County of San Diego

MARK WARDLAW
DIRECTOR
PHONE (858) 694-2962
FAX (858) 694-2555

PLANNING & DEVELOPMENT SERVICES
5510 OVERLAND AVENUE, SUITE 310, SAN DIEGO, CA 92123
www.sdcounty.ca.gov/pds

DARREN GRETLER
ASSISTANT DIRECTOR
PHONE (858) 694-2962
FAX (858) 694-2555

NOTICE OF PREPARATION DOCUMENTATION

DATE: April 16, 2015

PROJECT NAME: CHAPMAN SOLAR RANCH MAJOR USE PERMIT

PROJECT NUMBER(S): PDS2015-MUP-15-005

PROJECT APPLICANT: SEPV Boulevard Solar, LLC

ENV. REVIEW NUMBER: PDS2015-ER-15-21-001

PROJECT DESCRIPTION:

The Chapman Solar Ranch project (Proposed Project) involves the development of a 2.9-megawatt (MW) alternating current (AC) solar energy project on approximately 31 acres of the 132.94-acre Chapman Ranch property. The Proposed Project consists of the construction, operation and maintenance, and decommissioning of a solar generating facility (SGF) that would operate year-round, producing electric power during daytime hours. As described above, the project site is located on the Chapman Ranch in the Mountain Empire Subregional Plan Area and the Boulevard Subregional Group Area.

The Proposed Project would be constructed in phases and would interconnect to the regional distribution system through an existing San Diego Gas & Electric (SDG&E) 12 kilovolt (kV) distribution line via an overhead or underground line extension (gen-tie line). Construction of the SGF is proposed to be completed and the facility to be commercially operational by the fourth quarter of 2016. The SGF would utilize photovoltaic (PV) technology on either single-axis tracker or fixed-tilt mounting supports. The PV modules would convert sunlight striking the modules into low-voltage direct current (DC) power, which would subsequently be transformed into AC power through an inverter. The PV modules would be made of a semiconductor material through which electrons flow to convert light (photons) to electricity (voltage). The process is known as the PV effect. The project is not a typical commercial renewable energy venture insofar as it is a feed-in tariff project, where the power produced is intended to service the local area in which it is generated, thereby improving reliability.

Associated facilities include electrical systems, data monitoring equipment, the onsite gen-tie line, access roads, and security fencing. The site is subject to the Rural General Plan Regional Category and Rural Lands (RL-80) Land Use Designation. Zoning for the site is S92 (General Rural). Access to the site would be provided by a private road connecting to McCain Valley Road.

Components of the Proposed Project would include installation of individual single-axis- or fixed-tilt-mounted PV modules. The PV module arrays (a row of PV modules) would be supported by either a single-axis or fixed-tilt system. The fixed-tilt module arrays would be oriented toward the south

and angled at a degree that would optimize solar resource efficiency. For the single-axis tracking configuration, the modules would rotate from east to west over the course of the day. Visually the two types of configurations would be very similar and the PV panels for both would be non-reflective and highly absorptive. The mounting structures for both would be mounted on tubular shaped piles or beams. The PV modules, at their highest point, would be up to 12 feet above the ground surface depending on the technology selected. The module mounting system would be oriented in rows within a PV design block reflecting a standard and uniform appearance across the facility and the module configuration would be uniform in height and width.

The total number of PV modules installed would be dependent on the mounting system selected, an optimization evaluation, and detailed design. The market conditions, economic considerations, and environmental factors would also be taken into account during the detailed design process. The following PV module technologies or equivalent are planned to be incorporated into the SGF:

- PV thin-film technology
- PV crystalline silicon technology
- Stationary fixed-tilt modular configuration
- Tracking module configuration

The Proposed Project would interconnect to SDG&E's existing 12 kV distribution line on the northwest corner of Interstate-8 (I-8) and McCain Valley Road via a short (approximately 1,400 feet) span of gen-tie from the onsite switchyard, placed either overhead or underground on the project site. The required interconnection facilities and system upgrades are as follows:

- Reconductor approximately 2,007 feet of #8 copper wire to 336 aluminum conductor steel reinforced (ACSR) overhead wire
- Reconductor approximately 198 feet of single phase #2 to 336 ACSR
- Install Telemetering
- Install overhead supervisory control and data acquisition (SCADA) switch and inter-set pole
- Special relay scheme to trip generator in the event of high or low voltage
- Modify substation voltage control

The project site would be fenced along the project boundary for security with fencing with a barbed wire top that meets National Electrical Safety Code (NESC) requirements for protective arrangements in electric supply stations. The onsite access roads would be compacted to fire department standards. 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.

No extension of water or sewer services would be required as none are available in this rural location. No new wells or septic systems would be required. The Proposed Project would obtain either reclaimed or potable water from the Pine Valley Mutual Water Company, Pine Valley Sanitation District, or Padre Dam Municipal Water District for construction and cleaning of the solar panels. Cleaning would occur twice a year and would require less than 0.25-acre-foot (81,462 gallons) of water per year.

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 distribution 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.

Project construction would then include several phases occurring simultaneously with the construction of: (1) PV systems, pile driving of support masts, and placement of panels and racks on support masts; (2) trenching and installation of the DC and AC collection system; (3) electrical distribution facilities including the construction of an on-site gen-tie; and (4) the grading of access roads. Construction of the SGF is expected to last approximately 3-4 months.

Operation: Operation activities would 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 (twice per year), equipment testing, monitoring, and repair; routine procedures to ensure service continuity; and standard preventative maintenance; (3) maintenance and repair of distribution facilities, including pole or structure vegetation removal, equipment repair, and replacement.

The Proposed Project is anticipated to operate, at a minimum, for the life of its long-term Power Purchase Agreement (PPA). The initial term of the PPA for the Proposed Project is for 20 years, with additional terms anticipated. It is possible that the SGF could be re-tooled with new and upgraded technology to continue past the currently anticipated useful project life. The currently anticipated useful project life is 35 years. At the end of the useful project life, decommissioning would commence involving the removal of the panels for recycling. The Proposed Project's components and on-site materials would be readily recycled.

Decommissioning: The dismantling of the Proposed Project would entail disassembly of the solar facilities and substantive restoration of the project 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; 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. All decommissioning and restoration activities would adhere to the requirements of the appropriate governing authorities and would be in accordance with all applicable federal, State and County of San Diego regulations. A collection and recycling program would be executed to dispose of the site materials.

PROJECT LOCATION:

The Chapman Ranch (project property) is located at 2220 McCain Valley Road and totals approximately 132.94 acres within the Mountain Empire Subregional Plan area in unincorporated San Diego County. The Mountain Empire Subregional Plan Area contains five Subregional Group Areas. The Proposed Project would disturb an approximately 31-acre area located just north of I-8 and west of McCain Valley Road in the Boulevard Subregional Group Area. The Chapman Ranch is bounded by I-8 on the south, McCain Valley Road on the east, and rural ranch lands to the north and west. The Regional Location Map (Figure 1) shows the Proposed Project site's relationship with San Diego County. The Vicinity Map (Figure 2) shows the Proposed Project area on the Live Oak Springs, CA United States Geological Survey (USGS) quadrangle map. Access to the site would be provided by a private road connecting to McCain Valley Road (see Figure 3). Figure 4 shows the Proposed Project facility plot plan.

PROBABLE ENVIRONMENTAL EFFECTS:

The probable environmental effects associated with the Proposed Project are detailed in the attached Environmental Initial Study. All questions answered "Potentially Significant Impact" or "Less than Significant with Mitigation Incorporated" will be analyzed further in the Environmental Impact Report. All questions answered "Less than Significant Impact" or "Not Applicable" will not be analyzed in detail in the Environmental Impact Report.

The following is a list of the subject areas to be analyzed in the Environmental Impact Report (EIR) and the particular issues of concern:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology & Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology & Water Quality
- Land Use & Planning
- Noise
- Public Services
- Transportation & Traffic
- Mandatory Findings of Significance

PUBLIC SCOPING MEETING: Consistent with Section 21083.9 of the California Environmental Quality Act Statutes, a public scoping meeting will be held to solicit comments on the EIR. This meeting will be held on May 6, 2015 at the Boulevard Fire Station, 39223 Highway 94, Boulevard, CA 91905.

Attachments:

- Regional Location Map
- Project Location USGS Map
- Project Location Aerial Map
- Plot Plan Exhibit
- Environmental Initial Study