

County of Fresno

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

Planning Commission Staff Report Agenda Item No. 5 October 26, 2017

SUBJECT: Unclassified Conditional Use Permit (CUP) No. 3586

Unclassified Conditional Use Permit (CUP) No. 3587

Amend Unclassified Conditional Use Permit (UCUP) Nos. 3452 and 3453 for the Great Valley Solar 4 Project, formerly RE Tranquillity 2 and 3 LLC, by removing parcels APN 038-320-02T, 038-320-29ST, 038-320-37ST, and 038-320-38ST from the project boundaries, resulting in a total reduction of project area by 120 acres, in the AE-20 (Exclusive

Agricultural, 20-acre minimum parcel size) Zone District.

LOCATION: The Project sites are located approximately seven miles southwest of

the community of Tranquillity, 5.5 miles east of Interstate 5, and five miles north of the community of Three Rocks; are comprised of approximately 323.5 acres in western unincorporated Fresno County, and encompass 12 parcels located south of West Manning, north of West Nebraska Avenue, east of South San Bernardino Avenue, and

west of South San Benito Avenue. (SUP. DIST. 1)

APPLICANT/

OWNER: Great Valley Solar 4, LLC

STAFF CONTACTS: Marianne Mollring, Senior Planner

(559) 600-4597

Chris Motta, Principal Planner

(559) 600-4497

RECOMMENDATION:

- Move to approve the reduction in project boundaries for Unclassified Conditional Use Permit No. 3586 reducing the project site acreage by 80 acres; and
- Move to approve the reduction in project boundaries for Unclassified Conditional Use Permit No. 3587 reducing the project site acreage by 40 acres; and
- Direct the Secretary to prepare a Resolution documenting the Commission's action.

EXHIBITS:

- 1. Conditions of Approval for Unclassified Conditional use Permit Nos. 3586 and 3587
- 2. Mitigation Monitoring and Reporting Program, Conditions of Approval, and Project Notes (MMRP/COA) for UCUP No. 3452 and UCUP No. 3453
- 3. Location Map
- 4. Existing Zoning Map
- 5. Existing Land Use Map
- 6. Assessor's Parcel Map
- 7. Site Plan
- 8. Operational Statements

ENVIRONMENTAL ANALYSIS:

California Environmental Quality Act (CEQA)

The proposed use was evaluated by Environmental Impact Report (EIR) No. 6730. The EIR was adopted by the Planning Commission with approval of Unclassified Conditional Use Permit Applications No. 3451 through 3458 on October 9, 2014. Based on the project description, evaluation, and comments, staff has made the determination that no substantial change or new information of substantial importance has come to light. Additional environmental analysis is not required for this project under Section 15162 of the California Environmental Quality Act.

Section 15162 of the California Environmental Quality Act states that no subsequent Environmental Impact Report (EIR) shall be prepared unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

- Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- 3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was adopted, shows any of the following:
 - a. The project will have one or more significant effects not discussed in the previous FIR:
 - b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

- c. Mitigation Measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the Mitigation Measure or alternative; or
- d. Mitigation Measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the Mitigation Measure or alternative.

PUBLIC NOTICE:

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

PROCEDURAL CONSIDERATIONS:

An Unclassified Conditional Use Permit (CUP) is required to allow solar energy generation facilities in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District.

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

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

BACKGROUND INFORMATION:

The project was permitted by RE Tranquillity 2 and RE Tranquillity 3 on October 9, 2014, under UCUP No. 3452 and UCUP No. 3453, respectively. Great Valley Solar 4, LLC purchased the sites from RE Tranquillity in July 2017, and they will be developing and operating the sites.

The original project, UCUP Nos. 3451 through 3458, included the proposed construction, operation and maintenance, and decommissioning of a proposed solar power generation facility, with the capacity to generate up to 400 MW by converting sunlight into electrical energy, and a switching station to be owned and operated by Pacific Gas and Electric Company (PG&E).

Due to changes in the demand for electricity by power purchasers, as well as optimizations made by the engineering team, the new owner/applicant, Great Valley Solar 4, LLC, has decided not to install solar power generation equipment on two parcels (APN 038-320-29ST and 038-320-02T), 80 acres, within the approved boundaries of UCUP No. 3452; and on two parcels (APN 038-320-37ST and 038-320-38ST), 40 acres, within the approved boundaries of UCUP No. 3453. They desire to remove these parcels from the boundaries of the project areas.

Other than the removal of the parcels, all other project components and details will remain unchanged as described in the previously-approved project operational statement. Because the only change requested by this UCUP modification is to remove land that was already within the original project's approved development footprint, no new or more severe impacts will result from these benign changes, and if anything, the reduction in acreage will reduce the scope and severity of any potential environmental impacts previously identified in the project's Mitigation Measures and Conditions of Approval.

The currently permitted project site (UCUP Nos. 3453/3453) is located on 12 parcels totaling approximately 323.5 acres, in western unincorporated Fresno County. The site is zoned AE-20 (Exclusive Agricultural, 20-acre minimum parcel size). It is located approximately seven miles southwest of the community of Tranquillity, 5.5 miles east of Interstate 5, and five miles north of the community of Three Rocks. It is located east of South San Bernardino Avenue, and south of West Floral Avenue. Access to the site would be provided from South San Bernardino Avenue. The project site does not currently receive water from Westlands Water District and has not been irrigated in the last ten years. Irrigation is not allowed on any of the land within the project site.

PROJECT DESCRIPTION SUMMARY:

The applicant's request is to remove two parcels (APN 038-320-29ST and 038-320-02T), 80 acres, from the approved boundaries of UCUP No. 3452 (remainder 80.2 acres) and two parcels (APN 038-320-37ST and 038-320-38ST), 40 acres, from the approved boundaries of UCUP No. 3453 (remainder 123.3 acres).

SITE DEVELOPMENT AND OPERATIONAL INFORMATION:

Criteria	Existing	Proposed
General Plan Designation	Agriculture	No change
Zoning	AE-20 (Exclusive Agricultural, 20-acre minimum parcel size)	No change
Parcel Size	UCUP No. 3452 (160.2 acres) APN Nos. 038-320-01ST, 02T, 06ST, and 29ST; and	Remove 80 acres from the project boundaries of UCUP No. 3452 (APN Nos. 038-320-02T; 038-320-29T)
	UCUP No. 3453 (163.3 acres) APN Nos. 038-320-16T, 24ST, 25ST, 27ST, 28ST, 30ST, 37ST, and 38ST	Remove 40 acres from the project boundaries of UCUP No. 3453 (APN Nos. 038-320-37ST; and 038-320-38ST)
Project Site	The existing land use of the site is predominantly dry-farmed agriculture. For the past ten years, the site intermittently has been in low-yield agricultural production (tilled, seeded, and harvested for winter wheat and oats) or disked twice a year and left fallow.	No change
Structural Improvements	None	No change

Criteria	Existing	Proposed
Nearest Residence	The nearest homes are located approximately 2,600 feet to the south, along W. Nebraska Avenue and 4,800 feet to the southwest, along W. Nebraska Avenue.	No change
Surrounding Development	The project site is located in a predominantly agricultural area used for solar power generation, non-irrigated crops and a cotton gin operation. Roadways surrounding the site include West Floral Avenue, South San Bernardino Avenue, West Nebraska Avenue, and South Ohio Avenue. The closest community to the site is Three Rocks, which is located approximately five miles to the south. The next closest community, Tranquillity, is located approximately seven miles northeast of the site.	No change
Operational Features	N/A	N/A
Employees	N/A	N/A
Customers	N/A	N/A
Traffic Trips	Seasonal trips associated with harvesting during years with sufficient rainfall to support a crop, or trips associated with the transport of animals for grazing in years without sufficient rainfall to support harvesting	No change
Lighting	N/A	N/A
Hours of Operation	N/A	N/A

EXISTING VIOLATION (Y/N) AND NATURE OF VIOLATION: N

CUP FINDINGS ANALYSIS for UCUP Nos. 3586 and 3587:

UCUP Nos. 3586 and 3587 were previously evaluated as UCUP Nos. 3452 and 3453 in EIR No. 6730, under CEQA.

The EIR was adopted by the Planning Commission with approval of Unclassified Conditional Use Permit Applications No. 3451 through 3458 on October 9, 2014. Based on the project description, evaluation, and comments, staff has made the determination that no substantial change or new information of substantial importance has become known. Additional environmental analysis is not required for this project under Section 15162 of the California Environmental Quality Act.

The applicant, Great Valley Solar 4, LLC, has decided not to install solar power generation equipment on two parcels (APN 038-320-29ST and 038-320-02T), 80 acres, within the approved boundaries of UCUP No. 3452; and on two parcels (APN 038-320-37ST and 038-320-38ST), 40 acres, within the approved boundaries of UCUP No. 3453. Great Valley Solar 4, LLC, has requested to modify the boundaries of UCUP No. 3452 and 3453 to remove these parcels from the project area.

Great Valley Solar 4, LLC filed two separate CUP applications with the County. The findings provided in this Staff Report apply to both CUP applications.

<u>Finding 1</u>: 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 Street Side: 35 feet Rear: 20 feet	None	Yes
Building Heights	Main: 35 feet Accessory: 35 feet	None	Yes
Lot Area, Width, Depth, Ratio, Frontage, Density, and Coverage	No requirement	N/A	N/A
Separation Between Buildings	No requirement	N/A	N/A
Signs	No requirement	N/A	N/A
Height of Fences	Six feet	N/A	N/A
Height of Other Structures	35 feet	N/A	N/A
Wall Requirements	No requirement	N/A	N/A
Parking	No requirement	N/A	N/A

	Current Standard:	Proposed Operation:	Is Standard Met (y/n)
Access	No requirements for lots greater than five (5) acres – Fresno County Zoning Ordinance Section 816.5.J	N/A	N/A
Turnarounds	No requirement	N/A	N/A
District Size	No requirement	N/A	N/A
Septic Separations	No requirement	N/A	N/A
Landscaping	No requirement	N/A	N/A
Plan Lines	No requirement	N/A	N/A

Reviewing Agency/Department Comments Regarding Site Adequacy:

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

Analysis:

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

Recommended Condition of Approval:

See the previously approved Conditions of Approval included in the Mitigation Monitoring and Condition Compliance Matrix, for UCUP No. 3451 through 3458, attached as Exhibit 2, to remain in effect for the parcels remaining in the boundaries of Unclassified Conditional Use Permit Nos. 3452 and 3453, with this application.

Conclusion:

Finding 1 can be made.

Finding 2: That the site for the proposed use r

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

		Existing Conditions	Proposed Operation
State Route	No	N/A	N/A
Private Road	No	N/A	N/A

		Existing Conditions	Proposed Operation
Public Road Frontage	Yes	County roadway easements cross the project site.	All easements will be retained; No change
Direct Access to Public Road	No	Access to be provided from South San Bernardino Avenue (private road)	No change
Road ADT	ı	N/A	N/A
Road Classification		N/A	N/A
Road Width		N/A	N/A
Road Surface		South San Bernardino Avenue: paved	No change
Traffic Trips		N/A	N/A
Traffic Impact Study (TIS) Prepared	No	N/A	N/A
Road Improvements Required		N/A	N/A

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

California Department of Transportation: No comments.

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

Analysis:

The project site has private road frontage along South San Bernardino Avenue. Vehicular traffic will not increase do to this project.

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

Recommended Conditions of Approval:

See the previously approved Conditions of Approval included in the Mitigation Monitoring and Condition Compliance Matrix, for UCUP No. 3451 through 3458, attached as Exhibit 2, to remain in effect for the parcels remaining in Unclassified Conditional Use Permit Nos. 3452 and 3453, with this application.

Conclusion:

Finding 2 can be made.

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

Surrou	Surrounding Parcels					
	Size:	Use:	Zoning:	Nearest Residence:		
North	197.49 ac	Solar power generation	AE-20 (all)	N/A		
South	220.00 ac	Non-irrigated agricultural land	AE-20 (all)	A single-family residence is located south of the site at West Nebraska Avenue.		
East	622.68 ac	Non-irrigated agricultural land	AE-20 (all)	Approximately two miles southeast of the site		
West	20.00 ac 10.00 ac 10.00 ac	Non-irrigated agricultural land	AE-20 (all)	N/A		

Reviewing Agency/Department Comments:

California Department of Public Health, Drinking Water Program (CDPH): No comment.

Fresno County Department of Agriculture: No comment.

California Division of Oil, Gas, & Geothermal Resources, Coalinga: No comment.

No other comments specific to the effects on abutting property were expressed by reviewing Agencies or Departments.

Analysis:

The new owner/operator, Great Valley Solar 4, LLC, has decided not to install solar power generation equipment on two parcels (APN 038-320-29ST and 038-320-02T), 80 acres, within the approved boundaries of UCUP No. 3452 and on two parcels (APN 038-320-37ST and 038-320-38ST), 40 acres, within the approved boundaries of UCUP No. 3453. They desire to remove these parcels from the boundaries of the project area.

Based on the above information and with continued adherence to the approved Mitigation Measures, Conditions of Approval for UCUP Nos. 3452 and 3453, staff believes the project will not have an adverse effect upon surrounding properties.

Recommended Conditions of Approval:

See the previously approved Conditions of Approval included in the Mitigation Monitoring and

Condition Compliance Matrix, for UCUP No. 3451 through 3458, attached as Exhibit 2, to remain in effect for the parcels remaining in Unclassified Conditional Use Permit Nos. 3452 and 3453, with this application.

Conclusion:

Finding 3 can be made.

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

Relevant Policies:	Consistency/Considerations:
General Plan Policy LU-A.13: County shall require buffers between proposed non-agricultural uses and adjacent agricultural operations.	The project site will preserve 120 acres of land for potential agricultural use thereby increasing the buffer between the agricultural parcels and the solar facility.

Reviewing Agency Comments:

County Department of Agriculture: No Comments.

Analysis:

The new owner/operator, Great Valley Solar 4, LLC, has decided not to install solar power generation equipment on two parcels (APN 038-320-29ST and 038-320-02T), 80 acres, within the approved boundaries of UCUP No. 3452 and on two parcels (APN 038-320-37ST and 038-320-38ST), 40 acres, within the approved boundaries of UCUP No. 3453. They desire to remove these parcels from the boundaries of the project area.

The removal of 120 acres from the boundaries of the solar power generation facility will preserve the property for agricultural use. As discussed above, this proposal is consistent with the General Plan Policies applicable to the project.

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

Recommended Conditions of Approval:

None.

Conclusion:

Finding 4 can be made.

PUBLIC COMMENT:

None.

CONCLUSION:

Staff believes the required Findings for granting the Unclassified CUP Applications can be made based on the factors cited in the analysis.

The Mitigation Measures, Conditions of Approval, and Project Notes included in the Mitigation Monitoring and Condition Compliance Matrix for the parcels remaining within the boundaries of Unclassified Conditional Use Permit Nos. 3452 and 3453 will remain in place for the duration of those Unclassified Conditional Use Permit terms.

There will be no Mitigation Measures, Conditions of Approval or Project Notes for the parcels removed from the boundaries of Unclassified Conditional Use Permit Nos. 3452 and 3453.

Staff therefore recommends approval of Unclassified CUP Application Nos. 3586 and 3587, modifying the boundaries of Unclassified Conditional Use Permit Nos. 3452 and 3453.

PLANNING COMMISSION MOTIONS:

Recommended Motion (Approval Action)

- Move to determine the required Findings can be made and move to approve CUP
 Application No. 3586 allowing a reduction in project boundaries subject to the Conditions of
 Approval listed in Exhibit 1; and
- Move to determine the required Findings can be made and move to approve CUP
 Application No. 3587 allowing a reduction in project boundaries subject to the Conditions of
 Approval listed in Exhibit 1; and
- Direct the Secretary to prepare a Resolution documenting the Commission's action.

Alternative Motion (Denial Action)

- Move to determine that the required Findings cannot be made (state basis for not making the Findings) and move to deny CUP Application Nos. 3586 and 3587; and
- Direct the Secretary to prepare a Resolution documenting the Commission's action.

Recommended Conditions of Approval and Project Notes:

See attached Exhibit 1.

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Unclassified Conditional Use Permit No. 3586 Conditions of Approval

	Conditions of Approval
1.	Development shall be in substantial compliance with the site plan, elevations, and revised Operational Statement as approved by the Planning Commission.
2.	All prior Mitigation Measures, Conditions of Approval, and Project Notes applicable to UCUP No. 3452 shall remain in full force and effect for the subject project boundary modification.

Unclassified Conditional Use Permit No. 3587 Conditions of Approval

	Conditions of Approval
1.	Development shall be in substantial compliance with the site plan, elevations, and revised Operational Statement as approved by the Planning Commission.
2.	All prior Mitigation Measures, Conditions of Approval, and Project Notes applicable to UCUP No. 3453 shall remain in full force and effect for the subject project boundary modification.

Conditions of Approval reference recommended Conditions for the project.

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EXHIBIT 1

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

Introduction

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

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

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

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

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

Program Management

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

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

Condition Compliance Matrix

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

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

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Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
MITIGATION MEASURES (co			- compiler	9
Air Quality				
Impact 4.4-1: The Solar Facility would violate an air	Mitigation Measure 4.4-1a: Solar Facility Fugitive Dust Control Measures.	Applicants and/or their	Fresno County	Prior to grading
quality standard or contribute substantially to an existing or projected air quality violation.	Prior to grading on site, the Applicants shall submit a Solar Facility Fugitive Dust Control Plan to the SJVAPCD for review and approval. The Fugitive Dust Control Plan shall be applicable to only the construction and decommissioning phases and shall meet the requirements in Table 8021-1 and incorporate the Regulation VIII recommended fugitive dust control measures to reduce PM ₁₀ emissions to the extent practical, including but not limited to:	designees to implement measure as defined.	Department of Public Works and Planning, Development Services Division, and/or its designee	activities.
	 All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover. 			
	Stockpiles of excavated soils on the Solar Facility site shall be wetted during daily construction activities and shall be covered at the end of each workday, during weekends, and periods of extended storage.			
	All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.			
	All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water, dust palliatives, or by presoaking.			
	 When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained. 			
	 All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. 			
	Use of blower devices is expressly forbidden.			
	 Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. 			
	Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.			
	Limit traffic speeds on unpaved roads to 15 mph.			
	Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope toward the road of greater than one percent.			
	Install wind screens (fabric incorporated into fencing) at the windward side of active construction areas.			
	Suspend excavation and grading activity if dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or off-site property.			

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
MITIGATION MEASURES (d	cont.)			
Air Quality (cont.)				
Impact 4.4-1 (cont.)	 After active clearing, grading, and earth moving is completed within any portion of the site, the following dust control practices shall be implemented: 			
	 Once initial leveling and vegetation removal has been completed within a given area, that portion of the site shall be immediately treated with a dust suppressant (water or palliative). 			
	 Dependent on specific site conditions (season and wind conditions), revegetation shall occur in those areas where planned as soon as practical. 			
	 All unpaved road areas shall be treated with a dust suppressant or graveled as soon as possible to prevent excessive dust. 			
	Mitigation Measure 4.4-1b: Solar Facility Construction/Decommissioning Equipment Exhaust Control Measures.	Applicants and/or their designees to	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	ı ,
	During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications. Equipment maintenance records and equipment design specification data sheets shall be kept onsite during construction.	implement measure as defined.		
	 Electricity from power poles shall be used whenever practicable instead of temporary diesel or gasoline powered generators to reduce the associated emissions. 			
	To reduce construction vehicle (truck) idling while waiting to enter/exit the site, the contractor shall submit a traffic control plan that will describe in detail safe detours to prevent traffic congestion to the best of the Solar Facility's ability, and provide temporary traffic control measures during construction activities that will allow both construction and on-street traffic to move with less than 5-minute idling times.			
	Construction equipment will use only California certified diesel or gasoline fuels.			
	The Applicant will utilize construction equipment that is at the Tier 3 emission level (Appendix E).			
	Mitigation Measure 4.4-1c: Valley Fever Training.	Applicants and/or their	Fresno County	, activities.
	Prior to ground disturbance activities, the project operator shall provide evidence to the Fresno County Public Works and Planning Department that the project operator and/or construction manager has developed a "Valley Fever Training Handout," training, and schedule of sessions for education to be provided to all construction personnel. All evidence of the training session materials, handout(s), and schedule shall be submitted to the Fresno County Public Works and Planning Department within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews will come to the site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Fresno County Public Works and Planning Department regarding the "Valley Fever Training Handout," and Session(s) shall include the following:	designees to implement measure as defined.	Department of Public Works and Planning, Development Services Division, and/or its designee	
	a) A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session.			

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

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
immitis spores.				

MITIGATION MEASURES (cont.)

Biological Resources

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

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

Preconstruction surveys shall be conducted by a qualified biologist for the presence of San Joaquin kit fox dens within 14 days prior to commencement of construction activities. The surveys shall be conducted in areas of suitable habitat for San Joaquin kit fox. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur within 14 days prior to that portion of the Solar Facility site is disturbed. Surveys shall utilize the U.S. Fish and Wildlife Service (1999a) San Joaquin Kit Fox Survey Protocol for the Northern Range. If no potential San Joaquin kit fox dens are present, no further mitigation is required under this measure. If potential dens are observed and avoidance is determined to be feasible by a qualified biologist in consultation with the Project Owner and the County (as defined in CEQA Guidelines §15364 consistent with the USFWS (1999) Standardized Recommendations for Protection of the San Joaquin Kit Fox), the following minimum buffer distances shall be established prior to construction activities:

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

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

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

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

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

Applicants and/or their designees to implement measure as defined.

Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee

14 days prior to commencement of construction activities.

Applicants and/or their designees to implement measure as defined.

Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee Prior to construction.

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	status wildlife species that may occur on-site, including burrowing owl and Swainson's hawk.			
MITIGATION MEASURES (cont.)			
Biological Resources (cont				
Impact 4.5-1 (cont.)	The program shall also discuss each species' legal protection status, the definition of "take" under the federal and state Endangered Species Acts, measures the Solar Facility operator is implementing to protect the species, reporting requirements, specific measures that each worker shall employ to avoid take of wildlife species, and penalties for violation of the federal or state Endangered Species Act. An acknowledgement form signed by each worker indicating that environmental training has been completed would be kept on record. A sticker shall be placed on hard hats indicating that the worker has completed the environmental training. Construction workers shall not be permitted to operate equipment within the construction areas unless they have attended the training and are wearing hard hats with the required sticker. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms shall be submitted to Fresno County Public Works and Planning Department. The construction crews and contractor(s) shall be responsible for unauthorized impacts from construction activities to sensitive biological resources that are outside the areas defined as subject to impacts by Solar Facility permits.			
	Mitigation Measure 4.5-1c: Avoidance and Protection of Biological Resources.	Applicants and/or their		During construction, operation and maintenance.
	During construction, operation and maintenance, decommissioning of the Solar Facility, the Solar Facility operator and/or contractor shall implement the following general avoidance and protective measures to protect San Joaquin kit fox and other special-status wildlife species:	designees to implement measure as defined.	Department of Public Works and Planning, Development Services	
	 All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid special status species where possible. Construction-related activities outside of the impact zone shall be avoided. 		Division, and/or its designee	
	 The Solar Facility operator shall limit the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. These areas shall be flagged and disturbance activities, vehicles, and equipment shall be confined to these flagged areas. 			
	 Spoils shall be stockpiled in disturbed areas that lack native vegetation. Best Management Practices shall be employed to prevent erosion in accordance with the Project's approved Stormwater Pollution Prevention Plan. All detected erosion shall be remedied within two days of discovery or as described in the Stormwater Pollution Prevention Plan. 			
	• To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches with a 2-foot or greater depth shall be covered with plywood or similar materials at the close of each working day, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected by the Lead Biologist or approved biological monitor for trapped animals. Open trenches, holes, or excavations that could trap wildlife shall be inspected daily by the environmental compliance monitor. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If a listed species is trapped, the			

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	USFWS and/or CDFW shall be contacted immediately.			
MITIGATION MEASURES (cor	nt.)			
Biological Resources (cont.)				
impact 4.5-1 (cont.)	All construction pipes, culverts, or similar structures with a 4-inch or greater diameter that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until the Lead Biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated by the Lead Biologist. The Lead Biologist shall have the appropriate state or federal permits necessary to capture and/or relocate non-listed special-status species potentially occurring on the Project site. Capture and/or relocation of a state or federally listed species shall not occur without prior consultation with, and approval from, the applicable resource agencies.			
	No vehicle or equipment parked on the Solar Facility sites shall be moved prior to inspecting the ground beneath the vehicle or equipment for the presence of wildlife. If present, the animal shall be left to move on its own.			
	 Vehicular traffic to and from the Solar Facility sites shall use existing routes of travel. Cross country vehicle and equipment use outside of the Project properties shall be prohibited. A speed limit of 20 miles per hour shall be enforced within all Solar Facility areas during construction. 			
	A long-term trash abatement program shall be established for construction, operations, and decommissioning of the Solar Facility. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to wildlife such as common raven (Corvus corax), coyote (Canis latrans), and feral dogs.			
	Workers shall be prohibited from bringing pets and firearms to the Solar Facility area and from feeding wildlife.			
	Intentional killing or collection of any special-status wildlife species shall be prohibited.			
	 Fencing of the Solar Facility site shall incorporate wildlife-friendly fencing design. Fencing plans may use one of several potential designs that would allow SJKF to pass through the fence while still providing for Solar Facility security and exclusion of other unwanted species (i.e., domestic dogs and coyotes). Raised fences or fences with entry/exit points of at least 6 inches in diameter spaced along the bottom of the fence to allow species such as San Joaquin kit fox access into and through the Solar Facility site would be appropriate designs. 			
Impact 4.5-3: The Solar Facility could have a substantial adverse direct or indirect, non-collision- related impact on burrowing owl, Swainson's hawk, and other raptors.	Implementation of Mitigation Measures 4.5-1b through 4.5-1c. Mitigation Measure 4.5-3a: Preconstruction Burrowing Owl Surveys. Prior to the initiation of equipment staging or ground-disturbing activities, biological surveys shall be performed within 14 days of such activities to ensure that burrowing owls are not impacted by construction activities. Given the large size of the construction site, multiple or ongoing burrowing owl surveys may be required during successive phases of the Project (e.g., between successive construction in different areas). To protect burrowing owls, the following conditions shall be met	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	14 days prior to the initiation of equipment staging or ground-disturbing activities.

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
	prior to construction within each successive work area:			
MITIGATION MEASURES (c	ont.)		,	
Biological Resources (cont				
Impact 4.5-3 (cont.)	• A qualified wildlife biologist (i.e., a wildlife biologist with previous burrowing owl survey experience) shall conduct pre-construction surveys on the Solar Facility site and immediate vicinity only in areas of the site with suitable burrowing habitat to locate any active breeding or wintering burrowing owl burrows no fewer than 14 days prior to ground-disturbing activities (i.e., vegetation clearance, grading, tilling). The survey methodology shall be consistent with the methods outlined in the CDFW (2012) Staff Report on Burrowing Owl Mitigation and shall consist of walking parallel transects 7 to 20 meters apart, noting any potential burrows with fresh burrowing owl sign or presence of burrowing owls. As each burrow is investigated, biologists shall also look for sign of San Joaquin kit fox. Copies of the survey results shall be submitted to CDFW and the Fresno County Public Works and Planning Department. The surveys can be conducted concurrently with San Joaquin kit fox surveys.			,
	• If burrowing owls are detected on-site, no ground-disturbing activities, such as vegetation clearance or grading, shall be permitted within a buffer of no fewer than 200 meters (660 feet) from an active burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW with the exception noted below. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with CDFW.			
	The Project site shall be resurveyed to locate any breeding or wintering burrowing owls in the event that ground disturbing construction activities lapse for a period of 14 days after the most recent preconstruction survey.			
	 If burrow avoidance is infeasible during the non-breeding season, a qualified biologist shall implement a passive relocation program in accordance the CDFW (2012) Staff Report on Burrowing Owl Mitigation. 			
	If passive relocation is required, a qualified biologist shall prepare a Burrowing Owl Exclusion and Mitigation Plan and Mitigation Land Management Plan in accordance with CDFW 2012 Staff Report on Burrowing Owl Mitigation and for review by CDFW prior to passive relocation activities. The Mitigation Land Management Plan shall include a requirement for the permanent conservation of off-site Burrowing Owl Passive Relocation Compensatory Mitigation.			
	Burrowing Owl Passive Relocation Compensatory Mitigation. If passive relocation is required, the Project proponent shall implement the Mitigation Land Management Plan and permanently conserve in a conservation easement off-site habitat suitable for burrowing owl at ratio of 6 acres per passively relocated burrowing owl pair, not to exceed the size of the final project footprint. Land identified to mitigate for passive relocation of burrowing owl may be combined with other off-site mitigation requirements of the Project if the compensatory habitat is deemed suitable to support the species. The Passive Relocation Compensatory Mitigation habitat shall be approved by CDFW. If the Project is located within the service area of a CDFW-approved burrowing owl conservation bank, the Project proponent may purchase available burrowing owl			

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
L	conservation bank credits in lieu of placing off-site habitat into a conservation easement.			

MITIGATION MEASURES (cont.)

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

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
MITIGATION MEASURES (cor	nt.)			
Biological Resources (cont.)				
Impact 4.5-5 (cont.)	 Mitigation Measure 4.5-5b: Collision Reduction Strategy. The Applicant shall implement the following measures to reduce the risk of bird collisions with PV panels. Installation of visual deterrents or cues to encourage bird avoidance of the Project site. These deterrents will be made of a material that is both reflective and highly visible, such that the material reflects ambient light and is stimulated by air movement. The effect of installation will create the visual impression of continuous and varied movement, which has been shown as an avian deterrent in agricultural applications. Example of the types of material that could be used include plastic compact discs and reflective tape. Within 30 days after project commissioning, materials will be installed in 50-acre blocks to achieve coverage of a total of 200 acres within the Solar Facility on a 3-month trial basis to examine panel performance issues. Following the initial 3-month period, visual deterrents will either be adjusted to reduce performance issues and reexamined on continuing 3-month basis, or if adjustments are not deemed necessary to improve panel performance, deployed on the remainder of the site and maintained for the life of the project or until determined infeasible (based on the definition of "feasible" in CEQA Guidelines §15364) or ineffective by the Project owner in consultation with CDFW and the County. Panels shall include, if feasible, a light-colored, UV-reflective, or otherwise non-polarizing outline, frame, grid, or border, which has been shown to substantially reduce panel attractiveness to aquatic insects (Horvath, 2010) and may reduce avian mortality by avoiding collisions with panel faces (NFL, 2014). 	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction.
Impact 4.5-7: The Solar Facility could conflict with local policies protecting biological resources.	Implementation of Mitigation Measures 4.5-1a through 4.5-1c and 4.5-3a and 4.5-3b.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	Prior to and during construction.
Impact 4.5-8: The Project could cause a cumulatively considerable contribution to a significant cumulative effect to migratory birds related to the introduction of potential collision hazards.	Mitigation Measure 4.5-8: Off-site Avian Predation Reduction. The Project Owner shall partner with CDFW, the Rabies and Animal Control Program of the Environmental Health Division in Fresno County, and/or a similar program to fund existing feral cat control programs to be targeted within 10 miles of the Mendota Wildlife Area. The first project owner to be issued a notice to proceed shall fund the program in the amount of \$25,000 within 6 months of the notice to proceed. The obligation set forth in this measure shall not apply to the PG&E Switching Station.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During Solar Facility operation

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

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

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
of hazardous materials.	and protective of human health and the environment. The plan shall have the following elements:			
MITIGATION MEASURES (cor	nt.)			
Hazards and Hazardous Mate	rials (cont.)			
Impact 4.10-1 (cont.)	Worker health and safety provisions and handling protocol – These measures shall address isolating workers from the CdTe during the recovery of broken PV panels and shall include the following requirements:			
	 Workers shall wear gloves during the handling of broken pieces of PV panels to prevent cuts to the workers. 			
	 If broken pieces are separated from the PV panel, the pieces shall be collected and the areal extent of the collected pieces compared to the broken area on the PV panel to ensure that the pieces have been accounted for. 			
	 The broken pieces shall be placed in drums, sealed boxes, puncture-proof bags, or equivalent containers so as to prevent the broken pieces from tearing the containers and being re-released into the environment. 			
	Timing of removal – The PV panels shall be inspected for breakage prior to each washing PV panel event. In the event that broken PV panels are discovered, the broken PV panels and any pieces shall be removed prior to washing any adjacent PV panels so as to prevent wash water from spreading CdTe.			
	Recycling or disposal requirements – If available, broken panels shall be sent to a recycling or CdTe PV panel manufacturing facility licensed for the recycling of CdTe PV panels, if recycling is unavailable, the broken panels shall be sent to a landfill licensed to receive broken CdTe PV panels.			
	The plan shall be submitted to the County for review and approval prior to delivery of CdTecontaining PV panels to the Project site and shall be distributed to all construction crew members and temporary and permanent employees prior to construction and operation of the Project. All available data from the panel manufacturer(s) regarding materials used and safety procedures and/or concerns shall be appended to the plan to assist the County with identifying potential hazards and abatement measures.			
Hydrology and Water Quality				
Impact 4.11-2: Dewatering during construction activities could release previously contaminated groundwater to surface water channels and/or increase sediment loading to surface water channels through overland discharge and subsequent erosion, both processes	Mitigation Measure 4.11-1: If degraded soil or groundwater is encountered during excavation (e.g., there is an obvious sheen, odor, or unnatural color to the soil or groundwater), the Project Owner and/or its contractor(s) shall excavate, segregate, test, and dispose of degraded soil or groundwater in accordance with state hazardous waste disposal requirements.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During construction.

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

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

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
MITIGATION MEASURES (cor	rt.)			
Hydrology and Water Quality	(cont.)			
Impact 4.11-3: Construction and operation and maintenance of the Solar Facility could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such	Mitigation Measure 4.11-2: Groundwater Monitoring and Mitigation Plan. Prior to extracting groundwater at the Solar Facility site or from nearby wells, a well survey and pump test, as well as a Groundwater Monitoring and Mitigation Plan, shall be prepared. The Plan is not required if groundwater is not used for the Solar Facility. These documents shall be prepared by a qualified professional geologist, hydrogeologist, or civil engineer registered in the State of California. The documents shall be submitted by the Applicants to the County of Fresno (County) for approval, and to the CVRWQCB and/or other agencies as deemed appropriate by the County for review and comment.	Applicants and/or their designees to implement measure as defined.	Department of Public construction.	
that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.	Well Survey and Pump Test(s): For any existing and/or new groundwater well(s) that would be installed and/or used for the Project: a pump-test shall be conducted during the dry season (June through October). At a minimum, the pump test shall establish (or confirm):			
	 The maximum sustained yield of the well (or the maximum sustained pumping rate that would be used during construction and operation); 			
	The drawdown depth and corresponding stable groundwater elevation;			
	The area of influence of the well.			
	A well survey shall be conducted to locate nearby, existing groundwater wells that are or will be in active use, and that could potentially be impacted by the Project well(s) based upon the information gathered from the pump-test(s). The well survey shall include detailed information for each identified well, including but not limited to: date of installation, completed depth, screened interval, and any available information on pumping rate and corresponding static groundwater level.			
	Groundwater Monitoring and Mitigation Plan: This Plan shall provide a detailed methodology for monitoring background and Project area groundwater levels and flow. At least one monitoring well shall be established between the Project well(s) and all identified wells (above) in reasonable proximity (e.g., within a distance equivalent to the diameter of the radius of influence of the Project well[s]) to the Project area. Monitoring shall be performed during pre-construction, construction, and operation and maintenance of the Project, with the intent to establish pre-construction and Project-related groundwater level trends that can be quantitatively compared against observed and/or simulated trends near the Project pumping wells and near potentially affected existing wells, if any. Based on the existing and/or proposed Project well location(s), and for the estimated maximum pumping rate, the pre-construction monitoring shall demonstrate that less than 1-foot of drawdown would occur at the Project area boundary location nearest the neighboring well(s).			
	The Groundwater Monitoring and Mitigation Plan shall include a schedule for submittal of quarterly data reports by the Project Owner to the Fresno County Environmental Health Department for the duration of the monitoring period, which shall include the entire duration of construction and one year post-construction. The monitoring reports shall include data from the construction and operation of all Power Blocks in the active construction or operational phase. These quarterly data reports shall be prepared and submitted to the County for review and approval, and shall include:			

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

Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
MITIGATION MEASURES (cor	nt.)	odina nagara na na nagara na na nagara na na nagar		
Noise (cont.)				
Impact 4.14-1 (cont.)	Prior to the installation of the substations and associated transformers, the Applicant shall submit to the County, for review and approval, a plan that describes the specific measures that will be taken in order to comply with the County's noise standards and limits.			
Impact 4.14-3: Solar Facility operation and maintenance activities would result in a long-term increase in local ambient noise levels.	Implementation of Mitigation Measure 4.14-1.	Applicants and/or their designees to implement measure as defined.	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee	During Solar Facility operation and maintenance
Cumulative Traffic	Mitigation Measure 4.18-1: Prior to the issuance of construction or building permits, the Project sponsor and/or its construction contractor shall:	Applicants and/or their designees to	Fresno County Department of Public	Prior to construction.
	Prepare and submit a Construction Traffic Control Plan to Fresno County Divisions of Public Works and Planning and the California Department of Transportation District 6 office for approval. The Construction Traffic Control Plan must be prepared in accordance with current Caltrans standard plans, and both the California Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following issues:	implement measure as defined. Works and Planning, Development Services Division, and/or its designee		
	- Timing of deliveries of heavy equipment and building materials;			
	Directing construction traffic with a flagger;			
	 Placing temporary signing, lighting, and traffic control devices if required, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic; 			
	 Ensuring access for emergency vehicles to the project sites; 			
	 Temporarily closing travel lanes or delaying traffic during materials delivery, transmission line stringing activities, or any other utility connections; 			
	- Maintaining access to adjacent property;			
	 Specifying both construction-related vehicle travel and oversize load haul routes, minimizing construction traffic during the a.m. and p.m. peak hour, distributing construction traffic flow across alternative routes to access the project sites, and avoiding residential neighborhoods to the maximum extent feasible; 			
	Obtain all necessary permits for the work within the road right of way or use of oversized/overweight vehicles that would utilize county-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Fresno County Divisions of Public Works and Planning.			
	Prior to the start of construction enter into a secured agreement with Fresno County to ensure			
	that any county roads that are demonstrably damaged by project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the			

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

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

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

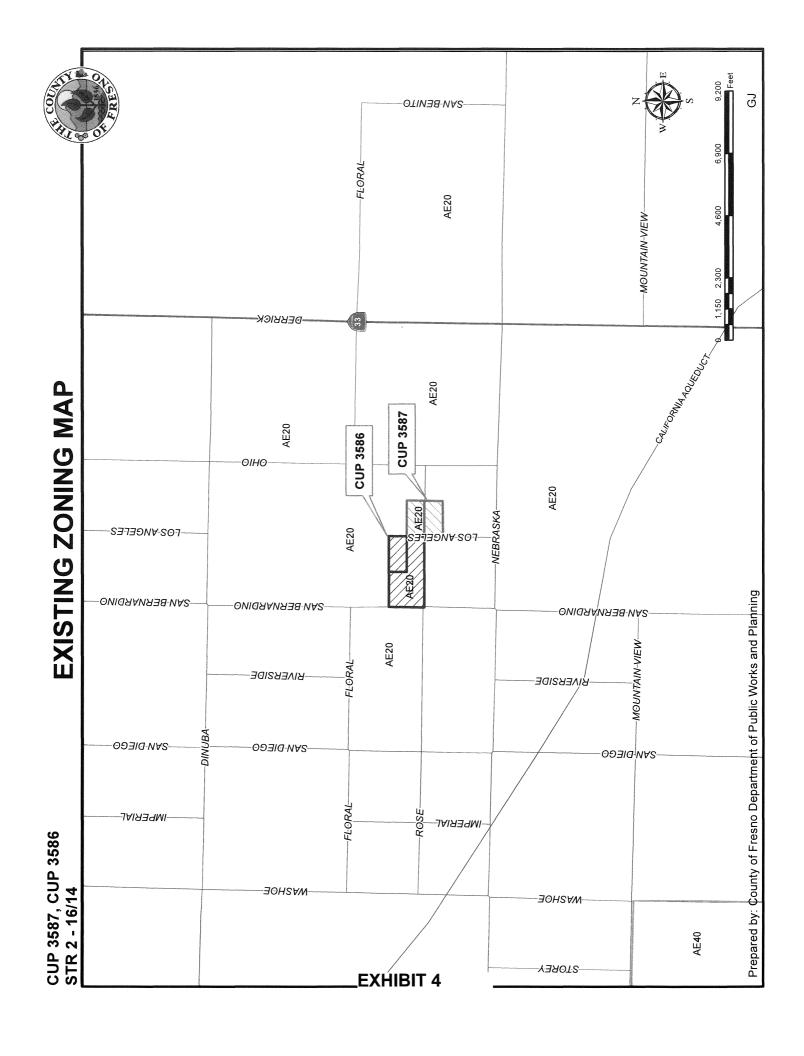
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Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
CONDITIONS OF APPROVAL	(cont.)			
Fresno County (cont.)				
9. Intersection Improvements on Manning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

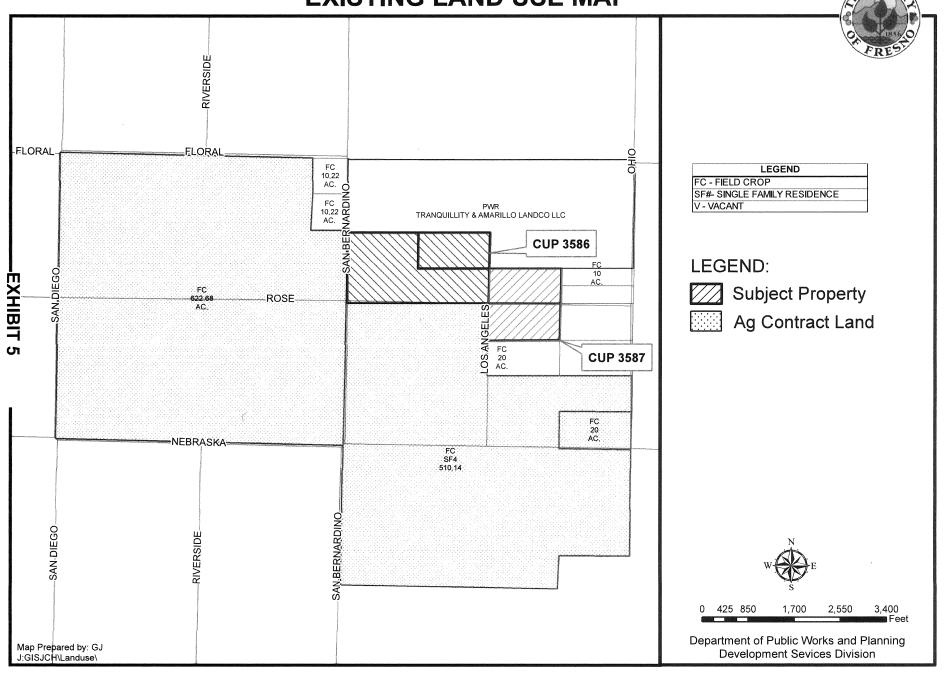
Mitigation Monitoring and Reporting Program, Conditions of Approval, and Project Notes

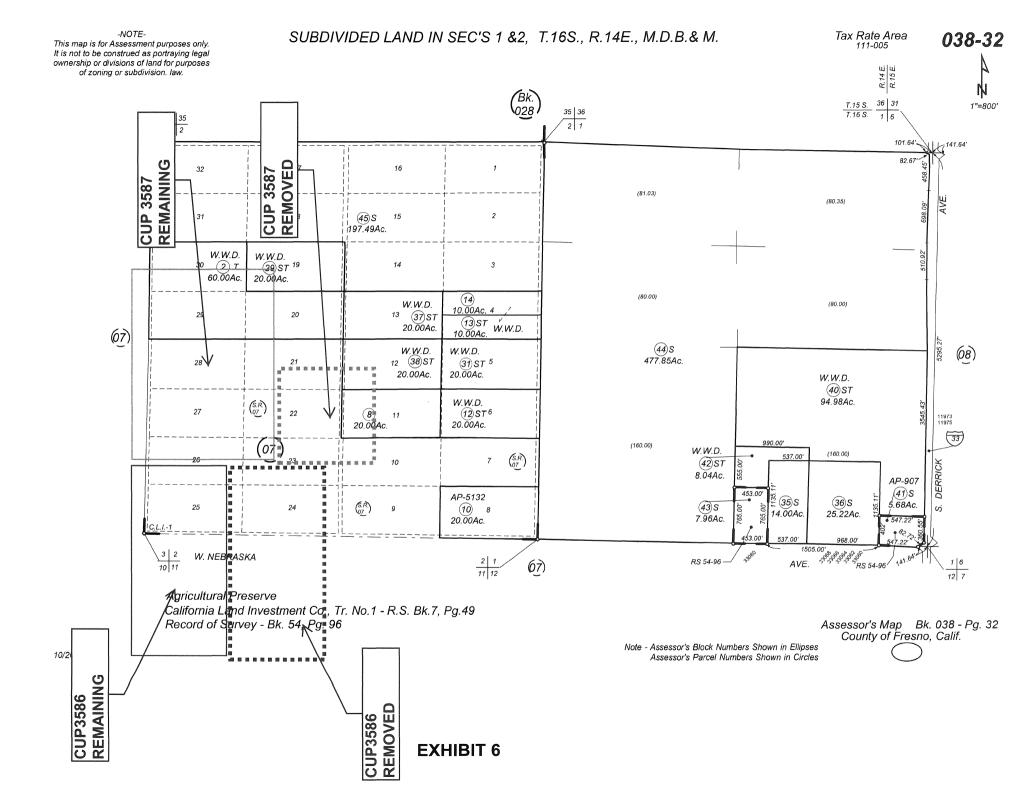
Environmental Impact	EIR Mitigation Measures/ Conditions of Approval	Responsible for Implementing Actions	Responsible for Verifying Compliance	Timing
NOTES: The following Note	es reference mandatory requirements of Fresno County or other Agencies and are provided as information	on to the Project Applican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

CUP 3586 AND CUP 3587 LOCATION MAP SAN BERNARDINO CUP 3586/3587 **CUP 3452 BOUNDARIES CUP 3453 BOUNDARIES** FLORAL CUP 3586 CUP 3587 SAN DIEGO **LEGEND** ROSE ORIGINAL BOUNDARIES NEW BOUNDARIES AREA REMOVED FROM PROJECT AREA TO BE REMOVED **NEBRASKA** SAN BERNARDINO SAN DIEGO RIVERSIDE **DEPARTMENT OF PUBLIC WORKS AND PLANNING DEVELOPMENT SERVICES DIV.** Date: 10/19/2017



EXISTING LAND USE MAP





PROJECT IN	FORMATION
APPLICANT	RE TRANQUILLITY LLC
	RE TRANQUILLITY 2 LLC
	RE TRANQUILLITY 3 LLC
	RE TRANQUILLITY 4 LLC
	RE TRANQUILLITY 5 LLC
	RE TRANQUILLITY 6 LLC
	RE TRANQUILLITY 7 LLC
	RE TRANQUILLITY 8 LLC
SITE ADDRESS	ALONG HWY 33 AND SOUTH OF W MANNING AVE TRANQUILLITY, CA
COUNTY	FRESNO
TOTAL PARCEL ACREAGE	±3732 ACRES
TOTAL PROJECT ACREAGE	±3732 ACRES
ZONING	AE20

SYSTEM SPECIFICATIONS

MAX AC CAPACITY AT THE POI: 400 MWgc
INTERCONNECTION VOLTAGE: 230 kV

GENERAL NOTES

DRAINAGE: NO CHANGES TO EXISTING GRADE OR HYDROLOGY ARE ANTICIPATED.

LANDSCAPING: NO EXISTING OR PROPOSED LANDSCAPING.

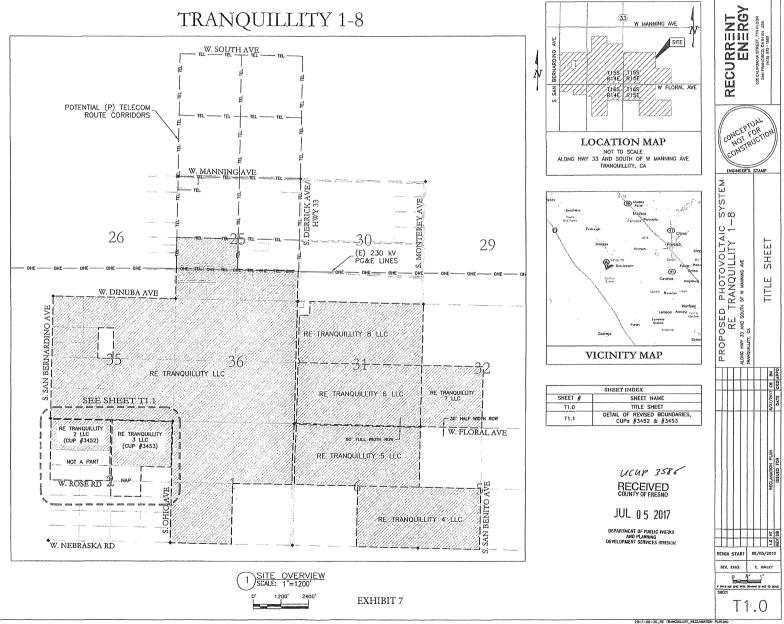
<u>LIGHTING:</u> LIGHTING TO BE INSTALLED AT SUBSTATION PER UTILITY REQUIREMENTS. ADDITIONAL LIGHTING TO MEET COUNTY SPECIFICATIONS.

PARKING: ON SITE PARKING TO ADHERE TO COUNTY REQUIREMENTS. PARKING AREA TO BE PERVIOUS PER COUNTY STANDARDS.

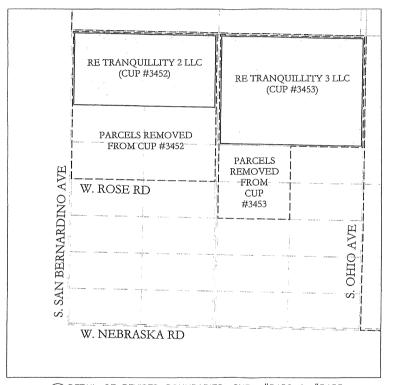
SECURITY: SECURITY CAMERAS TO BE INSTALLED AT THE INVERTER EQUIPMENT PADS. CAMERAS WILL BE MOUNTED ON POLES APPROXIMATELY 20 FEET IN HEIGHT AND WILL FACE INWARD TO MONITOR ONSITE ACTIVITY.

SIGNAGE: NO PERMANENT SIGNAGE IS PROPOSED. ANY SIGNAGE REQUESTED OR REQUIRED BY AUTHORITIES WILL COMPLY WITH REGULATIONS FOR LOCATION, SIZE, HEIGHT AND MATERIAL.

LEGEND OF LINET	PES AND SYMBOLS						
ATTENDED TO THE DESCRIPTION	PROPERTY LINE						
OHE OHE	OVERHEAD ELECTRIC LINE						
TEL	POTENTIAL (P) PROJECT TELECOM ROUTING						
—н—	(P) PERIMETER FENCE						
	(P) PROJECT BOUNDARIES SECTION CORNER						
•							
26	SECTION NUMBER						
	PROJECT AREA						
(E)	EXISTING						
(P)	PROPOSED						
POi	POINT OF INTERCONNECTION						
ROW	RIGHT OF WAY						



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LEGEND OF LINETYPES

PROPOSED CUP

LEGEND OF LINETYPES
PROPOSED CUP BOUNDARY
FOR CUPs \$3452 & \$3453
CURRENT CUP BOUNDARIES

RECEIVED COUNTY OF FRESNO

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CUPS #3452 & #3453

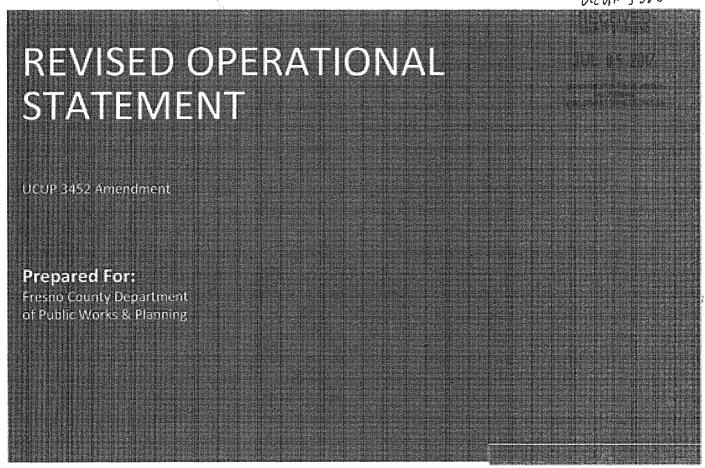
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DETAIL OF REVISED BOUNDARIES, CUPS #3452 & #3453

DETAIL OF REVISED BOUNDARIES, CUPS #3452 & #3453

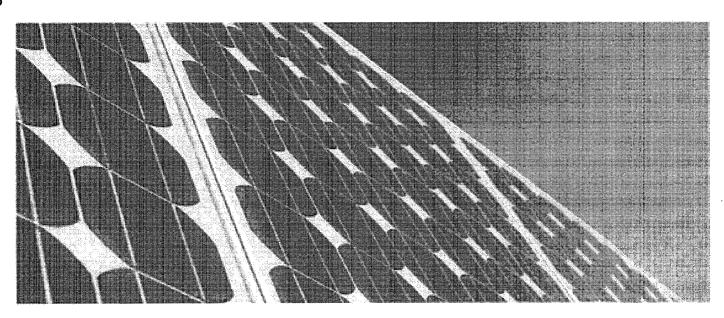
DETAIL OF REVISED BOUNDARIES, CUPS #3452 & #3453





Prepared June 2017

RECURRENT ENERGY



1. BACKGROUND REQUEST FOR REVISIONS

Recurrent Energy, through its wholly owned subsidiary RE Tranquillity 2 LLC, applied for an Unclassified Conditional Use Permit to construct, own, and operate a photovoltaic (PV) solar generating facility (the Project) of up to 15 megawatts (MW), located on up to 160 acres of property in Fresno County, California. The Project was to be known as the RE Tranquillity 2 Solar Generating Facility. The Conditional Use Permit was conditionally approved by Fresno County on October 9, 2014 pursuant to County Resolution No. 12466 as Unclassified Conditional Use Permit No. 3452.

Due to changes in the demand for electricity by power purchasers, as well as optimizations made by Recurrent Energy's engineering team, Recurrent Energy has canceled its plan to develop solar facilities approved to be installed on APNs 038-320-29ST and 038-320-02T. As such, no solar facilities have been or will be developed on those parcels and neither the benefits of, nor the conditions of approval or mitigation measures required by, UCUP No. 3452 should apply to those parcels. Accordingly, Recurrent Energy has submitted this CUP amendment application to request that the boundaries of UCUP No. 3452 be modified to remove these parcels from the area of land benefitted by UCUP No. 3452. Below is a revised project operational statement marked to show changes from the previously approved project operational statement, and attached as **Appendix A** is a revised Reclamation Plan reflecting the reductions in acreage.

Other than the removal of APNs 038-320-29ST and 038-320-02T from UCUP No. 3452, all other project components and details will remain unchanged as described in the previously approved project operational statement. Because the only change requested by this CUP amendment application is to remove land that was already within the original project's approved development footprint, no new or more severe impacts will result from these benign changes, and if anything, the reduction in acreage will reduce the scope and severity of any potential environmental impacts previously identified in the project's Mitigation Measures and Conditions of Approval.

2. REVISED OPERATIONAL STATEMENT

Recurrent Energy, through its wholly owned subsidiary RE Tranquillity 2 LLC, is proposing proposed to construct, own, and operate a photovoltaic (PV) solar generating facility (the Project) of up to 15 megawatts (MW), located on up to 160-80 acres of property in Fresno County, California, which was conditionally approved by Fresno County on October 9, 2014 pursuant to County Resolution No. 12466 as Unclassified Conditional Use Permit No. 3452. The Project is was formerly known as the RE Tranquillity 2 Solar Generating Facility and is now known as a portion of the RE Tranquillity 8 Amarillo Solar Generating Facility, but for historical purposes is referred to herein as the RE Tranquillity 2 Project.

The RE Tranquillity 2 Project would bise located in unincorporated Fresno County, California. The site is generally bounded by South San Bernardino Avenue to the west, West Floral Avenue to the north, an unnamed road east of South San Bernardino Avenue to the east, and West Rose Avenue to the south, as shown in Figure 1. The proposed Project site <u>originally included 4 parcels known as</u> Assessor's Parcel Numbers (APN) 038-320-01ST, 038-320-02T, 038-320-06ST, 038-320-29ST, but Recurrent Energy has canceled development of APN 038-320-02T and 038-320-29ST, so the Project now only includes the 2

parcels formerly known as Assessor's Parcel Number (APN) 038-320-1ST and 038-320-06ST (both now known as a portion of APN 038-320-045S after giving effect to certain lot mergers). The site is zoned AE, and is designated "Exclusive Agriculture" under the Fresno County General Plan.

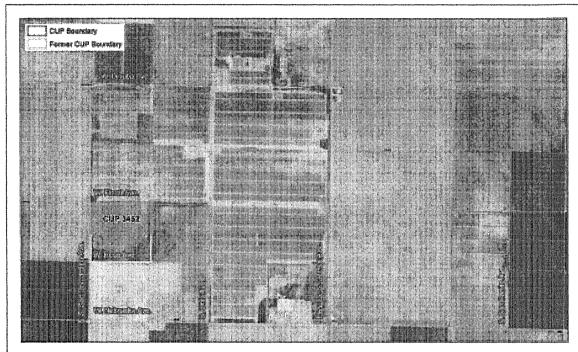


Figure 1. Tranquillity 2 Solar Generating Facility

The Project would will be surrounded by up to seven other solar photovoltaic projects proposed by Recurrent Energy on adjacent and contiguous properties, if these projects are which were also approved by the Fresno County Planning Commission on October 9, 2014 pursuant to County Resolution No. 12466 as Unclassified Conditional Use Permit Nos. 3451-3458, as shown in Figure 2.

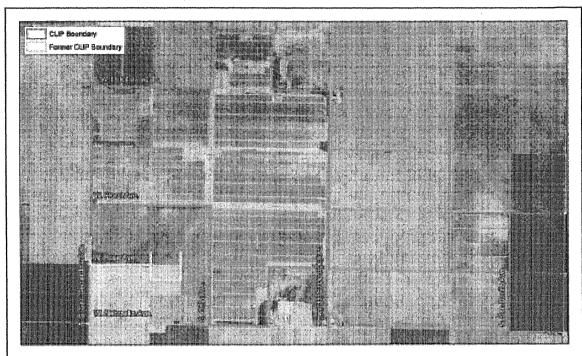


Figure 2. Tranquillity 1-8 Solar Generating Facilities

The proposed Project would will be comprised of solar panels, inverters, access roads, an operations and maintenance (O&M) building, and electrical equipment including substations, battery storage enclosures, and wiring.

REVISED RECLAMATION PLAN

RE Tranquillity 2 LLC

UCUP Application Number: 3452

Prepared For

Fresno County Department of Public Works & Planning

RECURRENT ENERGY August 2014 Revised June 2017

RECEIVED COUNTY OF FRESNO

JUL 0 5 2017

DEPARTMENT OF PUBLIC WORKS AND PLANNING DEVELOPMENT SERVICES DIVISION

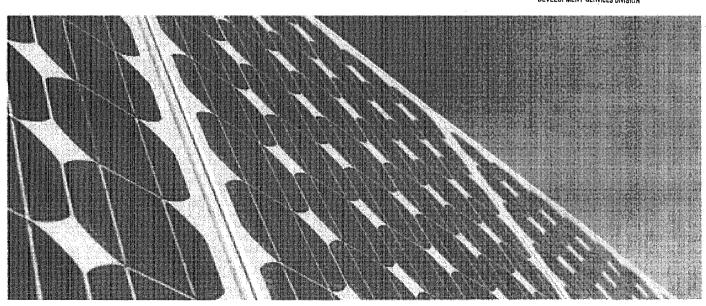


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1. Introduction

Recurrent Energy, through its wholly owned subsidiary RE Tranquillity 2 LLC, is proposing to construct, own, and operate a photovoltaic (PV) solar generating facility (the Project) of up to 15 megawatts (MW), located on up to approximately 460-80 acres of a property in Fresno County, California, which was conditionally approved by Fresno County on October 9, 2014 pursuant to County Resolution No. 12466 as Unclassified Conditional Use Permit No. 3452. The Project was formerly is-known as the RE Tranquillity 2 Solar Generating Facility and is now known as a portion of the RE Tranquillity 8 Amarillo Solar Generating Facility, but for historical purposes is referred to herein as the RE Tranquillity 2 Project.

The RE Tranquillity 2 Project would be is located in unincorporated Fresno County, California. The site is generally bounded by South San Bernardino Avenue to the west, West Floral Avenue to the north, an unnamed road east of South San Bernardino Avenue to the east, and West Rose Avenue to the south, as shown in Figure 1. The proposed Project site originally included 4 parcels known as Assessor's Parcel Numbers (APN) 038-320-01ST, 038-320-02T, 038-320-06ST, 038-320-29ST, but Recurrent Energy has canceled development of APN 038-320-02T and 038-320-29ST, so the Project now only includes the 2 parcels formerly known as Assessor's Parcel Number (APN) 038-320-1ST and 038-320-06ST (both now

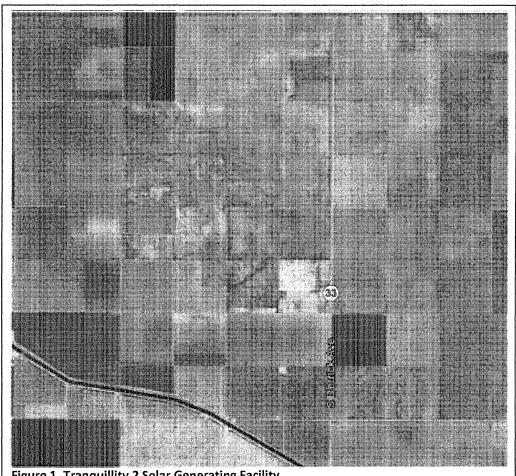


Figure 1. Tranquillity 2 Solar Generating Facility

known as a portion of APN 038-320-045S after giving effect to certain lot mergers). - The site is zoned AE, and is designated "Exclusive Agriculture" under the Fresno County General Plan.

The Project <u>will would</u>-be surrounded by up to seven other solar photovoltaic projects proposed by Recurrent Energy on adjacent and contiguous properties, <u>which were also if these projects are approved</u> by the Fresno County Planning Commission on October 9, 2014 pursuant to County Resolution No. 12466 as Unclassified Conditional Use Permit Nos. 3451-3458, as shown in Figure 2.

The proposed Project <u>will would</u>-be comprised of solar panels, inverters, access roads, an operations and maintenance (O&M) building, and electrical equipment including substations, battery storage enclosures, and wiring.

2. Historical Agricultural Use

The Project is located on undeveloped land that is zoned as Exclusive Agriculture and has been in low-yield agricultural production or left fallow intermittently for the past 10 years, as detailed in Table 1.

The Project site is presently owned by Westlands Water District. The site is subject to high levels of selenium and a water table that does not provide for sufficient drainage for commercially irrigated crops. As a result, all of the Project parcels were acquired by Westlands Water District in lieu of eminent domain, taken out of commercial production, and restricted from irrigation by a drainage easement.

The Project parcels are intermittently dry farmed for winter wheat and oats, which provide the lowest revenue per acre of any crop in Fresno County. Because the properties are cultivated without the benefit of irrigation, the productivity of the crop depends entirely on rain and often times results in a crop that never matures to harvest and is instead grazed as rangeland grass. Table 1 provides a ten-year crop history along with a record of the soil disturbance for the preparation, cultivation, and harvesting of rain-fed wheat and oat crops.

Table 1. Ten-year Crop History for APNs in RE Tranquillity 2 Solar Generating Facility Footprint

Year	Irrigation	Soil Preparation	Crop(s) Harvested
2013	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2012	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2011	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2010	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2009	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2008	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2007	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2006	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats

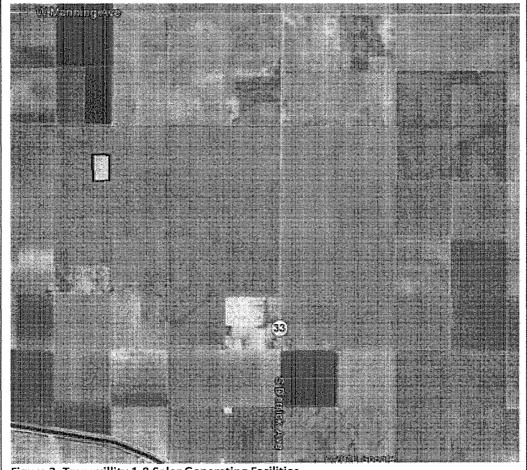


Figure 2. Tranquillity 1-8 Solar Generating Facilities

2005	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2004	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats

3. Project Facility & Equipment

The proposed Project would be comprised of solar panels, inverters, access roads, an operations and maintenance (O&M) building, and electrical equipment including substations, battery storage enclosures, and wiring.

The Site would be secured by a 6- to 8-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.

3.1 Photovoltaic Modules

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.

3.2 Panel Installation, Array Assembly, and Racking

Structures supporting the PV modules would consist of steel posts (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 posts typically would be spaced 10 feet apart and installed to a height of approximately 4 feet above existing grade. Once the posts have been installed, the horizontal cross-members of the tracking system and associated motors would be placed and secured. A galvanized metal racking system, which holds the PV modules in the correct position for maximum capture of solar irradiance, would then be field-assembled and attached to the horizontal cross members.

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

3.3 Electrical Collection, Inverters, and Transformers

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

would be installed. Once cable installation is completed, the excavated soil would likely be used to backfill the trench and be lightly compressed. Where used, overhead cables would be installed on wood poles up to 50 feet in height.

The Solar Facility would be designed and laid out in approximately 2 MW increments. Each 2 MW increment would include an inverter-transformer station centrally located within the PV arrays. All electrical inverters and transformers would be placed on concrete pads or steel skids.

3.4 Project Substation

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

Structural components in the substation area would include:

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

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

The substation transformer would contain mineral oil, and the substation would be designed to accommodate an accidental spill of transformer fluid by the use of containment-style mounting. No PCB-laden fluids would be used.

3.5 Telecommunications

Within the site, the fiber optic or other cabling required for the monitoring system would typically be installed in buried conduit, leading to a centrally located (or series of appropriately located) SCADA system cabinets. External telecommunications connections to the SCADA system cabinets may be through either wireless or hard wired connections to locally available commercial service providers. Similar to electrical wiring, cable depths would likely be buried at a minimum of 18 inches below grade by excavating a trench wide enough to accommodate the cables and conduit. Excavated soil would likely be used to backfill the trench and be lightly compressed.

3.6 Battery Storage System

The Project may include a battery storage system, consisting of battery banks housed in electrical enclosures and buried electrical conduit. Electrical enclosures measuring 40 feet by 8 feet by 8.5 feet high would be installed on concrete foundations designed for secondary containment.

3.7 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 four-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.

3.8 Operations and Maintenance Building and Electrical Control Building

The Project would include development of an O&M building and an electrical control building. The O&M building and control building would be constructed on concrete foundations.

4. Project's Useful Life

The Project has an expected useful life of 35 years, with an opportunity for a lifetime of 50 years or more, with equipment replacement and repowering. The Project consists of numerous recyclable materials, including glass, semiconductor material, steel, wood, aluminum, copper, and plastics. When the Project reaches the end of its operational life, the component parts can be dismantled and recycled. The Project components will be dismantled and removed using minimal impact conventional construction equipment and recycled or disposed of safely in accordance with all applicable laws and regulations.

5. Property Ownership

The site is presently owned by Westlands Water District. The property owner has executed an option agreement for purchase and sale with SiteCo LLC, a wholly owned subsidiary of Recurrent Energy Development Holdings. Consequently, SiteCo LLC would become the owner of the real property at commencement of construction of the Project.

6. Procedures for Decommissioning After Operations Cease

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; and restoration of topsoil, re-vegetation, and seeding. Electrical conduit and other materials that break off more than 4 feet below the ground surface would be decommissioned in place. Appropriate temporary (construction-related) erosion and seedimentation 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.

6.1 Timing for Removal

Reclamation of the Project will occur within six (6) months of either: (i) the expiration of a Project's CUP or (ii) the abandonment of a Project without the Project owner making efforts to cure a disruption of electricity production, whichever occurs first.

6.2 General Removal Process

Effectively, the reclamation of the Project proceeds in reverse order of the installation.

- The PV facility will be disconnected from the utility power grid.
- PV modules will be disconnected, collected, and either shipped to another project, salvaged, or submitted to a collection and recycling program.
- Aboveground and underground electrical interconnection and distribution cables that are no longer deemed necessary by the local public utility company will be removed and recycled offsite by an approved recycling facility.
- PV module racking system will be removed and recycled off-site by an approved metals recycler.
- Electrical and electronic devices, including transformers and inverters will be removed and recycled off-site by an approved recycler.
- Concrete foundations will be removed and recycled off-site by a concrete recycler.
- Fencing will be removed and will be recycled off-site by an approved recycler.
- The only roads constructed at the site will be the interior perimeter fire break roads, which will not be paved but rather compacted and treated to be durable and dustless. The interior roads can either remain onsite for future use, or be removed. Very little gravel will be required onsite; gravel would be repurposed either on- or off-site.
- The site may be converted to other uses in accordance with applicable land use regulations in effect at that time of reclamation. There are no permanent changes to the site and it can be restored to its original condition including revegetation. Any soil removed for construction purposes will be relocated on the site or used for landscaping after construction is complete.

6.3 Removal of Electrical Equipment, PV Modules, and Infrastructure

Above ground electrical wiring, equipment on the inverter pads and the interconnection transformer pad, and other associated equipment will be removed as part of reclamation. Prior to commencing electrical equipment removal activities, the system will be de-energized and all external electrical lines feeding into or out of the Project will be subject to "a lock out/tag out." The electrical components comprising the inverter pads and interconnection transformer pad will be salvaged and placed in appropriate shipping containers and secured in a truck transport trailer for shipment to the next location where it will be reused. The equipment on the inverter pads includes inverters, combiners, low voltage switch gear and medium voltage transformers. The equipment on the interconnection transformer pad includes medium and high voltage switchgear and a high voltage transformer. All of this is modular and each unit is bolted to a concrete pad.

The electrical connectors to each panel will be unfastened along with the combiner boxes and disconnect switches and the bolts and fasteners attaching each module to the racks will be removed. Each module will be removed from the rack and placed in secure transport crates and placed into a

trailer for storage and ultimately for transportation to another facility. The bolts and reusable fasteners will be saved for reuse also.

Once the solar modules have been removed, the racks will be disassembled and the piers supporting the racks removed. These components will require a track hoe or equivalent piece of machinery to extract the beams by pulling them out vertically. Both the racks and pipes or H-beams will be scraped and sold for salvage value. Rack disassembly involves removing bolts and stacking the rack components for salvage.

Underground electrical equipment, including electrical wiring, will be extracted and removed from the site. However, electrical conduit and other materials that break off more than 4 feet below the ground surface would be decommissioned in place. The wiring is either copper or aluminum (depending on the function/location) encapsulated in an insulating plastic material. Electrical materials consist primarily of recyclable commodities.

O&M buildings would be disassembled, and recycled or disposed of offsite. Concrete pads supporting inverters, transformers, and O&M buildings will be removed. All fences and gates will be maintained at all times until the equipment decommissioning and removal process is complete and the area is ready to be demobilized. The fence and gate will be removed and all materials recycled to the greatest extent possible. The area will be thoroughly cleaned and all debris removed.

6.4 Use and Removal of Hazardous Materials

Relatively small quantities of hazardous materials would be used during project construction and operation. Materials of concern that would be used during construction and operation include gasoline, diesel fuel, inverter coolant, transformer oil, sulfur hexafluoride, and cleaning chemicals.

Hazardous and non-hazardous wastes that are likely to be generated from project construction and operation at the Project include waste motor oils, used transformers and transformer oil, waste hydraulic fluids, and waste solvents and adhesives. During decommissioning activities, minor spills and leaks of hazardous materials from vehicles or equipment could also occur. All wastes would be required to be handled, stored, transported, and disposed of according to appropriate state and federal laws, ordinances, regulations, and standards.

Fuels, lubricants, and other materials would not be stored on the Project site, and the proposed Project applicant would not maintain an inventory of any hazardous materials on the project site. Project operations would not generate hazardous wastes.

On-site transformers would be filled with oil at the manufacturing company and subsequently checked in four-year intervals for integrity. Transformers would be mounted with secondary containment foundations to contain oil that may be spilled during replacement, and oils used would be 98 percent plant seed based. Inverter coolant would be routinely and remotely monitored, with replacement expected to occur every 15 years. All oils, lubricants, and spent filters would be collected and removed for recycling at the time of replacement and decommissioning.

6.5 Revegetation

Following removal of all solar equipment and related infrastructure, the site will undergo a series of steps to ensure successful revegetation. All topsoil on site will be removed and stockpiled as a first step. The site will then be deep chiseled to a depth of at least 18 inches to remove the compaction resulting from the original construction, O&M activities and from the decommissioning. After chiseling, compost

will be applied and the topsoil spread and then the entire site will be disked to further loosen the soil and blend in the compost.

As a final step, an appropriate rangeland seed mixture as specified by local authorities will be broadcast or drilled across the site. A weed-free mulch will be spread and crimped into the soil to stabilize soils until germination takes place. Mulching facilitates moisture retention in the soil, improving germination and survival of the seedlings.

7. Site Plans

Copies of the latest Site Plans for RE Tranquillity 1-8 may be found in Appendix A.

8. Engineer's Opinion of Probable Construction Cost

To provide a conservative estimate of costs associated with the decommissioning and restoration process, including the equipment and labor for the removal of above-ground structures and site reclamation, Recurrent Energy has engaged with established construction and engineering firms to identify the number of employees and equipment types required to remove Project elements. Table 2 identifies costs for equipment and labor to remove improvements associated with the Project.

As noted above, the Project would be surrounded by, and adjacent to, up to 7 other solar projects totaling 400 MW in all. The Project is anticipated to be decommissioned and the site reclaimed on a similar schedule to and/or sequentially with the RE Tranquillity 1 LLC, RE Tranquillity 3 LLC, RE Tranquillity 3 LLC, RE Tranquillity 5 LLC, RE Tranquillity 6 LLC, RE Tranquillity 7 LLC, and RE Tranquillity 8 LLC projects. As a result, economies of scale would be realized from worker and equipment efficiencies during site decommissioning and reclamation, and there is an estimated 10% cost decrease per 20 MW.

Table 2: Labor and Equipment Costs for Project Reclamation

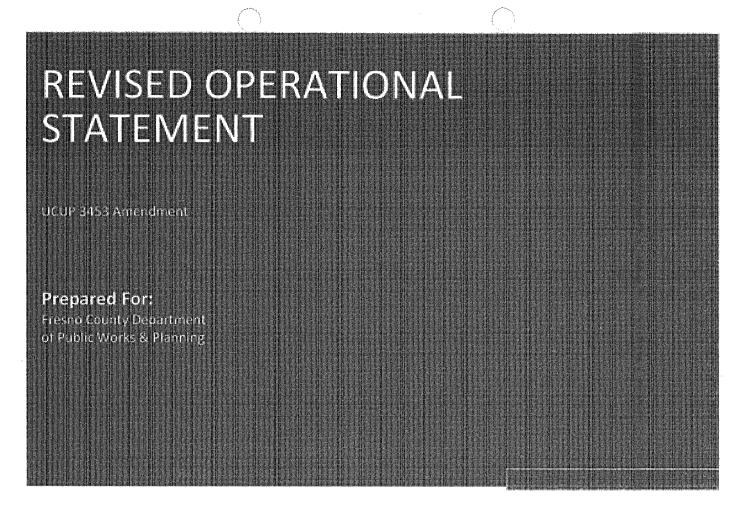
Site Name: RE Tranquil	lity 2 LI	.C R	teclan	nat	tior	1 C	Costs		1	V - 1. W N			TO A STATE OF THE	-	
Acres: 160 MW: 15		ı	abor Co	osts				Equipment Costs							Total Costs
Reclamation Task	Workers	Days	Hours		bor ite	s	ubtotal	Equipment/ fee	Hours or number of units	ı	Rates	5:	ubtotal		Costs
Onsite oils, lubricants, removed	1	2	16	\$	50	\$	800	Container	0.75	\$	1,250	\$	938	\$	1,738
Substation components removed and recycled	2	2	32	\$	75	\$	2,400	low bed truck/ semi end dump truck	12	\$	22	\$	264	\$	2,664
Electrical interconnection and	3	9	216	\$	75	\$	16,200	flat bed truck	30	\$	32	\$	960	\$	17,160
PV modules removed and recycled	3	10	240	\$	50	\$	12,000	flat bed truck	37.5	\$	32	\$	1,200	\$	13,200
PV module support H-beams and	3	9	216	\$	50	\$	10,800	backhoe	67.5	\$	162	\$	10,935	\$	21,735
Electrical and electronic devices,	2	,5	80	\$	75	\$	6,000	backhoe/ crane	18.75	\$	400	\$	7,500	\$	13,500
Fencing, gates removed and	2	4	64	\$	40	\$	2,560	, backhoe	18.75	\$	162	\$	3,038	\$	5,598
Roads, pathways, and other	2	4	64	Ş	40	\$	2,560	cat/ backhoe	15	\$	194	\$	2,910	\$	5,470
Site disced for revegetation	2	4	64	\$	40	\$	2,560	cat/ water truck	22.5	\$	146	\$	3,285	\$	5,845
				Sub	total	\$	55,880			Su	btotal	\$	31,029	\$	86,909

9. Financial Assurances

The Applicant will establish and maintain a Letter of Credit from a state or national financial institution in the amount of \$86,909 prior to issuance of building permits for each Phase to be maintained throughout the life of the Project. The dollar amount will be adjusted on an annual basis to reflect a 3 percent increase in the financial security associated with decommissioning. In lieu of a letter of credit or as a replacement of the letter of credit during the project life, RE Tranquillity 2 LLC may establish and maintain a Bond, Cash Payment, or Decommissioning Reserve Account to be managed by a third-party financial institution determined by the Project's financiers. Automatic routing of PPA payments into the Decommissioning Reserve Account would occur throughout the Project's life. RE Tranquillity 2 LLC would notify Fresno County of its election to establish this account thirty (30) days in advance and would provide all necessary documentation in advance for staff's review and approval. Since both the County and the landowner have an interest in decommissioning the facility after operations or in the unlikely event it is abandoned, the third party financial institution responsible for managing the Decommissioning Reserve Account would have a contractual obligation to the landowners not to release funds from the Decommissioning Reserve Account other than for payment of costs associated with decommissioning. The detailed terms and conditions under which the funds would be permitted to be released from the Decommissioning Reserve Account would be explicitly defined in an Escrow Account Agreement executed by the project owner, the land owner and the selected third party institution.

10. Record of Owner's Notice of Proposed Reclamation Plan

As discussed under Section 4, SiteCo LLC, a wholly-owned subsidiary of Recurrent Energy Development Holdings 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, the owner has not been notified of the proposed reclamation plan.

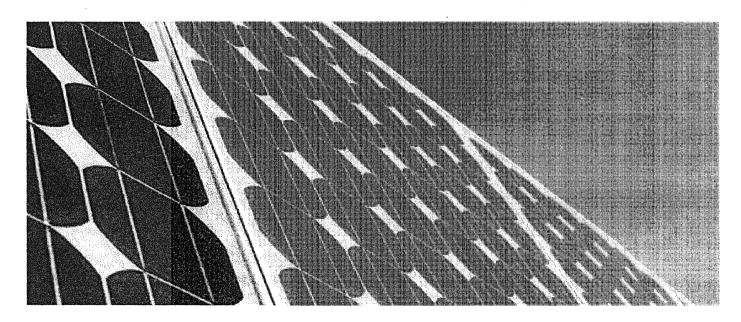


RECURRENT ENERGY COUNTY OF FRESHO

Prepared June 2017

JUL 05 2017

DEPARTMENT OF PUBLIC WORKS AND PLANNING DEVELOPMENT SERVICES DIVISION



1. BACKGROUND REQUEST FOR REVISIONS

Recurrent Energy, through its wholly owned subsidiary RE Tranquillity 3 LLC, applied for an Unclassified Conditional Use Permit to construct, own, and operate a photovoltaic (PV) solar generating facility (the Project) of up to 15 megawatts (MW), located on up to 163 acres of property in Fresno County, California. The Project was to be known as the RE Tranquillity 3 Solar Generating Facility. The Conditional Use Permit was conditionally approved by Fresno County on October 9, 2014 pursuant to County Resolution No. 12466 as Unclassified Conditional Use Permit No. 3453.

Due to changes in the demand for electricity by power purchasers, as well as optimizations made by Recurrent Energy's engineering team, Recurrent Energy has canceled its plan to develop solar facilities approved to be installed on APNs 038-320-37ST and 038-320-38ST. As such, no solar facilities have been or will be developed on those parcels and neither the benefits of, nor the conditions of approval or mitigation measures required by, UCUP No. 3453 should apply to those parcels. Accordingly, Recurrent Energy has submitted this CUP amendment application to request that the boundaries of UCUP No. 3453 be modified to remove these parcels from the area of land benefitted by UCUP No. 3453. Below is a revised project operational statement marked to show changes from the previously approved project operational statement, and attached as **Appendix A** is a revised Reclamation Plan reflecting the reductions in acreage.

Other than the removal of APNs 038-320-37ST and 038-320-38ST from UCUP No. 3453, all other project components and details will remain unchanged as described in the previously approved project operational statement. Because the only change requested by this CUP amendment application is to remove land that was already within the original project's approved development footprint, no new or more severe impacts will result from these benign changes, and if anything, the reduction in acreage will reduce the scope and severity of any potential environmental impacts previously identified in the project's Mitigation Measures and Conditions of Approval.

2. REVISED OPERATIONAL STATEMENT

Recurrent Energy, through its wholly owned subsidiary RE Tranquillity 3 LLC, is proposingproposed to construct, own, and operate a photovoltaic (PV) solar generating facility (the Project) of up to 15 megawatts (MW), located on up to 163-120 acres of property in Fresno County, California, which was conditionally approved by Fresno County on October 9, 2014 pursuant to County Resolution No. 12466 as Unclassified Conditional Use Permit No. 3453. The Project is was formerly known as the RE Tranquillity 3 Solar Generating Facility and is now known as a portion of the RE Tranquillity 8 Amarillo Solar Generating Facility, but for historical purposes is referred to herein as the RE Tranquillity 3 Project.

The RE Tranquillity 3 Project would bise located in unincorporated Fresno County, California. The site is generally bounded by South San Bernardino Avenue to the west, West Floral Avenue to the north, an unnamed road east of South San Bernardino Avenue to the east, and West Rose Avenue to the south, as shown in Figure 1. The proposed Project site originally included 8 parcels known as Assessor's Parcel Numbers (APN) 038-320-16T, 038-320-24ST, 038-320-25ST, 038-320-27ST, 038-320-28ST, 038-320-37ST, 038-320-38ST, but Recurrent Energy has canceled development of APN 038-320-37ST

and 038-320-38ST, so the Project now only includes the 6 parcels formerly known as Assessor's Parcel Number (APN) 038-320-16T, 028-320-24ST, 038-320-25ST, 038-320-27ST, 038-320-28ST and 038-320-30ST (all now known as a portion of APN 038-320-045S after giving effect to certain lot mergers). The site is zoned AE, and is designated "Exclusive Agriculture" under the Fresno County General Plan.

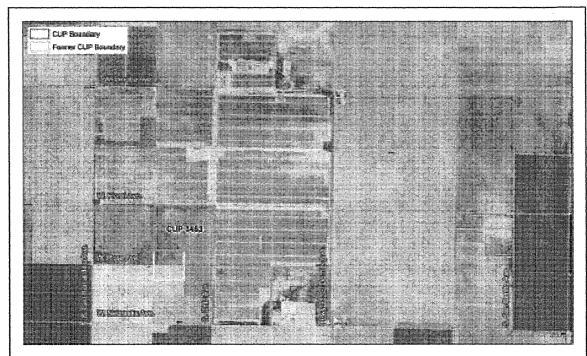


Figure 1. Tranquillity 3 Solar Generating Facility

The Project would will be surrounded by up to seven other solar photovoltaic projects proposed by Recurrent Energy on adjacent and contiguous properties, if these projects are which were also approved by the Fresno County Planning Commission on October 9, 2014 pursuant to County Resolution No. 12466 as Unclassified Conditional Use Permit Nos. 3451-3458, as shown in Figure 2.

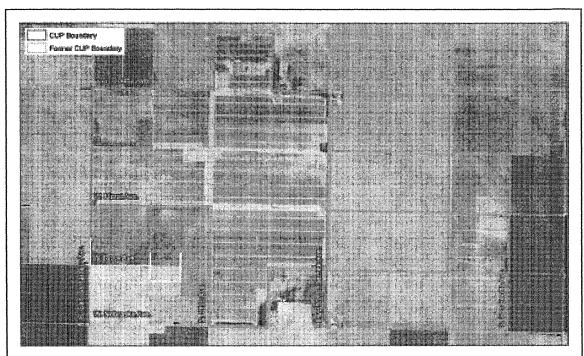


Figure 2. Tranquillity 1-8 Solar Generating Facilities

The proposed Project <u>would-will</u> be comprised of solar panels, inverters, access roads, an operations and maintenance (O&M) building, and electrical equipment including substations, battery storage enclosures, and wiring.

REVISED RECLAMATION PLAN

RE Tranquillity 3 LLC

UCUF Application Number: 3453

Prepared For:

Fresho County Department of Public Works & Planning

NCUP 3587 RECEIVED COUNTY OF FRESNO

August 2014
Revised June 2017

RECURRENT ENERGY JUL 0 5 2017

DEPARTMENT OF PUBLIC WORKS AND PLANNING DEVELOPMENT SERVICES DIVISION

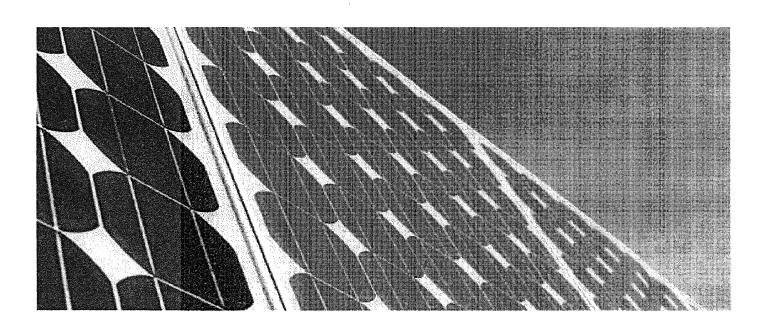


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1. Introduction

Recurrent Energy, through its wholly owned subsidiary RE Tranquillity 3 LLC, is proposing proposed to construct, own, and operate a photovoltaic (PV) solar generating facility (the Project) of up to 15 megawatts (MW), located on up to approximately 163-120 acres of a property in Fresno County, California, which was conditionally approved by Fresno County on October 9, 2014 pursuant to County Resolution No. 12466 as Unclassified Conditional Use Permit 3453. The Project is was formerly known as the RE Tranquillity 3 Solar Generating Facility and is now known as a portion of the RE Tranquillity 8 Amarillo Solar Generating Facility, but for historical purposes is referred to herein as the RE Tranquillity 3 Project.

The RE Tranquillity 3 Project is would be-located in unincorporated Fresho County, California. The site is generally bounded by an unnamed road east of South San Bernardino Avenue to the west, West Floral Avenue to the north, South Ohio Avenue to the east, and a parcel line south of West Rose Avenue to the south, as shown in Figure 1. The proposed Project site originally included 8 parcels known as includes 6 parcels, including-Assessor's Parcel Numbers (APN) 038-320-16T, 038-320-24ST, 038-320-25ST, 038-320-27ST, 038-320-37ST, 038-320-37ST, 038-320-38ST, but Recurrent Energy has canceled development of APN 038-320-37ST and 038-320-38ST, so the Project now only includes the 6 parcels formerly known as Assessor's Parcel Number (APN) 038-320-16T, 028-320-24ST, 038-320-25ST, 038-320-27ST, 038-320-28ST and 038-320-30ST (all now known as a portion of APN 038-320-045S after giving effect to certain lot mergers). The site is zoned AE, and is designated "Exclusive Agriculture" under the Fresno County General Plan.

The Project will would be surrounded by up to seven other solar photovoltaic projects proposed by Recurrent Energy on adjacent and contiguous properties, which were also approved by the Fresno County Planning Commission on October 9, 2014 pursuant to County Resolution No. 12466 as Unclassified Conditional Use Permit Nos. 3451-3458, as shown in Figure 2.

The proposed Project would will be comprised of solar panels, inverters, access roads, an operations and maintenance (O&M) building, and electrical equipment including substations, battery storage enclosures, and wiring.

2. Historical Agricultural Use

The Project is located on undeveloped land that is zoned as Exclusive Agriculture and has been in low-yield agricultural production or left fallow intermittently for the past 10 years, as detailed in Table 1.

The site is presently owned by Westlands Water District. The Project site is subject to high levels of selenium and a water table that does not provide for sufficient drainage for commercially irrigated crops. As a result, all of the Project parcels were acquired by Westlands Water District in lieu of eminent domain, taken out of commercial production, and restricted from irrigation by a drainage easement.

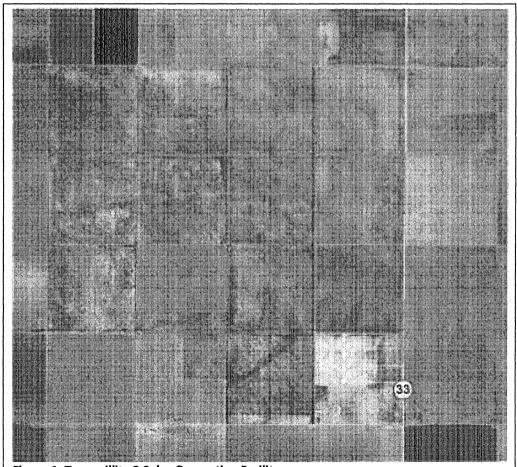


Figure 1. Tranquillity 3 Solar Generating Facility

2

The Project parcels are intermittently dry farmed for winter wheat and oats, which provide the lowest revenue per acre of any crop in Fresno County. Because the properties are cultivated without the benefit of irrigation, the productivity of the crop depends entirely on rain and often times results in a crop that never matures to harvest and is instead grazed as rangeland grass. Table 1 provides a ten-year crop history along with a record of the soil disturbance for the preparation, cultivation, and harvesting of rain-fed wheat and oat crops.

Table 1. Ten-year Crop History for APNs in RE Tranquillity 3 Solar Generating Facility Footprint

Year	Irrigation	Soil Preparation	Crop(s) Harvested
2013	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2012	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2011	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2010	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2009	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2008	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2007	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2006	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats

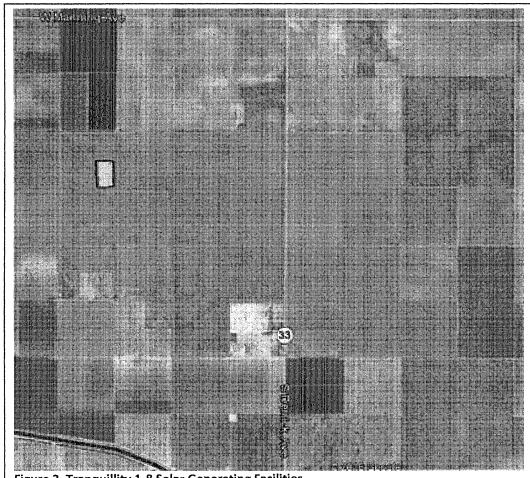


Figure 2. Tranquillity 1-8 Solar Generating Facilities

2005	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats
2004	Not Irrigated	Tilled, seeded, harvested & tilled	Rain-fed wheat and oats

3. Project Facility & Equipment

The proposed Project would be comprised of solar panels, inverters, access roads, an operations and maintenance (O&M) building, and electrical equipment including substations, battery storage enclosures, and wiring.

The Site would be secured by a 6- to 8-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.

3.1 Photovoltaic Modules

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.

3.2 Panel Installation, Array Assembly, and Racking

Structures supporting the PV modules would consist of steel posts (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 posts typically would be spaced 10 feet apart and installed to a height of approximately 4 feet above existing grade. Once the posts have been installed, the horizontal cross-members of the tracking system and associated motors would be placed and secured. A galvanized metal racking system, which holds the PV modules in the correct position for maximum capture of solar irradiance, would then be field-assembled and attached to the horizontal cross members.

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

3.3 Electrical Collection, Inverters, and Transformers

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

would be installed. Once cable installation is completed, the excavated soil would likely be used to backfill the trench and be lightly compressed. Where used, overhead cables would be installed on wood poles up to 50 feet in height.

The Solar Facility would be designed and laid out in approximately 2 MW increments. Each 2 MW increment would include an inverter-transformer station centrally located within the PV arrays. All electrical inverters and transformers would be placed on concrete pads or steel skids.

3.4 Project Substation

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

Structural components in the substation area would include:

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

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

The substation transformer would contain mineral oil, and the substation would be designed to accommodate an accidental spill of transformer fluid by the use of containment-style mounting. No PCB-laden fluids would be used.

3.5 Telecommunications

Within the site, the fiber optic or other cabling required for the monitoring system would typically be installed in buried conduit, leading to a centrally located (or series of appropriately located) SCADA system cabinets. External telecommunications connections to the SCADA system cabinets may be through either wireless or hard wired connections to locally available commercial service providers. Similar to electrical wiring, cable depths would likely be buried at a minimum of 18 inches below grade by excavating a trench wide enough to accommodate the cables and conduit. Excavated soil would likely be used to backfill the trench and be lightly compressed.

3.6 Battery Storage System

The Project may include a battery storage system, consisting of battery banks housed in electrical enclosures and buried electrical conduit. Electrical enclosures measuring 40 feet by 8 feet by 8.5 feet high would be installed on concrete foundations designed for secondary containment.

3.7 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 four-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.

3.8 Operations and Maintenance Building and Electrical Control Building

The Project would include development of an O&M building and an electrical control building. The O&M building and control building would be constructed on concrete foundations.

4. Project's Useful Life

The Project has an expected useful life of 35 years, with an opportunity for a lifetime of 50 years or more, with equipment replacement and repowering. The Project consists of numerous recyclable materials, including glass, semiconductor material, steel, wood, aluminum, copper, and plastics. When the Project reaches the end of its operational life, the component parts can be dismantled and recycled. The Project components will be dismantled and removed using minimal impact conventional construction equipment and recycled or disposed of safely in accordance with all applicable laws and regulations.

5. Property Ownership

The site is presently owned by Westlands Water District. The property owner executed an option agreement for purchase and sale with SiteCo LLC, a wholly owned subsidiary of Recurrent Energy Development Holdings. Consequently, SiteCo LLC would become the owner of the real property at commencement of construction of the Project.

6. Procedures for Decommissioning After Operations Cease

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; and restoration of topsoil, re-vegetation, and seeding. Electrical conduit and other materials that break off more than 4 feet below the ground surface would be decommissioned in place. Appropriate temporary (construction-related) erosion and seedimentation 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.

6.1 Timing for Removal

Reclamation of the Project will occur within six (6) months of either: (i) the expiration of a Project's CUP or (ii) the abandonment of a Project without the Project owner making efforts to cure a disruption of electricity production, whichever occurs first.

6.2 General Removal Process

Effectively, the reclamation of the Project proceeds in reverse order of the installation.

- The PV facility will be disconnected from the utility power grid.
- PV modules will be disconnected, collected, and either shipped to another project, salvaged, or submitted to a collection and recycling program.
- Aboveground and underground electrical interconnection and distribution cables that are no longer deemed necessary by the local public utility company will be removed and recycled offsite by an approved recycling facility.
- PV module racking system will be removed and recycled off-site by an approved metals recycler.
- Electrical and electronic devices, including transformers and inverters will be removed and recycled off-site by an approved recycler.
- Concrete foundations will be removed and recycled off-site by a concrete recycler.
- Fencing will be removed and will be recycled off-site by an approved recycler.
- The only roads constructed at the site will be the interior perimeter fire break roads, which will not be paved but rather compacted and treated to be durable and dustless. The interior roads can either remain onsite for future use, or be removed. Very little gravel will be required onsite; gravel would be repurposed either on- or off-site.
- The site may be converted to other uses in accordance with applicable land use regulations in effect at that time of reclamation. There are no permanent changes to the site and it can be restored to its original condition including revegetation. Any soil removed for construction purposes will be relocated on the site or used for landscaping after construction is complete.

6.3 Removal of Electrical Equipment, PV Modules, and Infrastructure

Above ground electrical wiring, equipment on the inverter pads and the interconnection transformer pad, and other associated equipment will be removed as part of reclamation. Prior to commencing electrical equipment removal activities, the system will be de-energized and all external electrical lines feeding into or out of the Project will be subject to "a lock out/tag out." The electrical components comprising the inverter pads and interconnection transformer pad will be salvaged and placed in appropriate shipping containers and secured in a truck transport trailer for shipment to the next location where it will be reused. The equipment on the inverter pads includes inverters, combiners, low voltage switch gear and medium voltage transformers. The equipment on the interconnection transformer pad includes medium and high voltage switchgear and a high voltage transformer. All of this is modular and each unit is bolted to a concrete pad.

The electrical connectors to each panel will be unfastened along with the combiner boxes and disconnect switches and the bolts and fasteners attaching each module to the racks will be removed. Each module will be removed from the rack and placed in secure transport crates and placed into a

trailer for storage and ultimately for transportation to another facility. The bolts and reusable fasteners will be saved for reuse also.

Once the solar modules have been removed, the racks will be disassembled and the piers supporting the racks removed. These components will require a track hoe or equivalent piece of machinery to extract the beams by pulling them out vertically. Both the racks and pipes or H-beams will be scraped and sold for salvage value. Rack disassembly involves removing bolts and stacking the rack components for salvage.

Underground electrical equipment, including electrical wiring, will be extracted and removed from the site. However, electrical conduit and other materials that break off more than 4 feet below the ground surface would be decommissioned in place. The wiring is either copper or aluminum (depending on the function/location) encapsulated in an insulating plastic material. Electrical materials consist primarily of recyclable commodities.

O&M buildings would be disassembled, and recycled or disposed of offsite. Concrete pads supporting inverters, transformers, and O&M buildings will be removed. All fences and gates will be maintained at all times until the equipment decommissioning and removal process is complete and the area is ready to be demobilized. The fence and gate will be removed and all materials recycled to the greatest extent possible. The area will be thoroughly cleaned and all debris removed.

6.4 Use and Removal of Hazardous Materials

Relatively small quantities of hazardous materials would be used during project construction and operation. Materials of concern that would be used during construction and operation include gasoline, diesel fuel, inverter coolant, transformer oil, sulfur hexafluoride, and cleaning chemicals.

Hazardous and non-hazardous wastes that are likely to be generated from project construction and operation at the Project include waste motor oils, used transformers and transformer oil, waste hydraulic fluids, and waste solvents and adhesives. During decommissioning activities, minor spills and leaks of hazardous materials from vehicles or equipment could also occur. All wastes would be required to be handled, stored, transported, and disposed of according to appropriate state and federal laws, ordinances, regulations, and standards.

Fuels, lubricants, and other materials would not be stored on the Project site, and the proposed Project applicant would not maintain an inventory of any hazardous materials on the project site. Project operations would not generate hazardous wastes.

On-site transformers would be filled with oil at the manufacturing company and subsequently checked in four-year intervals for integrity. Transformers would be mounted with secondary containment foundations to contain oil that may be spilled during replacement, and oils used would be 98 percent plant seed based. Inverter coolant would be routinely and remotely monitored, with replacement expected to occur every 15 years. All oils, lubricants, and spent filters would be collected and removed for recycling at the time of replacement and decommissioning.

6.5 Revegetation

Following removal of all solar equipment and related infrastructure, the site will undergo a series of steps to ensure successful revegetation. All topsoil on site will be removed and stockpiled as a first step. The site will then be deep chiseled to a depth of at least 18 inches to remove the compaction resulting from the original construction, O&M activities and from the decommissioning. After chiseling, compost

will be applied and the topsoil spread and then the entire site will be disked to further loosen the soil and blend in the compost.

As a final step, an appropriate rangeland seed mixture as specified by local authorities will be broadcast or drilled across the site. A weed-free mulch will be spread and crimped into the soil to stabilize soils until germination takes place. Mulching facilitates moisture retention in the soil, improving germination and survival of the seedlings.

7. Site Plans

Copies of the latest Site Plans for RE Tranquillity 1-8 may be found in Appendix A.

8. Engineer's Opinion of Probable Construction Cost

To provide a conservative estimate of costs associated with the decommissioning and restoration process, including the equipment and labor for the removal of above-ground structures and site reclamation, Recurrent Energy has engaged with established construction and engineering firms to identify the number of employees and equipment types required to remove Project elements. Table 2 identifies costs for equipment and labor to remove improvements associated with the Project.

As noted above, the Project would be surrounded by, and adjacent to, up to 7 other solar projects totaling 400 MW in all. The Project is anticipated to be decommissioned and the site reclaimed on a similar schedule to and/or sequentially with the RE Tranquillity 1 LLC, RE Tranquillity 2 LLC, RE Tranquillity 5 LLC, RE Tranquillity 5 LLC, RE Tranquillity 7 LLC, and RE Tranquillity 8 LLC projects. As a result, economies of scale would be realized from worker and equipment efficiencies during site decommissioning and reclamation, and there is an estimated 10% cost decrease per 20 MW.

Table 2: Labor and Equipment Costs for Project Reclamation

Acres: 163 MW: 15	en e	L	abor Co	sts				Equipment Costs						Total Costs
				La	oor				Hours or number of			•		
Reclamation Task	Workers	Days	Hours		te	St	ıbtotal	Equipment/fee	units	P	lates	Su	ibtotal	Costs
Onsite oils, lubricants, removed	1	2	16	\$	50	\$	800	Container	0.75	\$	1,250	\$	938	\$ 1,738
Substation components removed and recycled	2	2	32	\$	75	\$	2,400	low bed truck/ semi end dump truck	12	\$	22	\$	264	\$ 2,664
Electrical interconnection and	3	9	216	\$	75	\$	16,200	flat bed truck	30	\$	32	\$	960	\$ 17,160
PV modules removed and recycled	3	10	240	\$	50	\$	12,000	flat bed truck	37.5	\$	32	\$	1,200	\$ 13,200
PV module support H-beams and	3	9	216	\$	50	\$	10,800	backhoe	67.5	\$	162	\$	10,935	\$ 21,735
Electrical and electronic devices,	2	5	80	\$	75	\$	6,000	backhoe/ crane	18.75	\$	400	\$	7,500	\$ 13,500
Fencing, gates removed and recycled	- 2	4	64	\$	40	\$	2,560	backhoe	18.75	\$	162	\$	3,038	\$ 5,598
Roads, pathways, and other	2	4	64	\$	40	\$	2,560	cat/ backhoe	15	\$	194	\$	2,910	\$ 5,470
Site disced for revegetation	2	4	64	\$	40	\$	2,560	cat/ water truck	22.5	\$	146	\$	3,285	\$ 5,845
				Sub	total	\$	55,880		***************************************	Su	btotal	\$	31,029	\$ 86,909

9. Financial Assurances

The Applicant will establish and maintain a Letter of Credit from a state or national financial institution in the amount of \$86,909 prior to issuance of building permits for each Phase to be maintained throughout the life of the Project. The dollar amount will be adjusted on an annual basis to reflect a 3 percent increase in the financial security associated with decommissioning. In lieu of a letter of credit or as a replacement of the letter of credit during the project life, RE Tranquillity 3 LLC may establish and maintain a Bond, Cash Payment, or Decommissioning Reserve Account to be managed by a third-party financial institution determined by the Project's financiers. Automatic routing of PPA payments into the Decommissioning Reserve Account would occur throughout the Project's life. RE Tranquillity 3 LLC would notify Fresno County of its election to establish this account thirty (30) days in advance and would provide all necessary documentation in advance for staff's review and approval. Since both the County and the landowner have an interest in decommissioning the facility after operations or in the unlikely event it is abandoned, the third party financial institution responsible for managing the Decommissioning Reserve Account would have a contractual obligation to the landowners not to release funds from the Decommissioning Reserve Account other than for payment of costs associated with decommissioning. The detailed terms and conditions under which the funds would be permitted to be released from the Decommissioning Reserve Account would be explicitly defined in an Escrow Account Agreement executed by the project owner, the land owner and the selected third party institution.

10. Record of Owner's Notice of Proposed Reclamation Plan

As discussed under Section 4, SiteCo LLC, a wholly-owned subsidiary of Recurrent Energy Development Holdings 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, the owner has not been notified of the proposed reclamation plan.