
THE PROJECT:

The proposed Project consists of a solar photovoltaic (PV) generating facility approximately 250 megawatts (MW) in size. The ultimate energy output is dependent on several variables, including off-take arrangements and the evolving efficiency of PV panels. As a result, the Project could generate more or less than 250 MW. The major components of the proposed Project are described below.

Photovoltaic Solar Modules

The Project will use conventional PV modules (either crystalline or thin-film) or concentrated photovoltaic (CPV) modules. The system operates only when the sun is shining during daylight hours. While the system operates at peak output when the sunlight is most intense, it also produces power in low light conditions.

CPV modules use Fresnel lenses and/or mirrors to concentrate sunlight and focus it onto small, highly efficient solar cells (typically III-V triple-junction solar cells) that convert the sunlight directly into electrical energy. The CPV modules are non-reflective and convert sunlight directly into electricity.

CPV trackers vary among technology providers. Currently, the leading CPV manufacturer's trackers range between 30 and 50 feet in height and 50 to 75 feet in width. Inside each of leading CPV manufacturer's module are 135 cells connected in a series providing a nominal power output of 153 watts (W) per module or 1.83 kW per supermodule. Twelve (12) CPV modules collectively form a supermodule that is 8 feet wide by 16 feet long. Twelve supermodules are mounted atop a two-axis elevation-overazimuth tracker that follows the sun's daily trajectory across the sky to provide the highest possible level of energy production – particularly in the high-energy demand afternoon hours. Collectively, all of the trackers are wired to a centralized inverter for reliable feed-in to the power grid.

Fixed-Tilt and Tracker Structures

Depending on the selected manufacturer for the PV or CPV modules, the modules will be mounted on fixed-tilt, single or dual-axis tracking structures. The modules will be grouped in nominal 1 to 2 MW-AC arrays. Fixed tilt arrays will be oriented in east-west rows and will face in a generally southern orientation with a tilt angle between 10 and 35 degrees to maximize the amount of incidental solar radiation absorbed over the year. Single-axis trackers typically rotate ± 45 degrees (0 degrees is horizontal) along a nominally north-south axis to track the sun's movement throughout the day. Structural support elements will be constructed of corrosion-resistant steel, aluminum, or equivalent members that are attached to circular piers or I-beam posts that will be driven into the prepared base grade of the site.

CPV modules will be mounted on top of a dual-axis tracker. The mast will either be secured to a foundation below grade or vibratory driven into the ground, in which case the mast would serve as the foundation and the supporting structure.

The solar array field is arranged in groups called "blocks." The entire array block is connected to an inverter and transformer station to convert the current from DC to AC and step up the voltage to a higher voltage which is more efficient for transmitting power to the Project substation.

Inverters and Pad-mounted Transformers

A power conversion station is located at the center of each array. From this point, inverters take the DC power output from the PV modules and convert it to AC power. The adjacent pad-mounted transformer steps the voltage up to a medium voltage level. The medium voltage outputs from each of the pad-mounted transformers are collected together in combining switchgear located at discrete locations on the Project site parcels. The medium voltage output from the combining switchgear will be connected to the Project substation where it will then be stepped up to 230-kV for export to the grid.

Substation and Switchyard

An on-site substation will step-up the voltage from the collection level voltage to 230 kV. Breakers, buswork, protective relaying, Supervisory Control and Data Acquisition (SCADA), and associated substation equipment will be constructed on the Project site parcels. The communication system may include above or below ground fiber optic cable or microwave tower. The Project will be interconnected to the regional transmission system from this on-site substation/switchyard via the gen-tie interconnections of the proposed alignment.

Transmission Interconnection Facilities

Regardless of whether the Project is built in phases or at one time, the use of collector lines to collect electricity from the array fields to the Project substation would remain similar. Skid mounted enclosed switchgear would be used within panel fields/phases to collect and transmit the electricity from the panel array fields to the Project substation.

In order to minimize impacts to the environment, the Project will co-locate its generation-tie line (gen-tie) with neighboring solar projects. The Project will share towers with 8minutenergy Renewables' and AES Solar's Mount Signal Solar Project to get to the ISECS switchyard. From there, the Project will follow ISECS interconnection to the IV Substation. From the point at which the Project interconnects to the ISECS, WRS's power will flow wherever ISECS power flows, which will either be via interconnection to the Drew Road Switchyard (if the Imperial Irrigation District (IID), or San Diego Gas and Electric (SDGE), and LS Power have built the transmission line and substation) or to SDG&E's La Rosita to Imperial Valley 230kv circuit. The Project will hang its own arms, insulators, conductor and related transmission interconnection facilities on Mount Signal Solar's structures. This will require vehicles and equipment to work at each tower location as well as to utilize several pull sites along the transmission interconnection line path.

The preferred gen-tie route would involve the construction of an approximately one-half mile 230 kV line along Rockwood Rd until it intercepted the Mount Signal Solar gen-tie. This segment would require an encroachment permit from the California Department of Transportation (Caltrans) to cross State Route (SR) 98. From there, the Project would hang its conductors on poles built by Mount Signal Solar for approximately 2 miles to the northeastern edge of the ISECS site. The gen-tie would then extend approximately one-half mile south parallel to Pulliam Road and then turn to the west for approximately one-half mile to connect to the ISECS switchyard.

Operations and Maintenance (O&M) Building Complex

The Operations and Maintenance (O&M) Building Complex may contain administrative offices, parts storage, a maintenance shop, plant security systems, a site control center, and plant monitoring equipment. A specific design for the building(s) has not yet been selected as the technology utilized in utility scale solar energy production continues to improve dramatically at a rapid pace. The final layout will be based on the technology selected. The building(s) may have exterior lighting on motion sensors and will have fire and security alarms. The building(s) will be located on a graded area with adjacent worker parking. The parking lot will meet the requirements of the Imperial County Land Use Ordinance Division 3 Chapter 1 90302.02 Development of Standard (e) All access driveways, parking areas and vehicular maneuvering areas shall be surfaced with a minimum of three (3) inches of asphaltic concrete paving or higher quality material. The Project will collect wastewater from sanitary facilities such as sinks and toilets in the O&M Building(s). This waste stream will be sent to an onsite sanitary waste septic system and leach field to be installed in compliance with standards established by the County Environmental Health Department. Alternatively, the Project may be designed to direct these waste streams to an underground tank for storage until it is pumped out, on a periodic or as-needed basis, and transported for disposal at a licensed waste treatment facility. During periodic major maintenance events, portable restroom facilities may be provided to accommodate additional maintenance workers.

An onsite water treatment facility may be constructed. Each phase may have its own O&M Building Complex.

Energy Storage

The Project will likely incorporate an energy storage component and each phase may have its own energy storage component. The field of energy storage is rapidly advancing, thus a single technology or provider has not been selected for the energy storage component of the Project. The storage component of the Project will utilize storage technologies that operate based upon the principles of potential (like pumped storage), chemical (like batteries, mechanical energy [e.g flywheel]) or any combination thereof. The storage component may be centralized and located adjacent to the substation or switchgear. Alternatively, the energy storage component may be distributed throughout the facility adjacent to individual power conversion centers. The storage component would be housed in a warehouse type building or alternatively in smaller modular structures such as cargo shipping containers.

Project Phasing

The Project Applicant, Wistaria Ranch Solar (WRS) is requesting that a Conditional Use Permit (CUP) be permitted for each of the 17 phases of the Project. To this end, WRS has filed an application for 17 CUPs. The Project may be constructed at one time over an 18 month period, or it may be built out over a ten year period. As the CUPs are constructed over time, each CUP (phase) could take approximately 12 months. Construction of some CUPs would overlap one another. The Project would allow utilities greater flexibility in obtaining renewable energy to meet ratepayer needs. The construction equipment, materials, and labor involved in building the Project remain similar whether it is constructed in phases over ten years or built-out over an 18 month period. The 18 month build-out of the entire Project at once results in greater intensity of labor and equipment during the construction period. Each CUP (phase) of the Project may have its own off-taker and operate independently from the other CUPs or phases. The phases shown on the phasing plan are conceptual and will not be constructed in any particular order. The CUP /phases may be aggregated during construction and operations/maintenance so that multiple CUPs /phases could be built at one time. All CUPs /phases are anticipated to utilize the gen-tie line that extends from the Project site parcels to the Imperial Solar Energy Center South (ISECS) switchyard. The CUP /phases are anticipated to use the main Project switchyard; however, each CUP/phase may independently construct its own up to 230 kV step-up transformer and switchyard.

Development Agreement

WRS requests a Development Agreement with Imperial County to enable and control a phased build out of the Project. WRS desires an up to 10 year period from recordation of the CUPs to commencement of construction. WRS will use best efforts to commence construction as quickly as possible; however, given current market conditions and changing utility procurement plans, WRS needs the flexibility to meet this dynamic market. WRS understands that currently CUPs are valid for 30 years with an ability to extend them for another 10 years. The Project would have the same 40-year total CUP life as current CUPs. The requested Development Agreement would provide flexibility regarding the start of construction and the size of the phases. Additionally, it would provide for administrative amendments, phasing of infrastructure, and provide a mechanism for assignment and delegation of responsibilities to enable flexible financing structures. Moreover, this Development Agreement would allow the County to require extraordinary benefits such as a community or agricultural benefit payment which could be phased with the Project's phasing.

Decommissioning Plan

The planned operational life of the facility is 30 years. However, if the facility continues to be economically viable, it could be operated for a longer period. The Project will create a decommissioning

plan that will be implemented at the end of the Project's life, and will adhere to Imperial County's decommissioning requirements, including, but not limited to:

- Description of the proposed decommissioning measures for the facility and for all appurtenances constructed as part of the facility.
- Description of the activities necessary to restore the site to its previous condition.
- Presentation of the costs associated with the proposed decommissioning measures.
- Discussion of conformance with applicable regulations and with local and regional plans.

In the phased build-out, the phases will be decommissioned independently of one another.

EVALUATION OF ENVIRONMENTAL IMPACTS:

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