



County of San Diego, Planning & Development Services  
**SUPPLEMENTAL APPLICATION**  
ZONING DIVISION

- Type of permit requested: (check all that apply)
- |                                     |                       |                          |                                |
|-------------------------------------|-----------------------|--------------------------|--------------------------------|
| <input checked="" type="checkbox"/> | Major Use Permit      | <input type="checkbox"/> | Modification                   |
| <input type="checkbox"/>            | Minor Use Permit      | <input type="checkbox"/> | Minor/Administrative Deviation |
| <input type="checkbox"/>            | Administrative Permit | <input type="checkbox"/> | Time Extension                 |
| <input type="checkbox"/>            | Site Plan             |                          |                                |
| <input type="checkbox"/>            | Others _____          |                          |                                |

Waivers or exceptions (e.g., height or setbacks with Major Use Permit) associated with the application:

**DESCRIPTION OF PROPOSED USE**

Describe in detail the use/projects in terms of purpose, capacities, operating characteristics, access-parking arrangement, service radius and any other relevant data. Attach additional sheets if needed.

See PDS-346S Attachment A.

----- FOR OFFICIAL USE ONLY -----  
**SDC PDS RCVD 10-10-14**  
**MUP14-044**



**About OCI Solar Power:**

OCI is a utility-scale solar photovoltaic developer, owner and operator headquartered in San Antonio, TX. OCI has 91 MW of operating solar capacity spread across six projects in Georgia, New Jersey and Texas, and 105 MW under construction in Texas. OCI has approximately 500 MW of solar capacity in various stages of project development, including 210 MW signed to a long-term Power Purchase Agreement with CPS Energy, the San Antonio municipal utility. The 210 MW of solar capacity will reach commercial operation by the end of 2016.

**Description of the Facility:**

OCI Solar Lakeside (project) is a 2.0 megawatt (MW) alternating current (AC) and (2.5 MW direct current [DC]) solar photovoltaic (PV) facility located north of El Monte Road in Lakeside, California (see figures 1 and 2). The project will have a footprint of between 25-40 acres and is located on a site previously graded for agricultural activity.

The Proposed Project would include the following primary components, each are described in detail below:

- A 1,000-volt DC underground collection system and a 12-kilovolt (kV) underground collection system linking the inverters to the onsite project substation.
- An approximately 8-foot x 8-foot on-site private collector substation site encompassing a fenced pad area and an approximate height of 6 feet to surrounding equipment.
- Four inverters, each on a pad approximately 4 feet by 8 feet.
- A 12 kV overhead transmission line (gen-tie) connecting the on-site substation to San Diego Gas and Electric's (SDG&E's) distribution system.

Components of the Proposed Project would include installation of PV modules which generate electricity by safely converting the energy of the sun's photons into DC electrons. The PV module arrays (a row of PV modules) would be supported by a tracking system that would be east-west oriented. The mounting structures are typically mounted on tubular shaped piles or beams.

The east-west arranged arrays would be constructed approximately 6 feet apart (centerline to centerline) in a north-south direction, with an east-west array spacing of approximately 20 feet. PV modules would be electrically connected to adjacent modules via underground wiring.

The project will be comprised of approximately 8,065 Renesola 310 Watt PV modules (or equivalent) mounted on single-axis tracking system. The project will use approximately 20 modules per string, and would require approximately 404 strings. PV modules will range from 5-15feet in height, depending on final tracker design.

Inverters are a key component of solar PV power-generating facilities because they convert the DC generated by the PV module array into AC that is compatible for use with the transmission network. The inverters, medium-voltage transformers, and other electrical equipment would sit

on site, mounted on concrete foundation pads. The project will utilize four KACO New Energy XP500-OD-TL inverters (or equivalent). The inverter output voltage is stepped up to 12 kV at the inverter pad mount transformers. Each inverter will be approximately four feet by eight feet and seven feet tall.

The project will interconnect into San Diego Gas and Electric's (SDG&E) distribution system via 12 kV circuit 240, fed by SDG&E's Los Coches Substation. An overhead crossing easement will be required by SDG&E for purposes of interconnecting the project to SDG&E's distribution system. SDG&E will specify the exact location and details of their point of interconnection.

The project site would be fenced along the entire property boundary for security with an 8 foot high slatted chain link fence. Roads proposed for the Project that would be covered with gravel in order to reduce fugitive dust and erosion. To comply with the fire code, clearing and grubbing, as necessary, in localized areas would be required for construction and access to the project site. Additionally, a Fire Protection Plan will be prepared for the Proposed Project.

#### **Project Construction**

The construction of the Proposed Project would consist of several phases including site preparation, development of staging areas and site access roads, solar PV system assembly and installation, and construction of electrical transmission facilities. After site preparation, initial project construction would include the development of the staging and assembly areas, and the grading of site access roads for initial PV system installation.

The project's construction will kick off with light vegetation clearing. Steel pile foundations will be driven into the ground, with single or dual-axis trackers installed on top of the piles. AC and DC trenching of underground electrical wires and installation of electrical inverters will follow. After the electrical work and tracker installation have been completed, the contractor will erect the photovoltaic panels in place on top of the tracker systems. Finally, the contractor will connect the four inverters to project switchgear, which will interconnect with SDG&E's distribution system on the south side of El Monte Rd.

Construction of the project will occur over an approximately 3 month period. Because the site has been heavily modified for agricultural production, no grading is not expected at this time. Project construction trips will remain below 40 trips per day.

#### **Project Operation:**

Operation activities include the following: (1) routine inspection of overhead components and underground portions of cable systems; (2) routine maintenance including, but not limited to, PV panel washing, equipment testing, monitoring, and repair; routine procedures to ensure service continuity; and standard preventative maintenance; (3) maintenance and repair of transmission facilities, including pole or structure vegetation removal, application of herbicides, equipment repair, and replacement.

The Proposed Project is anticipated to operate, at a minimum, for the life of its long-term Power Purchasing Agreement (PPA). The initial term of the PPA for the project is for 20 years, with additional terms anticipated. At the end of the useful project life, decommissioning would commence involving the removal of the panels for sale into a secondary solar PV panel market. The projects' components and on-site materials can be readily recycled.

**Project Closure:**

Dismantling the project would entail disassembly of the solar facilities and substantive restoration of the site. Impacts associated with closure and decommissioning of the project site would be temporary and would span three basic activities: (1) disassembly and removal of all detachable above-ground elements of the installation; (2) removal of panel and racks and any other structural elements including those that penetrate the ground surface to a depth of 2 feet below grade; and (3) reuse of the land consistent with the Zoning Ordinance, which could include ground surface restoration to surrounding grade and reseeding with appropriate native vegetation.