
5.0 ENVIRONMENTAL INFORMATION

5.1 GENERAL

The following 16 subsections of this Application for Certification (AFC) address the various resource areas identified in the California Energy Commission (CEC) Energy Facilities Siting Regulations (Title 20, California Code of Regulations, Section 1704, Appendix B).

- 5.2 Air Quality
- 5.3 Biological Resources
- 5.4 Water Resources
- 5.5 Geologic Resources and Hazards
- 5.6 Agriculture and Soils
- 5.7 Land Use
- 5.8 Socioeconomics
- 5.9 Noise
- 5.10 Visual Resources
- 5.11 Traffic and Transportation
- 5.12 Hazardous Materials Handling
- 5.13 Waste Management
- 5.14 Worker Safety
- 5.15 Public Health
- 5.16 Cultural Resources
- 5.17 Paleontological Resources

For consistency and ease of review, each of these discipline areas is presented in a standardized format under the following subheadings:

- Laws, Ordinances, Regulations, and Standards (LORS) compliance, including involved agencies, agency contacts, permits requirements, and schedules, if applicable.
- Affected Environment
- Environmental Consequences
- Mitigation Measures
- References

5.1.1 Cumulative Impacts

An understanding of potential cumulative impacts is important, particularly in light of the recent and rapid development of proposed renewable energy projects in the southeast region of California, or the BLM California Desert District. Historically, the desert has seen little change or human development largely due to the adverse climatic conditions. The introduction of large utility scale solar facilities will reduce the amount of previously undisturbed desert area. The intensity of the proposed development at this time is purely speculative, making quantification of cumulative impacts difficult.

Federal and State of California regulations guide the analysis of cumulative impacts as part of environmental reviews under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). At the Federal level, the Council of Environmental Quality regulations for implementing the NEPA define cumulative impact as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 Code of Federal Regulations [CFR] Section 1508.7).

California state regulations have adopted similar language to define cumulative impacts as “the change in the environment which results from the incremental impact of the Genesis Solar Energy Project (the Project) when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time” (California Code of Regulations, Title 14 Division 6, Chapter 3, Section 15355).

This overview of the past, present, and reasonably foreseeable future projects provides the baseline for the cumulative impacts analysis of each environmental resource evaluated in the AFC. Factors that have been considered in developing the past, present, and reasonably foreseeable scenarios include Federal and State goals for renewable energy development; long-term transmission plans; local land use planning documents; and applications filed with Federal, State, and local agencies, including the Bureau of Land Management (BLM), the CEC, and Riverside County.

The BLM and CEC have recently discussed the idea of developing a region-wide cumulative impact assessment and inviting the cooperation of various renewable development companies in the area. To date, this group cumulative assessment activity has not occurred but will likely occur in the near future. At such time that a cumulative impact assessment is agreed upon by all developers, the Project will update their cumulative impacts.

5.1.1.1 Affected Environment

The BLM has developed the Guidance for Processing Applications for Solar Power Generation Facilities on Bureau of Land Management Administered Public Lands in the California Desert District (2008). The BLM guidance states “the reasonably foreseeable development scenario should be developed using an “areawide” approach selected specifically for the individual project and surrounding area. The appropriate land area to cover in analyzing cumulative impacts may vary by resource.” The BLM California Desert District, Palm Springs Field Office, the Federal lead agency on the Project, provided the area to consider for the cumulative impact analysis for the Project in pre-application meetings in July 2009. Figure 5.1-1 shows the extent of the area considered in the cumulative impact analysis, which accounts for other solar projects proposed within an approximately 30-mile radius from the Project. In accordance with BLM guidance, cumulative impacts to each resource evaluated in Sections 5.2 through 5.17 of this AFC extend to an area appropriate for that resource.

5.1.1.2 Environmental Setting, Past and Present Actions

The Project area is located in eastern Riverside County, where land use is characterized predominantly by open space and conservation and wilderness areas. The western portion of the county accounts for most of the developed area of the county, including urban areas and agricultural

areas. The southeastern corner of the county to the east of the Project also contains agricultural areas and limited rural development (Riverside County, 2003).

The Riverside County General Plan divides areas of the county into regional planning areas (Riverside County, 2003). The Project is located within the Eastern Riverside County Desert Areas (Non-Area Plan), which encompasses lands in the eastern portion of the county not located within a specific area plan. The General Plan land use policy is to “preserve the character of the Eastern Riverside County Desert Area” (Riverside County, 2003).

The area designated within the Palo Verde Valley Area Plan occurs to the east of the Project and encompasses the developed and agricultural area in eastern Riverside County. The portion of the Palo Verde Valley Area Plan in the vicinity of the Project consists mainly of sparsely populated desert and mountain areas. The more populated and agricultural areas occur farther east of the Project in the vicinity of Blythe.

The Project is also located within the BLM California Desert Conservation Area Resource Management Plan (CDCA Plan) (BLM, 1999). The CDCA Plan establishes a number of conservation areas under the Wilderness Review Program. The Project is located adjacent to the southern boundary of the Palen/McCoy Wilderness Area. The Chuckwalla Mountains and Little Chuckwalla Mountains Wilderness Areas are also located farther south-southwest of the Project.

The Riverside County General Plan for both the Eastern Riverside County Desert Area and the Palo Verde Valley Area discussed a variety of developments and actions in the area, including the Blythe Airport, small mining operations, the Colorado River Aqueduct, and activities associated with the Chocolate Mountains Naval Reservation and Aerial Gunnery Range.

5.1.1.3 Reasonably Foreseeable Future Actions

The State of California has issued a number of executive and legislative measures that have created a need in California for the development of solar and other renewable energy sources. The California Renewables Portfolio Standard (RPS) currently calls for the State’s utilities to procure 20 percent of their retail electricity sales from renewable energy by 2010, as specified in Senate Bill 107, passed in 2006 and effective as of January 1, 2007. The current RPS represents a more aggressive goal from the original RPS goal of 20 percent by 2017, originally established by Senate Bill 1078 in 2002. Governor Schwarzenegger’s Executive Order of November 2008 (S-14-08) and California Energy Action Plan (2005) have also set the goal at 33 percent by 2020.

In response to the growing demand for renewable energy sources in California, the BLM and the CEC have received applications for the development of solar and other renewable energy facilities throughout California. Several planning initiatives have been established to programmatically review California’s natural and social resources and identify areas most suitable for development of renewable energy resources. For the purposes of the cumulative impacts discussion, the proposed projects and public planning initiatives are considered present and reasonably foreseeable future actions that are included in the cumulative impacts analysis.

5.1.1.4 Solar Energy Facility Applications to the BLM California Desert District

Several solar energy projects in the area have already begun the permitting or application process with the BLM Palm Springs Field Office. Table 5.1-1 provides a list of solar projects within the study area for this cumulative impacts discussion.

Table 5.1-1. BLM Solar Facility Applications within Study Area

Number	Project Name	Distance to Genesis Project (closest point)* (mile)	Distance to Genesis Project (center to center)* (mile)	Acres included in the SF 299 ROW Request	Technology	MW	Status
CACA 048880	Genesis Solar Energy Project	NA	NA	4,640	Solar thermal	250	POD delivered June 2009.
CACA 049488	EnXco Development Inc.	1.0	6.5	2,070	Solar: pending solar thermal	300	Proffer Established. BLM received POD.
CACA 048810	Chevron Energy Solutions	4.0	12.5	3,119	Solar: pending solar thermal	100	Received cost recovery funds. BLM received POD.
CACA 049486	Solar Millennium	4.0	11.0	2,753	Solar: pending solar thermal	500	No cost recovery funds received. BLM awaiting POD
CACA 050379	Lightsource Renewables LLC	4.0	10.0	7,920	Solar: pending solar thermal	550	Cost recovery agreement and MOU sent 11/14/08.
CACA 049097	Bullfrog Green Energy	5.0	12.5	6,629	Solar: pending photovoltaic	2,500	Received cost recovery funds. BLM received POD.
CACA 048728	Florida Power & Light	7.0	13.5	7,773	Solar: pending solar thermal	250	Received cost recovery funds. BLM received POD. ROW issued for monitoring, water well drilling.
CACA 048808	Chuckwalla Solar	8.0	18.0	4,098	Solar: pending photovoltaic	200	Received cost recovery funds. NOI being sent out (for publication) in Federal Register

Table 5.1-1. BLM Solar Facility Applications within Study Area

Number	Project Name	Distance to Genesis Project (closest point)* (mile)	Distance to Genesis Project (center to center)* (mile)	Acres included in the SF 299 ROW Request	Technology	MW	Status
							11/9/07.
CACA 048811	Chevron Energy Solutions	8.5	17.0	3,119	Solar: pending solar thermal	100	Received cost recovery funds. BLM received POD.
CACA 049494	Solel Inc.	8.5	17.0	7,511	Solar: pending solar thermal	500	Received cost recovery funds. BLM received POD.
CACA 049397	OptiSolar Inc.	9.0	17.0	3,840	Solar: pending photovoltaic	600	Proffer Established. BLM received POD.
CACA 049490	EnXco Development Inc.	9.0	14.5	12,879	Solar: pending solar thermal	300	Proffer Established. BLM received POD.
CACA 049493	Solel	10.0	18.0	8,775	Solar: pending solar thermal	500	Received cost recovery funds. BLM received POD.
CACA 049702	Bull Frog Green Energy LLC	12.5	18.5	22,912	Solar: pending photovoltaic	2,500	Received cost recovery funds. BLM received POD.
CACA 049491	EnXco Development Inc.	15.5	22.5	1,071	Solar: pending solar thermal	300	Proffer Established. BLM received POD.
CACA 048649	OptiSolar Inc.	16.5	25.0	7,040	Solar: pending photovoltaic	350	Received cost recovery funds. BLM received POD.
CACA 049098	OTB Power Holdings	16.5	21.5	8,742	Solar: pending photovoltaic	1,000	No cost recovery funds. BLM awaiting POD.

The projects listed are assumed to be reasonably foreseeable based on the information they have provided to either the BLM or CEC; however, not enough publicly available information exists yet to perform a comprehensive analysis of their cumulative impacts within the Project study area. Project-specific information has been obtained for use in the cumulative impacts analysis to the extent possible; however, current Plan of Developments (PODs) to the BLM with information about the design of these projects, the routes of their transmission interconnections, or their schedules are not readily available and AFCs to the CEC have not been filed. Due to the lack of project-specific information, the evaluation of cumulative impacts for each resource area is based mainly on Project size and general information typical of the proposed technology.

The cumulative impacts study area does not contain proposed projects of other types of renewable energy facilities, such as wind and geothermal. The nearest non-solar proposed alternative energy project is located approximately 30 miles north of the Project and outside of the study area (BLM, 2009a).

5.1.1.5 BLM Solar Programmatic Environmental Impact Statement

The U.S. Department of Energy (DOE) and the BLM are preparing a draft Programmatic Environmental Impact Statement (PEIS) pursuant to NEPA to evaluate utility-scale solar energy development in six Western states, namely Arizona, California, Colorado, Nevada, New Mexico, and Utah. The DOE and BLM are preparing the Solar Energy PEIS to reach goals established by Congress, as set forth in Title II, Section 211 of the Energy Policy Act of 2005, and in accordance with Federal Executive Order 13212, Actions to Expedite Energy-Related Projects, and in response to the Secretary of the Interior's Secretarial Order No. 3285 issued March 11, 2009.

On June 30, 2009, the DOE and BLM issued a Federal Register Notice of Availability informing the public of the availability of the solar energy study area maps, and soliciting public comments for consideration in identifying environmental issues, existing resource data, and industry interest with respect to the proposed study areas. Some or all of the proposed solar energy study areas may be found appropriate for designation as solar energy zones in the future. The public scoping period, originally scheduled to end on July 30, 2009, has been extended to September 14, 2009.

The PEIS analysis involves identification of several tracts of BLM-administered land for in-depth study for solar development. Four study areas have been identified in California: Imperial East (12,830 acres), Iron Mountain (109,642 acres), Pisgah (26,282 acres), and Riverside East (202,295 acres) (BLM, 2009b). The Project, as well as the projects listed in Table 5.1-1, would fall within the Riverside East study area.

5.1.1.6 Western Governor's Association Western Renewable Energy Zones

The Western Governors' Association (WGA), along with the DOE, began the Western Renewable Energy Zones (WREZ) initiative in May 2008. The effort aims to identify areas within 11 states, two Canadian provinces, and Mexico with renewable energy resources to expedite the development and delivery of renewable energy (WGA, 2009). The WGA and the DOE released the WREZ Phase 1 report on June 15, 2009 which identifies areas in the Western Interconnection based on potential for commercial scale development of renewable resources and evaluation of environmental impacts (WGA, 2009). The Phase 1 report identified "hub" areas as graphical representations of regional renewable resource potential in the Western Interconnection. The hubs in California are mainly concentrated in southern California and encompass the cumulative impacts study area (WGA, 2009).

5.1.1.7 Renewable Energy Transmission Initiative (RETI)

The California Renewable Energy Transmission Initiative (RETI) is a California stakeholder process charged with developing a plan for expanding the State's electric transmission grid to provide access to renewable energy resource areas necessary to meet State energy goals. The RETI planning process is intended to help expedite development and approval of renewable energy infrastructure in ways that minimize the economic cost, environmental impacts, and number of new transmission facilities required (RETI, 2009). The RETI process will identify and rank Competitive Renewable Energy Zones (CREZ) in California and neighboring regions with the goal of developing a state-wide conceptual transmission plan to access priority CREZ. The RETI coordinating committee is comprised of the California Public Utilities Commission (CPUC), the CEC, the California Independent System Operator (California ISO), and publicly owned utilities such as Southern California Public Power Authority (SCPPA), Sacramento Municipal Utility District (SMUD), and Northern California Power Agency (NCPA) (RETI, 2009).

The RETI process consists of three phases: Phase 1 to identify and rank CREZ in California and neighboring regions; Phase 2 to develop a state-wide conceptual transmission plan to access priority CREZ; and Phase 3 to develop detailed plans of service for priority components of the state-wide transmission plan. The Phase 2A report was released in June 2009 and a final Phase 2A report will be released after incorporation of public comments received on the 2A report.

The Project falls within the Riverside East CREZ. RETI facilities within the Riverside East CREZ are shown on Figure 5.1-2 based on the available Phase 1B database. Updated Phase 2A CREZ generally coincide with the CREZ and project boundaries are shown in the figures that accompany the RETI Phase 2A report (RETI, 2009). The Riverside East CREZ generally coincide with the solar facilities applying for BLM rights-of-way. Conceptual RETI collector lines, trunk lines, and substations gather the generated power from the renewable energy facilities and transport the power to the foundation and delivery lines.

5.1.1.8 California Renewable Energy Action Team Desert, Desert Renewable Energy Conservation Plan

Governor Schwarzenegger's Executive Order of November 2008 (S-14-08) also created guidance for the establishment of a Renewable Energy Action Team (REAT) that would consist of the CEC and the California Department of Fish and Game (DFG) under a Memorandum of Understanding (MOU), signed November 2008 (MOU, 2008). The Executive Order called for the agencies to develop a streamlined permitting process for renewable energy generation power plants. The Executive Order also called for the REAT to initiate the Desert Renewable Energy Conservation Plan (DRECP) for the Mojave and Colorado Desert region to identify preferred areas that will benefit from a streamlined permitting and environmental review process. A draft of the plan is not available for review as part of the cumulative impacts analysis. The plan is currently under development, and meetings and workshops were held in March and June 2009 (CEC Docket 09-Renew EO-01). The RETI Phase 2A report (2009) notes the permitting agencies are expected to build on CREZ identified by RETI in designating areas for expedited permitting, subject to compliance with the Natural Community Conservation Planning (NCCP) program.

5.1.1.9 Conclusion

Past and previous actions have resulted in mainly open desert land and wilderness areas with minimal development in the immediate vicinity of the Project, consisting mainly of roads and transmission lines. More developed areas are located to the east of the Project within and near the City of Blythe. The construction and operation of solar energy facilities would introduce a new land use element to the mainly open and rural desert area.

The Project is located in an area under consideration by several Federal and State plans for renewable energy development. As such, projects located in the vicinity of the Project are more likely to obtain approvals and access to transmission and be constructed than projects located outside of the zones planned for renewable energy development. However, the planning initiatives do not constitute approval for any project and it is not possible to determine which projects would create a feasible design; complete the State, Federal, and local review and permitting; obtain financing; and be constructed.

5.1.2 Environmental Permits

Laws, Ordinances, Regulations, and Standards (LORS) are discussed in each of the 16 resource sections. Many of the LORS have permits associated with them. Specific information regarding the LORS or permits are discussed in more detail in each of the resource sections. The following table (Table 5.1-2) is a combined list of permits that are required or will potentially be required for the Genesis Solar Energy Project.

Table 5.1-2. Summary of Environmental Permits Required or Potentially Required for the Genesis Solar Energy Project

Permitting Agency	Permit/ Approval/ Consultation	Trigger	Processing Timeline	Comments
FEDERAL				
Bureau of Land Management, Palm Springs Field Office	National Environmental Policy Act /EIS/Record of Decision (ROD)	Major federal action; Decision to issue or deny a ROW grant	18 to 24 months from Notice of Intent (NOI) to ROD	The National Environmental Policy Act (NEPA) requires federal agencies to reveal the environmental consequences of their decision-making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions through the NEPA process. The timeline for NEPA review depends on site-specific factors and the ability to mitigate significant impacts.
	Application for ROW Grant on Federal Lands (SF-299) for solar energy project	Commercial solar energy facility development on BLM land	2 to 4 months from ROD to grant of ROW	Temporary ROW Application has been received by BLM with the application number CACA-48880 for the main facility. The ROW Grant/Long-Term Use Permit (Form 2800-14) is used for development of thermal power plants, including solar plants. The usual maximum for this grant is 30 years, but it is renewable under terms in place at time of renewal. This application requires full NEPA review at an EIS level.
	Cultural Resources Use Permit and Field Authorization	Recovery of cultural resources on federal land	Up to two months	Would apply if cultural resources discovered during construction.
U.S. Department of Defense (DOD)	Department of Defense R-2508 Complex Sustainability Office review and approval	Any potential impact to overhead aircraft	Varies	A letter from the DOD, stating that construction and operation of the arrays would not adversely affect DOD operations will be sufficient to meet this requirement; such a letter would be included in the EIS and submitted to the Riverside County Planning Department.

Table 5.1-2. Summary of Environmental Permits Required or Potentially Required for the Genesis Solar Energy Project

Permitting Agency	Permit/ Approval/ Consultation	Trigger	Processing Timeline	Comments
U.S. Army Corps of Engineers (USACE)	Nationwide Permit 12 under Section 404 of the Clean Water Act	Discharge of dredged or fill material into waters of the United States, including their adjacent wetlands	Permit not likely to be needed	The waters survey for the Project concluded that there are no wetlands meeting the definition found in the USACE Wetlands Delineation Manual traversed by the Project. Determination to be made by the USACE.
U.S. Fish and Wildlife Service (USFWS), Region 1, Pacific Region	Section 7 of the Endangered Species Act (ESA)/Consultation/ Biological Opinion (BO)	Potential impacts to federally listed species	Service has 30 days after Biological Assessment (BA) and consultation request are filed to find BA complete, and 135 days after complete BA accepted to deliver a BO	USFWS is required to assist other federal agencies to ensure that any action they authorize, implement, or fund, including solar energy developments, will not jeopardize the continued existence or recovery of any federally endangered or threatened species. Under Section 7 of the ESA, the BLM must consult with the USFWS regarding the proposed project if, in BLM's opinion, the project "may affect" any listed species. BLM will probably want to consult regarding desert tortoise, though the consultation may be informal if BLM determines that the project is "unlikely to adversely affect" the species and the USFWS concurs.
U.S. Environmental Protection Agency (EPA)	New Source Review (NSR) for new and modified major stationary sources	Any new permit unit which emits 25 pounds or more per day of non-attainment air pollutants	Varies	The facility will be subject to the local air district NSR rules and review process, including but not limited to, Best Available Control Technology (BACT) determination, offset analysis, air quality impact assessment, etc. The air quality analysis presented in the AFC air section and Appendices B.1 through B.9 fulfill the filing and analysis requirements of NSR. The MDAQMD will issue a Determination of Compliance (DOC) with conditions insuring compliance with all provisions of the NSR rule. See under local permits below.

Table 5.1-2. Summary of Environmental Permits Required or Potentially Required for the Genesis Solar Energy Project

Permitting Agency	Permit/ Approval/ Consultation	Trigger	Processing Timeline	Comments
	Title V Federal Operating Permit under National Ambient Air Quality Standards (NAAQS) and the Federal Clean Air Act (CAA)	Emissions potential from a new facility	The facility will file the required applications for a Title V permit within 12 months of the start of the facility, if the Title V program is determined to apply to the facility per the MDAQMD DOC	May not be needed; depends on a review of Project's emissions by MDAQMD. Authority for air quality compliance delegated to MDAQMD.
	EPA Identification Number	Generation of hazardous waste	7-10 businesses days once the application form has been received	As a generator of hazardous waste, the Project will be required to obtain an EPA identification number from the Department of Toxic Substances Control (DTSC). DTSC delegates some authority to local fire department hazardous materials divisions.
STATE				
California Energy Commission (CEC)	Certification	Thermal power plant over 50 MW	AFC; expect commission decision within 1 year of application being deemed complete	CEC will take jurisdiction over the state permitting of the solar facility and will be the state lead agency under CEQA. The CEC's certification process is the equivalent, in this case, of a CEQA Environmental Impact Report (EIR).
California Independent System Operators (CAISO)	Participating Generator (PG) Certification	Development of transmission project	1 year	The prospective PG must complete two contractual agreements, the Participating Generator Agreement and the Meter Service Agreement for the ISO Metered Entities (MSA-ISOME), install requisite CAISO-certified revenue quality metering, establish or verify SCADA visibility with the CAISO Energy Management System (EMS), and arrange to have the specific generation unit(s) scheduled with the CAISO by a certified Scheduling Coordinator.

Table 5.1-2. Summary of Environmental Permits Required or Potentially Required for the Genesis Solar Energy Project

Permitting Agency	Permit/ Approval/ Consultation	Trigger	Processing Timeline	Comments
California Department of Parks and Recreation, State Office of Historic Preservation (SHPO)	Section 106 of the National Historic Preservation Act/Consultation	Construction activities and subsurface work with a federal nexus	6 months	BLM will require consultation with SHPO as part of their NEPA process.
California Department of Fish and Game (CDFG)	Lake or Streambed Alteration Agreement	Temporary or permanent disturbance to bed and bank of any stream, including dry washes	60 days after application deemed complete, which includes proof of completing CEQA process	The CDFG will take jurisdiction and will issue a permit for any activity that impacts the bed and bank of a wash and all its tributaries. The permit will include mitigation requirements that may include compensatory payments.
	State Endangered Species Act Take Permit or Concurrence with Federal Take Permit	Potential for adverse impact to individual animals of species listed under CESA	No time limit on processing, can take up to a year. Requires completion of CEQA to issue.	The CDFG has the authority to issue a permit allowing the “take” of individuals of listed species provided the “take” is incidental to otherwise lawful activities and has been fully compensated for.
California Environmental Protection Agency; Regional Water Quality Control Board	Water Quality Certification under Section 401 of the CWA	Any work that may result in a discharge to waters of the U.S.	90 days- Not likely to be needed	Section 401 of the CWA requires that any applicant for a federal license or permit, who conducts any activity that may result in a discharge to waters of the state, must provide the licensing or permitting agency a certification that the activity complies with water quality requirements and standards. If a nationwide or individual permit 404 is required, a 401 certification is also required in California.

Table 5.1-2. Summary of Environmental Permits Required or Potentially Required for the Genesis Solar Energy Project

Permitting Agency	Permit/ Approval/ Consultation	Trigger	Processing Timeline	Comments
California Environmental Protection Agency; Colorado River Regional Water Quality Control Board (RWQCB), NPDES General Permits, Section 402, CWA	General Permit for Stormwater Discharges, Construction (General Construction Permit CAS 000002)	Ground disturbance greater than 1 acre (no permit is needed if less than 1 acre)	3 months or less	Discharges associated with construction activities, including clearing, grading, and excavation, that disturb 1 or more acres of land must obtain an NPDES Stormwater Discharge General permit. This permit is issued under authority of the Federal Water Pollution Control Act and requires a Stormwater Pollution Prevention Plan, Best Management Practices, and a Notice of Intent.
	General Permit for Discharges of Stormwater from Industrial Activities (General Industrial Permit CAS 000001)	Certain industrial activities and the use or storage of certain amounts of hazardous substances	3 months or less; submit Notice of Intent at least 1 month prior to construction	EPA stormwater regulations are delegated to the state and require that certain stormwater discharges associated with industrial activity must obtain an NPDES Stormwater Discharge General Permit. It is possible that hazardous materials stored on site during operations and maintenance (e.g., lubricants, oils, greases, antifreeze, cleaners, degreasers, hydraulic fluids) may trigger NPDES Stormwater Discharge General Permit requirements.
	Waste Discharge Requirement (WDR)	Construction and operation of evaporation ponds	12 months. Takes approximately 6 months for approval once application has been received.	Permit required to establish and operate evaporation ponds or bioremediation facility, file form 200 with RWQCB, ensure RWQCB involvement in CEQA process with the CEC.
	Report of Waste Discharge (ROWD) under Section 13260 et. seq. of California Water Code	Discharges that may affect water quality	3 months	ROWD required for discharges that might affect water quality of the state, unless the requirement is waived pursuant to Water Code section 13269(a).
California Department of	ROW Encroachment Permit (Form TR-0100)	Disturbance or use of state highway ROW	2 months	Requirements are a plan sheet(s) and full description of the encroachment on state ROW.

Table 5.1-2. Summary of Environmental Permits Required or Potentially Required for the Genesis Solar Energy Project

Permitting Agency	Permit/ Approval/ Consultation	Trigger	Processing Timeline	Comments
Transportation (CalTrans), District 8	Single Trip Transportation Permit	Use of oversize and/or overweight vehicles	Typically 1 day	Transportation of loads on state highways that exceed established size and/or weight limits (14 feet tall, 65 feet long, 8.6 feet wide, and/or over 80,000 pounds) requires a permit from California Department of Transportation. A Variance Permit is required (i.e., must be approved by special processing) if established size and weight limits are over 17 feet tall, 135 feet long, 15 feet wide, and/or includes special hauling equipment. The construction or transportation contractor typically obtains this permit.
California Highway Patrol	Notification of Transportation of Oversize/Overweight Loads	Use of oversize and/or overweight vehicles	Notification at least 7 working days prior to travel of oversize load on state highway	If a permit for the transportation of loads on state highways exceeds established size and/or weight limit requirements, the California Highway Patrol may need to escort the vehicle. This is dependent on chosen routes and highways. The construction or transportation contractor typically obtains this permit.
California Division of Motor Vehicles	License for Transport of Hazardous Materials and Wastes	Transport of Hazardous Materials	1 month	License needed for transport of hazardous materials on California roads and highways.
California Occupational and Safety Administration (Cal-OSHA), San Bernardino Office	Trenching, Excavation, and Erection or Demolition Permit	Trenches/excavations > 5 feet before ground surface where personnel enter; construction or demolition greater than 3 stories	Permit received within 24 hours	
	Erection of Fixed Tower Crane Permit	Erection, climbing, and dismantling fixed tower cranes	Notify 24 hours prior	

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Permitting Agency	Permit/ Approval/ Consultation	Trigger	Processing Timeline	Comments
LOCAL				
Mojave Desert Air Quality Management District (MDAQMD)	Authority to Construct (ATC) and Permit to Operate (PTO)	Activities that generate air pollutants at a regulated level	Prior to Construction and Prior to Operation	Air emissions associated with the construction and operation of the project requires permits from the MDAPCD. Air permitting will focus on cooling tower emissions and the very small amounts of emissions from freeze protection.
	Determination of Compliance (DOC)	AFC to the CEC	An application will be submitted to the MDAQMD at about the same time as the AFC is submitted. Decision approximately 180 days after AFC submittal.	The MDAQMD will work within the timeframes of the CEC's AFC process to issue the DOC. In most cases, California regulations that apply to stationary sources have been adopted as rules by the MDAQMD.
	Fugitive Dust Control Permit	Intent to construct	1 month	Part of the construction phase of the Project; may be encompassed in the DOC. Management of particulates generated by construction at the site is required; primarily typical Best Management Practices are employed and will be documented in the permit application.
	Stationary Source Operating Permit for Concrete Batch Plant	Intent to develop concrete batch plant	2 months	The Project's operating permits, with emissions limitations, will mostly likely be issued by the State of California under the Portable Equipment Registration Program. If the plant does not have a state permit, then a permit issued by MDAQMD will be required. In either case, MDAQMD will be responsible for ensuring that each plant is operated in accordance with the permit. Assumes need for 1 year or longer for an onsite concrete batch plant to construct the facility.

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Permitting Agency	Permit/ Approval/ Consultation	Trigger	Processing Timeline	Comments
Riverside County Planning and Building Departments	Construction, Grading, and Building Permits	Construction permit to install structure in county. Grading permit required for earth moving activities exceeding 50 cubic yards.	Construction permits cannot be issued until CUP approved. Application must be submitted six weeks prior to start of construction.	Local land use-related permits will be required prior to initiation of the Project. Site construction and drainage plans will be required to apply for permits.
	County Encroachment Permits for the Transmission Line	Development of new transmission line	Application must be submitted six weeks prior to start of construction	Requires Project plans to document the encroachment. Needed for connection from the solar generating facility to the existing transmission lines.
Riverside County Department of Environmental Health	Groundwater Supply Well Permit	Installation of new wells in Riverside County	1 month	Well permits will be needed for the construction of supply or monitor wells. These permits are ministerial and obtaining them is not a lengthy or complicated process. This will be done after AFC submittal. Wells not used for supply or to monitor pumping will be constructed consistent with Riverside County and DWR requirements.
	Hazardous Materials Handler and Hazardous Waste Generator Permit	Use of hazardous materials at any facility in Riverside County	Approx 30 days for approval once complete submittal received	Required by the Riverside County, Department of Environmental Health (reviewed by Riverside County Fire Department). Will need MSDS data for all hazardous materials used at Project site, plans for disposal, and contingency plans for release/spill.
	Aboveground Storage Tank (AST) Permit and Hazardous Materials Business Plan (HMBP)	Installation of above ground storage tanks at any facility	File HMBP 30 days prior to start of Project operations; Risk Management Plan 90 days prior to operations	The Project is required to file written hazardous material handling plans with the Riverside County Fire Department, including a Hazardous Materials Business Plan and the California Accidental Release Prevention (CalARP) Risk Management Plan (RMP).
	Septic Permit	Installation of septic tank at any facility	1 to 2 months to complete permitting of septic system	An onsite water treatment system (OWTS) means any individual or community onsite wastewater treatment, pretreatment, and dispersal system.

Table 5.1-2. Summary of Environmental Permits Required or Potentially Required for the Genesis Solar Energy Project

Permitting Agency	Permit/ Approval/ Consultation	Trigger	Processing Timeline	Comments
Riverside County Fire Department	Fire Protection Permit	Building of commercial or industrial facility	2 months	Will require information on fire detection and prevention systems installed at each facility. Also will likely need to consult with fire departments who have reviewed similar facilities.
Riverside County, Public Works Department	Application to Use ROW	Utility lines crossing the county ROW	7 to 30 days	An Application to Use ROW is needed to trench or bore a county road ROW, or to permanently cross it with overhead transmission lines. The process requires submission of an application and an engineering drawing showing the exact location of the crossing. This permit can typically be issued the same day as the application is made. Extra processing time would be required for pole line crossings of the ROW.
County of Riverside Transportation Department	Oversize and Overweight Vehicle and Highway Encroachment Permit	Oversize equipment traveling on county/state roads or if county ROW impacts are anticipated	Apply at least 5 working days prior to oversize load on county roadways	Requirements similar to state permit described above.
Riverside County Transportation Department	Drainage Plan Approval	Intent to construct	2 months for review process	Approval of drainage plan required prior to starting construction. The drainage and storm water plans will be required to obtain this permit.

5.1.3 References

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<http://www.energy.ca.gov/siting/solar/index.html>). Project-specific PODs, as available.
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- WREZ Phase 1 Report at <http://www.westgov.org/wga/publicat/WREZ09.pdf>.
- Map of WREZ hubs at <http://www.westgov.org/wga/initiatives/wrez/WREZ%20Map%20and%20Tables%20Only.pdf>.