capacitor bank(s)
- Circuit breakers and air disconnect switches
- A telecommunications tower up to 65 feet in height
- One microwave tower adjacent to the control building comprising a monopole structure up to
 50 feet in height mounted with an antenna up to 5 feet in diameter
- Dead-end structure(s) to connect Project substation(s) to the PG&E Tranquility Switching Station
- Two equipment storage containers measuring 40 feet by 8 feet by 9 feet each also would be located at each substation area

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 to a maximum depth of approximately 6 inches. Because each of the substation transformers would contain mineral oil (see Section 2.10.2), the substations would be designed to accommodate an accidental spill of transformer fluid by the use of containment-style mounting. Each substation would be surrounded by an up-to 8-foot high chain link fence topped with one foot of barbed wire. Each of the dead-end structures would require foundations excavated to a depth of 20 feet or more. Diagrams showing the substation plan, elevation, dead end structure elevation, and control enclosure elevations are provided in Figure 2-5.

Electrical transformers, switchgear, and related substation facilities would be designed and constructed to transform medium-voltage power from the Project's delivery system to the 230-kV gen-tie transmission lines (carried on either a single set of double-circuit structures or two sets of single-circuit transmission structures) connecting the Project site to the PG&E Switching Station via a new segment of transmission line (see Section 2.9.4). The gen-tie structures would include tubular steel poles and H-frame structures with foundations excavated to a depth of 20 feet or more. The overhead gen-tie line would be up to approximately 3.1 miles long and consist of up to 30 structures. The structures would be up to 150 feet tall, although most would likely be up to 110 feet.

Other electrical upgrades within the CAISO system could be triggered in part by the proposed Project in combination with other projects in the CAISO queue. In particular, it is anticipated that lower voltage power lines could require reconductoring. Reconductoring is the process of replacing a lower-capacity conductor on existing power poles. Reconductoring associated with the project would not require new ground disturbance and would typically be completed during daylight hours over the course of 6 weeks or less by a crew of line working personnel.

TELECOM POLE, -DEAD END STRUCTURE 230kV/34.5kV TRANSFORMER 0-DEAD END ±70' FROM PV COLLECTION SYSTEM TO SHARED SOLAR SWITCHYARD 3 ELEVATION B-B B CIRCUIT BREAKER - SECURITY FENCE NOTE: DIMENSIONS ARE APPROXIMATE -COMMUNICATION BUILDING CONTAINS RELAYS AND SCADA EQUIPMENT (UNINHABITED) CONTROL ENCLOSURE/ COMMUNICATIONS BUILDING ±180" 1)230 kV SOLAR SUBSTATION PLAN 4 CONTROL ENCLOSURE ELEVATIONS TELECOM POLE, DEAD END NOTE: DIMENSIONS ARE APPROXIMATE OPERATIONS AND ENANCE BUILDING TO SHARED SOLAR SWITCHYARD LIGHTNING MAST CIRCUIT BREAKER TRANSFORMER FROM PV COLLECTION SYSTEM 5) OPERATIONS & MAINTENANCE BUILDING SCALE: NTS SECURITY FENCE 2 ELEVATION A-A

Figure 2-5 230 kV Solar Substation Plan and Elevations

Source: Recurrent Energy 2017

2.9.4 PG&E Transmission Line

To interconnect the Scarlet Solar Project 230 kV gen-tie line (see Section 2.9.3) to the PG&E Switching Station, PG&E would construct a new 230 kV transmission line that would extend from the Tranquillity Switching Station to a point located just east of the Tranquillity Solar Project boundary. The PG&E transmission line would include up to 2,000 feet of 230-kV conductor strung on up to 15 new or existing poles that would be up to 150 feet high.

2.9.5 Other Infrastructure

2.9.5.1 Operation and Maintenance Building

An operation and maintenance (O&M) building to accommodate 8 permanent operation and maintenance staff would be required for the Project. The Applicant may use an existing home/trailer that is located southeast of the intersection of West Dinuba Avenue and SR 33, and is already in use by the Applicant for the Tranquillity Solar Project. If a new O&M building is constructed, it would be approximately 2,000 square feet in size (approximately 40 feet by 50 feet by 15 feet at its tallest point) and located within the Project site near the main substation. The O&M building would include permanent plumbing and restroom facilities for use by the staff, including an underground septic system and leach field. Personnel temporarily on-site to perform periodic module washing (up to 4 times per year) would be provided with portable restrooms on the Project site, as well as bottled water for drinking and hand washing. The O&M building would be constructed on concrete foundations.

2.9.5.2 Septic System and Leach Field

A septic system and leach field would be installed adjacent to the O&M building to support the restroom facilities and sewage needs of the 8 permanent staff working 8 hours per day at the O&M building during operation.

Wastewater from the building would be discharged into the septic tank for minimum detention period of 24 hours where most of the solids would be removed (see Section 2.10.1). The 1,000-gallon septic tank would then discharge effluent to approximately 420 feet of disposal trench consisting of seven 60-foot long trenches. The trenches would be approximately 3 feet wide, 4.5 feet deep, with 3 feet of drain rock below the drain line (equivalent to 7 square feet of absorption area per linear foot trench). The leach field would also have a 100 percent expansion area in the event that additional percolation area is necessary.

2.9.5.3 Supervisory Control and Data Acquisition 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.

2.9.5.4 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 Applicant's option, a battery or flywheel storage system capable of storing up to 400 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. Electrical enclosures measuring 40 feet by 8 feet by 8.5 feet high would be installed on concrete foundations designed for secondary containment. 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.

2.9.5.5 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.

2.9.5.6 Telecommunications Facilities

The Solar Facility's SCADA system would interconnect to this fiber optic network at PG&E's Tranquillity Switching Station, and no additional disturbance associated with telecommunications is anticipated.

2.9.5.7 Access Roads

The main access to the Project site would be provided from West Manning Avenue to South Monterey Avenue with multiple points of ingress/egress for emergency access. Public access and vehicle use of West Manning Avenue (paved) and unpaved roadways⁶ in the Project area would not be affected by the Project. In addition, there is a California Department of Transportation (Caltrans) future right-of-way adjacent to SR 33 (South Derrick Avenue), which would be avoided by the Project. The Project modules and electrical infrastructure would be set back from the existing SR 33 highway by a minimum of 50 feet plus additional clearance for any deed restrictions and the future right-of-way.

The Solar Facility on-site roadway system would include a perimeter road, access roads, and internal roads. 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 modules, and facilitate on-site circulation for emergency vehicles.

⁶ It should be noted that these unpaved roads are private roads that are not maintained by the County.

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 likely involve surfacing with gravel, compacted native soil, or a dust palliative and would not involve lime treatment. Temporary driveway aprons to points of ingress/egress during construction, such as along West Manning Avenue to South Monterey Avenue, may be up to 80 feet wide to accommodate construction traffic; however, permanent driveway aprons would be built according to Fresno County Improvement Standards. During decommissioning of the facility, it is anticipated that the same access roads would be used for removal of the facility components.

2.9.6 Solar Facility Site Safety and Security

2.9.6.1 Controlled Access

Multiple points of ingress/egress would be accessed via locked gates located at multiple points along the perimeter fence from West Manning Avenue.

2.9.6.2 Fencing

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 fence design would be either traditional or "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. Public access rights on roadways through the Project area would not be affected by the type of project fencing. Existing public vehicle use of West Manning Avenue and other private unpaved roadways would continue through the Solar Facility.

2.9.6.3 Lighting

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. All lighting would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties. All lighting also would conform to applicable Fresno County rules and regulations for outdoor lighting.

2.9.6.4 Other Security Measures

Off-site security personnel could be dispatched during nighttime hours or could be on-site, depending on security risks and operating needs. Infrared security cameras, motion detectors, and/or other similar technology would be installed to allow for monitoring of the site through review of live footage 24 hours per day, 7 days per week. Such cameras or other equipment would be placed along the perimeter of the facility and/or at the inverters.

2.9.6.5 Signage

During all phases of the Project, signage for safety and identification would be posted around the perimeter of the Project site. No large billboard or signage for advertisement is proposed. All signage would conform to Fresno County signage requirements.

2.9.7 Site Buffers and Respect for Nearby Agricultural Operations

The Project proposes to maintain a buffer between the site and neighboring agricultural operations:

- Per Fresno County Public Works and Planning guidelines, the Scarlet Solar Project will achieve a minimum 50-foot buffer to adjacent properties by excluding structural improvements and equipment (excluding fencing) from within 50 feet of the outside boundary of the Scarlet Solar Project.
- An up to 8-foot chain-link galvanized metal fence topped with standard three-strand barbed wire will surround the Project.
- Internal perimeter roads a minimum of 20 feet wide will be installed along the outside edges of the Site between the fence and the solar modules.

The modules produce minimal glare. The system operates quietly and does not use any fluids or emit any odors. Given the modules' sensitivity to dust and dust's resulting impact on power production, the site will be managed to minimize dust and prevent weed growth. As described in Section 2.14, weeds and pests will be continuously managed such that the Project does not harbor or serve as a source of pests for neighboring farms. Rodent populations represent a risk to system performance given the potential for chewing wires, as such the Project site will be actively monitored and if rodents are found, remedial actions will be taken.

2.10 Water Requirements and Waste Generation

2.10.1 Water and Wastewater

2.10.1.1 Water

During the construction phase, if grading and grubbing is required at the project site, it is anticipated that a total of up to 360 acre-feet⁷ of water would be used for dust suppression (including truck wheel washing) and other purposes (Recurrent Energy 2018). If grading and grubbing is not required at the Project site, water needs would be less.

During the operation and maintenance phase (which would last up to 40 years), water would be required for module washing and maintenance and for the O&M building restroom facilities. The Solar Facility would require the use of approximately 20 acre-feet annually for module washing and other uses, equivalent to 0.05 acre-feet (or 16,250 gallons) per MW annually. Of this, approximately 1.5 acre-feet of non-potable water would be used by employees on-site for washing or rinsing equipment, hand washing, and other non-toilet uses. Approximately 1.47 acre-feet would be used for washing the modules up to four times a year (up to 3.7 acre-feet of water per washing period). The remaining estimated water would be used to support on-site sheep (if grazing is used for weed control) and other miscellaneous needs (Recurrent Energy 2018).

The Project site does not receive any surface water from Westlands Water District (WWD). The entire Project site is part of two Westlands Water District settlements that require a non-irrigation covenant to be recorded upon transfer of ownership. During construction, water would be obtained from an existing well on the neighboring Tranquillity Solar Generating Station project site or another

⁷ One acre-foot of water equals 325,851 gallons – approximately the amount needed to cover an acre (roughly a football field) of ground one foot deep.

location, and/or would be trucked to the site. Water used for module washing during operation would be obtained either from this same well or trucked in from an off-site local water purveyor.

During construction, restroom facilities would be provided by portable units to be serviced by licensed providers. Potable water, for drinking and hand washing, would be brought to the site by construction employees or by a bottled water service provider.

During operation, potable water would be supplied to the O&M building by a licensed provider.

2.10.1.2 Wastewater

A septic system and leach field would be installed adjacent to the O&M building to support the restroom facilities and sewage needs of the 8 permanent staff (8 hours per day) at the O&M building during operation. Personnel on-site to perform module washing (up to 4 times per year) would be provided with portable restrooms serviced by a licensed provider. Anticipated peak flow is 600 gallons into the leach field per day during Project operation (or 0.67 acre-feet per year) (Recurrent Energy 2018). No surface discharges are proposed, other than natural stormwater runoff. A Waste Discharge Permit would not be required from the Regional Water Quality Control Board (RWQCB) because the Project would not exceed 2,500 gallons per day of sewage. The septic system would be required to be permitted by the Fresno County Department of Public Works and Planning. The septic system and leach field testing procedures and design would meet all applicable specifications and regulations.

2.10.2 Solid Waste

Construction and decommissioning of the Project would involve the use of hazardous materials, such as fuels and greases to fuel and service construction equipment. Such substances may be stored in temporary aboveground storage tanks or sheds located on the Project site. The fuels stored on-site would be in a locked container within a fenced and secure temporary staging area (see Section 2.11.1). If the quantities stored are estimated to be in excess of 1,320⁸ gallons, storage would be undertaken in compliance with the Spill Prevention, Control, and Countermeasure (SPCC) Rule and a Hazardous Materials Business Plan, which would be developed prior to construction for submission to the Fresno County Division of Environmental Health. Trucks and construction vehicles would be serviced from off-site facilities. The use, storage, transport, and disposal of hazardous materials used in construction of the facility would be carried out in accordance with federal, state, and county regulations. No extremely hazardous substances (i.e., those governed pursuant to Title 40, Part 335 of the Code of Federal Regulations) are anticipated to be produced, used, stored, transported, or disposed of as a result of project construction. Material Safety Data Sheets for all applicable materials present on-site would be made readily available to on-site personnel.

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 (Recurrent Energy 2018). Wooden construction waste (such as wood from wood pallets) would be sold, recycled, or chipped and spread on the Project site for

⁸ Effective January 1, 2008 the Certified Unified Program Agencies (CUPAs) are vested with the responsibility and authority to implement the Aboveground Petroleum Storage Act (APSA). Owners or operators of aboveground petroleum storage tanks are required to file a storage statement and implement spill prevention measures according to the Aboveground Petroleum Storage Act of 1990. Facilities with a single tank or cumulative aboveground storage capacities of 1,320 gallons or greater of petroleum are covered by this law.

Scarlet Solar Energy Project

weed control as appropriate. Other compostable materials, such as vegetation, might also be composted off-site. Non-hazardous construction materials that cannot be reused or recycled would likely be disposed of at municipal county landfills. 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.

Operation and maintenance activities would produce negligible volumes of solid and liquid wastes and are not expected to require hazardous materials or to generate hazardous waste. The transformers proposed to be located at the Project substations would use biodegradable seed oil, which is not a hazardous material. Oil disposal would occur in accordance with applicable regulations. PV modules and the inverters would not produce any waste during operation.

2.11 Construction

2.11.1 Solar Facility Phase 1: Site Preparation

2.11.1.1 Staging and Other Temporary Work Areas

A staging/refueling area would be located at or near the primary access point to the project. Assuming continuous construction, one main staging area would be located near West Manning Avenue at the western end of the site. 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.

2.11.1.2 Access Roads

The Project's on-site roadway system would include a perimeter road, access roads, and internal roads, which are described in Section 2.9.4. 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. This would likely involve surfacing with gravel, compacted native soil, or a dust palliative and would not involve lime treatment. 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.

2.11.1.3 Security Fencing

As described in Section 2.9.6, Project fencing would include perimeter fencing. 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.

2.11.1.4 Construction-related Grading and Vegetation Management

As necessary for equipment access, the site would be grubbed and scarified. As the site is nearly flat and has been historically graded/tilled, 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 (Section 2.11.2), an average of 25 acres would undergo installation at any one time, with an estimated maximum active disturbance area of up to 90 acres when Phase 1 and 2 overlap.

2.11.1.5 Erosion and Sediment Control and Pollution Prevention

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 applicant would prepare a single or multiple Stormwater Pollution Prevention Plans (SWPPP), which would be based on the final engineering design.

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.

2.11.2 Solar Facility Phase 2: Photovoltaic Module System

2.11.2.1 Standard Installation, Array Assembly, and Racking

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, 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 modules to be secured directly to the torque tubes using appropriate module clamps. For some single-axis tracking systems and for all fixed-tilt systems, a galvanized metal racking system, which secures the PV modules to the installed foundations, would then be field-assembled and attached according to the manufacturer's guidelines.

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

Underground cables to connect module 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 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 County.

In addition to the Solar PV Facility, the 400 MW energy storage system, including battery or flywheel enclosures and electrical cabling, would be installed at the Project site, concurrently with Phase 3 or at a later date. The system would be largely assembled offsite and transported to the Project site for installation.

2.11.4 Construction Site Restoration and Revegetation

Following the completion of major 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. 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 would be restored to their original condition by the planting of appropriate species.

2.11.5 Construction Schedule and Workforce

Construction equipment would operate between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday for up to a maximum of 8 hours per piece of equipment, daily. Weekend construction work is not expected to be required, but may occur on occasion, depending on schedule considerations. All construction work, including any weekend work, would be required to comply with the Fresno County noise ordinance.

Construction of the Solar Facility would commence as early as mid-2020, and the last phase would be expected to be complete as early as late 2021 depending on opportunities in the solar market. Total duration of continuous construction would be approximately 18 months. The Applicant is committed to establishing a point of sale, purchasing a majority of equipment and materials, and hiring locally in connection with the Project. The anticipated construction processes, schedule, and workforce are described in this section.

Agricultural activities are expected to continue during the project construction phase on portions of the Project site not being actively disturbed by construction activities.

Assuming continuous construction, phasing would be as follows:

- Phase 1, Site Preparation, would extend for approximately 16 weeks, or 80 working days.
- Phase 2, PV Module System Installation (foundations, tracker racks, and modules), would extend for a duration of approximately 56 weeks, or 282 working days, and would overlap Phase 1 by approximately 14 weeks.
- Phase 3, Installation of Inverters, Substations, and Connection, would extend for a duration of 24 weeks, or 121 working days, and overlap Phase 2 by about 16 weeks. The proposed energy storage system may be installed concurrently with Phase 3 or at a later date.

Table 2-1 shows the average and maximum number of workers required for construction of the solar facility and energy storage component, as well as the length of each phase. The total number of construction workers at any given time would range between 132 and 678, with the peak number of workers (678) on-site during February and March of 2018. The exact timing of installation of the energy storage component is unknown, but it may overlap with construction of the final phase of the solar facility. The majority of the labor force is expected to be from Fresno and the surrounding communities with a maximum round-trip commute of up to 80 miles (Recurrent Energy 2018).

Table 2-1 Proposed Construction Phasing and Construction-related Employment

	Construction Phase	
Average Number of Workers	Maximum Number of Workers	Length of Phase (work days)
309	412	81
576	678	282
105	140	121
74	98	22
63	84	174
54	71	146
	Workers 309 576 105 74 63	Average Number of Workers 309 412 576 678 105 140 74 98 63 84

2.11.6 Construction Access, Equipment, and Traffic

All materials for the Project's 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. 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 are transported to and from the Project site. Materials deliveries during construction would travel up to 115 miles one-way from source to the Project site. Quantities for construction equipment and traffic represent the conservative assumption of construction of the entire project (400 MW_{ac} at the Point of Interconnection) simultaneously; should fewer units be constructed these quantities would be reduced. The exact timing of installation of the energy storage system is unknown, but it is conservatively assumed that it may overlap with construction of the final phase of the solar facility.

2.11.6.1 Solar Facility

The anticipated maximum number of vehicle trips per day for each construction phase of the solar facility is as follows⁹:

Phase 1: Site Preparation

- An average of 232 daily worker round trips with an average travel distance of up to 80 miles to and from the project site from the City of Fresno area (assuming 25% of workers carpool to the Project site).
- Approximately 8,564 total trips (4,282 round trips) by water tankers of 10,000 gallons each.
 Each roundtrip would be less than 10 miles total (5 miles each way).

Phase 2: PV Module System/Installation

- An average of 432 daily worker round trips with an average travel distance of up to 80 miles to and from the Project site from the City of Fresno area (assuming 25% of workers carpool to the Project site).
- Approximately 4,282 total trips (2,141 round trips) by water tankers of 10,000 gallons each.
 Each roundtrip would be less than 10 miles total (5 miles each way).

Phase 3: Inverter, Transformer, Substation and Electrical System Installation

- An average of 79 average daily worker round trips with an average travel distance of up to 80 miles to the Project site from the City of Fresno area (assuming 25% of workers carpool to the Project site).
- Approximately 4,282 total trips (2,141 round trips) by water tankers of 10,000 gallons each.
 Each roundtrip would be less than 10 miles total (5 miles each way).

Equipment and vehicles to be used for the construction of the Solar PV Facility are identified in Table 2-2.

⁹ Source: Recurrent Energy, Construction Estimating Division, 2018.

Table 2-2 Solar Facility On-site Equipment and Vehicle Use by Construction Phase

On-site Equipment ¹	Estimated Usag	e	
	Units	Hours/Day	Total Days Per Unit
Phase 1: Site Preparation			
Pickup	12	4	78
Bulldozers	82	7	80
Water Trucks	49	4	80
Graders	2	7	64
Flatbeds	23	4	72
Skid Steers	2	7	12
Front End Loaders	4	7	32
Roller Compactor	6	7	70
Backhoes	4	7	1
Instrument	12	7	78
Gravel Trucks	127	4	80
Phase 2: Photovoltaic Array Insta	Illation		
Water Trucks	5	4	280
Flatbeds	62	4	282
Skid Steers	10	7	140
Trenchers	12	4	105
Phase 3: Installation Of Inverters	, Substations, and Connection	n	
Skid Steer	2	7	62
Pile Drivers	2	7	62
Trenchers	8	4	95
Backhoes	2	7	121
Cranes	6	4	91
Aerial Lifts	8	4	78
Concrete Trucks	21	4	1

2.11.6.2 Energy Storage System

The anticipated maximum number of vehicle trips per day for each construction phase of the energy storage system is as follows¹⁰:

Phase 1: Site Preparation

- An average of 56 daily worker round trips with an average travel distance of up to 80 miles to and from the project site from the City of Fresno area (assuming 25% of workers carpool to the Project site).
- Approximately 3,167 total trips (1,584 round trips) by water tankers of 10,000 gallons each.
 Each roundtrip would be less than 10 miles total (5 miles each way).

-

¹⁰ Source: Recurrent Energy, Construction Estimating Division, 2018.

Phase 2: Foundations, Structures and DC Electrical System Installation

- An average of 48 daily worker round trips with an average travel distance of up to 80 miles to and from the Project site from the City of Fresno area (assuming 25% of workers carpool to the Project site).
- Approximately 1,584 total trips (792 round trips) by water tankers of 10,000 gallons each.
 Each roundtrip would be less than 10 miles total (5 miles each way).

Phase 3: Inverter, Substation and AC Electrical System Installation

- An average of 41 average daily worker round trips with an average travel distance of up to 80 miles to and from the Project site from the City of Fresno area (assuming 25% of workers carpool to the Project site).
- Approximately 1,584 total trips (792 round trips) by water tankers of 10,000 gallons each.
 Each roundtrip would be less than 10 miles total (5 miles each way).

Table 2-3 shows equipment and vehicles to be used for the construction of the energy storage system.

Table 2-3 Energy Storage System On-site Equipment and Vehicle Use

On-site Equipment	Estimated Usage			
	Units	Hours/Day	Total Days Per Unit	
Phase 1: Site Preparation				
Pickup	8	4	22	
Bulldozers	16	7	22	
Water Trucks	14	4	22	
Graders	6	7	21	
Flatbeds	3	4	18	
Skid Steers	1	7	12	
Front End Loaders	5	7	20	
Roller Compactor	5	7	20	
Instrument	8	7	22	
Gravel Trucks	161	4	22	
Phase 2: Foundations, Structures	and DC Electrical System Inst	tallation		
Pickup	3	4	102	
Water Trucks	3	4	102	
Skid Steers	3	7	102	
Trenchers	2	4	74	
Crane	3	4	170	
Phase 3: Inverter, Substation and	d AC Electrical System Installa	tion		
Skid Steer	2	7	64	
Pile Drivers	2	7	64	
Trenchers	7	4	146	
Backhoes	3	7	47	
Cranes	3	4	121	
Aerial Lifts	2	4	70	
Concrete Trucks	3	4	1	

2.11.7 Construction Personnel Training

2.11.7.1 Biological Resources

Prior to construction, 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 Project site, and would include:

- A description of species of concern and associated habitats.
- The general provisions of applicable environmental regulations and the need to adhere to the provisions of the regulations.
- General measures being implemented to conserve the species of concern as they relate to the Project.

The training would include a discussion of the defined access routes to the Project site 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 areas 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.

2.11.7.2 Fire Suppression and Safety Training

The Applicant 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 Project site boundary would be actively managed by the Project 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 Project boundary.

The Applicant 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 site. The plan would include at least the following provisions:

- Fire Prevention Training. The Applicant would provide training for fire personnel in the safe interruption of electrical power for emergency incidents requiring fire suppression or rescue activities.
- Emergency Action Training. The Applicant would train all construction and operation and maintenance personnel in:
 - Evacuation routes from the Project site to safe areas, in the event of fire or other natural hazards.
 - Coordination with local fire department, sheriff department, and emergency medical services.
 - Safety measures in accordance with the California Occupational Safety and Health
 Administration (Cal/OSHA) regulations and guidance for construction, which would be

Scarlet Solar Energy Project

reviewed by all Project construction staff prior to starting work. Safety measures would include those that address potential electrical incidents and fire hazards.

- **Fire Prevention Measures**. The Applicant would implement the following measures during Project construction and operation:
 - All applicable Fresno County improvement standards would be followed, to ensure accessibility and ground clearance of emergency vehicles (e.g., fire engines).
 - Vegetation would be maintained to reduce potential fire hazards at the Project site.
 - Smoking would be prohibited at the Project site, except within designated areas.
 - 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 Project 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.

2.12 Operation and Maintenance

Upon commissioning, the Project would enter the operation phase. The solar modules at the site would operate during daylight 7 days per week, 365 days per year.

Operational activities at the Project site would include:

- Solar module washing
- Vegetation, weed, and pest management
- Security
- Responding to automated electronic alerts based on monitored data, including actual versus expected tolerances for system output and other key performance metrics
- Communicating with customers, transmission system operators, and other entities involved in facility operations

2.12.1 Operation and Maintenance Workforce

Up to 8 permanent staff could be on the site at any one time for ongoing facility maintenance and repairs. On intermittent occasions, up to 25 workers could be required on-site if repairs or replacement of equipment were needed in addition to module washing. A record of inspections would be kept on-site. The duration of scheduled maintenance activities would vary in accordance with the required task, but could involve up to 40 workers full-time for up to 2 weeks up to four times per year for module washing, and a similar number and duration for workers regularly visiting the site for routine maintenance activities. The maximum number of staff on-site at any time would be 48 (40 temporary staff and 8 permanent staff). The personnel and time required for emergency maintenance would vary in accordance with the necessary response.

The majority of the operational labor force is expected to be from Fresno and the surrounding communities with a maximum anticipated commute of 40 miles one way.

2.12.2 Automated Facility Control and Monitoring 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. Infrared security cameras, motion detectors, and/or other similar technology also would be installed to allow for monitoring of the site through review of live footage 24 hours per day, 7 days per week.

Facility operators 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 Project site, and would analyze collected data on an ongoing basis to schedule maintenance. The operators 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 for comparison with expected generation.
- Inverter registers for inverter failures, and inverter voltage and current flow for comparison with expected flows.
- Combiner output current 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 for: scheduling output to the transmission system operator, comparison with forecasts, and calculation of expected generation and expected currents.

2.12.3 Site Maintenance

The Project 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 the on-site operation and maintenance facilities and/or a regional operations and maintenance facility located within Fresno County, and on-site maintenance as required to clear weeds for ground-mount systems.

Maintenance typically would include module repairs; module 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 and weed management also would be performed in accordance with the Pest and Weed Management Plan. 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.

2.12.4 Operation Equipment

Equipment to be used during operation and maintenance of the Project is identified in Table 2-4. Quantities for equipment and traffic represent the conservative assumption of operation of the entire $400~\text{MW}_{ac}$ at the Point of Interconnection simultaneously; should fewer units be constructed these quantities would be reduced proportionate to the number of MW actually in operation.

Table 2-4 Proposed Operations and Maintenance Equipment and Estimated Annual Usage

On-site Equipment	Estimated Usage					
	Units	Hours/Day	Days/Week	Total Days		
All-Terrain Vehicles (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		

2.12.5 Fire Suppression and Safety Training

The fire suppression and safety training that would occur during the operations and maintenance phase of the Project would be similar to that described for the construction phase. It would occur annually and for every new employee.

2.13 Decommissioning and Site Reclamation

2.13.1 Decommissioning of Equipment

The Solar Facility is anticipated to have an operating life of up to 40 years. After this period, the facility would be either repowered or decommissioned. Repowering after the operating life is not anticipated at this time; however, if repowering were to be pursued, it would require the owner to obtain all required permit approvals. Project decommissioning would occur in accordance with the expiration of UCUP and would involve the removal of all above-grade facilities, buried electrical conduit, and all concrete foundations in accordance with a Reclamation Plan. Utility-owned infrastructure would not be removed at the time the Solar Facility is decommissioned. In the event that a structure breaks off 4 feet or more beneath the ground surface, the remaining section would be left in place. If the structure breaks off in the upper 4-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 that used for construction.

For the entire Project site, decommissioning activities are expected to require approximately 3,000 truck trips, a workforce of approximately 100 workers, and would take up to 24 months. Decommissioning may occur simultaneously or individually as the power blocks go offline. Appropriate hazardous materials control and erosion control measures would be used throughout the decommissioning process. It is anticipated that such controls would be substantially similar to those implemented during construction.

2.13.2 Site Reclamation

A Reclamation Plan containing details regarding site reclamation and decommissioning will be submitted by the applicant to Fresno County. 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, locally-sourced (from the City of Fresno or other location within 40 miles of the Project site) topsoil would be placed to a depth and density consistent with adjacent properties. Locally-sourced 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.

2.14 Other Required Permits and Commitments

The Project requires the certification of this EIR and the following approvals from Fresno County.

- Unclassified Conditional Use Permit The Project would require an Unclassified Conditional
 Use Permit (UCUP) from Fresno County to allow for use of the Project site for a Solar Facility.
- Parcel Map The Project may result in the modification of the existing parcels to create new parcels. This is anticipated to be addressed by Fresno County via a Parcel Map Waiver and would not require an amendment to the County's General Plan. The Applicant would prepare a parcel map application or lot line adjustment request and submit to the Fresno County Public Works and Planning Department for the creation of these parcel(s).
- Building and Grading Permits Fresno County Building and Grading Permits would be required
 for the erection, demolition, or conversion of any building or structure. Such permits are
 ministerial and would be secured prior to the commencement of construction.
- Pest and Weed Management Plan A Pest and Weed Management Plan detailing methods of exotic weed, rodent, nuisance arthropod, and vector control during operation and after decommissioning of the Project has been prepared by the applicant and will be submitted to the County. Among other things, the plan would include vegetation management to discourage the harboring of rodents on-site and prevent impacts on surrounding agricultural operations. The growth of on-site vegetation would be controlled either by periodic mowing, herbicide use, or sheep grazing, as appropriate. All herbicides would be applied by (or under the oversight of) an applicator licensed to apply pesticides in California. Herbicides would be applied in accordance with the label instructions only for their intended use. Applicators would wear all required personal protective equipment.

In addition, the following discretionary approvals from other agencies may be required for the project:

- California Regional Water Quality Control Board A National Pollutant Discharge Elimination System (NPDES) Construction Storm Water Permit would be required for the Project. Construction activities disturbing one acre or more of land are subject to the permitting requirements of the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (Construction General Permit) and must apply for Construction General Permit coverage.
- California Department of Transportation (Caltrans) An Oversize/Overweight permit and Traffic Control Plan would be required for the transportation of substation transformers.
- State of California, Department of Fish and Wildlife Authorization to take State-listed species subject to the California Endangered Species Act may be required.

<mark>r take of federa</mark> l	•		

Operational Statement for the Scarlet Solar Energy Project

1. Nature of the Operation

RE Scarlet LLC (Applicant) proposes to construct, operate, maintain, and decommission the Scarlet Solar Energy Project (Project) in unincorporated Fresno County. The Project includes a 400-megawatt (MW) solar photovoltaic (PV) electrictic generating facility (referred hereinafter as the Solar Facility), 400 MW energy storage system, and associated infrastructure on approximately 4,089 acres of undeveloped fallow agricultural land. The Solar Facility would also include a substation, operation and maintenance building, a supervisory control and data acquisition system (SCADA), and other necessary infrastructure installed within the Solar Facility footprint. The proposed substation would tie into Pacific Gas and Electric's (PG&E's) high-voltage 230 kilovolt (kV) Tranquility Switching Station, via a new generation-tie (gen-tie) transmission line.

Construction

As described in more detail in the Project's Environmental Impact Report (EIR), construction of the Project would occur over approximately 16 months with an expected start date in October 2021 and termination date in January 2023. Within this timeframe construction of the following three Project components would occur:

- Solar Facility: Construction of the Solar Facility would include the following phases: 1) site preparation; 2) PV module system installation; and 3) inverters, transformers, substation, and electrical collector system installation. Site restoration and revegetation would occur immediately following major construction.
- Energy Storage System: Construction of the energy storage system would overlap with the Solar Facility and would include the following phases: 1) site preparation; 2) foundations, structures, and direct current (DC) electrical system installation; and 3) inverter, substation, and alternating current (AC) electrical system installation.
- PG&E Improvements: Construction of the PG&E Improvements would partially overlap with construction of the Solar Facility and energy storage system and would include the following phases: 1) site work and 2) electrical work.

Operation and Maintenance

As described in more detail in the Project's EIR, upon commissioning, the Project would enter the operation phase. The solar modules at the site would operate during daylight 7 days per week, 365 days per year. Operational activities at the Project site would include: solar module washing; vegetation, weed, and pest management; security; responding to automated electronic alerts 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.

The Project would be designed with a comprehensive SCADA system to allow remote monitoring of facility operation and/or remote control of critical components. Infrared security cameras, motion detectors, and/or other similar technology also would be installed to allow for monitoring of the site through review of live footage 24 hours per day, 7 days per week. Maintenance of equipment associated with the Project would typically take place in the early morning or evening when the plant would be producing the least amount of energy. Maintenance typically would include module repairs; module washing; maintenance of transformers, inverters, and other electrical equipment as needed; maintenance of the oil/water separator system; and road and fence repairs.

The PG&E Improvements would operate continuously once fully energized and would remain operational for the duration of the operational life of the Project (up to 35 years). Switching station maintenance (including routine inspections) would occur on a regular basis in accordance with PG&E's maintenance program within the service area. The gen-tie would be maintained and repaired as needed under the direction of or by PG&E personnel consistent with CPUC regulations.

Decommissioning and Site Reclamation

As described in more detail in the Project's EIR, after the 35-year operational life of the Project, the facility would be decommissioned., Project decommissioning would occur in accordance with the expiration of Unclassified CUP No. 3555 and would involve the removal of all above-grade facilities, buried electrical conduit, and all concrete foundations in accordance with a Reclamation Plan. For the entire Project site, decommissioning activities would take up to 24 months. The Applicant would reclaim the Project site in accordance with the County-approved Reclamation Plan.

2. Operational Time Limits

As described above under Item #1, Nature of the Operation, and in the Project's EIR, the Project would operate during daylight 7 days per week, 365 days per year over a 35 year operational life.

3. Number of Customers or Visitors

The Project consists of a solar electricity generating facility and associated infrastructure. The Project would not generate customers or visitors and would be closed to the general public.

4. Number of Employees

As described in more detail in the Project's EIR, the total number of construction workers at any given time during Project construction and decommissioning would range between 132 and 974. During operation of the Project, up to eight permanent staff could be on the site at any one time for ongoing facility maintenance and repairs. On intermittent occasions, up to 25 workers could be required on-site if repairs or replacement of equipment were needed in addition to module washing. The duration of scheduled maintenance activities would vary in accordance with the required task, but could involve up to 40 workers full-time for up to two weeks up to four times per year for module washing, and a similar number and duration for workers regularly visiting the site for routine maintenance activities. The maximum number of staff on-site at any time would be 48 (40 temporary staff and 8 permanent staff).

5. Service and Delivery Vehicles

The anticipated number of vehicle trips per day for each construction phase is as follows:

- Phase 1: Site Preparation
 - o An average of 232 daily worker round trips
 - Approximately 8,564 total trips (4,282 round trips) by water tankers of 10,000 gallons
- Phase 2: PV Module System Installation
 - An average of 432 daily worker round trips
 - Approximately 4,282 total trips (2,141 round trips) by water tankers of 10,000 gallons each
- Phase 3: Inverters, Transformers, Substations, and Electrical Collector System Installation
 - o An average of 79 average daily worker round trips
 - Approximately 4,282 total trips (2,141 round trips) by water tankers of 10,000 gallons each

Operation of the Project would require up to eight light duty pick-up trucks for routine operation and maintenance activities up to 130 days per year and up to 15 light-duty pick-up trucks up to 80 days per year for panel washing activities.

6. Access to the Site

The primary access to the portion of the Solar Facility south of Manning Avenue would be provided from Manning Avenue at Monterey Avenue, and the primary access point to the portion of the Solar Facility north of Manning Avenue would be provided from Manning Avenue at the San Benito Avenue alignment. The PG&E Improvements would be accessed for construction work via Ohio Avenue or Dinuba Avenue.

7. Number of Parking Spaces for Employees, Customers, and Service **Delivery Vehicles**

The operation and maintenance building would include parking and turnaround areas for staff vehicles. delivery trucks, and service vehicles. The number of parking stalls that would be consistent with County requirements. The Project would not generate customers; therefore, no parking stalls would be available for the general public.

8. Goods to be sold on-site.

The Project consists of a solar electricity generating facility and associated infrastructure. The Project would not involve the sale of goods on-site.

9. Equipment Used

The Project consists of a solar electricity generating facility and associated infrastructure. As described in more detail in Tables 2-2 through 2-4 of the Project's EIR, equipment used during construction of the

Project consists of heavy equipment and vehicles such as graders, flatbeds, backhoes, excavators, gravel trucks, pile drivers, cranes, aerials lifts. As provided in Table 2-5 of the Project's EIR, equipment used during operation of the project involves the occasional use of tractors, portable generators, all-terrain vehicles, light-duty pick-up trucks, and portable water trailers.

10. Supplies and Materials

The Project would require the use of materials such as steel, aluminum, and concrete, as well as polycrystalline silicone associated with the Project PV panels. During construction, materials would be temporarily stored within staging and laydown areas.

11. Appearance

The Project's EIR evaluated the Project's effects with respect to noise, glare, dust, and odor. Although described in detail in the EIR, each of these topics are briefly described below with regard to the Project.

- Noise. Construction and decommissioning of the Project would generate noise levels that could be experienced by nearby sensitive receptors. However, construction and decommissioning activities would be temporary and County of Fresno Noise Control Ordinance exempts construction activity noise from standard exterior noise exposure limits, if conducted during specific hours. Because Project construction and decommissioning activities would not occur outside of the hours specified in the County of Fresno Noise Control Ordinance, the Project would result in less than significant noise impacts. Operation of the Project would involve the use of noise generating equipment such as transformers, exhaust fans, and HVAC systems. However, use of this equipment would not generate noise levels in excess of County standards, and impacts would be less than significant.
- Glare. The reflection of sunlight off solar panel surfaces would be the primary source of potential glare from the Project. Solar panels comprise cells designed to capture solar energy to convert it into usable energy. Therefore, solar panels are designed to absorb as much light as possible to maximize the efficiency of energy production. Additionally, PV panels are covered with a tempered glass layer treated with an anti-reflective coating that further reduces the reflectivity of the panels. When compared to common reflective surfaces, solar panels without an anti-reflective coating produce around the same amount of reflectivity as water, which is about half the amount of reflectivity as standard glass commonly used in residential or commercial applications. Additional glare could be created by metal components of the Solar Facility. The amount of glare created by such components would depend on the material type, surface area, and the orientation of the viewer. Given the orientation of the panels and the low visual profile of the Project, the period during which glare from panels or other metal components of the Project could potentially be seen by motorists would be relatively short (i.e., a matter of minutes) and would be of relatively low intensity. Due to the relatively low intensity and short duration of Project-caused glare, the potential impact would not be significant.
- **Dust**. Project construction activities have the potential to generate dust. However, the Project would comply with all applicable SJVAPCD rules governing dust emissions and would implement a Dust Control Plan.
- **Odor**. The Project consists of a solar electricity generating facility and associated infrastructure, which do not produce odor emissions.

12. Solid or Liquid Wastes

Most of the hazardous waste generated by the Solar Facility would occur during the temporary construction period and would consist of liquid waste (including cleaning fluids, dust palliative, herbicides, and solvents) and some solid hazardous waste (such as welding materials and dried paint). These materials would be transported to the site during construction, and any hazardous materials produced from construction would be collected and transported away from the site. During construction, material safety data sheets for all applicable materials present at the site would be made readily available to onsite personnel. Fuels and lubricants used on field equipment would be subject to the hazardous materials handling BMPs and other measures contained in the required Stormwater Pollution Prevention Plan to limit releases of hazardous materials and wastes. Further discussion of BMP requirements is provided in Section 4.10, Hydrology and Water Quality, of Project's EIR.

Operations and maintenance activities would require limited use of hazardous materials. The Solar Facility is not expected to produce hazardous wastes. Oil would be used as an insulating fluid in the transformers proposed to be located at the Project substations. The transformers would be filled with oil by the manufacturing company off-site and subsequently checked every four years for integrity. No chemical cleaners would be used to wash the solar module. Herbicides may be used during operation as part of weed management. Implementation of the Pest and Weed Management Plan and compliance with relevant federal, state, and local herbicide regulations would avoid potential impacts associated with herbicide use. The energy storage system could contain battery acids, lead acid, sodium sulfur, and sodium or nickel hydride. The storage containers are sealed such that no fluid leaks can escape from the containers. In addition, all components would have a comprehensive Spill Prevention Control and Countermeasure plan, in accordance with all applicable federal, state, and local regulations. Therefore, mandatory compliance with applicable federal, state, and County regulations would result in less than significant impacts during operation of the Project.

13. Estimated Volume of Water to be Used

Construction of the Project would require up to 360 acre-feet per year, for an average of approximately 321,370 gallons per day. Construction demands would be met either using groundwater supplies or WWD-provided water, managed by WWD for long-term supply reliability. Operation and maintenance of the Solar Facility would require approximately 20 acre-feet per year, for an average of approximately 17,855 gallons per year. Water for operations and maintenance would be provided by an off-site local municipal water purveyor, either the City of Fresno or the City of Mendota.

14. Proposed Advertising

The Project consists of a solar electricity generating facility and associated infrastructure. The Project would not include any advertising.

15. New Buildings Constructed

An operation and maintenance building to accommodate eight permanent operation and maintenance staff would be required for the Project. The O&M building would be approximately 2,000 square feet in size (approximately 40 feet by 50 feet by 15 feet at its tallest point) and located within the Project site near the substation.

16. Building Used for Operations

The operation and maintenance building described above in response to item #15 would be used by Project employees to support operation of the Project.

17. Lighting and Outdoor Sound Amplification

Motion sensitive directional lights would be installed to provide security and approach lighting for the substation area, the operation and maintenance building, inverter stations, 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 also would conform to applicable Fresno County rules and regulations for outdoor lighting.

The Project would not involve outdoor sound amplification.

18. Landscaping or Fencing

Following the completion of major 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. Vegetation would be selected based on growth habit (lower growing cover would be preferred) and suitability for the area.

The Solar Facility would include perimeter fencing. The perimeter of each area would be securely fenced and gated as part of site preparation prior to the installation of solar arrays to prevent unauthorized access. 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.

19. Other Information that will Provide Clear Understanding of the Project

A detailed description of the Project and an assessment of potential environmental effects resulting from construction, operation, and decommissioning activities is provided in the Project's EIR.

20. Applicant Project Representative Information

Ryan Schalk Development Project Manager (503) 922-7731 Ryan.Schalk@edpr.com

Will Talbott Director of Development (503) 922-7725 Will.Talbott@edpr.com

Kristofer Cheney Executive Vice President - West, Central & Environmental Affairs (713) 766-2609 Kristofer.Cheney@edpr.com



Scarlet Solar Energy Project

Findings of Fact SCH#2018091022

prepared by

County of Fresno

Department of Public Works and Planning 2220 Tulare Street, Sixth Floor Fresno, California 96721 Contact: Ejaz Ahmad

> prepared with the assistance of Rincon Consultants, Inc. 7080 N. Whitney, Suite 101 Fresno, California 93720

> > August 2021



Scarlet Solar Energy Project

Findings of Fact SCH#2018091022

prepared by

County of Fresno

Department of Public Works and Planning 2220 Tulare Street, Sixth Floor Fresno, California 96721 Contact: Ejaz Ahmad

> prepared with the assistance of Rincon Consultants, Inc. 7080 N. Whitney, Suite 101 Fresno, California 93720

> > August 2021





Table of Contents

1	Intro	roduction					
	1.1	Project	: Description	1			
		1.1.1	Project Location	1			
		1.1.2	Project Overview	1			
		1.1.3	Project Objectives	2			
		1.1.4	Project Approvals	2			
	1.2	CEQA P	Public Review Process	3			
		1.2.1	Notice of Preparation	3			
		1.2.2	Draft EIR	4			
		1.2.3	Final EIR	4			
	1.3	Record	of Proceedings	4			
2	Findir	ngs of Fac	ct	6			
	2.1	Finding	s Required Under CEQA	6			
	2.2	Legal E	ffect of Findings	32			
	2.3	Signific	ant Effects and Mitigation Measures	32			
	2.4	Growth	ı Inducement	32			
	2.5	Significant and Irreversible Environmental Effects3					
	2.6	Mitigation Monitoring and Reporting Program					
	2.7	Project	Alternatives	35			
Tal	bles						
Tab	le 1	Compa	rison of Impacts of Alternatives to Proposed Project	41			

Abbreviations

APLIC Avian Power Line Interaction Committee
CAISO California Independent System Operator

CCR California Code of Regulations

CDFG California Department of Fish and Game
CDFW California Department of Fish and Wildlife
CEQA California Environmental Quality Act
CNDDB California Natural Discovery Database

COA Condition of Approval

County Fresno County

CPUC California Public Utilities Commission

CUP Conditional Use Permit

DEIR Draft Environmental Impact Report
EIR Environmental Impact Report
ESA Environmental Site Assessment
GHG Greenhouse gas emissions
HEPA High Efficiency Particulate Air
HMBP Hazardous Materials Business Plan

IS Initial Study kV kilovolt

MMRP Mitigation Monitoring and Reporting Program

MW megawatt

NOP Notice of Preparation NO_x Nitrogen oxides

NPDES National Pollutant Discharge Elimination System

O&M Operation and maintenance

OSHA Occupational Safety and Health Administration

PG&E Pacific Gas and Electric Company

PM_{2.5} Particulate matter 2.5 microns or less in diameter PM₁₀ Particulate matter 10 microns or less in diameter

Project Scarlet Solar Energy Project
PRC Public Resources Code

PV Photovoltaic SB Senate Bill

SCADA supervisory control and data acquisition

SJVAPCD San Joaquin Valley Air Pollution Control District

SR State Route

SVP Society of Vertebrate Paleontology
USFWS United States Fish and Wildlife Service
VERA Voluntary Emission Reduction Agreement
WEAP Worker Environmental Awareness Program

1 Introduction

This document provides a brief summary of the Scarlet Solar Energy Project (Project) and the environmental review process. This document contains the Findings of Fact (Findings) of the County of Fresno's Planning Commission (Commission) for each significant environmental effect identified within the Final Environmental Impact Report (EIR), as required by Section 21081 of the Public Resources Code (PRC) and Section 15091 of the *State CEQA Guidelines* (California Code of Regulations [CCR] Title 14).

1.1 Project Description

1.1.1 Project Location

The Project site is located in unincorporated Fresno County, approximately 3.5 miles west-southwest of the community of Tranquillity and approximately 6.5 miles east of Interstate 5 (I-5). The Project site is northeast of and adjacent to the Great Valley Solar Facility (previously the Tranquillity Solar Facility). The Project site would encompass up to 33 parcels¹ located generally south of West South Avenue, north of West Dinuba Avenue, east of South Ohio Avenue and State Route (SR) 33 (South Derrick Avenue), and west of South San Mateo Avenue. The Project site encompasses approximately 76 acres of federally owned land that are not part of the Project.²

1.1.2 Project Overview

The Scarlet Solar Energy Project (Project) is proposed by RE Scarlet LLC (Applicant), a wholly owned subsidiary of EDP Renewables North America LLC (EDPR NA). The Applicant has applied to the Fresno County Department of Public Works and Planning (the County) for an Unclassified Conditional Use Permit (CUP) to construct, operate, maintain, and decommission a 400-megawatt (MW) solar photovoltaic (PV) electricity generating facility and 400 MW energy storage system and associated infrastructure to be known as the Scarlet Solar Energy Project. It would provide solar power to utility customers by interconnecting to the regional electricity grid at Pacific Gas and Electric Company's (PG&E) Tranquillity Switching Station.

The Project consists of two major components: the solar facility and the PG&E improvements. The solar facility would include solar PV modules, support structures, electrical inverters, intermediate voltage transformers, two electrical substations, and a switchyard, and a generation intertie (gentie) transmission line. Each substation area would include an electrical control building. Other necessary infrastructure would include a permanent operation and maintenance building, a supervisory control and data acquisition (SCADA) system, up to 400 MW of on-site battery storage, meteorological data system, access roads, and security fencing.

¹ The Project will be constructed on any or all of assessor parcels 028-07-134, 028-07-139, 028-07-140, 028-07-141, 028-07-143, 028-07-144, 028-07-145, 028-07-147, 028-07-148, 028-07-149, 028-08-166, 028-11-101, 028-11-102, 028-11-104, 028-11-106, 028-11-107, 028-11-109, 028-11-110, 028-11-112, 028-11-113, 028-11-114, 028-11-115, 028-11-116, 028-11-117, 028-11-119, 028-11-120, 028-12-061, 028-12-062, 028-10-074, 028-10-072, 028-10-082, 028-10-081, and 028-101-75S. The project site excludes assessor parcels 028-12-033, 028-12-035, 028-12-037, and 028-12-039.

² The project site excludes assessor parcels 028-12-033, 028-12-035, 028-12-037, and 028-12-039.

Scarlet Solar Energy Project

Improvements to PG&E electrical infrastructure would include expansion of PG&E's Tranquillity Switching Station and approximately 1,900 feet of 230 kilovolt (kV) transmission line to connect the solar facility's 230 kV gen-tie line to the Tranquillity Switching Station.

1.1.3 Project Objectives

The Applicant has identified the following objectives for the Project:

- Establish a solar PV power generating facility of a sufficient size and configuration to produce up to 400 MW_{ac} of electricity at the Point of Interconnection in a cost-competitive manner;
- Develop sites in proximity to existing transmission infrastructure in order to minimize environmental impacts;
- Assist California utilities in meeting their obligations under California's RPS Program to achieve 60 percent eligible renewable energy resources by the end of 2030 and zero-carbon sources by the end of 2045 in addition to meeting the 2030 greenhouse gas emissions reduction goals as required by the California Global Warming Solutions Act (Senate Bill [SB] 32);
- Assist California utilities in meeting their obligations under the CPUC's Energy Storage
 Framework and Design Program by providing up to 400 MW of storage capacity; and
- Facilitate grid integration of intermittent and variable PV energy generation and minimize energy losses associated with transmission to off-site storage by collocating battery storage at the Project site.

1.1.4 Project Approvals

Project approval requires the County as lead agency, as well as certain "responsible agencies," to take discrete planning and regulatory actions to approve the overall project. In addition to certifying the Final EIR and adopting these Findings and Mitigation Monitoring and Reporting Program (CEQA requirements), permits and approvals would be required from the County including, but not limited to:

- Unclassified Conditional Use Permit The Project would require an Unclassified Conditional
 Use Permit (CUP) from Fresno County to allow for use of the Project site for a solar facility.
- **Encroachment Permit** An Encroachment Permit would be required for any improvements in the County right-of-way prior to commencement of construction.
- Parcel Map and Other County Approvals The Project may result in the modification of the existing parcels to create new parcels. This is anticipated to be addressed by Fresno County via a Parcel Map Waiver and would not require an amendment to the County's General Plan. The Applicant would prepare a parcel map application or lot line adjustment request and submit to the Fresno County Public Works and Planning Department for the creation of these parcel(s).
- Site Plan Review Site Plan review and approval would be required by Fresno County prior to the issuance of Building and Grading Permits.
- Building and Grading Permits Fresno County Building and Grading Permits would be required
 for the erection, demolition, or conversion of any building or structure. Such permits are
 ministerial and would be secured prior to the commencement of construction.
- Pest and Weed Management Plan A Pest and Weed Management Plan detailing methods of exotic weed, rodent, nuisance arthropod, and vector control during operation and after decommissioning of the Project has been prepared by the Applicant and would be submitted to the County. Among other things, the plan would include vegetation management to discourage

the harboring of rodents on-site and prevent impacts on surrounding agricultural operations. The growth of on-site vegetation would be controlled either by periodic mowing or herbicide use, as appropriate. All herbicides would be applied by (or under the oversight of) an applicator licensed to apply pesticides in California. Herbicides would be applied in accordance with the label instructions only for their intended use. Applicators would wear all required personal protective equipment.

In addition, the following discretionary approvals from other agencies may be required for the project:

- California Regional Water Quality Control Board A National Pollutant Discharge Elimination System (NPDES) Construction Storm Water Permit would be required for the Project. Construction activities disturbing one acre or more of land are subject to the permitting requirements of the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (Construction General Permit) and must apply for Construction General Permit coverage.
- San Joaquin Valley Air Pollution Control District District approval of Indirect Source Review, stationary and/or mobile sources may be required. As discussed in Section 4.3, Air Quality, prior to issuance of construction permits for the Solar Facility, the Applicant would provide evidence to the County of a fully-executed Voluntary Emission Reduction Agreement (VERA) with the San Joaquin Valley Air Pollution Control District if required to reduce nitrogen oxides (NO_x), particulate matter 10 microns or less in diameter (PM₁₀), and particulate matter 2.5 microns or less in diameter (PM_{2.5}) emissions.
- California Department of Transportation An Oversize/Overweight permit and Traffic Control Plan would be required for the transportation of substation transformers. An encroachment permit would be required for overhead lines crossing SR 33.
- California Department of Fish and Wildlife Authorization may be required if the proposed activities could result in "take" as defined in the California Endangered Species Act (Fish and Game Code Section 2050 et seq.).
- United States Fish and Wildlife Service Consultation/authorization may be required if the proposed activities could result in "take" as defined in the Federal Endangered Species Act.
- California Public Utilities Commission (CPUC) The CPUC has sole jurisdiction over the PG&E facilities and those facilities are subject to General Order 131-D permitting/licensing requirements. PG&E would file the appropriate documents required for the project with the CPUC in order to comply with the General Order.

1.2 CEQA Public Review Process

The following provides a summary of the environmental review process to date for the Project that has resulted in the preparation of this Final EIR.

1.2.1 Notice of Preparation

The County of Fresno prepared an Initial Study and circulated a Notice of Preparation (NOP) regarding this EIR for a 34-day agency and public review period, starting on September 12, 2018 and ending on October 15, 2018. The Initial Study determined that the Project required the preparation of an EIR to further evaluate potentially significant impacts related to aesthetics, agriculture, air

Scarlet Solar Energy Project

quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, transportation, and utilities and service systems. In addition, the County held an EIR Scoping Meeting on October 11, 2018. The County received letters from five agencies and three County departments during the public review period in response to the NOP. No verbal comments were received during the EIR Scoping Meeting. The written comments are summarized in Table 1-1 of the Draft EIR, and the Initial Study, NOP, and NOP response letters are presented in Appendix A to the Draft EIR.

The Initial Study in Appendix A determined the Project would have no impact to any of the following resource considerations:

- Forestry Resources
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Tribal Cultural Resources

1.2.2 Draft EIR

The Draft EIR was released for public and agency review on May 7, 2021, with a 45-day review period ending on June 22, 2021; however, comments on the Draft EIR were accepted through June 29, 2021. The Draft EIR contains a description of the Project, description of the environmental setting, identification of Project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of Project alternatives. The Draft EIR was provided to interested public agencies and the public and was made available for review at County offices, on the County's website, and at County libraries.

1.2.3 Final EIR

The County received comment letters from local, regional, and state agencies regarding the Draft EIR. The Final EIR document responds to the written comments received, as required by CEQA, and contains minor edits to the Draft EIR, which are included in Section 3.0, Minor Revisions to the Draft EIR. The Final EIR and response to comments were provided to agencies that commented on the Draft EIR. In addition, the Final EIR and was made available for review on the County's website.

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 County's decision on the project includes the following documents:

- The NOP and all other public notices issued by the County in conjunction with the Project;
- The May 2021 Draft EIR for the Project;
- The August 2021 Final EIR for the Project;
- The Mitigation Monitoring and Reporting Project (MMRP) 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 Applicant or the Applicant's 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 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).

2 Findings of Fact

2.1 Findings Required Under CEQA

These findings have been prepared in accordance with CEQA and the State CEQA Guidelines. Public Resources Code (PRC) 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 that, "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."

PRC Section 21081 requires a lead agency to adopt written findings of project effects when a lead agency decides to approve a project for which an EIR has been certified. Pursuant to Section 15091 of the State CEQA Guidelines, 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:

- a. Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
- b. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- c. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

The CCR Title 14, Section 15091(b), requires that the City's findings be supported by substantial evidence in the record. The documents and other materials that constitute the administrative record upon which the Commission based its decision and findings are held by the County of Fresno at the following location:

County of Fresno
Department of Public Works and Planning
2220 Tulare Street, Sixth Floor
Fresno, California 93721

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 Final EIR and adopted by the County, and states the County's findings on the significance of each impact after implementation of the adopted mitigation measures. In making these findings, the County ratifies, adopts, and incorporates into these findings the analysis and explanation in the Final EIR and the determinations and conclusions of the Final EIR 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 project deemed to have no impact or less than significant impacts prior to mitigation are discussed in detail in the EIR and summarized below with reference to their location in the Initial Study (IS) or Draft EIR (DEIR):

- Aesthetics Have a substantial adverse effect on a scenic vista. (No Impact, IS page 23)
- Aesthetics Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. (No Impact, IS page 23)
- Aesthetics Substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Less Than Significant Impact, DEIR pages 4.1-14 through 4.1-16)
- Aesthetics Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area. (Less Than Significant Impact, DEIR pages 4.1-16 through 4.1-18)
- Agriculture and Forestry Resources Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. (Less Than Significant Impact, DEIR pages 4.2-8 through 4.2-9)
- Agriculture and Forestry Resources Conflict with existing zoning for agricultural use, or a Williamson Act contract. (Less Than Significant Impact, DEIR page 4.2-9)
- Agriculture and Forestry Resources Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)). (No Impact, IS page 28)
- Agriculture and Forestry Resources Result in the loss of forest land or conversion of forest land to non-forest use. (No Impact, IS page 28)
- Agriculture and Forestry Resources Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use. (Less Than Significant Impact, DEIR pages 4.2-10 through 4.2-11)
- Air Quality Conflict with or obstruct implementation of the applicable air quality plan. (Less Than Significant Impact, DEIR pages 4.3-16 through 4.3-31)
- Air Quality Expose sensitive receptors to substantial pollutant concentrations. (Less Than Significant Impact, DEIR pages 4.3-31 through 4.3-35)
- Air Quality Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. (No Impact, IS page 30)
- Biological Resources Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). (Less Than Significant Impact, DEIR pages 4.4-22)
- Biological Resources Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. (No Impact, IS page 32)
- Biological Resources 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, IS page 32)

- Biological Resources Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. (Less Than Significant Impact, DEIR page 4.4-13)
- Cultural Resources Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5. (Less Than Significant Impact, IS page 35)
- Cultural Resources Disturb any human remains, including those interred outside of formal cemeteries. (Less Than Significant Impact, DEIR page 4.5-11)
- Energy Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction, operation and maintenance, or decommissioning. (Less Than Significant Impact, DEIR pages 4.6-6 through 4.6-9)
- Energy Conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (No Impact, DEIR pages 4.6-9 through 4.6-10)
- Geology and Soils Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (No Impact, IS page 38)
- Geology and Soils Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. (Less Than Significant Impact, DEIR pages 4.7-9 through 4.7-10)
- Geology and Soils Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving landslides. (No Impact, IS pages 37-38)
- Geology and Soils Result in substantial soil erosion or the loss of topsoil. (Less Than Significant Impact, DEIR pages 4.7-12 through 4.7-13)
- Geology and Soils Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property. (Less Than Significant Impact, DEIR pages 4.7-13 through 4.7-14)
- Geology and Soils Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. (Less Than Significant Impact, DEIR pages 4.7-14 through 4.7-15)
- Greenhouse Gas Emissions Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. (Less Than Significant Impact, DEIR pages 4.8-13 through 4.8-17)
- Greenhouse Gas Emissions Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. (Less Than Significant Impact, DEIR pages 4.8-13 through 4.8-17)
- Hazards and Hazardous Materials Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (Less Than Significant Impact, DEIR pages 4.9-11 through 4.9-13)
- Hazards and Hazardous Materials Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. (No Impact, IS page 44)

- Hazards and Hazardous Materials Be located on a site that is included on a list of hazardous
 material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it
 create a significant hazard to the public or the environment. (No Impact, IS page 45)
- Hazards and Hazardous Materials For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the Project result in a safety hazard or excessive noise for people residing or working in the Project area. (No Impact, IS page 45)
- Hazards and Hazardous Materials Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less Than Significant Impact, IS page 45)
- Hazards and Hazardous Materials Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. (Less Than Significant Impact, DEIR pages 4.9-21 through 4.9-22)
- Hydrology and Water Quality Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. (Less Than Significant, DEIR pages 4.10-9 through 4.10-11)
- Hydrology and Water Quality Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. (Less Than Significant DEIR pages 4.10-12 through 4.10-14)
- Hydrology and Water Quality Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - Result in substantial erosion or siltation on- or -off-site. (Less Than Significant Impact)
 - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. (Less Than Significant Impact)
 - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. (Less Than Significant Impact)
 - Impede or redirect flood flows. (Less Than Significant Impact)
 (DEIR pages 4.10-15 through 4.10-18)
- Hydrology and Water Quality Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (Less Than Significant Impact, DEIR pages 4.10-9 through 4.10-14)
- Land Use and Planning Physically divide an established community. (No Impact, IS page 51)
- Land Use and Planning Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. (No Impact, DEIR pages 4.11-4 through 4.11-6)
- Mineral Resources Result in the loss of availability of a known mineral resource that would be
 of value to the region and the residents of the state. (No Impact, IS page 53)
- Mineral Resources Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. (No Impact, IS page 53)

- Noise Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Less Than Significant Impact, DEIR pages 4.12-10 through 4.12-18)
- Noise Result in the generation of excessive groundborne vibration or groundborne noise levels. (Less Than Significant Impact, DEIR pages 4.12-18 through 4.12-20)
- Noise For a Project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels. (No Impact, IS page 56)
- Population and Housing Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure). (Less Than Significant Impact, IS pages 59-60)
- Population and Housing Displace substantial amounts of existing people or housing, necessitating the construction of replacement housing elsewhere. (No Impact, IS page 60)
- Public Services Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, and other public facilities. (Less Than Significant Impact, IS page 61)
- Recreation Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. (No Impact, IS page 63)
- Recreation Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. (No Impact, IS page 63)
- Transportation Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. (No Impact, IS page 66)
- Transportation Conflict or be inconsistent with State CEQA Guidelines section 15064.3, subdivision (b). (Less Than Significant Impact, DEIR pages 4.13-4 through 4.13-5)
- Transportation Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Less Than Significant Impact, DEIR pages 4.13-5 through 4.13-6)
- Transportation Result in inadequate emergency access. (Less Than Significant Impact, DEIR pages 4.13-6 through 4.13-7)
- Tribal Cultural Resources Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). (No Impact, IS pages 69-70)
- Tribal Cultural Resources Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1. (No Impact, IS pages 69-70)

- Utilities and Service Systems Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (Less Than Significant Impact, DEIR pages 4.14-7 through 4.14-9)
- Utilities and Service Systems Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. (Less Than Significant Impact, DEIR pages 4.14-10 through 4.14-11)
- Utilities and Service Systems Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. (No Impact, IS page 72)
- Utilities and Service Systems Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals (Less Than Significant Impact, DEIR pages 4.14-12 through 4.14-15)
- Utilities and Service Systems Comply with federal, state, and local management and reduction statutes and regulations related to solid waste. (Less Than Significant Impact, DEIR pages 4.14-12 through 4.14-15)

The County has reviewed the Final EIR, which contains responses to comments on the Draft EIR, any text changes to the Draft EIR, and additional information. The County also has considered the entire record for this project. The following Findings of Fact regarding the significant effects of the project pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15091 are based on this review.

Air Quality

Threshold a:	Whether the Project would conflict with or obstruct implementation of the applicable air quality plan
Threshold b:	Whether the Project would result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard

IMPACT AQ-1. THE PROJECT WOULD EXCEED SJVAPCD THRESHOLDS FOR EMISSIONS OF SOME CRITERIA AIR POLLUTANTS DURING CONSTRUCTION, OPERATION AND MAINTENANCE, AND DECOMMISSIONING, AND WOULD THEREFORE CONFLICT WITH SJVAPCD'S AIR QUALITY MANAGEMENT PLANS.

FINDING: Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs.§ 15091(a)(1)).

FACTS IN SUPPORT OF FINDING: Section 4.3 of the Draft EIR found construction, operation and maintenance, and decommissioning of the Project would result in emissions of criteria pollutants including ozone precursors, such as $PM_{2.5}$ and NO_x , as well as particulate matter (PM). While the PG&E Improvements would not result in emissions of criteria pollutants in excess of San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds, construction of the Solar Facility would result in exceedances of the SJVAPCD thresholds for PM_{10} , $PM_{2.5}$, and NO_x . Operation and maintenance and decommissioning of the Solar Facility would also generate PM_{10} emissions greater than SJVAPCD thresholds. Therefore,

implementation of Mitigation Measures AQ-1 and AQ-2 would be required to reduce impacts to a less than significant level.

As a condition of approval (COA), the Project would comply with SJVAPCD Rule 8021 and Regulation VIII to control dust emissions generated during construction activities. Additionally, the Project would comply with the SJVAPCD Rule 9510, *Indirect Source Review*, which requires large development projects to reduce exhaust emissions from construction equipment 20 percent for NO_X and 45 percent for PM₁₀ compared to the statewide average. Despite compliance with SJVAPCD regulations and the COA (Exhibit 1 of the Staff Report), impacts would still be potentially significant; therefore, Mitigation Measures AQ-1 and AQ-2 would be required. With implementation of MM-AQ 1 and MM AQ-2, impacts related to obstruction of the applicable air quality plans and net increase of any criteria pollutant would be less than significant. (Draft EIR pages 4.3-16 through 4.3-31)

The County adopts the following mitigation measures that will reduce the effects to a less-than significant level. The following mitigation measures are applicable to both the Solar Facility and the PG&E Improvements, and will be implemented to ensure that Project-related impacts related to special-status species are avoided or minimized to a less than significant level:

MM AQ-1 Air Quality Best Management Practices. During construction and decommissioning of the Project, the following measures shall be implemented:

- 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.
- Construction equipment will use only California-certified diesel or gasoline fuels
- The Applicant will use construction equipment that is at the Tier 4 interim emission level for equipment less than or equal to 81 horsepower and Tier 3 engines for all other equipment.

MM AQ-2 Further Reduction of NOX, PM10, and PM2.5 Emissions During Construction, and Decommissioning and PM10 Emissions During Operation and Maintenance. Prior to issuance of construction/grading permits for the Project, the Project Applicant shall enter into a Voluntary Emission Reduction Agreement (VERA) with the San Joaquin Valley Air Pollution Control District (SJVAPCD) to mitigate or reduce Project construction emissions of NO_x, PM₁₀, and PM_{2.5}, and Project operation and maintenance emissions of PM₁₀ beyond the requirements of Rule 9510 through the payment of fees (on a per-ton basis) to the SJVAPCD. The payment of fees shall be made to the SJVAPCD based on the fee schedule in the development mitigation contract and the amount of reduction necessary to offset project emissions below the SJVAPCD's thresholds. Prior to the issuance of construction/grading permits for the Project, the Project Applicant shall provide evidence to the County of a fully-executed VERA.

Twelve months prior to initiation of decommissioning activities, the Project Applicant shall provide evidence, consisting of an air quality analysis based on final decommissioning plans and prepared by an air quality specialist, to the County demonstrating that Project decommissioning emissions would not exceed the SJVAPCD PM $_{10}$ significance thresholds of 15 tons per year. If the PM $_{10}$ emissions will exceed the SJVAPCD thresholds of significance of 15 tons per year, the Project Applicant shall enter into a new VERA with the SJVAPCD to offset the decommissioning emissions below the thresholds of significance. Prior to the issuance of permits for decommissioning activities, the Project Applicant shall provide evidence to the County of the new fully-executed VERA, should one be required.

Biological Resources

Threshold a: Whether the Project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local of regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service

Threshold g: Whether the Project would have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal

IMPACT BIO-1. IMPLEMENTATION OF THE PROJECT HAS POTENTIAL TO HAVE A DIRECT OR INDIRECT ADVERSE EFFECT ON SPECIAL STATUS SPECIES.

FINDING: Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs.§ 15091(a)(1)).

FACTS IN SUPPORT OF FINDING: Section 4.4 of the Draft EIR (pages 4.4-13 through 4.4-21) found that the Project would not substantially reduce habitat for fish and wildlife species because the site is highly disturbed and is currently use for agricultural production, and thereby does not provide habitat for fish species or significant habitat for plants or other wildlife species compared to that of the region.

Activities associated with construction and/or decommissioning of the Project could result in the disturbance of burrowing owl burrows through ground-disturbing activities, as well as loss of foraging habitat during vegetation clearing. Implementation of BIO-1(a) through BIO-1(g) would reduce impacts to Burrowing owl to less than significant. (Draft EIR page 4.4-14)

No kit foxes were observed during protocol surveys of the Project site or surveying of adjacent solar facilities. However, San Joaquin kit fix is a highly mobile animal known to occur in the region, and project activities could potentially result in injury, mortality, or den destruction during ground disturbing activities, if present. Implementation of Mitigation Measures BIO-1(a), BIO-1(h) through BIO-1(u) would reduce impacts to San Joaquin Kit Fox to less than significant. (Draft EIR pages 4.4-15 through 4.4-16)

There are no trees on the Project site, however the site provides foraging habitat and nesting grounds for multiple Species of Special Concern. Vegetation clearing or ground disturbance could result in the destruction of nests, eggs, or chicks of ground-nesting species during the typical avian breeding season. Project activities could also result in noise and other disturbance with potential to cause nest failure, and some project components (such as hollow chain link fencing poles or other hollow tubes) could result in accidental bird entrapment. Implementation of Mitigation Measures BIO-1(a) and BIO-1(h) would reduce impacts to Swainson's Hawk, migratory and nesting birds, and other special-status bird species and raptors to less than significant. (Draft EIR pages 4.4-14 through 4.4-15)

The County adopts the following mitigation measures that will reduce the effects to a less-than significant level. The following mitigation measures are applicable to both the Solar Facility and the PG&E Improvements, and will be implemented to ensure that Project-related impacts related to special-status species are avoided or minimized to a less than significant level:

MM BIO-1(a) Worker Environmental Awareness Program. Prior to initiation of construction activities (including staging and mobilization), operation and maintenance activities, and decommissioning, all personnel associated with Project construction shall attend Worker Environmental Awareness Program training, conducted by a qualified biologist, to aid workers in recognizing special-status resources that may occur in the Project area. The specifics of this program shall include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information shall be prepared for distribution to all contractors, their employers, and other personnel involved with construction of the Project. All employees shall sign a form provided by the trainer documenting they have attended the training and understand the information presented to them.

MM BIO-1(b) Pre-Construction Nesting Bird Surveys and Impact Avoidance. If Project activities are scheduled to take place between September 16 through January 31, which is outside of the avian nesting season, no action would be required to protect nesting birds. If Project activities have been continuous since prior to February 1, no action would be required to protect nesting birds. If any Project activities that could harm birds or their nests (e.g., clearing temporary workspaces; staging or stockpiling machinery or supplies; parking vehicles, equipment, or trailers; grading or leveling; creating stockpiles of dirt or gravel; or any activity that could cover or remove existing habitat or disrupt surface soils) commence during the typical avian nesting season (February 1 through September 15), the following measures shall be implemented to avoid impacts on nesting raptors and other protected and common birds.

No more than 14 days prior to initiation of such activities, a qualified biologist shall conduct a pre-construction survey to determine if birds or nests are present. The survey area shall include suitable nesting habitat within 300 feet of the Project boundary (inaccessible areas outside of the Project site can be surveyed from the site or from public roads using binoculars or spotting scopes). Surveys may be phased as construction is phased, so that each section is

- surveyed no more than 14 days prior to the start of construction in that area. If no active nests are identified, no further mitigation is required.
- If active nests are identified, a qualified biologist shall establish a no-disturbance buffer around the nests and no construction within the buffer shall be allowed until a qualified biologist determines that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest, or the nest has failed). The avoidance buffer size shall be determined based on species that is nesting, the status of the nest, site conditions, and level of anticipated Project activity in the vicinity of the nest. Encroachment into the buffer may occur at the discretion of a qualified biologist. Any encroachment into the buffer shall be monitored by a qualified biologist to determine whether nesting birds exhibit any negative responses to the activity. The biologist shall have the authority to halt or redirect construction activities in order to protect nesting birds and to help ensure an impact to nesting birds is avoided.

MM BIO-1(c) Cap Hollow Tubes and Poles. Any vertical tubes (e.g., solar mount poles, chain link fencing poles, or any other hollow tubes or poles) used on the Project site shall be capped immediately after installation to avoid entrapment of birds.

MM BIO-1(d) Avoid Construction and Decommissioning Activities During the Burrowing Owl Nesting Season. Ground-disturbance activities associated with construction and decommissioning of the Project shall begin outside of the burrowing owl nesting season (February 1 through September 15), unless reasonably necessary to stay on schedule. The site shall be maintained in a manner inhospitable to burrowing owl, such as keeping the site free of vegetation and maintaining regular site disturbance by construction equipment and personnel.

MM BIO-1(e) Burrowing Owl Take Avoidance Survey. No more than 14 days prior to initiation of ground-disturbing activities associated with construction and decommissioning, a qualified biologist shall conduct a take avoidance survey of the Project site and surrounding areas to a distance of 150 meters, in accordance with the methods outlined in the CDFG Staff Report on Burrowing Owl Mitigation (CDFG 2012). The pre-construction survey will cover all areas within 150 meters of the portion of the site in which construction/decommissioning is scheduled to start. Surveys will be phased, based on the construction/decommissioning schedule, such that they are conducted no more than 14 days before the start of ground disturbance in new areas. If construction/decommissioning activities in portions of the site cease for a period of 14 days, those portions of the site will be resurveyed for burrowing owls prior to the resumption of construction. If no occupied (breeding or wintering) burrowing owl burrows are identified, no further mitigation will be required.

MM BIO-1(f) Burrowing Owl Burrow Avoidance or Passive Relocation. If occupied burrows are identified on the site or within 150 meters of the Project disturbance area, one of the following actions shall be taken: (1) permanent avoidance of the burrow or (2) establishment of a temporary avoidance buffer followed by passive relocation and compensatory mitigation for loss of habitat in conjunction with the measures below:

- Site-specific, no-disturbance buffer zones shall be established and maintained between Project activities and occupied burrows, using the distances recommended in the CDFW guidelines (CDFG 2012) or as otherwise determined appropriate by the qualified biologist in consultation with CDFW:
- 2. Avoidance of active burrows is preferrable, however if an occupied burrow cannot be avoided, and the burrow is not actively in use as a nest, the burrowing owls can be excluded from burrows in accordance with an approved Burrowing Owl Exclusion Plan, which shall be prepared and submitted for approval by CDFW prior to passive relocation of any burrowing owls. The Burrowing Owl Exclusion Plan shall be based on the recommendations made in the Staff Report on Burrowing Owl Mitigation and shall include the following information for each proposed passive relocation:
 - Confirmation by site surveillance that the burrow(s) is empty of burrowing owls and other species;
 - Identification of type of scope to be used and appropriate timing of scoping;
 - Occupancy factors to look for and what shall guide determination of vacancy and excavation timing;
 - Methods for burrow excavation;
 - Removal of other potential owl burrow surrogates or refugia on site;
 - Methods for photographic documentation of the excavation and closure of the burrow;
 - Monitoring of the site to evaluate success and, if needed, to implement remedial measures to prevent subsequent owl use to avoid take;
 - Methods for assuring the impacted site shall continually be made inhospitable to burrowing owls and fossorial mammals; and
 - Method for compensatory mitigation for burrow loss.
- 3. If burrowing owls cannot be excluded from an off-site burrow and it is not feasible to maintain an avoidance buffer as stated above, coordination shall be conducted with CDFW to determine and implement appropriate measures to minimize impacts to off-site burrowing owls. Such measures could include, but are not limited to: 1) installation of barriers between the construction area and the occupied burrows to block noise and views of construction equipment and personnel, and 2) regular monitoring by a qualified biologist to determine if construction is resulting in disturbance of the owls that could lead to nest abandonment or harm to adult owls or their young. If such disturbance was occurring, the biological monitor would have the authority to halt construction until further modifications could be made to avoid disturbance of the owls.

MM BIO-1(g) Management of Permanent Avoidance Buffers. If permanent avoidance buffers are established on the Project site to protect burrowing owls, such areas shall be managed for the duration of the Project through decommissioning to preserve current values as foraging habitat for burrowing owl. Management shall include: 1) exclusion of all Project activities throughout the construction, operation, and decommissioning phases, including staging, parking, driving, or dumping; 2) vegetation management by grazing or mowing to preserve open, low-growing vegetation; 3) fencing to discourage

human incursion; and 4) signs identifying the area as a biologically sensitive area managed for burrowing owl.

MM BIO-1(h) Swainson's Hawk Avoidance and Minimization. If Project construction or decommissioning is initiated during the Swainson's hawk nesting season (March 1 through September 15), a qualified biologist shall conduct a pre-construction Swainson's hawk and general raptor nest survey of all potential nesting habitat within 0.5-mile of the Project site. The survey shall be conducted according to current Swainson's hawk protocol (Swainson's Hawk Technical Advisory Committee 2000). If no active nests are identified, no further mitigation would be required. If active Swainson's hawk nests are identified an avoidance buffer of 0.5 mile shall be established around active nests consistent with the CDFW Staff Report (California Department of Fish and Game 1994). If active nests of non-listed raptors are identified, an appropriate avoidance buffer, as determined by the qualified biologist, shall be established. No construction within avoidance buffers shall be 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). If it is not feasible to maintain a 0.5-mile buffer for an active Swainson's hawk nest to reasonably accommodate construction, maintenance, or decommissioning activities, the established buffer distance may be reduced through coordination with CDFW. Project activities within the reduced buffer shall be monitored at the discretion of a qualified biologist and based on coordination with CDFW.

MM BIO-1(i) Pre-Construction Survey for San Joaquin Kit Fox. A qualified biologist shall conduct a preconstruction survey no more than 14 days prior to the beginning of ground disturbance and/or construction or decommissioning activities, or any other Project activity likely to impact San Joaquin kit fox. This is to determine if San Joaquin kit fox dens are present in or within 500 feet of the Project site (inaccessible areas outside of the Project site can be surveyed using binoculars or spotting scopes from public roads). The surveys shall be conducted in all areas of suitable habitat for San Joaquin kit fox. Survey shall be phased so that surveys occur within 14 days prior to disturbance of any portion of the site.

MM BIO-1(j) San Joaquin Kit Fox Den Avoidance. If potential dens are observed and avoidance of the dens is determined to be feasible by a qualified biologist in consultation with the Project Applicant and CDFW, the following minimum buffer distances shall be established prior to construction activities (consistent with USFWS standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance [USFWS 2011]):

Potential den: 50 feet
Atypical den: 50 feet
Known den: 100 feet

Natal/pupping den: at least 500 feet -USFWS must be contacted

If occupied San Joaquin kit fox dens are observed on the site, USFWS must be contacted. If avoidance of potential dens is not feasible, the following measures are required to avoid potential adverse effects to the San Joaquin kit fox:

1. If the qualified biologist determines that potential dens are inactive after monitoring the den per the USFWS Standard Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS)

- 2011), the biologist shall excavate these dens by hand with a shovel to prevent foxes from re-using them during construction.
- 2. If the qualified biologist determines that a potential 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 with prior concurrence from USFWS.

MM BIO-1(k) Vehicle Speed Limits. On-site vehicles shall observe a daytime speed limit of 20 mph and a nighttime speed limit of 10 mph throughout the Project site, except on County roads and state and federal highways. Off-road traffic shall be prohibited outside of designated Project areas.

MM BIO-1(I) Hole and Trench Covering and Inspection for Kit Fox. To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of the Project, all excavated, steep-walled holes or trenches more than 2-feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the USFWS and the CDFW shall be contacted.

MM BIO-1(m) Construction Pipe and Culvert Inspections for Kit Fox. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe shall not be moved until the USFWS has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped

MM BIO-1(n) Trash Disposal. During construction, operations, and decommissioning, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers and removed at least once a week from the construction site or Project site.

MM BIO-1(o) Firearm Restrictions. No firearms shall be allowed on the Project site during construction, operations, and decommissioning.

MM BIO-1(p) Pet Restrictions. No pets, such as dogs or cats, shall be permitted on the Project site to prevent harassment, mortality of kit foxes, or destruction of dens during construction, operations, and decommissioning.

MM BIO-1(q) Rodenticide and Herbicide Restrictions. During construction, operations, and decommissioning, use of rodenticides and herbicides in Project areas shall be in compliance with the approved pest and weed management plan.

MM BIO-1(r) Notification of Kill or Injury of Kit Fox. During construction, operations, and decommissioning, a representative shall be appointed by the Project Applicant who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured, or entrapped kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the Service.

Any contractor, employee, or military or agency personnel responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFW immediately in the case of a dead, injured, or entrapped kit fox. The CDFW contact for immediate assistance is State Dispatch at (916) 445-0045. They will contact the local warden or the wildlife biologist at (530) 934-9309. The USFWS shall be contacted at Endangered Species Division, 2800 Cottage Way, Suite W2605, Sacramento, CA 95825, (916) 414-6620 or (916) 414-6600.

The Sacramento Fish and Wildlife Office and CDFW shall be notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during Project related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information.

MM BIO-1(s) Reporting of Kit Fox Sighting. During construction, operations, and decommissioning, new sightings of kit fox shall be reported to the CNDDB. A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the USFWS.

MM BIO-1(t) Site Restoration. Upon completion of the Project and decommissioning, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. shall be re-contoured if necessary, and revegetated to promote restoration of the area to pre- Project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the Project, but after Project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas shall be in compliance with the approved Reclamation Plan.

MM BIO-1(u) Wildlife Fencing. Fencing of the Solar Facility Project site shall incorporate wildlife-friendly fencing design. Fencing plans may use one of several potential designs that would allow kit foxes to pass through the fence while still providing for Project security and exclusion of other unwanted species (e.g., 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 Project site would be appropriate designs.

Threshold d: Whether the Project would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites

IMPACT BIO-3. THE PROJECT HAS THE POTENTIAL TO SUBSTANTIALLY INTERFERE WITH THE LOCAL MOVEMENT OF WILDLIFE AND MIGRATORY BIRDS ON THE PROJECT SITE AS A RESULT OF IMPLEMENTATION OF THE PROJECT.

FINDING: Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs.§ 15091(a)(1)).

FACTS IN SUPPORT OF FINDING: Section 4.4 of the Draft EIR (pages 4.4-22 through 4.4-24) found that the Project would introduce new collision and electrocution hazards to the site, including new transmission lines with which special status avian species, raptors, and migratory birds may come in contact. Additionally, fencing for the Project could potentially interfere with movement and predator avoidance for local wildlife. Implementation of Mitigation Measures BIO-3(a), BIO-3(b), and BIO-1(u) (described above) would ensure impacts to wildlife movement corridors and nursery sites for native resident or migratory wildlife species would be reduced to less than significant levels.

The County adopts the following mitigation measures that will reduce the effects to a less-than significant level. The following mitigation measures are applicable to both the Solar Facility and the PG&E Improvements, and will be implemented to ensure that Project-related impacts to wildlife movement corridors and nursery sites for native resident or migratory fish or wildlife species are avoided or minimized to a less than significant level:

MM BIO-3(a) Avian/Power Line Collision Avoidance and Minimization.

Construction of the gen-tie transmission line shall include installation of bird flight diverters, in accordance with the applicable measures of the most recent Avian Power Line Interaction Committee (APLIC) guidelines for minimizing avian collisions (Reducing Avian Collisions with Power Lines; APLIC 2012). Details of design components shall be indicated on all construction plans and be provided and approved by the County prior to construction. The applicant shall monitor for new versions of the APLIC collision guidelines and update designs or implement new measures as needed during Project construction, provided these actions do not require the purchase of previously ordered transmission line structures. Once constructed, all bird flight diverters shall be maintained for the duration of construction and operation.

MM BIO-3(b) Avian Electrocution Avoidance and Minimization. The applicant shall design, construct, and maintain all transmission facilities, towers, poles, and lines in accordance with applicable policies set forth in the most recent APLIC Avian Protection Plan Guidelines for minimizing avian electrocutions (APLIC 2006). Details of design components shall be indicated on all construction plans and shall be provided and approved by County prior to construction. The Applicant shall monitor for new versions of the APLIC guidelines and update designs or implement new measures as needed during Project construction.

The County adopts the following mitigation measures that will reduce the effects to a lessthan significant level. The following mitigation measure (described above under Impact BIO- 1) is applicable to the Solar Facility, and will be implemented to ensure that Project-related to wildlife movement corridors and nursery sites for native resident or migratory fish or wildlife species are avoided or minimized to a less than significant level:

MM BIO-1(u) Wildlife Fencing.

Threshold e: Whether the Project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

IMPACT BIO-4. THE PROJECT HAS THE POTENTIAL TO CONFLICT WITH LOCAL POLICIES PROTECTING BIOLOGICAL RESOURCES.

FINDING: Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs.§ 15091(a)(1)).

FACTS IN SUPPORT OF FINDING: Section 4.4 of the Draft EIR (page 4.4-24) found that the Project has the potential to conflict with local policies protecting biological resources because the Fresno County General Plan includes several policies intended to promote conservation of existing high-value biological resources in the county and assure no net loss of sensitive resources and special-status species, and the Project area has been subject to a long history of intensive agricultural land use and disturbance that has severely reduced the biological value of the site compared to undisturbed natural habitats. Implementation of Mitigation Measures BIO-1(a) through BIO-1(u), MM BIO-3(a), and MM BIO-3(b) (described above) would, collectively, ensure that impacts to biological resources are reduced to a less than significant level, and therefore would reduce impacts related to conflict with local policies and ordinances protecting biological resources to a less than significant level.

The County adopts the following mitigation measures that will reduce the effects to a less-than significant level. The following mitigation measures (described above under Impact BIO-1 and BIO-3) are applicable to both the Solar Facility and the PG&E Improvements, and will be implemented to ensure that the Project would not conflict with local policies and ordinances protecting biological resources:

- MM BIO-1(a) Worker Environmental Awareness Program.
- MM BIO-1(b) Pre-Construction Nesting Bird Surveys and Impact Avoidance.
- MM BIO-1(c) Cap Hollow Tubes and Poles.
- MM BIO-1(d) Avoid Construction and Decommissioning Activities During the Burrowing Owl Nesting Season.
- MM BIO-1(e) Burrowing Owl Take Avoidance Survey.
- MM BIO-1(f) Burrowing Owl Burrow Avoidance or Passive Relocation.
- MM BIO-1(g) Management of Permanent Avoidance Buffers.
- MM BIO-1(h) Swainson's Hawk Avoidance and Minimization.
- MM BIO-1(i) Pre-Construction Survey for San Joaquin Kit Fox.
- MM BIO-1(j) San Joaquin Kit Fox Den Avoidance.
- MM BIO-1(k) Vehicle Speed Limits.

MM BIO-1(I) Hole and Trench Covering and Inspection for Kit Fox.

MM BIO-1(m) Construction Pipe and Culvert Inspections for Kit Fox.

MM BIO-1(n) Trash Disposal.

MM BIO-1(o) Firearm Restrictions.

MM BIO-1(p) Pet Restrictions.

MM BIO-1(q) Rodenticide and Herbicide Restrictions.

MM BIO-1(r) Notification of Kill or Injury of Kit Fox.

MM BIO-1(s) Reporting of Kit Fox Sighting.

MM BIO-3(a) Avian/Power Line Collision Avoidance and Minimization.

MM BIO-3(b) Avian Electrocution Avoidance and Minimization.

The County adopts the following mitigation measures that will reduce the effects to a less-than significant level. The following mitigation measures (described above under Impact BIO-1) are applicable to the Solar Facility, and will be implemented to ensure that the Project would not conflict with local policies and ordinances protecting biological resources:

MM BIO-1(t) Site Restoration.

MM BIO-1(u) Wildlife Fencing.

Cultural Resources

Threshold b: Whether the Project would cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5

IMPACT CR-1. GROUND DISTURBING ACTIVITIES COULD CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF PREVIOUSLY UNKNOWN ARCHAEOLOGICAL RESOURCES, PURSUANT TO CEQA GUIDELINES SECTION 15064.5.

FINDING: Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs.§ 15091(a)(1)).

FACTS IN SUPPORT OF FINDING: Section 4.5 of the Draft EIR (pages 4.5-6 through 4.5-10) found that earth moving activities during project construction could potentially result in a significant impact to previously unknown archaeological resources, pursuant to CEQA Guidelines Section 15064.5, due to the potential destruction or loss of integrity in these resources. Implementation of Mitigation Measures CR-1(a) through CR-1(c) are required, or are incorporated into the project, and would reduce the impact related to substantial adverse changes in the significance of a historic resource to a less than significant level.

The County adopts the following mitigation measures that will reduce the effects to a less-than significant level. The following mitigation measures are applicable to both the Solar Facility and the PG&E Improvements, and will be implemented to ensure that Project-related impacts related to archeological resources are avoided or minimized to a less than significant level:

- **CR-1(a)** Retain a Qualified Archaeologist. Prior to the issuance of construction/grading permits, the Applicant shall retain a Registered Professional Archaeologist or a monitor under their direction (qualified archaeologist) to carry out all mitigation measures related to archaeological and historical resources.
- **CR-1(b)** Cultural Resources Awareness Program. Prior to the commencement of construction/grading activities, the Applicant shall ensure that the qualified archaeologist has conducted a Cultural Resources Awareness Training for the general contractor, subcontractor(s), and all construction workers participating in earth disturbing activities. The training shall describe the potential of exposing archaeological resources, the types of cultural materials that may be encountered, and directions on the steps that shall be taken if such a find is encountered. This training may be presented alongside other environmental training programs required prior to construction. A training acknowledgment form must be signed by all workers who receive the training and retained. Additional trainings shall be conducted for all new construction personnel participating in earth disturbing activities throughout construction.
- **CR-1(c)** Accidental Discovery Procedures. In the event unanticipated archaeological resources are encountered during earth disturbing activities, compliance with federal and state regulations and guidelines regarding the treatment of cultural resources and/or human remains shall be required.
- 1. All construction activities within 50 feet shall halt and the County shall be notified.
- 2. A qualified archaeologist, defined as one meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology, shall inspect the findings and report the results of the inspection to the developer and the County.
- 3. In the event that the identified archaeological resource is determined to be prehistoric, the County and qualified archaeologist will coordinate with and solicit input from the appropriate Native American Tribal Representatives regarding significance and treatment of the resource as a tribal cultural resource. Any cultural resource of Native American origin discovered during Project work shall be treated in consultation with the tribe, with the goal of preserving in place with proper treatment.
- 4. If the County determines that the resource qualifies as a significant archaeological resource (as defined pursuant to the CEQA Guidelines) and that the Project has potential to damage or destroy the resource, mitigation shall be implemented in accordance with PRC Section 21083.2 and CEQA Guidelines Section 15126.4. Consistent with CEQA Guidelines Section 15126.4(b)(3), mitigation shall be accomplished through either preservation in place or, if preservation in place is not feasible, data recovery through excavation conducted by a qualified archaeologist implementing a detailed archaeological treatment plan.

Geology and Soils

Threshold a.iii: Whether the Project would directly or indirectly cause potential substantial adverse

effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction

failure, including ilqueraction

Threshold c: Whether the Project would be located on a geologic unit or soil that is unstable, or

that would become unstable as a result of the Project, and potentially result in on- or

off-site landslide, lateral spreading, subsidence, liquefaction, or collapse

IMPACT GEO-2. THE PROJECT COULD CAUSE ADVERSE EFFECTS, INCLUDING RISK OF LOSS, INJURY, OR DEATH RELATED TO GROUND FAILURE, INCLUDING LIQUEFACTION. THE PROJECT WOULD NOT EXACERBATE THE RISK OF GROUND FAILURE AND WOULD BE CONSTRUCTED IN COMPLIANCE WITH APPLICABLE CODES.

FINDING: Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs.§ 15091(a)(1)).

FACTS IN SUPPORT OF FINDING: Section 4.7 of the Draft EIR (pages 4.7-11 through 4.7-12) found that the Project would not exacerbate the risk of ground failure and would be constructed in compliance with applicable codes. However, the Project could cause adverse effects, including risk of loss, injury, or death related to ground failure, including liquefaction because soils found on site indicate moderate-to-high potential for liquefaction or settling caused by an earthquake. Impacts related to liquefaction would be less than significant with compliance of Building Code regulations, approval and inspection by the Fresno County Building and Safety Team, and incorporation of MM GEO-2, which ensures the Project incorporates engineering recommendations to minimize liquefaction potential on the site.

The County adopts the following mitigation measure that will reduce the effects to a less-than significant level. The following mitigation measure is applicable to both the Solar Facility and the PG&E Improvements, and will be implemented to ensure that Project-related impacts related to liquefaction are avoided or minimized to a less than significant level:

GEO-2 Reduction of Liquefaction Potential. Prior to issuance of a grading permit, the applicant shall submit to the County Department of Public Works and Planning for review and approval, a ground improvement program prescribed by a qualified engineer to minimize liquefaction potential on the site. Measures to reduce liquefaction impacts could include, but may not be limited to, site preparation measures, foundation design measures such as removal and replacement of liquefiable soils, or others recommended by a structural engineer.

Threshold f: Whether the Project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature

IMPACT GEO-6. GROUND DISTURBING ACTIVITIES ASSOCIATED WITH THE PROJECT HAVE THE POTENTIAL TO UNEARTH OR IMPACT PREVIOUSLY UNIDENTIFIED PALEONTOLOGICAL RESOURCES.

FINDING: Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs.§ 15091(a)(1)).

FACTS IN SUPPORT OF FINDING: Section 4.7 of the Draft EIR (pages 4.7-15 through 4.7-17) found that ground disturbing activities associated with the Project have the potential to unearth or impact previously unidentified paleontological resources, and that the potential for paleontological resources to be present onsite is low to high depending on the location within the site. Because inadvertent discovery of paleontological resources onsite is possible, MM GEO-6(a) through GEO-6(d) are required to ensure that previously undiscovered paleontological resources that may be discovered onsite are treated appropriately, and that workers are trained on notification of such resources. Collectively these mitigation measures would ensure that potential damage to paleontological resources would be less than significant. With implementation of Mitigation Measures GEO-6(a) through GEO-6(d), impacts would be less than significant.

The County adopts the following mitigation measures that will reduce the effects to a less-than significant level. The following mitigation measures are applicable to both the Solar Facility and the PG&E Improvements, and will be implemented to ensure that Project-related impacts related to paleontological resources are avoided or minimized to a less than significant level:

GEO-6(a) Retention of Qualified Paleontologist. Prior to initial ground disturbance, the Applicant shall retain a Qualified Paleontologist, defined as a paleontologist who meets the Society of Vertebrate Paleontology's (SVP) standards (SVP 2010), to direct the implementation of Mitigation Measures GEO-6(b) through 6(d). A Qualified Paleontologist (Principal Paleontologist) is defined by the SVP standards as an individual with an MS or PhD in paleontology or geology experienced with paleontological procedures and techniques, knowledgeable in the geology of California and the San Joaquin Valley, and who has worked as a paleontological mitigation project supervisor for a least one year.

GEO-6(b) Paleontological Mitigation and Monitoring Program. Prior to construction activity the Qualified Paleontologist shall prepare a Paleontological Mitigation and Monitoring Program to be implemented during ground-disturbance activity for the proposed Project. This program shall outline the procedures for construction staff Worker Environmental Awareness Program (WEAP) training, paleontological monitoring extent and duration, salvage and preparation of fossils, the final mitigation and monitoring report, and paleontological staff qualifications.

GEO-6(c) Paleontological Worker Environmental Program. Prior to the start of construction, the Qualified Paleontologist or his or her designee, shall conduct WEAP training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The WEAP shall be conducted at a preconstruction meeting when

the Qualified Paleontologist is present. In the event of a fossil discovery by construction personnel, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find before restarting work in the area. If it is determined the fossil(s) is(are) scientifically significant, the qualified paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources.

GEO-6(d) Paleontological Monitoring and Reporting. Prior to the start of construction activity, the Qualified Paleontologist retained under Mitigation Measure GEO-6(a) shall implement the Paleontological Mitigation and Monitoring Program as follows:

- Paleontological Monitoring. Ground disturbing construction activities 1. (including grading, trenching, foundation work and other excavations) exceeding 5 feet in depth shall be monitored on a full-time basis by a qualified paleontological monitor during initial ground disturbance. Implementation of the Paleontological Mitigation and Monitoring Program shall be supervised by the Qualified Paleontologist. Monitoring shall be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources. The duration and timing of the monitoring will be determined by the Qualified Paleontologist. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, he or she may authorize, after approval of the County, that monitoring be reduced to periodic spotchecking or ceased entirely. Monitoring shall be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension would need to be reconsidered by the Qualified Paleontologist. Ground disturbing activity that does not exceed 5 feet in depth shall not require paleontological monitoring.
- 2. **Salvage of Fossils.** If fossils are discovered, the Qualified Paleontologist or paleontological monitor shall recover them. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case the paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner.
- 3. **Preparation and Curation of Recovered Fossils**. Once salvaged, significant fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology), along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the Qualified Paleontologist.
- 4. **Final Paleontological Mitigation Report**. Upon completion of ground disturbing activity (and curation of fossils if necessary), the Qualified Paleontologist shall prepare a final mitigation and monitoring report outlining the results of the mitigation and monitoring program. The report shall include discussion of the location, duration and methods of the monitoring, stratigraphic sections, any

Findings of Fact

recovered fossils, and the scientific significance of those fossils, and where fossils were curated.

Hazards and Hazardous Materials

Threshold b: Whether the Project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment

IMPACT HAZ-3. EARTHMOVING ACTIVITIES ASSOCIATED WITH CONSTRUCTION OF THE PROJECT COULD RESULT IN THE RELEASE OF COCCIDIOIDES SPORES INTO THE AIR, WHICH CAN CAUSE VALLEY FEVER.

FINDING: Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs.§ 15091(a)(1)).

FACTS IN SUPPORT OF FINDING: Section 4.9 of the Draft EIR (pages 4.9-16 through 4.9-19) found that earthmoving activities associated with construction of the Project could result in fugitive dust, which could result in the release of *Coccidioides* spores into the air, thereby causing Valley Fever. To minimize potential exposure to fugitive dust, as well as regulate workplace respiratory safety, compliance with Occupational Safety and Health Administration (OSHA) regulations would be required. Additionally, implementation of Mitigation Measures HAZ-3(a) through HAZ-3(d) are required to reduce potential exposure to Valley Fever. With implementation of MM HAZ-3(a) through HAZ-3(d), impacts related to the release of hazardous materials into the environment would be reduced to a less than significant level.

The County adopts the following mitigation measures that will reduce the effects to a less-than significant level. The following mitigation measures are applicable to both the Solar Facility and the PG&E Improvements, and will be implemented to ensure that Project-related impacts related to the release of hazardous materials into the environment are avoided or minimized to a less than significant level:

HAZ-3(a) Valley Fever Management Plan. The Project applicant shall consult with the County, San Joaquin Valley Air Pollution Control district, and Cal/OSHA to develop a Valley Fever Management Plan that includes specific measures to reduce the potential for exposure to Valley Fever. Before grading permits can be issued, the applicant shall submit the Valley Fever Management Plan to the County for review and approval. The Valley Fever Management Plan shall include a program to evaluate the potential for exposure to Valley Fever from construction activities and to identify appropriate dust management and safety procedures that shall be implemented, as needed, to minimize personnel and public exposure to potential Valley Fever-containing dust. Measures in the Valley Fever Management Plan, which shall be implemented as applicable, may include the following:

- Provide High Efficiency Particulate Air (HEPA)-filtered air-conditioned enclosed cabs on heavy equipment. Train workers on proper use of cabs, such as turning on air conditioning prior to using the equipment.
- Provide communication methods, such as two-way radios, for use in enclosed cabs.

- Provide National Institute for Occupational Safety and Health-approved respirators for workers.
- Conduct a job hazard analysis in compliance with Cal/OSHA regulations for any worker that will be exposed to dust.
- Require half-face respirators equipped with N-100 or P-100 filters to be used during digging if determined to be warranted after conducting a job hazard analysis.
- Require employees to wear respirators when working near earthmoving machinery if determined to be warranted after conducting a job hazard analysis.
- Require employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Protection Standard (8 CCR 5144).
- Provide separate, clean eating areas with handwashing facilities.
- Thoroughly clean construction tools, equipment, and vehicles with water before they are moved off-site to other work locations.
- Wheel-washing facilities with water-recycling systems shall be provided at all site egress points. Vehicles leaving the site on a daily basis shall utilize wheelwashing facilities in order to reduce dust migration off the Project site.
- On-site workers shall be required to change clothes after work every day before leaving the work site, to prevent distribution of Coccidioides to non-endemic areas. As an alternative, disposable Tyvek® or equivalent work suits and work boots for use on-site shall be provided for workers.
- Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever. Reporting of symptoms of Valley Fever and diagnosed cases of Valley Fever must occur consistent with Cal/OSHA requirements.

HAZ-3(b) Valley Fever Dust Suppression Measures. If wind speeds exceed 15 miles per hour or temperatures exceed 95 degrees Fahrenheit for three consecutive days, additional dust suppression measures (such as additional water or the application of additional soil stabilizer) shall be implemented prior to and immediately following ground disturbing activities. The additional dust suppression shall continue until winds are 10 miles per hour or lower and outdoor air temperatures are below 90 degrees Fahrenheit for at least two consecutive days. The additional dust suppression measures shall be incorporated into the Final Construction Management Plan. The Final Construction Management Plan shall be submitted to the County for review and approval prior to the issuance of any grading permit.

HAZ-3(c) Valley Fever Worker Training Program and Safety Measures. Prior to any Project grading activity, the primary construction contractor shall prepare and implement a worker training program that describes potential health hazards associated with Valley Fever, common symptoms, proper safety procedures to minimize health hazards, and notification procedures if suspected work-related symptoms are identified during construction. The objective of the training shall be to

ensure that workers are aware of the dangers associated with Valley Fever. The worker training program shall be included in the standard in-person training for construction workers and shall identify safety measures to be implemented by construction contractors during construction, including all safety measures included in the Valley Fever Management Plan prepared pursuant to Mitigation Measure HAZ-3(a). Prior to initiating any grading, the Project applicant shall provide the County with copies of all educational training material for review and approval. No later than 30 days after any new employee(s) begin work, the Project applicant shall submit evidence to the County that each employee has acknowledged receipt of the training (e.g., sign-in sheets with a statement verifying receipt and understanding of the training).

HAZ-3(d) Valley Fever Information Handout. The Project applicant shall work with a medical professional, in consultation with the County, to develop an educational handout for on-site workers, and include the following information on Valley Fever: the potential sources/causes, the common symptoms, the options or remedies available should someone be experiencing these symptoms, and places where testing for exposure is available. Prior to construction permit issuance, this handout shall have been created by the applicant and reviewed by the County. A printed version of this handout shall be provided to all on-site workers on their first day at the Project site.

Threshold b: Whether the Project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment

IMPACT HAZ-4. CONSTRUCTION OF THE SOLAR FACILITY HAS THE POTENTIAL TO ENCOUNTER ASBESTOS-CONTAINING MATERIALS, WHICH COULD RESULT IN A SIGNIFICANT HAZARD TO THE PUBLIC OR ENVIRONMENT.

FINDING: Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs.§ 15091(a)(1)).

FACTS IN SUPPORT OF FINDING: Section 4.9 of the Draft EIR (pages 4.9-19 through 4.9-20) found that construction of the Solar Facility has the potential to encounter asbestoscontaining materials, which could result in a significant hazard to the public or environment, because the Project site may have used asbestos-containing Transite irrigation piping during its historic agricultural use. Mitigation Measure HAZ-4 requires specific, careful handling of all materials suspected of containing asbestos, and safety protocols to protect workers from exposure to asbestos, thus reducing the potential for asbestos to be released into the environment. Therefore, with implementation of MM HAZ-4, impacts from asbestos release would be reduced to a less than significant level.

The County adopts the following mitigation measure that will reduce the effects to a lessthan significant level. The following mitigation measure is applicable to the Solar Facility, and will be implemented to ensure that Project-related impacts related to release of asbestos into the environment are avoided or minimized to a less than significant level: **HAZ-4** Suspected Asbestos-Containing Materials. The Project proponent shall comply with the following mitigation in the event that materials suspected to contain asbestos are uncovered during construction activities:

- If suspected asbestos-containing materials are discovered during Project construction activities, work within a 100-foot distance of the discovery shall immediately halt and a California certified asbestos professional shall take samples for analysis of the suspect materials.
- All damaged asbestos-containing materials and asbestos-containing materials that would be disturbed by Project construction activities shall be removed in accordance with federal, state, and local laws and the National Emissions Standards for Hazardous Air Pollutants guidelines before work may recommence.
- 3. All construction activities shall be undertaken in accordance with Cal/OSHA standards, as contained in Title 8 of the Cal. Code Regs., Section 1529, to protect workers from exposure to asbestos. Construction shall be performed in conformance with federal, state, and local laws and regulations so construction workers and/or the public avoid significant exposure to asbestos-containing materials.

Threshold b: Whether the Project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment

IMPACT HAZ-5. CONSTRUCTION OF THE SOLAR FACILITY HAS THE POTENTIAL TO ENCOUNTER PETROLEUM PRODUCTS IN THE ON-SITE SOIL, WHICH COULD RESULT IN A SIGNIFICANT HAZARD TO THE PUBLIC OR ENVIRONMENT.

FINDING: Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs.§ 15091(a)(1)).

FACTS IN SUPPORT OF FINDING: Section 4.9 of the Draft EIR (pages 4.9-20 through 4.9-21) included a Phase I Environmental Site Assessment (ESA) which observed the presence of petroleum products and soil staining near agricultural wells and pumps on the Solar Facility Project site. Given these initial findings, construction of the Solar Facility has the potential to encounter petroleum products in the on-site soil, which could result in a significant hazard to the public or environment, and Mitigation measure HAZ-5 would be required to reduce impacts from petroleum soil contamination to a less than significant level.

The County adopts the following mitigation measure that will reduce the effects to a less-than significant level. The following mitigation measure is applicable to the Solar Facility, and will be implemented to ensure that Project-related impacts related to release of petroleum products into the environment are avoided or minimized to a less than significant level:

HAZ-5 Hazardous Materials Soil Sampling and Remediation. Prior to issuance of grading permits, for construction activities near the potential Recognized Environmental Concerns, additional soil samples testing for total petroleum hydrocarbons shall be performed near the on-site agricultural wells and pumps, fuel

Findings of Fact

ASTs, turbine oil ASTs, diesel powered agricultural engines, and engine oil ASTs under the supervision of a professional geologist or professional engineer. The County shall review the results of the soil sampling to determine if any additional investigation or remedial activities are deemed necessary. No work shall resume in that area until the County has provided written authorization that the area does not warrant any additional action.

If concentrations of contaminants are identified in areas of the Project site and are confirmed to pose a potential risk to human health and/or the environment by a qualified environmental specialist, contaminated materials shall be remediated either prior to or concurrent with construction. Remediation shall generally include a management plan which establishes design and implementation of remediation. Cleanup may include excavation, disposal, bioremediation, and/or any other treatment of conditions subject to regulatory action. All necessary reports, regulations and permits shall be followed to achieve cleanup of the site. The contaminated materials shall be remediated under the supervision of an environmental consultant licensed to oversee such remediation and under the direction of the lead oversight agency. The remediation program shall also be approved by the County. All proper waste handling and disposal procedures shall be followed. Upon completion of the remediation, the environmental consultant shall prepare a report summarizing the project, the remediation approach implemented, and the analytical results after completion of the remediation, including all waste disposal or treatment manifests.

Hydrology and Water Quality

Threshold c.iv:	Whether the Project would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows
Threshold d:	Whether the Project would, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation

IMPACT HWQ-4. PART OF THE SOLAR FACILITY SITE IS LOCATED WITHIN THE 100-YEAR FLOODPLAIN; HOWEVER, FLOODWATER PATTERNS WOULD NOT BE ALTERED WHEN COMPARED TO EXISTING CONDITIONS, AND POTENTIAL IMPACTS ASSOCIATED WITH IMPEDANCE AND REDIRECTION OF FLOOD FLOWS WOULD BE LESS THAN SIGNIFICANT. IN THE 100-YEAR FLOOD EVENT, THE PORTIONS OF THE SOLAR FACILITY SITE LOCATED IN ZONE A WOULD POTENTIALLY BE INUNDATED. THEREFORE, IF POLLUTANTS ON THE SOLAR FACILITY SITE ARE NOT PROPERLY STORED AND MANAGED IN EMERGENCY FLOOD EVENTS, A SIGNIFICANT IMPACT RELATED TO RELEASE OF POLLUTANTS COULD OCCUR.

FINDING: Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (Pub. Res. Code §21081(a)(1); 14 Cal. Code Regs.§ 15091(a)(1)).

FACTS IN SUPPORT OF FINDING: Section 4.10 of the Draft EIR (pages 4.10-18 through 4.10-19) found that the Project site is not located in a designated dam inundation area, nor is it located in an area subject to inundation by seiche, tsunami or mudflow. However, part of the Solar Facility site is located within the 100-year floodplain, and in a 100-year flood

event, portions of the site would potentially be inundated. While the floodwater patterns and direction of flow would not be altered compared to existing conditions, inundated areas could potentially release pollutants if materials are not stored or managed properly. Therefore, compliance with OSHA, the Hazardous Materials Transportation Uniform Safety Act, other applicable regulations, and Mitigation Measure HWQ-4 would be required to reduce this impact to a less than significant level.

The County adopts the following mitigation measure that will reduce the effects to a less-than significant level. The following mitigation measure is applicable to the Solar Facility, and will be implemented to ensure that Project-related impacts related to release of pollutants due to flood inundation are avoided or minimized to a less than significant level:

HWQ-4 Hazardous Materials Business Plan (HMBP) Inundation Measures. In addition to the HMBP requirements established by California Health and Safety Code Section 25500 and the Fresno County Division of Environmental Health, the Project's HMBP shall include a flood inundation plan in the emergency response plan section.

2.2 Legal Effect of Findings

These findings constitute the County's best efforts to set forth the evidentiary and policy bases for its decision to approve the Project in a manner that is consistent with the requirements of CEQA. To the extent that these findings conclude that various mitigation measures outlined in the Final EIR are feasible and have not been modified, superseded, or withdrawn. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when the County adopts a resolution approving the project.

2.3 Significant Effects and Mitigation Measures

The Draft EIR identified a number of potentially significant environmental effects (or impacts) that the Project would cause, or to which it would contribute. However, all of these potentially significant effects can be substantially avoided through the adoption of feasible mitigation measures. The County's recommendations with respect to the Project's mitigation measures are set forth in the Mitigation and Monitoring Report (MMRP) which is provided in Exhibit 1 of the Staff Report. These findings do not attempt to describe the full analysis of each environmental impact contained in the EIR. Instead, they provide a summary description of each impact, describe the applicable mitigation measures identified in the EIR, and state the County's findings on the significance of each impact after imposition of the mitigation measures. A full explanation of these environmental findings and conclusions can be found in the Final EIR, and these findings incorporate by reference the discussion and analysis in those documents supporting the EIR's determinations regarding the Project's impacts and mitigation measures designed to address those impacts.

2.4 Growth Inducement

CEQA Guidelines Section 15126.2(e) required an evaluation of growth inducing impacts that may result from a proposed project and provides the following guidance regarding growth-inducing impacts:

Findings of Fact

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

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, construction phases of the Solar Facility (including energy storage system) and PG&E Improvements are expected to overlap, and the number of construction workers is expected to range between 132 and 701 workers per day, with a maximum of 974 workers per day during approximately one month when Phases 1 and 2 of the solar facility, Phase 1 of the energy storage system, and the PG&E Improvements may overlap. The existing construction labor pool in Fresno County is sufficient for meeting Project needs. Following construction, Solar Facility operation would require up to eight full-time personnel in permanent positions (or personnel hours totaling eight full-time positions) and maintenance activities would require up to 40 additional personnel at any given time. Operation and maintenance of the PG&E Improvements would not require additional staff. Therefore, the number of personnel on the Project site during Solar Facility operation may range from zero (it is not necessary for staff to be present during plant operations) to 48 during periodic, routine maintenance events. Decommissioning is expected to require a workforce similar to construction. Because construction and decommissioning would be temporary, the Project is unlikely to cause substantial numbers of people to relocate to Fresno County. Therefore, the Project would not result in a large increase in employment levels that would significantly induce growth. (Draft EIR page 5-1)

Employment and Population Growth

Jobs that would be generated by the Project are not expected to induce substantial population growth because the existing available Fresno County construction labor pool is sufficient to meet anticipated needs. 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 relocate to Fresno County, the existing available housing supply could accommodate them without requiring new construction. Therefore, the Project is not expected to induce population growth, the housing and provision of services for which could cause significant adverse environmental impacts. (Draft EIR page 5-1)

Increased Power Generation and Transmission Capacity

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. Further, the proposed solar power is intended to offset the use of fossil fuels to generate electricity. 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.

The PG&E Improvements would expand the existing Tranquillity Switching Station and construct a new 230 kV transmission line to accommodate the Solar Facility and interconnect the Project's proposed 230 kV gen-tie line to the PG&E Switching Station. The proposed improvements would only serve the Solar Facility and the switching station's electrical busbar (a conducting bar that carries heavy currents to supply several electric circuits) would not increase in size. While the PG&E Improvements could reduce potential constraints for other solar facilities, those facilities would

require individual discretionary actions and CEQA review. PG&E is an investor-owned utility, regulated by the California Public Utilities Commission (CPUC). The utility's transmission system is operated by the California Independent System Operator (CAISO) under regulations established by the Federal Energy Regulatory Commission. When an electricity generator requests use of PG&E's transmission facilities, PG&E is required to provide access after completion of power flow and cost studies. The CPUC evaluates each PG&E project to ensure that its need and costs are justified and appropriate, and that financial effects on California electricity ratepayers are appropriate. Any transmission system upgrades that are required as a result of other solar projects would need to be evaluated by the CPUC in accordance with CEQA as a part of the CPUC permitting process. Because any potential transmission system upgrades would be speculative, the potential for population growth induced by the transmission system upgrades from other solar facilities would also be speculative. Therefore, the proposed project is not expected to be large enough to induce the development of other large solar projects and population growth in the region. (Draft EIR page 5-2)

Extension of Urban Infrastructure

The Project includes the construction of a new on-site septic tank and leach field and stormwater drainage, electric power, and telecommunications facilities. These facilities would be adequate to serve the Project site, and no additional or expanded facilities would be required. No water, wastewater treatment, natural gas, or solid waste infrastructure would be constructed or significantly affected as part of the Project.

During construction and decommissioning (including site restoration), portable restroom facilities would be provided for on-site personnel by a licensed provider. During operation, a septic system and leach field may be installed adjacent to the O&M building to support the restroom facilities and sewage generated by the eight permanent staff members. Because an on-site septic system and leach field would be sufficient to serve operations, the Project would not require connection to or expansion of an existing wastewater treatment facility.

The Project proposes telecommunications facilities which would service only the Project. Additionally, electric facilities and connections are proposed as part of the Project given its nature as a solar infrastructure project. The Project would consume electricity from PG&E's service, as required, when the Project is not powered by on-site energy generation. (Draft EIR Section 4.14)

2.5 Significant and Irreversible Environmental Effects

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

Buildout of the Project would commit nonrenewable resources during Project construction and ongoing utility services during Project operations until decommissioning, would occur after 35 years (Draft EIR Section 2). 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 operations. However, once operational, the Project would result in a substantial net benefit associated with the amount of renewable energy that would be generated. Therefore, the project would not commit resources irreversibly. (Draft EIR page 5-2)

2.6 Mitigation Monitoring and Reporting 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) to track Project compliance with required mitigation measures. The Final MMRP 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.

2.7 Project Alternatives

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 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).

For the proposed Project, as noted in the preceding discussion regarding Project impacts, the County finds that all potential Project impacts either would be avoided or reduced to less than significant levels as a result of implementation of feasible mitigation measures recommended in the EIR. The Project would not cause or contribute to any significant and unavoidable impacts, nor would it have a cumulatively considerable contribution to a significant cumulative impact. Thus, the County may approve the Project as mitigated.

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). For this Project, the County evaluated the potential impacts of the alternatives described in the Draft EIR in Section 6.0.

The County has considered the alternatives presented and analyzed as part of the CEQA process. In considering the Project alternatives, the County considered not only the relative environmental impacts and feasibility of the alternatives, but also the ability of the alternatives to achieve the most basic objectives of the Project, which are listed in Section 1.1.3 of these Findings. The potential direct, indirect, and cumulative impacts of the Alternatives were analyzed on a resource-by-resource basis in Section 6.0 of the Draft EIR (pages 6-1 through 6-12). Based on the requirements of CEQA Guidelines Section 15126.6, the project objectives, and the rejection of the initially considered

alternatives listed below, the "No Project" and "Reduced Acreage" alternatives to the Project were set forth in the EIR.

It is the Finding of the County that there is no feasible, environmentally superior alternative to the Project. Thus, the Project may be approved as mitigated.

1. ALTERNATIVES CONSIDERED AND REJECTED FROM FURTHER CONSIDERATION

CEQA Guidelines Section 15126.6(c) requires EIRs to identify any alternatives that were considered by the lead agency, but were rejected as infeasible during the scoping process, and briefly explain the reasons underlying the lead agency's determination. Section 15126.6(c) provides that among the factors that may be used to eliminate alternatives from detailed consideration in and EIR are (i) failure to meet most of the basic Project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts. The following potential alternatives initially were considered but eliminated from further consideration based on the screening criteria described in the Draft EIR:

- Other Potential Candidate Sites
- Other Degraded Agricultural Lands
- Impaired or Underutilized Lands
- Alternative Solar Technology: Concentrated Solar
- Alternative Approaches: Conservation and Demand Side Management

Other Potential Project Sites Alternative

The Project site is uniquely suited for solar development for following reasons:

- The Project site is degraded, poorly drained farmland, and is in-part subject to restrictive covenants prohibiting the use of irrigation water on the property. It is not subject to a Williamson Act contract.
- The Project site is flat and will require minimal grading, resulting in limited alteration of existing drainage patterns or surface disturbance.
- The Project has rights to use existing private infrastructure, such as the PG&E's existing Tranquillity Switching Station, and would avoid the costs and impacts associated with building similar infrastructure at another location. Further, the Project would help maximize the utilization of this existing infrastructure.
- The Tranquillity Switching Station has been determined to be a desirable place to interconnect an energy generation project because power injected at this location helps stabilize the electric grid. An interconnection study and Interconnection Agreement for the Tranquillity Switching Station and the Project was already prepared. Changing the substation would require an additional 3 to 5 years of studies and agreements.

For these reasons, and as described below, no other sites were identified that would feasibly accommodate the Project or meet the Project objectives. Therefore, other potential candidate sites were considered but rejected as alternatives for the Project. (Draft EIR page 6-2)

Other Degraded Agricultural Land Alternative

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

Findings of Fact

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 published 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 Westland 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. (Draft EIR pages 6-2 through 6-3)

Impaired or Underutilized Lands Alternative

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 (RCRA) and closed mine lands". The County researched potentially contaminated and underutilized sites identified as appropriate for solar-PV projects as part of the United States Environmental Protection Agency's Re-Power America's Lands Project and reviewed the RE-Powering Screening Dataset (which provides details for more than 80,000 sites nationwide that have been pre-screened for renewable energy potential) to identify potential utility-scale or large-scale solar PV energy sites in Fresno County that were located on existing contaminated lands, landfills, or mines.

This effort resulted in the identification of 195 contaminated land sites in Fresno County, only three of which were noted as suitable for large or utility scale PV solar development. None of the three sites is reported to have an estimated solar PV capacity potential greater than approximately 73 MW: the Orange Avenue Disposal Inc. site located at 3280 South Orange Avenue in Fresno has an estimated solar PV capacity potential of approximately 7 MW; the Southeast Regional Solid Waste Disposal Site located at 12716 Dinuba Avenue in Selma has an estimated solar PV capacity potential of approximately 22 MW; and the American Avenue Landfill site located at 18950 West American Avenue in Kerman has an estimated solar PV capacity potential of approximately 73 MW. The American Avenue Landfill site also is insufficient in that the power line serving the site is scaled only for distribution at 69 kV. These sites were eliminated from further consideration as inadequately sized or served to meet the Project objective of establishing a solar PV energy-generating facility of a sufficient size and configuration to produce approximately 400 MWac of electricity. (Draft EIR page 6-3)

Alternative Solar Technology: Concentrated Solar Alternative

A concentrated solar (parabolic trough) power system was considered as a potential alternative to the Project. However, for the reasons discussed below, this type of system was 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. 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, 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 6.2 acres per MWac for solar thermal relative to between 5.5 acres per MWac for fixed-tilt PV and 6.3 acres per MWac for single-axis tracker. 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); greater water demand (to generate steam to power turbines connected to electrical power generators); and as a result of the solar thermal arrays' reflective surfaces, causing or contributing to substantial glint- or glare-related impacts. Accordingly, a concentrated solar power system alternative was not considered further. (Draft EIR pages 6-3 through 6-4)

Alternative Approaches: Conservation and Demand Side Management

Conservation and demand side management consists of a variety of approaches to reduce electricity use and shift electrical demand to times of the day when energy demand is lower. It includes increased energy efficiency and conservation, building and appliance standards, fuel substitution, 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.

Increased energy efficiencies and reductions in energy demand would not meet Project objectives including the generation of approximately 400 MWac of renewable electricity, assisting the State in achieving its RPS and SB 32 GHG reduction goals by providing a significant new source of solar energy, and assisting the California utilities in meeting their obligations under the CPUC's Energy Storage Framework and Design Program by providing up to 400 MW of storage capacity. These alternative approaches were not carried forward for more detailed review because they would not meet most of the basic Project objectives. (Draft EIR page 6-4)

2. No Project Alternative

Pursuant to CEQA Guidelines Section 15126.6(e)(1), the No Project Alternative is required as part of the "reasonable range of alternatives" to allow decision-makers to compare the impacts of approving the proposed project with the impacts of taking no action or not approving the proposed project. Under this alternative, the proposed project would not be constructed, and the project site would remain in its current condition.

a. Description

Under the No Project Alternative, construction, operation, and decommissioning of the Project would not occur. The baseline environmental conditions for the No Project Alternative would remain the same as for the proposed Project. The Project site would continue to be used for low-yield agriculture production and/or left fallow. The Project site is designated as Agriculture in the Fresno County General Plan (2000) and is zoned AE-20 (Exclusive Agricultural, 20-acre minimum parcel size). If the Project were not approved, then other uses consistent with the AE-20 zoning designation could be made on one or more of the parcels that comprise the Project site. Pursuant to Fresno County Ordinance Code Section 816, uses (among others) that are

allowed by right without a permit relate to livestock, poultry, and crops; home occupations; agricultural products; apiaries; kennels; and welding and blacksmith shops. 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 nodevelopment/no Project scenario where the existing agricultural use is continued as it exists under pre-Project conditions. (Draft EIR pages 6-4 through 6-5)

b. Analysis of the No Project Alternative's Ability to Reduce Project Impacts

The No Project Alternative would involve no changes to the physical environment and thus would have no immediate adverse environmental effects. However, the proposed Project's beneficial impacts related to GHG emissions and energy would not occur under this alternative.

c. Analysis of the No Project Alternative's Ability to Meet Project Objectives

The No Project Alternative would not achieve any of the project objectives as shown below:

- The No Project Alternative would not establish a solar PV power generating facility of a sufficient size and configuration to produce up to 400 MW_{ac} of electricity at the Point of Interconnection in a cost-competitive manner.
- The No Project Alternative would not develop sites in proximity to existing transmission infrastructure in order to minimize environmental impacts.
- The No Project Alternative would not assist California utilities in meeting their obligations under California's RPS Program to achieve 60 percent eligible renewable energy resources by the end of 2030 and zero-carbon sources by the end of 2045, in addition to meeting the 2030 greenhouse gas emissions reduction goals as required by the California Global Warming Solutions Act (SB 32).
- The No Project Alternative would not assist California utilities in meeting their obligations under the CPUC's Energy Storage Framework and Design Program by providing up to 400 MW of storage capacity.
- The No Project Alternative would not facilitate grid integration of intermittent and variable PV energy generation and minimize energy losses associated with transmission to off-site storage by collocating battery storage at the Project site.

d. Findings of the No Project Alternative

This alternative would avoid the effects of the Project on agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, transportation, and utilities and service systems. All of the potential impacts associated with these issues would be mitigated to a level of less than significant with the Project as proposed, but under the No Project alternative there would be no physical changes whatsoever at the Project site. However, the proposed Project's beneficial impacts related to GHG emissions and energy would not occur under this alternative. Because the No Project Alternative would not meet any Project objectives, and because The No Project Alternative would not provide the same benefits as the proposed Project, it is not a feasible alternative.

3. REDUCED ACREAGE ALTERNATIVE

a. Description

Under Alternative 2, approximately 320 acres in the southeastern portion of the Project site would not be developed (see Figure 6-1, Reduced Acreage Alternative). This represents an approximately 8 percent reduction in the size of the Solar Facility. No solar panels would be constructed in that area, and perimeter chain link fencing would not enclose that section. Land within this area would continue to be used for low-yield agriculture production and/or left fallow. The Project otherwise would be as described in Section 2, Project Description. Notably, this alternative would generate the same amount of renewable energy (400 MWac) and energy storage capacity (400 MW) as the proposed Project, by reducing the area of open spaces and other areas on the site that would otherwise be used for storage, parking, or other purposes, and increasing the density/concentration of solar modules (also known as increasing the ground coverage ratio represented by the modules) across the site. Under this alternative, the total disturbed acreage associated with the Solar Facility would be approximately 3,760 acres. The 320 acres removed from this alternative are designated as Farmland of Statewide Importance. (Draft EIR page 6-5 through 6-10)

b. Analysis of the Reduced Acreage Alternative's Ability to Reduce Project Impacts

Similar to the proposed Project, no significant and unavoidable impacts would occur under the Reduced Acreage Alternative.

c. Analysis of the Reduced Acreage Alternative's Ability to Meet Project Objectives

The Reduced Acreage Alternative would achieve all of the project objectives as shown below:

- The No Project Alternative would not establish a solar PV power generating facility of a sufficient size and configuration to produce up to 400 MW_{ac} of electricity at the Point of Interconnection in a cost-competitive manner.
- The No Project Alternative would not develop sites in proximity to existing transmission infrastructure in order to minimize environmental impacts.
- The No Project Alternative would not assist California utilities in meeting their obligations under California's RPS Program to achieve 60 percent eligible renewable energy resources by the end of 2030 and zero-carbon sources by the end of 2045, in addition to meeting the 2030 greenhouse gas emissions reduction goals as required by the California Global Warming Solutions Act (SB 32).
- The No Project Alternative would not assist California utilities in meeting their obligations under the CPUC's Energy Storage Framework and Design Program by providing up to 400 MW of storage capacity.
- The No Project Alternative would not facilitate grid integration of intermittent and variable PV energy generation and minimize energy losses associated with transmission to off-site storage by collocating battery storage at the Project site.

d. Findings of the Reduced Acreage Alternative

There are no significant and unavoidable impacts that cannot be reduced to a less-thansignificant level under the Project or Reduced Acreage Alternative. The Reduced Acreage Alternative would incrementally reduce impacts in most issue areas from the 320 fewer acres of disturbance, but the impact conclusions would be the same as the Project. Because the Reduced Acreage Alternative would incur similar environmental impacts, yet would not meet the Project objectives to the same extent as the Projector provide the same benefits as the proposed Project, it is not a feasible alternative.

4. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As analyzed and documented above, neither the Project, nor the Reduced Acreage Alternative, nor the No Project Alternative would cause a significant and unavoidable impact to any environmental resource. All impacts of the Project and the Reduced Acreage Alternative would be less than significant or less than significant with mitigation incorporated.

The results of the comparative analysis of each of the resource areas analyzed above are set forth in Table 1, which compares the conclusions of the impact analyses for the No Project Alternative and Reduced Acreage Alternative against the conclusions for the Project. The comparative analysis summarized in Table 1 shows that the No Project Alternative would be environmentally superior to the Project in all impact areas except for GHG Emissions, Land Use and Planning, and Energy. Under the Reduced Acreage Alternative all impact resource areas would be similar but slightly reduced compared to the Project; this would not affect significance determinations, which would remain the same as for the Project. For GHG emissions and Energy, the Reduced Acreage Alternative would be comparable to the Project. (Draft EIR pages 6-10 through 6-12)

Table 1 Comparison of Impacts of Alternatives to Proposed Project

Issue	Project Impact Classification	Alternative 1: No Project	Alternative 2: Reduced Acreage
Aesthetics	Less than Significant	Superior to the proposed Project (reduced level of impact)	Similar level of impact to the proposed Project
Agricultural Resources	Less than Significant with Mitigation Incorporated	Superior to the proposed Project (reduced level of impact)	Similar level of impact to the proposed Project
Air Quality	Less than Significant with Mitigation Incorporated	Superior to the proposed Project (reduced level of impact)	Similar level of impact to the proposed Project
Biological Resources	Less than Significant with Mitigation Incorporated	Superior to the proposed Project (reduced level of impact)	Similar level of impact to the proposed Project
Cultural Resources	Less than Significant with Mitigation Incorporated	Superior to the proposed Project (reduced level of impact)	Similar level of impact to the proposed Project
Energy	Less than Significant	Inferior to the proposed Project (increased level of impact)	Similar level of impact to the proposed Project
Geology and Soils	Less than Significant with Mitigation Incorporated	Superior to the proposed Project (reduced level of impact)	Similar level of impact to the proposed Project

Scarlet Solar Energy Project

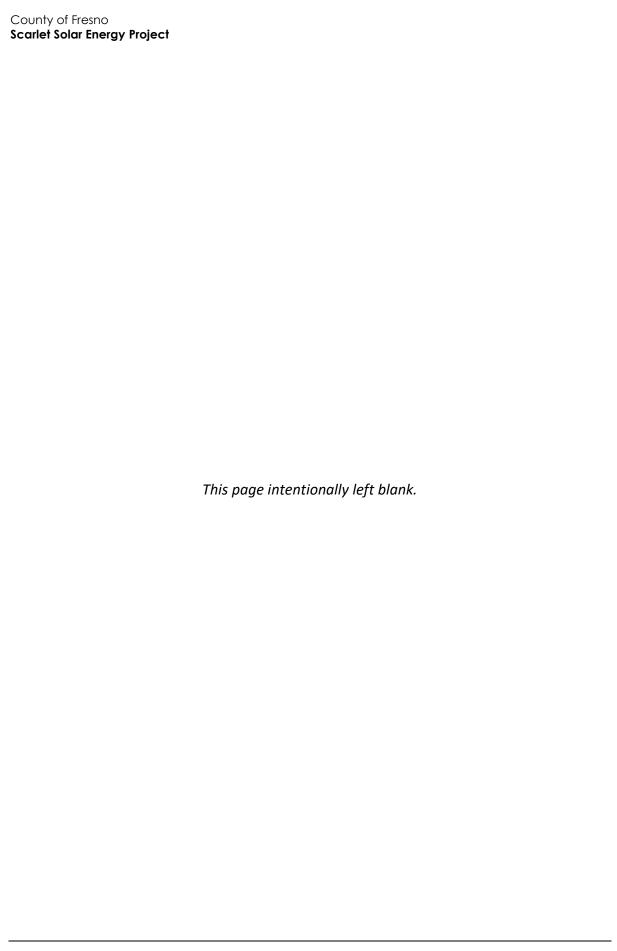
Issue	Project Impact Classification	Alternative 1: No Project	Alternative 2: Reduced Acreage
Greenhouse Gas Emissions	Less than Significant and Beneficial	Inferior to the proposed Project (increased level of impact)	Similar level of impact to the proposed Project
Hazards and Hazardous Materials	Less than Significant with Mitigation Incorporated	Superior to the proposed Project (reduced level of impact)	Similar level of impact to the proposed Project
Hydrology and Water Quality	Less than Significant with Mitigation Incorporated	Superior to the proposed Project (reduced level of impact)	Similar level of impact to the proposed Project
Land Use and Planning	No Impact	Similar level of impact to the proposed Project	Similar level of impact to the proposed Project
Noise	Less than Significant	Superior to the proposed Project (reduced level of impact)	Similar level of impact to the proposed Project
Transportation	Less than Significant	Superior to the proposed Project (reduced level of impact)	Similar level of impact to the proposed Project
Utilities and Service Systems	Less than Significant with Mitigation Incorporated	Superior to the proposed Project (reduced level of impact)	Similar level of impact to the proposed Project

CEQA Guidelines Section 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. 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. However, no significant and unavoidable effects were identified for the Project.

The No Project Alternative is considered the environmentally superior alternative for CEQA purposes because it would avoid all impacts of the Project and would not create any new significant impacts of its own, even though it would have a less beneficial impact than the Project on GHG emissions and energy. The No Project Alternative would fail to meet the basic objectives of the Project, including, but not limited to, the generation of renewable solar electricity from proven technology and construction of a project that would assist the State in achieving RPS and SB 32 GHG reduction goals.

Since the environmentally superior alternative is the No Project Alternative, the EIR also must identify an environmentally superior alternative from among the other alternatives. There are no significant and unavoidable impacts that cannot be reduced to a less-than-significant level under the Project or Reduced Acreage Alternative. The Reduced Acreage Alternative would incrementally reduce impacts in most issue areas from the 320 fewer acres of disturbance, but the impact conclusions would be the same as the Project.

The County has identified the Project as the environmentally superior alternative because no alternative was identified that reduces any significant impacts and the Project, by definition, meets all Project objectives.



Scarlet Solar Energy Project

Reclamation Plan

Prepared for

Fresno County Department of Public Works and Planning
Development Services Division
2220 Tulare Street 6th Floor
Fresno, CA 93721

Prepared by

HELIX Environmental Planning, Inc. 11 Natoma Street, Suite 155 Folsom, CA 95630

April 2021 | EDP-01

This page intentionally left blank

TABLE OF CONTENTS

Section	<u>1</u>		<u>Page</u>
1.0	INTRO	DUCTION	1
	1.1 1.2 1.3	Purpose of the Plan Fresno County Solar Facility Guidelines Project Location and Overview	1
2.0	RECLA	MATION PLAN CONTENT	3
3.0	BASELI	NE CONDITIONS	5
	3.1 3.2	Soil Conditions Historical Agricultural Use	
4.0	PROJEC	CT FACILITY AND EQUIPMENT	6
	4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8	Foundations	6 6 7 7
5.0	DECON	MMISSIONING AND RESTORATION PROCESS	8
	5.1 5.2 5.3 5.4 5.5 5.6	Decommissioning Procedures and Timing Site Preparation Activities Removal of Facilities Debris Management, Disposal, and Recycling Hazardous Waste Site Restoration	8 9 10
6.0	DECON	MISSIONING COSTS AND FINANCIAL ASSURANCES	11
7.0	REFERE	ENCES	11

LIST OF APPENDICES

- A Figures
- B Engineer Estimate Report (PENDING)

TABLE OF CONTENTS (cont.)

LIST OF TABLES

<u>No</u> .	<u>Title</u>	<u>Page</u>
1	Project Site Soils Land Capability Classification and Storie Index Scores	5

ACRONYMS AND ABBREVIATIONS

AC alternating current

CDA Community Development Agency

County County of Fresno

CUP Conditional Use Permit

DC direct current

dS/m decisiemens per meter

EC electrical conductivity

ESP exchangeable sodium percentage

gen-tie generation intertie

MMRP Mitigation, Monitoring and Reporting Program

NAS Lemoore Naval Air Station Lemoore

O&M Operations and Maintenance

PG&E Pacific Gas & Electric Company

Plan Scarlet Solar Energy Project Reclamation Plan

PV photovoltaic

SCADA supervisory control and data acquisition

This page intentionally left blank

1.0 INTRODUCTION

1.1 PURPOSE OF THE PLAN

The Scarlet Solar Energy Project Reclamation Plan (Plan) outlines a framework for decommissioning and post-operational restoration of the Scarlet Solar Energy Project (project). This Plan is submitted to fulfill the requirements of the Fresno County Solar Facility Guidelines (Fresno County 2017) and mitigation measures related to post-operational site reclamation.

The purpose of this Plan is to outline a framework for the removal of the installed power generation equipment and to return the project site to a condition as close to a pre-construction state as possible. The project energy generation equipment is expected to have a life of up to 35 years. At the end of the useful life of the project, the project owner or operator will prepare the project site such that it may be re-used or sold, or will provide the County of Fresno (County) with the financial assurances to conduct such work in the event that the owner or operator is incapable of performing such work. The procedures outlined in this Plan will ensure that the project owner, operator, and contractors protect public health and safety, provide environmental protection, and comply with applicable regulations. Additionally, should the facility not be reused this Plan describes methods to decommission the facility and restore the site to pre-development conditions. Should the site be recommissioned rather than decommissioned, it will be done so in accordance with County permitting requirements.

A Final Reclamation Plan will be prepared and finalized in the months prior to decommissioning which will address the approved project, proposed land uses of the site post-decommissioning, and the applicable rules and regulations in place at that time.

1.2 FRESNO COUNTY SOLAR FACILITY GUIDELINES

The Fresno County Solar Facility Guidelines (Fresno County 2017) requires that as part of the application review process, the applicant will provide a Reclamation Plan detailing the lease life, timeline for removal of the improvements and specific measures to return the site to the agricultural capability prior to installation of solar improvements. The Guidelines also include detailed guidance for the minimum content of Reclamation Plans (addressed in Section 2 of this Plan).

1.3 PROJECT LOCATION AND OVERVIEW

The project site is an approximately 4,089-acre site located in unincorporated Fresno County, approximately 3.5 miles west-southwest of the community of Tranquillity and approximately 6.5 miles east of Interstate 5 (I-5). The existing Pacific Gas and Electric Company's (PG&E) Tranquillity Solar Generating Facility is approximately 0.75 mile west of the project site. The project site would encompass up to 33 parcels¹ generally located south of West South Avenue, north of West Dinuba Avenue, east of South Ohio Avenue and State Route (SR) 33 (South Derrick Avenue), and west of South San Mateo Avenue.

¹ The project would be constructed on any or all of parcels with the following assessor parcel numbers (APN) 028-07-134, 028-07-139, 028-07-140, 028-07-141, 028-07-143, 028-07-144, 028-07-145, 028-07-147, 028-07-148, 028-07-149, 028-08-166, 028-11-101, 028-11-102, 028-11-104, 028-11-106, 028-11-107, 028-11-109, 028-11-110, 028-11-112, 028-11-113, 028-11-114, 028-11-115, 028-11-116, 028-11-117, 028-11-119, 028-11-120, 028-12-061, 028-12-062, 028-10-074, 028-10-072, 028-10-081, and 028-101-755.



1

All of the parcels, except for one (APN 028-11-112), are currently owned by Westlands Water District.² Refer to Figure 1 in Attachment A for the project site in the region, and Figure 2 for an aerial image of the project site.

The project is proposed to construct, operate, maintain, and decommission a 400-megawatt (MW) solar photovoltaic (PV) electricity generating facility, energy storage system, and associated infrastructure. The project would provide solar power to utility customers by interconnecting to the regional electricity grid at PG&E Tranquillity Switching Station. The proposed facility is intended to operate year-round.

The project would operate year-round to generate solar electricity during daylight hours and would store and dispatch power to the energy storage system during both daylight and non-daylight hours. The project is anticipated to be constructed in continuous phases, with the first phase beginning in mid-2021. The exact timing of the last phase is dependent on opportunities in the solar market, but it is currently anticipated to be online as early as late 2022.

Components of the project would include the following, which are further described below:

- Groups of solar arrays (arrays include PV modules and steel support structures, electrical inverters, transformers, cabling, and other infrastructure);
- One electrical substation:
- A switchyard, including one high-voltage 230 kV utility switchyard, telecommunications infrastructure, and two 65-foot high dead-end structures;
- Approximately 3.5 miles of 230 kV generation intertie (gen-tie) transmission line (from the substations and the project 230 kV switchyard) to connect to the existing PG&E Tranquillity Switching Station;
- Improvements to PG&E electrical infrastructure, including a minor expansion of PG&E's Tranquillity Switching Station and approximately 1,900 feet of PG&E 230 kV transmission line to connect the 230 kV gen-tie line to the Tranquillity Switching Station;
- A 400 MW energy storage system, consisting of battery or flywheel enclosures and electrical cabling; and
- Other necessary infrastructure, including one permanent operations and maintenance (O&M) building, a septic system and leach field, a supervisory control and data acquisition (SCADA) system, a meteorological data system, buried conduit for electrical wires, overhead collector lines, on-site access roads, a shared busbar, ³ lighting, and wildlife-friendly security fencing.

This project is anticipated to remain in operation for up to 35 years from completion of construction. Figure 3 in Attachment A shows the location of the components of the proposed project and associated facilities.

³ A busbar is a system of electrical conductors in a generating or receiving station on which power is concentrated for distribution to several electrical circuits.



_

² The Westlands Water District acquired these properties as part of the following settlements: (1) the September 3, 2002 settlement agreement reached among the United States, Westlands Water District, and others in the Sumner Peck Ranch et al. v. Bureau of Reclamation et al. lawsuit; (2) the Britz settlement (a separate action executed on September 3, 2002); and (3) the 2002 settlement agreement reached in the Sagouspe et al. v. Westlands Water District et al. lawsuit.

2.0 RECLAMATION PLAN CONTENT

The County Solar Facility Guidelines include guidelines for preparing a Reclamation Plan (Fresno County 2020). Each of the requirements is addressed individually below.

1. Description of present use of the site;

The existing land use of the project site is primarily dry-farmed agriculture. For the past 10 years, the project site intermittently has been in low-yield agricultural production (tilled, seeded, and harvested for winter wheat); intermittently irrigated (drip or sprinkler) and harvested for alfalfa seed or other crops; or disked twice a year and left fallow. Some of the parcels in the project footprint are part of Westlands Water District settlements that require a non-irrigation covenant upon transfer of ownership (refer to Figure 4 in Attachment A).

2. Describe the proposed alternative use of the land (all equipment to be installed above and underground, structures, fencing, etc.);

Section 1.3 includes a description of the proposed project facilities. The PV modules will be installed on steel posts supported by piles. Inverters, transformers, substations, electrical storage system containers, and the O&M building will be installed on concrete pads. The collection system will be installed overhead and/or underground. Additional facilities include the 230 kV utility switchyard, telecommunications infrastructure, two 65-foot high dead-end structures, SCADA system, meteorological data system, septic system with leach field, and wildlife-friendly security fencing.

3. Duration of the alternative use of the property (specify termination date);

The proposed facility is expected to be in commercial operation for approximately 35 years from the commencement of operations. Extension of use would be in accordance with County permitting requirements.

4. Address ownership of the property (lease or sale);

The project site is presently owned by Westlands Water District. Westlands Water District has executed an option agreement for purchase and sale with RE Scarlet LLC, a wholly owned subsidiary of EDP Renewables North America LLC. Consequently, RE Scarlet LLC would become the owner of the real property at commencement of construction of the project.

Approximately 76 acres of federally owned land are surrounded by the project site but are not proposed to be included in the project.

- 5. Describe how the subject property will be reclaimed to its previous agricultural condition (if applicable), specifically:
 - a. Timeline for completion of reclamation after solar facility lease has terminated (identify phasing if needed); and
 - b. Handling of any hazardous chemicals/materials to be removed; and



- c. Removal of all equipment, structures, buildings and improvements at and above grade; and
- d. Removal of any below-grade foundations;
- e. Removal of any below-grade infrastructure (cables/lines, etc.) that are no longer deemed necessary by the local public utility company; and
- f. Detail any grading necessary to return the site to original grade; and
- g. Type of crops to be planted; and
- h. Irrigation system details to be used (existing wells, pumps, etc. should remain throughout the solar facility use).

Procedures to remove the facility and restore the project back to pre-project conditions are included in Section 3 of this Plan. It should be noted that although the property has been historically used for agricultural production, a number of the parcels no longer have rights to water delivery from the Westlands Water District, the present property owner. In consideration of these restrictions, this Plan contemplates decommissioning the project, stabilizing the site, but does not propose additional actions to restore agricultural capacity to the property beyond its present condition on those parcels.

6. A Site Plan shall be submitted along with the text of the Reclamation Plan showing the location of equipment, structures, above and underground utilities, fencing, buffer area, reclamation phasing, etc.

A Site Plan is included in Attachment A.

7. An engineering cost estimate of reclaiming the site to its previous agricultural condition shall be submitted for review and approval.

Per the Solar Facility Guidelines for a Final Reclamation Plan, the engineer cost estimate to implement the Reclamation Plan will be provided following project approval and will be included in this Plan as Attachment B.

8. Financial assurances equal to the cost of reclaiming the land to its previous agricultural condition shall be submitted to ensure the reclamation is performed according to the approved plan. Financial assurances shall be made to the County of Fresno and may take the form of cash, letter of credit or bond that complies with Section 66499 of the California Government Code, et. seq.

Financial assurances will be provided based on the engineer cost estimate noted under item 7, above.

9. Evidence that all owners of record have been notified of the proposed Reclamation Plan.

As discussed under item 4, above, RE Scarlet LLC, a wholly-owned subsidiary of EDP Renewables North America LLC, will be purchasing the real property from the current property owner (Westlands Water District) prior to the start of construction. Given that the current property owner will no longer have an ownership interest in the real property once construction commences, there will be no need to notify Westlands Water District of the Plan.



3.0 BASELINE CONDITIONS

3.1 SOIL CONDITIONS

Table 1 describes the project's soil classifications according to various systems used in California. Refer to Figure 5 in Attachment A for the distribution of soils on the project site. The majority of the site consists of the Tranquillity clay and Ciervo clay as only 390 square feet of Calfax clay soil exists on-site.

Table 1 - Project site soils land capability classification and storie index scores

Map Symbol	Mapping Unit	Acres	Proportion Project Site	LCC Rating	LCC Rating Value	Storie Index Rating Class
	Tranquility clay (Irrigated)	1,783	.43	IIIw	60	Grade 4-
286	Tranquility clay (Nonirrigated)	930	.23	VIIw	10	Poor
461	Ciervo clay (Irrigated)	850	.21	IIIs	60	Grade 4- Poor
	Ciervo clay (Nonirrigated)	526	.13	VIIs	10	
482	Calfax clay (Irrigated)	0	0	IIIs	60	Grade 2- Good
	Calfax clay (Nonirrigated)	0.01	0	VIIs	10	
	TOTAL	4,089	1.00			

Source: NRCS 2019

Notes: LCC - Land Capability Classification.

Land Capability Classification (LCC) demonstrates the suitability of soils for growing field crops. Based on LCC, the site's LCC non-irrigated soil rating is Class 7 and its irrigated soil rating is Class 3. Class 3 soils have severe limitations that reduce the choice of plants or require special conservation practices, or both. Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

The Storie Index Rating provides a numeric rating (based on a 100-point scale) of the relative degree of suitability or value of a given soil for intensive agriculture use. This rating is based upon soil characteristics only.

3.2 HISTORICAL AGRICULTURAL USE

The project site is primarily dry-farmed agriculture that has been intermittently irrigated. For the past 10 years, the project site has been in low-yield agricultural production (tilled, seeded, and harvested for winter wheat); intermittently irrigated (drip or sprinkler) and harvested for alfalfa seed or other crops; or disced twice a year and left fallow. The site is subject to high levels of selenium and a water table that does not provide for sufficient drainage for most commercially irrigated crops. Furthermore, some of the parcels in the project footprint are part of Westlands Water District settlements that require a non-irrigation covenant upon transfer of ownership (refer to Figure 4 in Attachment A).

For the portion of the project site that is cultivated without the benefit of irrigation, the productivity of these crops depends entirely on rainfall. When the unirrigated crops fail to mature to harvest, the land is grazed as rangeland grasses.



4.0 PROJECT FACILITY AND EQUIPMENT

The project would be comprised of solar panels, inverters, access roads, an O&M building, septic system and leach field, and electrical equipment including substations, battery storage enclosures, and wiring.

The site would be secured by an up to eight-foot-high chain link perimeter fence, topped with three-strand barbed wire, through which multiple points of ingress/egress would be accessed by locked gates.

4.1 FOUNDATIONS

Concrete foundations (equipment pads) will be required for energy storage containers, substation deadend structures, project inverters, transformers, and switchgear. The O&M building will be constructed on a concrete foundation. Foundations will vary in depth based on micro-siting of these elements, but will range from approximately four inches to 36 inches. PV arrays will be supported by steel piles that are driven directly into the substrate and will not require concrete foundations.

4.2 SOLAR PV ARRAYS AND RACKING

The PV modules will be manufactured at an off-site location and then transported to the Project site. The PV modules will be mounted on a galvanized metal racking system (that would include a metal single-axis utility-scale tracker or a fixed-tilt racking system) and would be connected to inverter- transformer stations. The modules will be made of a semiconductor material covered by a tempered glass pane or otherwise sealed for long-term outdoor durability. PV modules would be dark colored, highly absorptive, and minimally reflective. As previously mentioned, the structures supporting the PV modules consist of steel piles, driven into the substrate.

4.3 ENERGY STORAGE SYSTEM

The project could include, at the applicant's option, a battery or flywheel storage system capable of storing up to 400 MW of electricity and conducting energy to the regional electricity grid. If provided, the storage system would consist of battery or flywheel banks housed in electrical enclosures and buried electrical conduit. The project could use one of a number of commercially available energy storage technologies, including but not limited to Lithium-ion (Li-ion), flow batteries, sodium sulfur or mechanical fly wheels. The energy storage system will either be dispersed throughout the project site, connected to the PV array via direct current ("DC-coupled"); or concentrated in one location on the site, connected to the PV array via alternating current ("AC-coupled").

4.4 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. 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. Where used, overhead cables would be installed on wood poles up to 50 feet in height.



Each 2 MW block of the project would include an inverter-transformer station. Each inverter-transformer station would be construction on a concrete pad or steel skid measuring approximately 40 feet by 25 feet; however, the final size would depend on available technology and market conditions. Each inverter and transformer station would contain a DC combiner (which would collect DC electrical power from the PV modules), up to four inverters, a transformer, an auxiliary power transformer, and a switchboard approximately 8 to 11 feet high. If required based on site meteorological conditions, an inverter shade structure would be installed at each pad. The shade structure would consist of wood or metal supports and a durable outdoor material shade structure (metal, vinyl, or similar). The shade structure would extend up to 10 feet above the top of the inverter pad.

4.5 SUBSTATION AND GEN-TIE TRANSMISSION LINES

The project would include one substation. Each substation would occupy an approximately 27,000-square-foot (150 feet by 180 feet) area enclosed by an approximately 8-foot-high chain link fence topped with one foot of barbed wire.

Structural components in each substation area would include transformers, footings, control buildings, metering stand, capacitor bank, circuit breaker and air disconnect switches, fiber optic telecommunications infrastructure, lighting mast, dead-end structure, and equipment storage containers. The substation area would be graded and compacted and the equipment placed on concrete pads.

Because the substation transformers would contain oil as an insulating fluid, the substation would be designed to accommodate an accidental spill of transformer fluid using containment-style mounting. Each of the dead-end structures would require foundations excavated to a depth of 20 feet or more.

The gen-tie structures would include tubular steel poles and H-frame structures with foundations excavated to a depth of 20 feet or more. The overhead gen-tie line would be up to approximately 3.5 miles long and consist of up to 30 structures. The structures could be up to 150 feet tall, although most would likely be no more than 110 feet.

4.6 SUPPORT FACILITIES

Support facilities include the 2,000-square-foot O&M building, SCADA system, and the meteorological data collection system. The O&M building will be located on a concrete foundation and would include plumbing, a septic system and leach field.

The SCADA system will include buried fiber optic cables, and the SCADA system cabinet would be located in the O&M building. Telecommunication systems associated with the SCADA system will interconnect at PG&E's Tranquillity Switching Station.

4.7 FENCING

A dual purpose security and wildlife fence will be constructed around the project and will enclose all operational areas throughout the lifetime of the project through decommissioning. The fence design will reach up to 8 feet high and would consist of approximately 6-foot-high chain-link galvanized metal fence topped by three strands of barbed wire approximately 1 foot high.



4.8 DRIVEWAYS

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. 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 likely involve surfacing with gravel, compacted native soil, or a dust palliative.

5.0 DECOMMISSIONING AND RESTORATION PROCESS

Decommissioning of the project is assumed to begin approximately 35 years after operation of the project is initiated. Project decommissioning may incorporate sale and/or recycling of some components; however, this Draft Reclamation Plan assumes that all equipment and facilities within and associated with the facility will be removed. Decommissioning will be conducted in accordance with a Final Reclamation Plan that will be finalized in the months prior to initiation of decommissioning activities.

5.1 DECOMMISSIONING PROCEDURES AND TIMING

All decommissioning, reclamation, and restoration activities will adhere to the requirements of appropriate governing authorities, and will be in accordance with all applicable federal, provincial, and local permits. The reclamation and restoration process comprises removal of above ground structures; removal of below ground foundations and infrastructure to 3 feet below ground surface; and restoration of topsoil, re-vegetation, and seeding. Electrical conduit and other materials that break off more than 3 feet below the ground surface would be decommissioned in place. Appropriate temporary (construction-related) erosion and sedimentation control best management practices (BMP) will be used during the reclamation phase of the project. The BMPs will be inspected on a regular basis to ensure their function.

Reclamation of the project will occur within 24 months of either: (i) the expiration of the project's CUP or (ii) the abandonment of the project without the project owner making efforts to cure a disruption of electricity production, whichever occurs first.

5.2 SITE PREPARATION ACTIVITIES

The project site will be prepared prior to commencement of decommissioning and salvage activities (including removal of facilities, Section 5.3, and site restoration, Section 5.6). These preparatory measures will include electrical inspections as well as inspections of any water tanks on site, access routes, drainage crossings, security fences, and gates to ensure all such components are safe and functional. Following these inspections, preparatory measures may be required including, but not limited to, electrical improvements, road improvements, as-needed vegetation clearing, fencing and gate repair, and removal and disposal of materials generated from the above-listed activities. Creation of temporary work area(s) to provide sufficient area for the lay-down of the disassembled project components and loading onto trucks will be required.



5.3 REMOVAL OF FACILITIES

This section describes the materials and other equipment that will require removal or salvage during the decommissioning process. Prior to, during, and after removal, project equipment and component will be inspected to ensure all components are safe and functional.

The equipment will generally be removed in reverse order of the installation, as follows:

- 1. The solar facility will be disconnected from the utility power grid.
- 2. PV modules will be disconnected, collected, and either shipped to another project, salvaged, or submitted to a collection and recycling or disposal program. During decommissioning, PV panels will be de-energized and dismantled from the torque tubes by sliding the panels off the mounting saddles once the connector clips are removed. Next, the PV solar panels and rack supports will be removed in their entirety from the site. The panels will be carefully removed by hand and the rack supports will be removed by excavators with attachments, or other similar equipment. The panels will be placed on pallets and transported off-site.
- Aboveground and underground electrical interconnection and distribution cables that are no longer deemed necessary by the local public utility company will be removed to approximately 3 feet below ground surface and disposed of or recycled off-site by an approved recycling facility.
- 4. PV module racking systems will be removed and may be recycled off-site by a metals recycler. The racking structure supporting the PV panels will be unbolted and disassembled using standard hand tools. The vertical steel piles, poles, and posts supporting the racks and all steel support piles will be completely removed and transported off-site for salvage or reuse. Other equipment and/or material will be removed from the site for resale, scrap value, recycled, or disposal depending on market conditions.
- 5. Electrical demolition includes the electrical equipment and infrastructure. CD combiner boxes, power aggregation wiring, Power Conversion Stations (CD recombiner/inverter/transformer modular units), sensors, weather stations, the gen-tie line connecting to the substation. Power Conversion Stations will be removed by cutting and removing the conduit and using a crane to place the unit in a salvage truck. All additional above ground cables would be cut and removed, including above ground conductors and grounding cable, and overhead lines. Decommissioning will require dismantling and removal of all aboveground electrical equipment and conduit to a depth of 3 feet below grade. Removal of substation equipment includes transformers, switches, structures, overhead lines, equipment pads, and grounding grid. Underground equipment to be removed consists of underground cables, conduit, and electrical lines. Equipment will be deenergized prior to removal; salvaged (where possible); placed in appropriate shipping containers; and secured in a truck transport trailer for transport off-site. All conductors are assumed to be removed and aggregated for recycling. All subterranean conduit, Power Conversion Stations, and other electrical equipment will be removed for off-site recycling or disposal. All decommissioning, recycling, and disposal of electrical devices, equipment and wiring/cabling will be conducted in accordance with applicable local, state, and federal standards and guidelines.
- 6. The larger slab-on-grade concrete foundations and support pads will be broken up by mechanical equipment (such as a backhoe-hydraulic hammer/shovel, or jackhammer), loaded onto trucks,



and removed from the site. Concrete pads will be recycled or reused as clean fill at another location.

- 7. The gen-tie to the PG&E Tranquillity Switching Station will be removed. Overhead electrical lines and poles will be removed and recycled, reused, or disposed of in accordance with regulatory requirements at the time of decommissioning, and holes from pole removal will be filled with clean fill.
- 8. The septic system and leach field will be removed.
- 9. Fencing will be removed and will be recycled off-site by an approved recycler.
- 10. Interior driveways and pre-fabricated bridges can either remain on-site for future use or be removed. Gravel will be repurposed either on- or off-site.

5.4 DEBRIS MANAGEMENT, DISPOSAL, AND RECYCLING

During the demolition process, removed materials and demolition debris will be placed in designated locations within the project site. The stockpiles will then be transported to an off-site recycling center, used equipment market for resale, or an approved landfill depending on the material being disposed of. Equipment will be salvaged or recycled wherever possible.

5.5 HAZARDOUS WASTE

Relatively small quantities of hazardous materials would be used during decommissioning. Disposal and transportation of hazardous wastes will be conducted in compliance with appropriate state and federal laws, ordinances, regulations, and standards.

5.6 SITE RESTORATION

Soils will be restored to pre-project topographic conditions to prepare the site for the continuation of agricultural land uses. APNs with a non-irrigation covenant will be restored using a rangeland seed mix of grasses and forage crops, and areas planned for crop production within 12 months following decommissioning will be left unplanted.

All driveways and other areas compacted during original construction or by equipment used in the decommissioning will be tilled in a manner adequate to restore the sub-grade material to the proper density and depth consistent with adjacent properties. Holes and low areas resulting from the removal of project features such as piles, poles, and foundations will be filled with clean, compatible sub-grade material resulting from on-site decommissioning activities. After proper sub-grade depth is established, locally-sourced topsoil would be placed to a depth and density consistent with adjacent properties.

As previously mentioned, areas that will be revegetated may be limited to areas disturbed during decommissioning activities and that won't be used for crop production within 12 months following decommissioning. Areas planned for revegetation restoration will be prepared as followed: 1) Mow area; 2) Disk area; 3) Hydraulic seeding project site using a rangeland seed mix of grasses and forage crops.



6.0 DECOMMISSIONING COSTS AND FINANCIAL ASSURANCES

Prior to the issuance of the grading permit, the project owner will provide financial assurance in an amount sufficient to reclaim the site to its previous conditions in accordance with the approved Reclamation Plan. Financial assurances will be made to the County of Fresno and may take the form of cash, letter of credit or bond that complies with Section 66499 of the California Government Code, et. seq.

The bond instrument will be based on a decommissioning cost estimate provided by the project owner and based on the final approved design of the project. This estimate will consider any project components that are expected to be left in place at the request of and for the benefit of the subsequent landowner (e.g., access roads, electrical lines, O&M building).

7.0 REFERENCES

Fresno, County of (Fresno County). 2020. Guidelines for Preparing a Solar Electrical Generation Facility Reclamation Plan. Accessed June 2020. Available at: https://www.co.fresno.ca.us/departments/public-works-and-planning/development-services-division/planning-and-land-use/photovoltaic-facilities-p-3106

2017. Solar Facility Guidelines. Revised by the Board of Supervisors on December 12. Available at: https://www.co.fresno.ca.us/departments/public-works-planning/divisions-of-public-works-and-planning/development-services-division/planning-and-land-use/photovoltaic-facilities-p-1621

Natural Resource Conservation Service, United States Department of Agriculture (NRCS). 2019. Custom Soil Resource Report for RE Scarlett LESA. Accessed on March 13, 2019 at https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

2018. Farmland Protection Policy Act. Accessed on March 4, 2019 at https://www.nrcs.usda.gov/wps/portal/nrcs/detail/?cid=nrcs143 008275

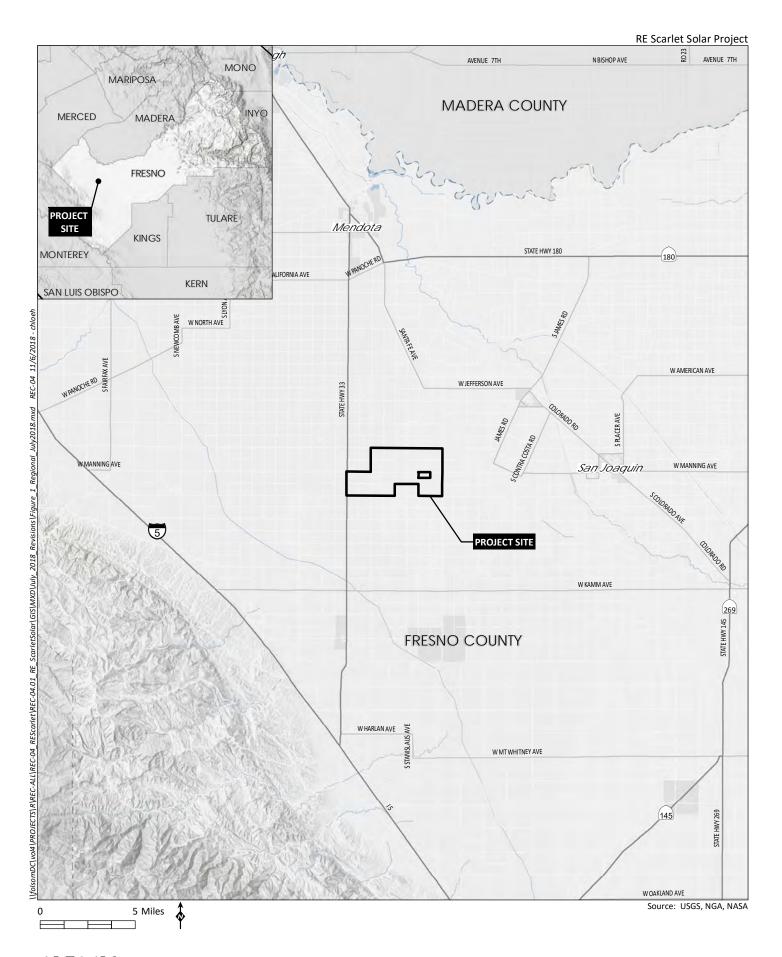


This page intentionally left blank

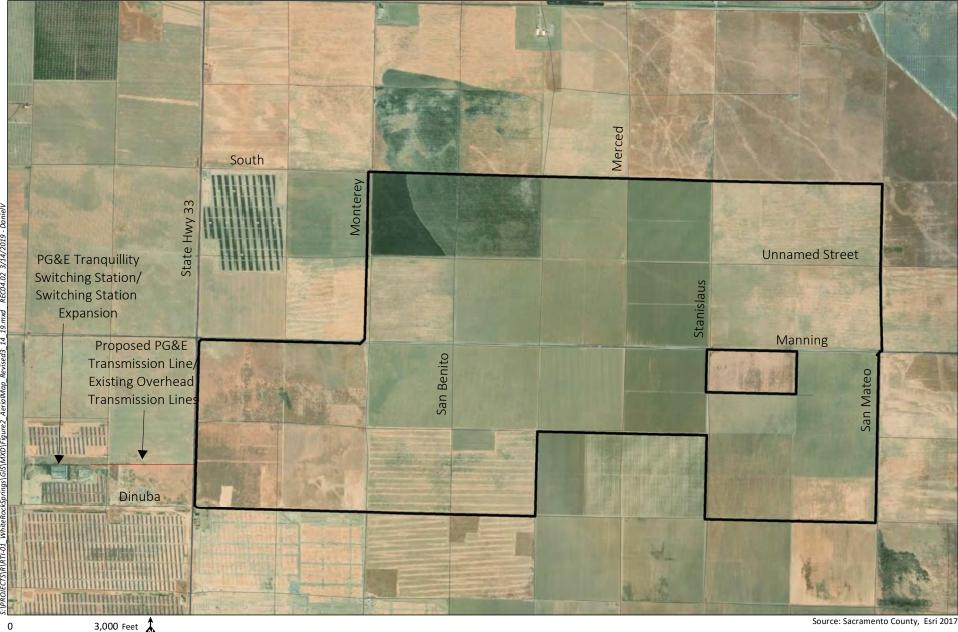


Attachment A

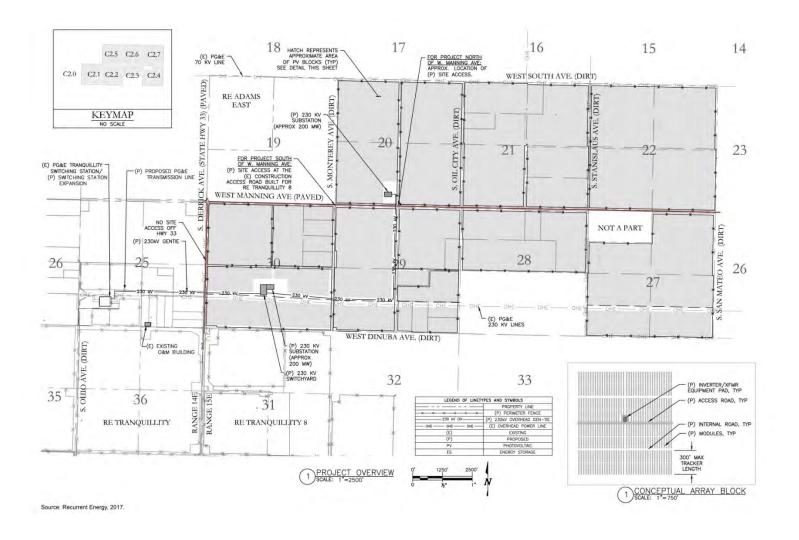
Figures













HELIX
Environmental Planning



Soils

<u>NOTE: Exhibits 9 and 10</u> consisting of the Draft EIR, Appendices, and Final EIR, as well as all other related documents, for the Scarlet Solar Energy Project are available at the following link: http://www.co.fresno.ca.us/EIR



Scarlet Solar Energy Project

Final Environmental Impact Report No. 7230 SCH#2018091022

prepared by

County of Fresno

Department of Public Works and Planning 2220 Tulare Street, Sixth Floor Fresno, California 96721 Contact: Ejaz Ahmad

> prepared with the assistance of Rincon Consultants, Inc. 7080 N. Whitney, Suite 101 Fresno, California 93720

> > August 2021



Scarlet Solar Energy Project

Final Environmental Impact Report No. 7230 SCH#2018091022

prepared by

County of Fresno

Department of Public Works and Planning 2220 Tulare Street, Sixth Floor Fresno, California 96721 Contact: Ejaz Ahmad

> prepared with the assistance of Rincon Consultants, Inc. 7080 N. Whitney, Suite 101 Fresno, California 93720

> > August 2021



This report pr	epared on 50% recy	cled paper with 50%	6 post-consumer con	tent.

Table of Contents

Table of Co	ontents	i
1 Introduc	tion	1-1
1.1 Ba	ackground and Purpose of the EIR	1-1
1.2 CI	EQA Public Review Process	1-1
	1.2.1 Notice of Preparation	1-2
	1.2.2 Draft EIR	1-2
	1.2.3 Final EIR	1-2
	1.2.4 Certification of the Final EIR/Project Consideration	1-2
1.3 In	tended Use of the EIR	1-3
1.4 O	rganization and Scope of the EIR	1-3
2 Commer	nts and Responses on the Draft EIR	2-1
2.1 Li	st of Comments	2-1
2.2 Co	omments and Responses	2-1
	2.2.1 Requirements for Responding to Comments on a Draft EIR	2-1
	2.2.2 Responses to Comments	2-2
3 Minor Re	evisions to the Draft EIR	3-1
3.1 In	troduction	3-1
	3.2 Minor Changes and Edits to the Draft EIR	3-1
Tables		
Table 2-1	List of Commenters	2-1

Scarlet Solar Energy Project

Abbreviations

AB Assembly Bill
AIA Air Impact Analysis

Caltrans California Department of Transportation CEQA California Environmental Quality Act

County Fresno County

EIR Environmental Impact Report

MMRP Mitigation Monitoring and Reporting Program

NAHC Native American Heritage Commission

NOP Notice of Preparation
Project Scarlet Solar Energy Project

PV Photovoltaic

SJVAPCD San Joaquin Valley Air Pollution Control District

SR State Route

VERA Voluntary Emission Reduction Agreement

1 Introduction

1.1 Background and Purpose of the EIR

This Final Environmental Impact Report (Final EIR) is an informational document prepared by the County of Fresno (County) to evaluate the potential environmental impacts of the proposed Project. The primary objectives of the EIR process under the California Environmental Quality Act (CEQA) are to inform decision-makers and the public about a project's potential significant environmental effects, identify possible ways to minimize significant effects, and consider reasonable alternatives to the project.

The Draft EIR for the Scarlet Solar Energy Project (Project) (State Clearinghouse No. 2018091022) was circulated for 45-day public review between May 7, 2021 and June 22, 2021; however, comments were accepted through June 29, 2021 per the request of the San Joaquin Valley Air Pollution Control District.¹ An additional comment letter was received from the Santa Rosa Rancheria Tachi-Yokut Tribe on July 15, 2021, after the close of the public review period. ²

As prescribed by the State CEQA Guidelines Sections 15088 and 15132, the lead agency, the County, is required to evaluate comments on environmental issues received from persons who have reviewed the Draft EIR and to prepare written responses to those comments. In accordance CEQA Guidelines Section 15088, Fresno County (County), as the lead agency, has evaluated the comments received on the Draft EIR. This Final EIR contains individual responses to each written letter received during the public review period for the DEIR. In accordance with State CEQA Guidelines Section 15088(b), the written responses describe the disposition of significant environmental issues raised. The County has provided a good faith effort to respond in detail to all significant environmental issues raised by the comments.

The Final EIR consists of the Draft EIR together with the responses to the comments and revisions to the Draft EIR, which are included in this document, and the Mitigation Monitoring and Reporting Program (MMRP), which is provided under separate cover. Pursuant to the requirements of CEQA, the County must certify the Final EIR as complete and adequate prior to approval of the Project or a Project alternative. The Fresno County Planning Commission and County Board of Supervisors will use this Final EIR, in conjunction with other information developed in the County's formal record, when considering whether to certify the Final EIR and whether to approve the Applicant's Conditional Use Permit (CUP) application to the County Department of Public Works and Planning.

1.2 CEQA Public Review Process

The following provides a summary of the environmental review process to date for the Project that has resulted in the preparation of this Final EIR.

¹ Prior to the close of the public review period, the County agreed to the San Joaquin Valley Air Pollution Control District's request that their comment letter be accepted on June 29, 2021 after the close of the public review period.

² The County is only required to consider comments received within the public review period (Public Resources Code Section 21091[d[[1]). Although the comment letter from the Santa Rosa Rancheria Tachi-Yokut Tribe was received after the close of the public review period, the County is providing a written response as a good faith effort to respond to public comments the project.

1.2.1 Notice of Preparation

The County of Fresno prepared an Initial Study and circulated a Notice of Preparation (NOP) regarding this EIR for a 34-day agency and public review period, starting on September 12, 2018 and ending on October 15, 2018. The Initial Study determined that the Project required the preparation of an EIR to further evaluate potentially significant impacts related to aesthetics, agriculture, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, transportation, and utilities and service systems. In addition, the County held an EIR Scoping Meeting on October 11, 2018. The County received letters from five agencies and three County departments during the public review period in response to the NOP. No verbal comments were received during the EIR Scoping Meeting. The written comments are summarized in Table 1-1 of the Draft EIR, and the Initial Study, NOP, and NOP response letters are presented in Appendix A to the Draft EIR.

1.2.2 Draft EIR

The Draft EIR was released for public and agency review on May 7, 2021, with a 45-day review period ending on June 22, 2021; however, comments on the Draft EIR were accepted through June 29, 2021. The Draft EIR contains a description of the Project, description of the environmental setting, identification of Project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of Project alternatives. The Draft EIR was provided to interested public agencies and the public and was made available for review at County offices, on the County's website, and at County libraries.

1.2.3 Final EIR

The County received comment letters from local, regional, and state agencies regarding the Draft EIR. This document responds to the written comments received, as required by CEQA. This document also contains minor edits to the Draft EIR, which are included in Section 3.0, Minor Revisions to the Draft EIR. This document constitutes the Final EIR.

1.2.4 Certification of the Final EIR/Project Consideration

The County will review and consider the Final EIR. In accordance with the requirements of CEQA and County procedures, the Final EIR must be certified as complete and adequate prior to any action on the proposed Project. Once the Final EIR is certified and all information considered, using its independent judgment, the County can take action to go forward with the proposed Project, make changes, or select an alternative to the proposed Project. While the information in the Final EIR does not control the County's ultimate decision, the County must respond to each significant effect and mitigation measure identified in the EIR by making findings supporting its decision in accordance with CEQA Guidelines Section 15091. Public Resources Code Section 21081.6 also requires lead agencies to adopt an MMRP to ensure the implementation of measures that have been adopted or have been made a condition of the Project approval to mitigate or avoid significant impacts on the environment.

1.3 Intended Use of the EIR

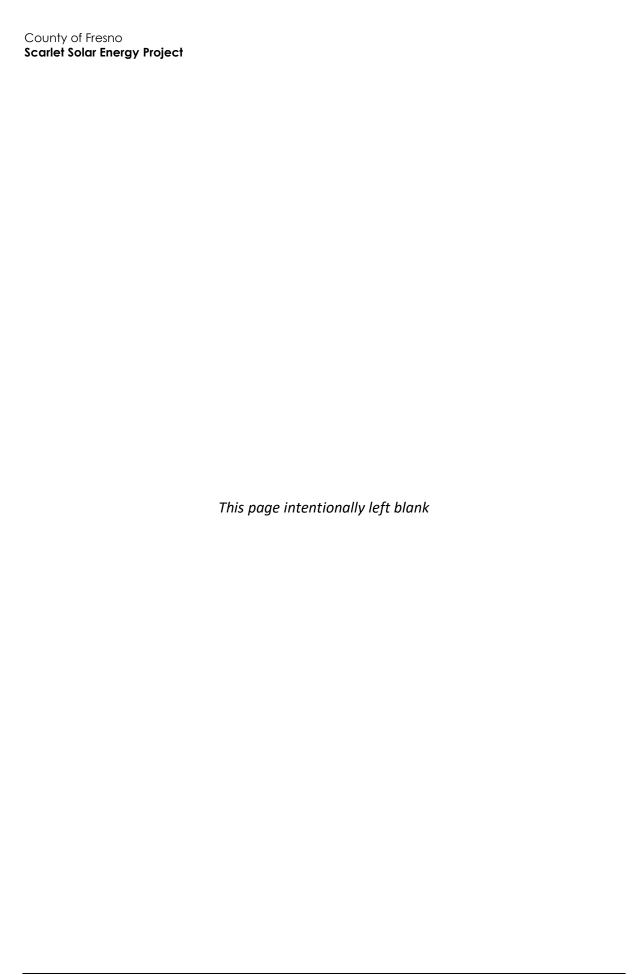
The EIR is intended to evaluate the environmental impacts of the Project. This EIR, in accordance with CEQA Guidelines Section 15126, should be used as the primary environmental document to evaluate all planning and permitting actions associated with the Project. Please refer to Section 2, Project Description, of the Draft EIR for a detailed discussion of the Project.

1.4 Organization and Scope of the EIR

This document is organized into the following sections:

- Section 1.0 Introduction: Section 1.0 provides an overview of the EIR process to date and the requirements of the Final EIR.
- Section 2.0 Comments and Responses on the Draft EIR: Section 2.0 provides a list of the
 agencies, organizations, and individuals that commented on the Draft EIR. Copies of all the
 letters received regarding the Draft EIR and responses thereto are included in this section.
- Section 3.0 Minor Revisions to the Draft EIR: Section 3.0 contains refinements and clarifications on the Draft EIR, which have been incorporated as a result of comments.
- MMRP The timing, responsible entity, and required actions of measures that have been
 adopted or made a condition of the Project approval to mitigate or avoid significant impacts on
 the environment have been included in the MMRP, provided under separate cover.

Because of its length, the text of the Draft EIR is not included with these written responses; however, it is included by reference in this Final EIR. None of the revisions or clarifications to the Draft EIR identified in this document constitute "significant new information" pursuant to CEQA Guidelines Section 15088.5. As a result, recirculation of the Draft EIR is not required.



2 Comments and Responses on the Draft EIR

2.1 List of Comments

A list of public agencies, organizations, and individuals that provided comments on the Draft EIR is presented in Table 2-1. Individual comments within each communication have been numbered so comments can be crossed-referenced with responses. Following this list, the text of the communication is reprinted and followed by the corresponding response.

Table 2-1 List of Commenters

Agency	Commenter Name (last, first)	Comment Date (mm/dd/yyyy)	Comment Code
State Agencies			
California Department of Transportation	Padilla, David	06/23/2021	Caltrans
Regional Agencies			
San Joaquin Valley Air Pollution Control District	Clements, Brian	06/29/2021	SJVAPCD
Local Agencies			
County of Monterey Housing and Community Development	Lundquist, Erik	05/14/2021	Monterey
Native American Tribes			
Santa Rosa Rancheria Tachi- Yokut Tribe	Samantha McCarthy	7/15/21	Tribe

2.2 Comments and Responses

2.2.1 Requirements for Responding to Comments on a Draft EIR

CEQA Guidelines Section 15088 requires that lead agencies evaluate all comments on environmental issues received on the Draft EIR and prepare a written response. CEQA Guidelines Section 15088 states:

- a) The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The lead agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments.
- b) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, major environmental issues raised when the lead agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail, giving the reasons that specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.

Scarlet Solar Energy Project

- c) The response to comments may take the form of a revision to the draft EIR or may be a separate section in the final EIR. Where the response to comments makes important changes in the information contained in the text of the draft EIR, the lead agency should either:
 - 1. Revise the text in the body of the EIR; or
 - 2. Include marginal notes showing that the information is revised in the responses to comments.

2.2.2 Responses to Comments

In accordance with CEQA Guidelines Section 15088, the County, as the lead agency, evaluated the comments received on the Draft EIR (State Clearinghouse No. 2018091022) for the Project, and has prepared the following responses to the comments received. This Responses to Comments document is part of the Final EIR for the Project in accordance with CEQA Guidelines Section 15132. The comment letters reproduced in the following pages follow the same organization as used in the List of Commenters (Table 2-1).

California Department of Transportation

DISTRICT 6 OFFICE 1352 WEST OLIVE AVENUE | P.O. BOX 12616 | FRESNO, CA 93778-2616 (559) 981-7373 | FAX (559) 488-4195 | TTY 711 www.dot.ca.gov





June 23, 2021

06-FRE-33-58.422 DEIR #7230 CUP DRAFT ENVIRONMENTAL IMPACT REPORT #7230 SCARLET SOLAR ENERGY PROJECT

Sent via email

Ejaz Ahmad Divisions of Public Works and Planning County of Fresno 2220 Tulare St. 6th Floor Fresno, CA 93721

Dear Mr. Ejaz Ahmad:

Thank you for the opportunity to review the Draft Environmental Impact Report for the proposed photovoltaic electricity generation and storage facility. The project site is located on both sides of Manning Avenue and east of State Route (SR) 33 in Fresno County.

The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development -Intergovernmental Review (LD-IGR) Program reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

Caltrans provides the following comments consistent with the State's smart mobility goals that support a vibrant economy and sustainable communities:

Caltrans-1

Mr. Ejaz Ahmad June 23, 2021 Page 2

Caltrans-2

1. Oversized or heavy load vehicles used for the construction of this solar project may require a Transportation Permit Application from Caltrans Headquarters.

Caltrans-3

2. It is recommended that a construction traffic management plan be prepared and submitted to Caltrans for Review.

Caltrans-4

- 3. There currently exists 100 feet of Right of Way (ROW) and based on Caltrans' Transportation Concept Report for SR 33, the ultimate ROW is 110 feet. In the future, an additional five feet of ROW will be need. Any proposed structure (s) or development should be placed outside of Caltrans ultimate ROW for SR 33. In addition, Caltrans owns access control, therefore, direct access to SR 33 will not be allowed.
- 4. An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State highway rights-ofway. Activity and work planned in the State right-of-way shall be performed to State standards and specifications, at no cost to the State. Engineering plans, calculations, specifications, and reports (documents) shall be stamped and signed by a licensed Engineer or Architect. Engineering documents for encroachment permit activity and work in the State right-of-way may be submitted using English Units. The Permit Department and the Environmental Planning Branch will review and approve the activity and work in the State right-of-way before an encroachment permit is issued. The Streets and Highways Code Section 670 provides Caltrans discretionary approval authority for projects that encroach on the State Highway System. Encroachment permits will be issued in accordance with Streets and Highway Codes, Section 671.5, "Time Limitations." Encroachment permits do not run with the land. A change of ownership requires a new permit application. Only the legal property owner or his/her authorized agent can pursue obtaining an encroachment permit. Please call the Caltrans Encroachment Permit Office - District 6: 1352 W. Olive, Fresno, CA 93778, at (559) 488-4058. Please review the permit application checklist at:

https://forms.dot.ca.gov/v2Forms/servlet/FormRenderer?frmid=TR0402&distpath=MAOTO&brapath=PERM

Caltrans-5

Mr. Ejaz Ahmad June 23, 2021 Page 3

Caltrans-6 If you have any further questions, please contact Nicholas Isla at (559) 981-7373 or email nicholas.isla@dot.ca.gov.

Sincerely,

DAVID PADILLA, Branch Chief Transportation Planning - North

California Department of Transportation (Caltrans)

Response Caltrans-1

The commenter provided introductory greetings, summarized the Project, summarized Caltrans' mission, and stated that the agency has provided comments on the Draft EIR. The comment is acknowledged by the County. The comment does not address the adequacy of the analysis in the Draft EIR; and therefore, no further response is required.

Response Caltrans-2

The commenter states that oversized and heavy load vehicles may require a Transportation Permit Application from Caltrans. As stated in Section 2.14 of the Draft EIR (page 2-35), an Oversize/ Overweight permit from Caltrans would be required for the transportation of substation transformers.

Response Caltrans-3

The commenter states that a construction traffic management plan should be prepared and submitted to Caltrans for review. As stated in Section 2.14 of the Draft EIR (page 2-35), a Traffic Control Plan would be required for the transportation of substation transformers. The Traffic Control Plan would be submitted to Caltrans for review and approval.

Response Caltrans-4

The commenter provides information on future Caltrans right-of-way for State Route (SR) 33 and states that direct access to SR 33 is not allowed. Caltrans future right-of-way and access control for SR 33 is acknowledged. Section 2.9.5.6 of the Draft EIR (page 2-17) discusses the Caltrans future right-of-way adjacent to SR 33, which would be avoided by the Project. The Project modules and electrical infrastructure would be set back from the existing SR 33 highway by a minimum of 50 feet plus additional clearance for any deed restrictions and the future right-of-way. The only encroachment into SR 33 right-of-way would be the proposed overhead gen-tie lines, which would cross over SR 33.

As discussed in Section 2.9.5.6 of the Draft EIR (page 2-16) and shown on Figure 2-6 (page 2-6), direct access would not be provided via SR 33. Primary access to the portion of the Solar Facility south of West Manning Avenue would be provided from West Manning Avenue at South Monterey Avenue. Primary access to the portion of the Solar Facility north of West Manning Avenue would be provided from West Manning Avenue at the San Benito Avenue alignment. Multiple points of ingress/egress for emergency access would be provided. Primary access to the Tranquility Switching Station would be via the existing access gates at either South Ohio Avenue or West Dinuba Avenue.

Response Caltrans-5

The commenter states that an encroachment permit must be obtained from Caltrans for all proposed activities within, under, or over the State highway right-of-way and provides contact information for the Caltrans Encroachment Permit Office. As stated in Section 2.14 of the Draft EIR (page 2-35), a Caltrans encroachment permit would be required for the proposed overhead gen-tie lines which would cross over SR 33. The contact information is acknowledged by the County.

Response Caltrans-6

The commenter provided contact information to address any questions on the provided comments. The contact information is acknowledged by the County. The comment does not address the adequacy of the analysis in the Draft EIR; and therefore, no further response is required.





June 29, 2021

Ejaz Ahmed County of Fresno Department of Public Works and Planning 2220 Tulare Street, Suite A Fresno, CA. 96721

Project: Draft Environmental Impact Report No. 7230 for Scarlet Solar Energy Project Conditional Use Permit Application No. 3555

District CEQA Reference No: 20210486

Dear Ejaz Ahmed:

SJVAPCD-1

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the Draft Environmental Impact Report (DEIR) for the project referenced above from the County of Fresno (County). The project consists of an Unclassified Conditional Use Permit (CUP) to construct, operate, maintain and decommission a photovoltaic solar facility, energy storage, and associated infrastructure. (Project). The Project is located approximately 3.5 miles west-southwest of the community of Tranquility and approximately 6.5 miles east of Interstate 5, in Fresno County, CA. The District offers the following comments:

1) Voluntary Emissions Reduction Agreement (VERA)

The DEIR determined certain criteria pollutants emissions exceeded the thresholds of significance and included a Mitigation Measure "AQ-2 Further Reduction of NOx, PM10, and PM2.5 Emissions During Construction, and Decommissioning and PM10 Emissions During Operation and Maintenance" to mitigate the Project's construction and decommissioning emissions of NOx, PM10, and PM2.5, and the Project's operation and maintenance emissions of PM10 to a less than significant impact.

SJVAPCD-2

This Mitigation Measure states "If the Project Applicant is unable to guarantee that Project construction and decommissioning emissions of NOx, PM10, and PM2.5, and Project operation and maintenance emissions of PM10 would not exceed the SJVAPCD significance thresholds, the Project Applicant shall enter into a Voluntary Emission Reduction Agreement (VERA) with the SJVAPCD to mitigate or reduce project emissions beyond the requirements of Rule 9510 through the payment of

Executive Director/Air Pollution Control Officer

Northern Region 4800 Enterprise Way Modesto, CA 95356-8718 Tel: (209) 557-6400 FAX: (209) 557-6475 Central Region (Main Office) 1990 E. Gettysburg Avenue Fresno, CA 93726-0244 Tel: (559) 230-6080 FAX: (559) 230-8061 Southern Region 34946 Flyover Court Bakersfield, CA 93308-9725 Tel: (661) 392-5500 FAX: (661) 392-5585 fees (on a per-ton basis) to the SJVAPCD. The payment of fees shall be made to the SJVAPCD based on the fee schedule in the development mitigation contract and the amount of reduction necessary to offset project emissions below the SJVAPCD's thresholds. Prior to the issuance of construction/grading permits for the Project, the Project Applicant shall provide evidence to the County of a fully-executed VERA, should one be required"

SJVAPCD-2 (cont.)

Although this Mitigation Measure is intended to mitigate the impacts as the Project's emissions were determined to be significant, it is unclear if the text in this Mitigation Measure regarding "If the Project Applicant is unable to guarantee that Project construction and decommissioning emissions of NOx, PM10, and PM2.5, and Project operation and maintenance emissions of PM10 would not exceed the SJVAPCD significance thresholds, the Project Applicant shall enter into a VERA with SJVAPCD to mitigate or reduce project emissions..." implies there would be a way for the applicant to guarantee to the County that the Project will not exceed CEQA significance thresholds. The District recommends that the County define the method by which the applicant substantiates Project emissions, or provide clarification for the applicant to demonstrate if the significance thresholds are exceeded, such that the need to enter into a VERA or lack thereof is well documented.

Regarding additional information on implementing a VERA, the District is available to provide assistance. Information can be obtained by contacting District CEQA staff at by email at CEQA@valleyair.org or by phone at (559) 230-6000.

2) District Rules and Regulation

The District issues permits for many types of air pollution sources and regulates some activities not requiring permits. A project subject to District rules and regulation would reduce its impacts on air quality through compliance with regulatory requirements. In general, a regulation is a collection of rules, each of which deals with a specific topic. Here are a couple of example, Regulation II (Permits) deals with permitting emission sources and includes rules such as District permit requirements (Rule 2010), New and Modified Stationary Source Review (Rule 2201), and implementation of Emission Reduction Credit Banking (Rule 2301).

SJVAPCD-3

The list of rules below is neither exhaustive nor exclusive. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm. To identify other District rules or regulations that apply to this Project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (559) 230-5888.

2a) District Rules 2010 and 2201 - Air Quality Permitting for Stationary Sources

SJVAPCD-4

Stationary Source emissions include any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. District Rule 2010 requires operators of emission sources to obtain an Authority to

Construct (ATC) and Permit to Operate (PTO) from the District. District Rule 2201 requires that new and modified stationary sources of emissions mitigate their emissions using best available control technology (BACT).

SJVAPCD-4 (cont.)

This Project may be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and may require District permits.

Prior to commencing construction on any permit-required equipment or process, a finalized Authority to Construct (ATC) must be issued to the Project proponent by the District. For further information or assistance, the project proponent may contact the District's Small Business Assistance (SBA) Office at (559) 230-5888.

2b) <u>District Rule 9510 (Indirect Source Review)</u>

The purpose of District Rule 9510 (Indirect Source Review) is to reduce the growth in both NOx and PM10 emissions associated with development and transportation projects from mobile and area sources associated with construction and operation of development projects. The rule encourages clean air design elements to be incorporated into the development project. In case the proposed project clean air design elements are insufficient to meet the targeted emission reductions, the rule requires developers to pay a fee used to fund projects to achieve off-site emissions reductions.

SJVAPCD-5

The proposed Project is subject to District Rule 9510 because it will receive a project-level discretionary approval from a public agency and will equal or exceed 9,000 square feet of space. When subject to the rule, an Air Impact Assessment (AIA) application is required prior to applying for project-level approval from a public agency. In this case, if not already done, please inform the project proponent to immediately submit an AIA application to the District to comply with District Rule 9510.

An AIA application is required and the District recommends that demonstration of compliance with District Rule 9510, before issuance of the first building permit, be made a condition of Project approval.

Information about how to comply with District Rule 9510 can be found online at: http://www.valleyair.org/ISR/ISRHome.htm.

The AIA application form can be found online at: http://www.valleyair.org/ISR/ISRFormsAndApplications.htm.

2c) Other District Rules and Regulations

SJVAPCD-6

SJVAPCD-7

The Project may also be subject to the following District rules: Regulation VIII, (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants).

3) <u>District Comment Letter</u>

The District recommends that a copy of the District's comments be provided to the Project proponent.

If you have any questions or require further information, please contact Regine Letim by e-mail at reg regine.letim@valleyair.org or by phone at (559) 230-5892.

Sincerely,

Brian Clements
Director of Permit Services

For John Stagnaro Program Manager

San Joaquin Valley Air Pollution Control District (SJVAPCD)

Response SJVAPCD-1

The commenter provided introductory greetings, summarized the Project, and stated that the agency has provided comments on the Draft EIR. The comment is acknowledged by the County. The comment does not address the adequacy of the analysis in the Draft EIR; and therefore, no further response is required.

Response SJVAPCD-2

The commenter recommends that Mitigation Measure AQ-2 be clarified as to the method in which the Applicant will substantiate Project emissions and demonstrate if significance thresholds are exceeded, resulting in the need to enter into a Voluntary Emission Reduction Agreement (VERA) with SJVAPCD. The commenter also provides contact information for further information on the VERA. Mitigation Measure AQ-2 has been revised to clarify that, prior to issuance of construction and grading permits, the Applicant will enter into a VERA with SJVAPCD for project construction and operation and maintenance emissions. Prior to decommissioning, the Applicant will provide evidence, consisting of an air quality analysis based on final decommissioning plans, to the County to demonstrate whether decommissioning emissions would exceed SJVAPCD thresholds. If decommissioning emissions are determined to exceed SJVAPCD thresholds, the Applicant will enter into a new VERA with SJVAPCD to offset decommissioning emissions. Specific revisions to Mitigation Measure AQ-2 are shown in Section 3.2 of this Final EIR. The County acknowledges SJVAPCD's contact information regarding further information on the VERA.

Response SJVAPCD-3

The commenter provided an introductory summary of SJVAPCD's rules and regulations. The comment is acknowledged by the County. The comment does not address the adequacy of the analysis in the Draft EIR; and therefore, no further response is required.

Response SJVAPCD-4

The commenter provides information on SJVAPCD's rules and regulations (Rules 2010 and 2201) and states these rules may be applicable to the Project. Rule 2201 applies to all new stationary sources and modifications to existing stationary sources which are subject to SJVAPCD permit requirements, and after construction emit or may emit one or more affected pollutant. The Project proposes to construct, operate, maintain, and decommission a solar photovoltaic (PV) electricity generating facility, energy storage system, and associated infrastructure. Additionally, the facility would be electrically powered, and electrically powered equipment does not emit criteria pollutants. Process gas that could emit criteria pollutants would not be used during operation. As a solar project, there are no stationary sources proposed that would emit criteria pollutants during regular operation and maintenance that would require a permit for the operation or maintenance of this facility under Rules 2010 and 2201. The primary emissions associated with the Project would be generated during construction and decommissioning and would be covered under Rule 9510 (refer to Response to Comment SJVAPCD-5 for a discussion of Project compliance with Rule 9510).

Based on the size of potential emergency generators or emergency fire water pump engines, an operating permit for non-emergency use may be required from the SJVAPCD under Rule 2201. Depending on the fuel, this equipment would be required to comply with the California Air Resources Board's (CARB) rules for compression-ignition or spark-ignition internal combustion

engines. Typically, SJVAPCD permits limit non-emergency use of this type of equipment to periodic testing. Use of portable equipment during operation and maintenance activities may require registration under the Portable Equipment Registration Program (PERP) for the equipment to be operated without having to obtain a permit. The Applicant will coordinate with the SJVAPCD to determine the applicability of the PERP and Rules 2010 and 2201 for any emergency generators or emergency fire water pumps that may be required for the Project.

Section 4.3.1.2 of the Draft EIR has been revised to reflect the potential applicability of Rules 2010 and 2201. The changes to the Draft EIR are shown in Section 3.2 of this Final EIR.

Response SJVAPCD-5

The commenter states the Project must comply with SJVAPCD's Rule 9510, Indirect Source Review, which requires an Air Impact Assessment (AIA) application be submitted to SJVACPD. The purpose of Rule 9510 is acknowledged. The Project would comply with Rule 9510. Rule 9510 is described in the Draft EIR in Section 4.3.1.2 (page 4.3-8) and Section 4.3.2.2 (pages 4.3-17, 4.3-26, and 4.3-27). The Applicant will submit an AIA application to the SJVAPCD in compliance with Rule 9510. Proof of compliance and payment of any offsite mitigation fees would be made a condition of approval prior to issuance of grading permits by the County.

Response SJVAPCD-6

The commenter states that the Project may be subject to SJVAPCD's Regulation VIII and Rules 4102, 4601, 4641, and 4002. The Project's compliance with SJVAPCD Regulation VIII and Rules 4102, 4601, and 4641 is discussed in the Draft EIR in Section 4.3, Air Quality; specifically, pages 4.3-7 and 4.3-8 summarize applicable SJVAPCD regulations. The Project does not involve any demolition; therefore, the District Rule 4002 would not be applicable.

Response SJVAPCD-7

The commenter recommends that the comment letter be provided to the Project proponent and provides contact information to contact SJVAPCD for questions or further information. The comment letter from the SJVAPCD was provided to the Project proponent; therefore, no additional action is necessary. The County acknowledges SJVAPCD's contact information regarding further questions on the comment letter.

From: <u>Lundquist, Erik</u>
To: <u>Ahmad, Ejaz</u>

Subject:NOA - Scarlet Solar Energy ProjectDate:Friday, May 14, 2021 12:43:24 PM

CAUTION!!! - EXTERNAL EMAIL - THINK BEFORE YOU CLICK

Ejaz

Monterey-1

Monterey County has no comment on the referenced project, from a transportation or planning perspective.

Thank you,

Erik V. Lundquist, AICP
Chief of Planning
County of Monterey Housing & Community Development
1441 Schilling Place South, 2nd Floor, Salinas, CA 93901
831-755-5154 | lundquiste@co.monterey.ca.us

County of Monterey Housing and Community Development

Response Monterey-1

The commenter states that the County of Monterey has no comments on the Project. The comment is acknowledged by the County. The comment does not address the adequacy of the analysis in the Draft EIR; and therefore, no further response is required.

Ahmad, Ejaz

From: Samantha McCarty <SMcCarty@tachi-yokut-nsn.gov>

Sent: Thursday, July 15, 2021 8:45 AM

To: Ahmad, Ejaz

Cc: Shana Powers; Maria Gonzales; William K. Barrios; Paige Berggren **Subject:** Scarlet Solar Energy Project (County EIR No. 7230, CUP No. 3555)

CAUTION!!! - EXTERNAL EMAIL - THINK BEFORE YOU CLICK

Dear Ejaz,

Thank you for contacting the Santa Rosa Rancheria Tachi-Yokut Tribe regarding: Scarlet Solar Energy Project (County EIR No. 7230, CUP No. 3555). The Tribe has concerns with this project is requesting to have a monitor on site for all ground disturbance related to the project, be retained for a cultural presentation to be given to all construction staff and the landowner, and to have a curation agreement created for this project as well. If you have any questions, comments, and or concerns please contact the Santa Rosa Rancheria Cultural Department. Thank you.

Sincerely,

Tribe-

Samantha McCarty

Santa Rosa Rancheria Tachi-Yokut Tribe Cultural Specialist II SMcCarty@tachi-yokut-nsn.gov Office: (559) 924-1278 x 4091

Cell: (559) 633-6640

^{*}PLEASE KEEP ALL CULTURAL STAFF IN EMAILS UNLESS STATED OTHERWISE

Santa Rosa Rancheria Tachi-Yokut Tribe

Response Tribe-1

The commenter requested that a tribal monitor be on-site to monitor all ground disturbing activities and provide cultural presentations to construction staff and the landowner. The commenter also requested that the tribal monitor have a curation agreement with the County for the project.

As discussed in in the Initial Study and in Section 4.5, Cultural Resources of the Draft EIR, as part of preparation of the Cultural Resources Assessment prepared for the project, search of the Sacred Lands File was requested from the Native American Heritage Commission (NAHC) on August 5, 2016 to identify any known places of importance to Native Americans in or adjacent to the Project site. On August 11, 2016, the NAHC responded that no sacred lands or other Native American cultural resources were identified in the Project site and provided a contact list of eight Native American individuals or tribal organizations who may have knowledge of cultural resources. On August 17, 2016, consultation request letters were sent to the list of eight Native American individuals or tribal organizations who were on the list provided by the NAHC, which included the Santa Rosa Rancheria Tachi-Yokut Tribe. Follow up phone calls were made to the tribes on August 24, 2016. All eight tribes either declined to participate in the Native American consultation process, deferred to other tribes, or failed to respond. The Santa Rosa Rancheria Tachi-Yokut Tribe was among the tribes that failed to respond to the County's outreach efforts.

In addition, the four tribes, including the Santa Rosa Rancheria Tachi-Yokut Tribe, who had requested to be consulted pursuant to Assembly Bill 52 (AB 52) were notified of the Project on May 4, 2018. One tribe declined participation and the other tribes, including the Santa Rosa Rancheria Tachi-Yokut Tribe, failed to respond. The timeline established by AB 52 allows the lead agency to consider the information it receives during consultation in determining a project's impacts and mitigation measures for tribal cultural resources. Pursuant to AB 52, a tribe has 30 days after being notified of a project to request consultation. If the tribe does not respond in that period or writes to decline consultation, the lead agency has no further obligation.

The tribal consultation process provides tribal representatives the opportunity to provide early input on the Project, including potential impacts and appropriate mitigation for significant impacts to cultural tribal resources. Because the tribes, including the Santa Rosa Ranceria Tachi-Yokut Tribe, declined to provide input on the Project, the analysis in the Initial Study and Draft EIR were developed based on the results of the Cultural Resources Assessment prepared for the project, which took into consideration the information provided by the NAHC that no sacred lands or other Native American cultural resources are present on the Project site. Therefore, the Initial Study concluded that no impacts related to tribal cultural resources would occur and no mitigation for tribal cultural resources is required.

As discussed in Section 4.5, Cultural Resources of the Draft EIR, there is a low to moderate potential for buried archaeological resources to be discovered on the project site during construction. Therefore, Mitigation Measures CR-1(a) through CR-1(c) were developed to reduce impacts to archaeological resources. The mitigation measures developed for the Project (Mitigation Measure CR-1[b]) requires that a qualified archaeologist provide construction worker training and be contacted in the event of an unanticipated cultural resource discovery. In the unlikely event that unanticipated prehistoric archaeological resources are discovered on the project site, the appropriate tribe would be contacted, as required by Mitigation Measure CR-1(b). The approval of the qualified archaeologist is under the jurisdiction of the County, who is not obligated to use of a tribal monitor. The Santa Rosa Rancheria Tachi-Yokut Tribe, as well as the other tribes contacted as

County of Fresno

Scarlet Solar Energy Project

part of the tribal consultation process for the project, have provided no evidence that tribal cultural resources have a potential to be present on the project site, that on-going monitoring for tribal cultural resources is needed, or that monitoring, construction worker training, and curation services are required to be provided by a tribal monitor instead of by a qualified archaeologist. No changes to the Final EIR were made in response to this comment letter.

3 Minor Revisions to the Draft EIR

3.1 Introduction

This section includes minor edits to the Draft EIR. These modifications were made in response to the public comments received on the Draft EIR. Revisions herein do not result in new significant environmental impacts, do not constitute significant new information, and do not alter the conclusions of the environmental analysis. Changes are provided in revision marks (<u>underline</u> for new text and strikeout for deleted text).

3.2 Minor Changes and Edits to the Draft EIR

Section 4.3 Air Quality

Section 4.3.1.2, pages 4.3-7 and 4.3-8, of the Draft EIR is revised as follows:

San Joaquin Valley Air Pollution Control District

The Project site is located within the jurisdiction of the SJVAPCD, which regulates air pollutant emissions for all sources throughout the Air Basin other than motor vehicles. The SJVAPCD enforces regulations and administers permits governing stationary sources. The following regional rules and regulations would apply to the Project:

- Regulation VIII (Fugitive PM₁₀ Prohibitions) contains rules developed pursuant to USEPA guidance for "serious" PM₁₀ nonattainment areas. Rules included under this regulation limit fugitive PM₁₀ emissions from the following sources: construction, demolition, excavation, extraction and other earth moving activities, bulk materials handling, carryout and track-out, open areas, paved and unpaved roads, unpaved vehicle/equipment traffic areas, and agricultural sources. Table 4.3-3 contains control measures that the Applicants would be required to implement during Project construction activities pursuant to Rule 8021, Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities.
- Rule 2010 (Permits Required). This rule requires that any project constructing, altering, replacing, or operating any source operation, the use of which emits, may emit, or may reduce emissions to obtain an Authority to Construct (ATC) and a Permit to Operate (PTO). This rule applies to the construction and operation of new or modified processes and equipment, except those specifically exempted from permitting requirements.
- Rule 2201 (New and Modified Stationary Source Review). This rule applies to all new and modified stationary sources that would emit, after construction, a criteria pollutant for which there is an established NAAQS or CAAQS. The rule provides mechanisms by which an ATC can be granted without interfering with the basin's attainment with ambient air quality standards. These mechanisms offer methods to generate no net increases in emissions of nonattainment pollutants over specific thresholds as detailed in the rule.
- Rule 4101 (Visibility) limits the visible plume from any source to 20 percent opacity.
- Rule 4102 (Nuisance) prohibits the discharge of air contaminants or other materials in
 quantities that may cause injury, detriment, nuisance, or annoyance to any considerable
 number of persons or to the public or which endanger the comfort, repose, health, or safety of
 any such person or the public.

Scarlet Solar Energy Project

- Rule 4601 (Architectural Coatings) limits volatile organic compound (VOC) emissions from architectural coatings. This rule specifies architectural coatings storage, cleanup, and labeling requirements.
- Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations) limits VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations and applies to the manufacture and use of cutback asphalt, slow cure asphalt, and emulsified asphalt for paving and maintenance operations.
- Rule 9510 (Indirect Source Review) requires certain development projects to mitigate exhaust emissions from construction equipment greater than 50 horsepower to 20 percent below statewide average NO_x emissions and 45 percent below statewide average PM₁₀ exhaust emissions. This rule also requires applicants to reduce baseline emissions of NO_x and PM₁₀ emissions associated with operations by 33.3 percent and 50 percent respectively over a period of 10 years (SJVAPCD 2017b).

In addition to reducing a portion of the development project's impact on air quality through compliance with District Rule 9510, a developer can further reduce the project's impact on air quality by entering into a "Voluntary Emission Reduction Agreement" (VERA) with the District to address mitigation requirements under CEQA. Under a VERA, the developer may fully mitigate project emission impacts by providing funds to the District, which then are used by the District to administer emission reduction projects on behalf of the project proponent (SJVAPCD 2015b).

Executive Summary and Section 4.3 Air Quality

Mitigation Measure AQ-2 in Table ES-2 (page ES-11) and in Section 4.3.2.2 (pages 4.3-30 and 4.3-31) of the Draft EIR is revised as follows:

AQ-2 Further Reduction of NOX, PM10, and PM2.5 Emissions During Construction and Decommissioning, and PM10 Emissions During Operation and Maintenance. Prior to issuance of construction/grading permits for the Project, the Project Applicant shall provide evidence, to the County that Project construction and decommissioning emissions of NO_x, PM₁₀, and PM_{2.5}, and Project operation and maintenance emissions of PM₁₀ would not exceed the SJVAPCD significance thresholds. If the Project Applicant is unable to guarantee that Project construction and decommissioning emissions of NO_x, PM₁₀, and PM_{2.5}, and Project operation and maintenance emissions of PM₁₀ would not exceed the SJVAPCD significance thresholds, the Project Applicant shall enter into a Voluntary Emission Reduction Agreement (VERA) with the San Joaquin Valley Air Pollution Control District (SJVAPCD) to mitigate or reduce Project construction emissions of NO_x, PM₁₀, and PM_{2.5}, and Project operation and maintenance emissions of PM₁₀ beyond the requirements of Rule 9510 through the payment of fees (on a per-ton basis) to the SJVAPCD. The payment of fees shall be made to the SJVAPCD based on the fee schedule in the development mitigation contract and the amount of reduction necessary to offset project emissions below the SJVAPCD's thresholds. Prior to the issuance of construction/grading permits for the Project, the Project Applicant shall provide evidence to the County of a fully-executed VERA, should one be required.

Twelve months prior to initiation of decommissioning activities, the Project Applicant shall provide evidence, consisting of an air quality analysis based on final decommissioning plans and prepared by an air quality specialist, to the County demonstrating that Project decommissioning emissions would not exceed the SJVAPCD PM₁₀ significance thresholds of

15 tons per year. If the PM₁₀ emissions will exceed the SJVAPCD thresholds of significance of 15 tons per year, the Project Applicant shall enter into a new VERA with the SJVAPCD to offset the decommissioning emissions below the thresholds of significance. Prior to the issuance of permits for decommissioning activities, the Project Applicant shall provide evidence to the County of the new fully-executed VERA, should one be required.

