



## Colorado River Basin Regional Water Quality Control Board

### **NOTICE OF PREPARATION OF DRAFT ENVIRONMENTAL IMPACT REPORT**

**Date:** March 18, 2021

**To:** Responsible and Trustee Agencies, Interested Organizations, and Individuals

**Project Title:** Oberon Renewable Energy Project – Draft Environmental Impact Report

**Lead Agency:** Colorado River Basin Regional Water Quality Control Board  
c/o Aspen Environmental Group  
San Francisco, California 94104

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**Website:** <http://www.aspeneg.com/oberon-renewable-energy-project/>

**Applicant:** IP Oberon, LLC  
c/o Intersect Power  
9450 SW Gemini Drive PMB #68743  
Beaverton, OR 97008-7105

**Project Location:** The Oberon Renewable Energy Project would be located in Riverside County, north of Interstate 10 (I-10) and adjacent to the community of Lake Tamarisk in Desert Center, California, on 4,700-acres of public land administered by the U.S. Bureau of Land Management (BLM). The 500 kilovolt (kV) generation tie (gen-tie) transmission line would run north and south of the I-10 freeway to connect into the existing Southern California Edison (SCE) Red Bluff Substation. See Figures 1, 2, and 3 of Attachment A.

**Project Description:** IP Oberon, LLC, a subsidiary of Intersect Power, LLC, proposes to construct, operate, maintain, and decommission a 500 megawatt (MW) solar photovoltaic (PV) electricity generating station, battery energy storage facility, electrical substation, gen-tie lines and associated access roads on approximately 4,700 acres of BLM-managed land in Riverside County, California. The Oberon Renewable Energy Project would interconnect to Southern California Edison's (SCE) 500 kV Red Bluff Substation via one new 500 kV gen-tie line. The proposed 500-kV gen-tie line would be located within one 175-foot right-of-way (ROW), running approximately 0.5 miles southeast from the solar facility, across BLM-administered land, to the SCE Red Bluff Substation. All of the lands within the project application area are within the California Desert Conservation Area (CDCA) Planning Area, within the Riverside East Solar Energy Zone.

BLM will be the lead agency under the National Environmental Policy Act (NEPA), 42 U.S.C. section 4321 et seq. Due to submittal of a Wastewater Discharge Requirements (WDRs) application package, this project is also under the jurisdiction of the Colorado River Basin Regional Water Quality Control Board (Regional Water Board), who is the lead agency responsible for environmental review of the project in compliance with the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq.

NANCY WRIGHT, CHAIR | PAULA RASMUSSEN, EXECUTIVE OFFICER

Pursuant to section 15082 of the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), notice is given to responsible and interested agencies that the Regional Water Board plans to oversee the preparation of an Environmental Impact Report (EIR) for the above-described project. The purpose of this notice is to solicit guidance from responsible and trustee agencies, interested organizations, and individuals as to the scope and content of the environmental information to be included in the EIR. In accordance with the time limits mandated by state law, information in that regard should be submitted to this office as soon as possible, but **not later than thirty (30) days** after receiving notice. **Written comments must be received or postmarked by Monday April 19, 2021.**

In addition to offering the opportunity to submit written comments, the Regional Water Board will hold a scoping meeting in conjunction with the U.S. Bureau of Land Management to discuss the proposed project and the environmental process, and to provide agency representation, individuals, and other interested parties the opportunity to make oral comments regarding the scope of the EIR. The combined CEQA and NEPA scoping meeting will be held at the time and place indicated below.

### **Oberon Renewable Energy Project Scoping Meeting**

Date: Tuesday April 13, 2021  
Start Time: 5:00 p.m.  
Location: Zoom Meeting ID: <https://us02web.zoom.us/j/84009948080>  
Webinar ID: 840 0994 8080  
Telephone Access: (669) 900-6833

Attachment A contains a brief project description and lists environmental topics that will be addressed in the Draft EIR. If you have any questions, please contact Logan Raub at (760) 776-8966 or by email at [Logan.Raub@waterboards.ca.gov](mailto:Logan.Raub@waterboards.ca.gov).

NOTICE OF PREPARATION  
ATTACHMENT A:  
OBERON RENEWABLE ENERGY PROJECT

## **1.1 Description of the Proposed Project**

IP Oberon, LLC (Proponent), a subsidiary of Intersect Power, LLC, proposes to construct, operate, maintain, and decommission a 500 megawatt (MW) solar photovoltaic (PV) electricity generating station, battery energy storage facility, electrical substation, generation intertie (gen-tie) lines and associated access roads on Bureau of Land Management (BLM) managed land in Riverside County, California (Project). The Project is known as the Oberon Renewable Energy Project.

### **Project Location**

The Project is located on BLM-administered lands in Riverside County just east of Desert Center, California, north of I-10 (see Figures 1 and 2). The Project site and surrounding lands are part of BLM-administered lands designated for renewable energy development. There are solar facilities in the surrounding area in various stages of development, including operational (Desert Sunlight, Desert Harvest, Palen solar projects), currently under construction (Athos project), and under permitting (Arica and Victory Pass solar projects). Figure 3 illustrates the solar development in the Project area.

### **Applicant's Project Objectives**

The purpose of the Project is to generate, store, and transmit 500 MW of renewable energy to the statewide wholesale electricity grid. The Applicant's project objectives are as follows:

- Assist with achieving California's renewable energy generation goals under the Clean Energy and Pollution Reduction Act of 2015 (Senate Bill 350) and The 100 Percent Clean Energy Act of 2018 (Senate Bill 100), as well as greenhouse gas (GHG) emissions reduction goals of the California Global Warming Solutions Act of 2006 (AB 32), as amended by Senate Bill 32 in 2016;
- Bring living-wage jobs to eastern Riverside County;
- Minimize environmental impacts and land disturbance associated with solar development by siting the facility on relatively flat, contiguous lands with high solar insolation, in close proximity to established utility corridors, existing transmission lines with available capacity to facilitate interconnection, and road access;
- Further the purpose of Secretarial Order 3285A1, establishing the development of environmentally responsible renewable energy as a priority for the Department of the Interior; and
- Comply with the BLM's "all-of-the-above" energy strategy to improve the management of energy resources found on federal lands in a balanced way to ensure the Nation's economic and energy security and quality of life.

### **Project Description**

The Project would be a 500 MW solar photovoltaic generation and integrated energy storage facility that would interconnect to Southern California Edison's (SCE) 500 kilovolt (kV) Red Bluff Substation via one new 500 kV gen-tie line (see Figure 2, Project Area). IP Oberon, LLC is willing to collocate the gen-tie line

with another developer, pending financial negotiations, if the voltages, substation approaches, and time-lines are similar. Construction would occur over approximately 15 to 20 months, concluding in or before the fourth quarter of 2023. The Project would operate for a minimum of 35 years and up to 50 or more years. At the end of the Project's useful life, the Project would be decommissioned and the land returned to its pre-

Project contours. Revegetation would be attempted, though revegetation success would be subject to the microclimatic conditions in the area at the time of decommissioning.

The Project application covers approximately 4,700 acres project area of BLM-administered land within which fewer than 3,000 acres would be developed with solar panels (see Figure 3, Project Area).

The proposed Project would consist of the following major components:

### **Solar Array**

The solar facility would include several million solar panels; the precise panel count would depend on the technology ultimately selected at the time of procurement. The ultimate decision for the panel types and racking systems described here would depend on market conditions and environmental factors, including the recycling potential of the panels at the end of their useful lives. Panels would be sited to avoid Desert Dry Wash (Microphyll) Woodland habitat (see Figure 2, Project Area).

Types of panels that may be installed include thin-film panels (including cadmium telluride [CdTe or "cad tel"] and copper indium gallium diselenide [CIGS] technologies), crystalline silicon panels, or any other commercially available PV technology. Solar thermal technology is not being considered. Panel mounting systems that may be installed include either fixed-tilt or tracking technology, depending on the PV panels ultimately selected.

The PV modules would be manufactured at an offsite location and transported to the Project site. Panels would be arranged in strings with a maximum height of 14 feet. Panel faces would be minimally reflective, dark in color, and highly absorptive.

### **Inverters, Transformers, and Electrical Collection System**

The Project would be designed and laid out primarily in 2 MW to 5 MW increments, which would include an inverter equipment area measuring 40 feet by 25 feet. The color of the inverter equipment would be standard white or desert tan, depending on availability from the manufacturer. Non-conforming module blocks would be designed and sized as appropriate to accommodate the irregular shape of the developable Project footprint. The final module block increment sizes ultimately would depend on available technology and market conditions. Each 2 MW to 5 MW increment would include an inverter-transformer station constructed on a concrete pad or steel skid, and centrally located within the PV arrays. Each inverter-transformer station would contain up to four inverters, a transformer, a battery enclosure, and a switchboard 8 to 11 feet high. The pads would contain a security camera at the top of an approximately 20-foot pole. If required based on site meteorological conditions, an inverter shade structure would be installed at each pad. The shade structure would consist of wood or metal supports and a durable outdoor material shade structure (metal, vinyl, or similar). The shade structure would extend up to 10 feet above the top of the inverter pad.

Panels would be electrically connected into panel strings using wiring secured to the panel racking system. Underground cables would be installed to convey the direct current (DC) electricity from the panels via combiner boxes located throughout the PV arrays, to inverters to convert the DC to alternating current (AC) electricity. The output voltage of the inverters would be stepped up to the collection system voltage

via transformers located in close proximity to the inverters. The 34.5 kV level collection cables would primarily be buried underground within the solar facility, with some segments potentially installed overhead on wood poles outside of the solar facility connecting the two parcel groups.

### **Project Substations and Switchyards**

Project substation(s) would transform or step up the voltage from 34.5 kV to 500 kV. The substation area and associated equipment would be located in a 20-acre area in the southeastern area of the solar facility. Each substation would collect consolidated intermediate voltage cables from the MV and PV collector system. Electrical transformers, switchgear, and related substation facilities would be designed and constructed to transform medium-voltage power from the Project's delivery system to the 500 kV SCE Red Bluff Substation.

### **500 kV Generation-Tie Line**

The Project 500 kV gen-tie line would be located within one 175-foot ROW, running approximately 0.5 miles (2,640 feet) southeast from the solar facility, across BLM-administered land, to the existing SCE Red Bluff Substation.

The Project gen-tie lines would be constructed with either monopoles, lattice steel structures, or wooden H-frame poles. Gen-tie structures would be on average 120 feet tall, with a maximum height up to approximately 200 feet for dead-end structures near the Red Bluff Substation.

Upgrades to Red Bluff Substation would be required by SCE within the existing substation fence line to accommodate interconnection of the Oberon 500 kV gen-tie line.

### **Operation and Maintenance Building**

A new O&M building would be constructed at the Project site with an electrical distribution line running to the O&M building from the existing SCE distribution system adjacent to the solar facility. The O&M building would be designed for Project security, employee offices, and parts storage. During O&M, the Applicant may use one of the homes that currently exists on the solar facility site, or it may use an existing home's septic system and build a new O&M building. If a new O&M building is constructed, the O&M building would be approximately 3,000 square feet in size and approximately 15 feet at its tallest point, which would accommodate operation and maintenance staff. The O&M building would be constructed on a concrete foundation with its color to be determined in coordination with the BLM.

### **12 kV Distribution Line**

Electrical power for the O&M building and substation would be supplied via a new overhead or underground 12 kV distribution line from the existing SCE distribution system adjacent to the solar facility site.

### **SCADA and Telecommunications Facilities**

The facility would be designed with a comprehensive Supervisory Control and Data Acquisition (SCADA) System to allow remote monitoring of facility operation and/or remote control of critical components. The fiber optic or other cabling required for the monitoring system typically would be installed in buried conduit within the access road, leading to a SCADA system cabinet centrally located within the Project site or a series of appropriately located SCADA system cabinets constructed within the O&M building. External telecommunications connections to the SCADA system cabinets could be provided through wireless or hard-wired connections to locally available commercial service providers. The Project's SCADA system would interconnect to this fiber optic network at the switching station, and no additional disturbance associated with telecommunications is anticipated.

## **Battery Energy Storage System (BESS)**

Battery energy storage systems (BESS) can assist grid operators in more effectively integrating intermittent renewable resources into the statewide grid. The Project would include a battery, flywheel, or other similar storage system capable of storing up to 500 MW of power. If provided, the storage system would consist of battery, flywheel banks, or other similar storage technology housed in electrical enclosures and buried electrical cable. The battery system would be concentrated near the Project switching station on approximately 25 acres in the southeastern area of the Project site.

The Applicant plans to expand/upscale the BESS capacity on up to 40 acres within the approved Project area at a future date depending on contracting opportunities. The areas identified for future BESS expansion and its associated substation are located in the vicinity of the proposed BESS and onsite substation and are depicted on Figure 2 (Project Area).

## **Meteorological Data Collection System**

The Project would include a meteorological (MET) data collection system with up to 15 MET stations throughout the solar facility. Each met station would be up to 10 feet tall and 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 4-foot horizontal metal 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.

## **Access Roads**

Access to the Project site would be provided from Highway 177. The Project's on-site roadway system would include a perimeter road, access roads, and internal roads. The perimeter road and main access roads would be approximately 20 feet wide and constructed to be consistent with facility maintenance requirements and county standards, and the gate would be 24 feet wide. These roads would be surfaced with gravel, compacted dirt, or another commercially-available surface and would provide a fire buffer, accommodate Project O&M activities such as cleaning of solar panels, and facilitate on-site circulation for emergency vehicles. Dust control would be implemented as necessary to mitigate dust plumes. However, the roadway system would be specially designed to accommodate the safe passage of desert tortoise and other wildlife across the site. If gravel is used for road surfaces, portions of road lengths would remain free of gravel in strategic locations in order to facilitate tortoise movement. In addition, culverts may be placed along internal roads to avoid the potential to disturb or injure tortoise individuals.

## **Fencing, Site Security, and Lighting**

**Fencing.** The solar facility would be enclosed with fencing that meets National Electric and Safety Code (NEC) requirements for protective arrangements in electric supply stations. The boundary of the Project sites would be secured by up-to 6-foot-high chain-link perimeter fences, topped with one foot of three strand barbed wire, or as dictated by BLM specifications. The fence would typically be set approximately 100 feet from the edge of the array. Desert tortoise exclusion fencing may be constructed along the bottom of the security fence.

**Site Security.** Multiple points of ingress/egress would be accessed via locked gates located at multiple points. Each Project unit would have at least one point of access. It is anticipated that there would be solar facility entrances off of Rice Road to both the east and west, as well as along Orion Road to access the northern Project area.

**Lighting.** Coordination with the California Department of Transportation (Caltrans) would be initiated to ensure compliance with exterior lighting regulations of lighting along Interstate 10. Care would be taken to prevent undue light pollution from the nighttime security lighting. Nighttime lighting would be limited to areas required for operation, safety, or security, such as the O&M building, and would be directed or shielded from major roadways or possible outside observers. Lighting at high illumination areas not required on a continuous basis would be controlled by switches, motion detectors, etc., to light the areas only when required. All lighting would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties. The Project would use portable lighting for any emergency work that must occur on panels at night.

## **Water Requirements**

Water for construction-related dust control and operations would be obtained from either an on-site or off-site groundwater well. During the construction phase, it is anticipated that a total of up to 700 acre-feet would be used for dust suppression (including truck wheel washing) and other purposes during the 15-month construction timeframe. During construction, restroom facilities would be provided by portable units to be serviced by licensed providers.

During the operation and maintenance phase, water would be required for panel washing and maintenance, and for substation restroom facilities that would be located adjacent to the O&M building. The associated leach field would not be located within 0.25 miles of any drinking water well. During operation, the Project would require the use of approximately 40 acre-feet annually for panel washing (up to four times per year) and other uses. No wastewater would be generated during panel washing as water would be absorbed into the surrounding soil or would evaporate.

## **General Construction Process**

### **Construction Schedule and Workforce**

The start of construction is dependent on obtaining all necessary federal, state, and local approvals. Construction is anticipated to occur over an approximately 15- to 20-month period, depending on Power Purchase Agreement and financing requirements. The Project may be phased. The on-site workforce would consist of laborers, craftsmen, supervisory personnel, supply personnel, and construction management personnel. The on-site workforce is expected to reach its peak of approximately 530 individuals with an average construction-related on-site workforce of 320 individuals. The construction workforce would largely be recruited from within Riverside and San Bernardino Counties. Certain non-local specialty trade workers supporting proprietary plant equipment/components and construction processes may be employed on a short-term basis during construction. Construction equipment would operate between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday for up to a maximum of 8 hours per piece of equipment, daily. Weekend construction work is not expected to be required, but may occur on occasion, depending on schedule considerations. Similarly, if nighttime construction is performed, a night lighting construction plan would be developed.

### **Pre-construction Activities**

Prior to construction activities at the Project site, a number of activities would be undertaken to prepare the site and crews for construction, including: Environmental resource surveys, geotechnical evaluations, resource and site boundary staking/flagging, desert tortoise exclusion fence installation, construction crew training, and establishment of construction staging areas.

A Stormwater Pollution Prevention Plan (SWPPP) or SWPPP-equivalent document would be designed and implemented prior to and during construction and operations to reduce potential impacts related to erosion and surface water quality.

**Desert Tortoise Exclusion Fence Installation.** A desert tortoise exclusion fence would be installed around the Project perimeter and clearance surveys would be conducted in accordance with the U.S. Fish and Wildlife Service (USFWS) protocol. Tortoises would be removed from the site and handled in accordance with a desert tortoise management and translocation plan and in compliance with Desert Renewable Energy Conservation Plan (DRECP) Conservation and Management Actions (CMAs).

Upon BLM approval and Offer of Right-of-Way (ROW) Grant, the Applicant proposes to install desert tortoise (DETO) exclusion fencing in conjunction with security fencing around a portion of the Project under a Limited Notice to Proceed in January 2022, which includes the Project substation, a laydown area, and one solar PV block for a total of up to 350 acres (as shown on Figure 2). Due to schedule constraints, this proposed fence installation would occur outside of the DETO activity period. The exact location of the solar PV block will be determined based on biological resources survey results and in consultation with BLM and USFWS. The remaining DETO exclusion fencing would be installed in March 2022 and followed by DETO clearance surveys during the spring DETO active period (April/May).

The DETO exclusion fence would be constructed along the bottom of the security fence with durable materials (i.e., 16 gauge or heavier) suitable to resist desert environments, alkaline and acidic soils, wind, and erosion. Fence material would consist of 1-inch horizontal by 2-inch vertical, galvanized welded wire, 36 inches in width. Other materials include: Hog rings, steel T-posts, and smooth or barbed livestock wire. Hog rings would be used to attach the fence material to existing strand fence. Steel T-posts (5- to 6-foot) are used for new fence construction. Standard smooth livestock wire fencing would be used for new fence construction, on which tortoise-proof fencing would be attached. Installing DETO fencing in conjunction with security fencing would also serve as exclusion fencing for desert kit fox.

## **Construction Activities**

The Project would be constructed in the following phases, which would occur simultaneously on different portions of the site:

**Gen-tie Line Construction.** SCE has scheduled a significant interconnection blackout window from May to December 2023, requiring the high-voltage components of the Project (the Project substation and gen-tie line) to be constructed and interconnected no later than April 30, 2023. As a result, the Applicant proposes to construct the gen-tie line, 500 kV substation, a laydown/staging area, and one block of PV panels (approximately 300 acres) beginning in January 2022 under a Limited Notice to Proceed (NTP). Installation of desert tortoise exclusion fencing and security fencing around the 500 kV substation, laydown/staging area, and the block of PV panels would be included as part of the Limited NTP. SCE would also install any required upgrades to Red Bluff Substation during this time.

The overhead gen-tie line structure foundations would be excavated to a depth of 35 feet or more and include concrete supports depending on final engineering. Gen-tie structures would be on average 120 feet tall. During stringing of the conductor, pull and tensioning temporary work areas may be required outside of the 175-foot ROW.

**Solar Facility Site Preparation.** Mass grading would not be conducted on the Project site. Several solar and storage facility locations would require specific ground treatments, but this represents a minority of the ground surface of the facility. Substation, storage container, O&M facility, and internal and external road locations would require mowing, grubbing, grading and compaction. Inverter station locations would require light grubbing. The solar array areas would require trimming of woody vegetation to a height of



24 inches. Certain areas of the site with highly irregular topography that provide important hydrologic functions to the site would be avoided by project design. Other irregular areas would be more-or-less leveled or smoothed to provide for construction access and installation.

The site cut and fill would be approximately balanced; minimal import/export would be necessary. Onsite pre-assembly of trackers would take place in the staging area.

**Photovoltaic Panel System** – The structures supporting the PV module arrays would consist of steel piles (e.g., cylindrical pipes, H-beams, or similar), which would be driven into the soil using pneumatic techniques, similar to a hydraulic rock hammer attachment on the boom of a rubber-tired backhoe excavator. The piles typically are spaced 10 feet apart. For a single-axis tracking system, piles typically would be installed to a reveal height of approximately 4 to 6 feet above grade, while for a fixed-tilt system the reveal height would vary based on the racking configuration specified in the final design.

**Inverters, Transformers, Substations and Electrical Collector System** - Electrical inverters would be placed on steel skids, elevated as necessary with steel piles to allow for hydrologic flows beneath the inverter structures. Medium-voltage cabling would be installed either underground, or for the low-impact design portion of the Project, would be installed overhead along panel strings in a CAB<sup>1</sup> system to avoid the need for underground cabling and trenching. At the end of panel strings, cables would be combined and routed overhead on wood poles roughly 30 to 50 feet high, depending on voltage.

Substation areas would be excavated for the transformer equipment and control building foundation and oil containment area. The site area for the substation would be graded and compacted to an approximately level grade. Concrete pads would be constructed as foundations for substation equipment, and the remaining area would be graveled. Concrete for foundations would be brought onsite from a batching plant in Blythe or would be batched on site as necessary.

**Post-Construction Cleanup.** Construction sites would be kept in an orderly condition throughout the construction period by using approved enclosed refuse containers. All refuse and trash would be removed from the sites and disposed of in accordance with BLM regulations. No open burning of construction trash would occur. All vegetation that may interfere with equipment would be trimmed and removed using manual nonmechanical means or sprayed with an approved herbicide, as necessary.

**Construction Site Stabilization, Restoration, and Wildlife Monitoring.** Following the completion of major construction, temporarily disturbed areas would be revegetated for the operations phase pursuant to an approved Restoration Plan. The Plan would describe the Applicant's strategy to minimize adverse effects on native vegetation, soils, and habitat. Where necessary, native re-seeding or vertical mulching techniques would be used. However, it is anticipated that many species will regenerate post-construction due to preservation of desert vegetation during the construction phase.

At the conclusion of restoration activities, and if determined beneficial by USFWS and BLM biologists, previously relocated plants and wildlife would be reintroduced to the Project site and monitored for safety and health.

## **Operation and Maintenance Activities**

The solar modules at the site would operate during daylight 7 days a week, 365 days a year. Operational activities at the Project site would include:

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<sup>1</sup> Cambria Association for the Blind and Handicapped produces overhead cable management systems comprised of cable trays, hooks, and other devices. The sale of CAB Products helps support its services to persons with disabilities.

- Solar module washing;
- Vegetation, weed, and pest management;
- Security;
- Responding to automated electronic alerts based on monitored data, including actual versus expected tolerances for system output and other key performance metrics; and
- Communicating with customers, transmission system operators, and other entities involved in facility operations.

Up to 10 permanent staff could be on the site at any one time for ongoing facility maintenance and repairs. Alternatively, approximately 2 permanent staff and 8 Project operators would be located off-site and would be on call to respond to alerts generated by the monitoring equipment at the Project site. Security personnel would be on-call. The O&M building would house the security monitoring equipment, inclusive of security cameras feeds for monitoring the Project 24-hours per day.

The Project site maintenance program would be largely conducted on-site during daytime hours. Equipment repairs could take place in the early morning or evening when the plant would be producing the least amount of energy. Key program elements would include maintenance activities originating from the on-site O&M facility.

Maintenance typically would include panel repairs; panel washing; maintenance of transformers, inverters, and other electrical equipment as needed; road and fence repairs; and weed management.

On-site vegetation would be managed to ensure access to all areas of the site and to screen Project elements as needed. Solar modules would be washed as needed (up to four times each year) using light utility vehicles with tow-behind water trailers, as needed, to maintain optimal electricity production. No chemical cleaners would be used for module washing.

No heavy equipment would be used during normal operation. O&M vehicles would include trucks (pickup and flatbed), forklifts, and loaders for routine and unscheduled maintenance and water trucks for solar panel washing. Large heavy-haul transport equipment may be brought to the solar facility infrequently for equipment repair or replacement.

Long-term maintenance schedules would be developed to arrange periodic maintenance and equipment replacement in accordance with manufacturer recommendations. Solar panels are warranted for 25 years or longer and are expected to have a life of 30 or more years, with a degradation rate of 0.5 percent per year. Moving parts, such as motors and tracking module drive equipment, motorized circuit breakers and disconnects, and inverter ventilation equipment, would be serviced on a regular basis, and unscheduled maintenance would be performed as necessary.

**Fire Safety During Operation.** Solar arrays and PV modules are fire-resistant, as they are constructed largely out of steel, glass, aluminum, or components housed within steel enclosures. As the tops and sides of the panels are constructed from glass and aluminum, PV modules are not vulnerable to ignition from firebrands from wildland fires. In a wildfire situation, the panels would be rotated and stowed in a panel-up position. The rotation of the tracker rows would be controlled remotely via a wireless local area network. All trackers could be rotated simultaneously in a hazard situation.

## Decommissioning

At the end of the Project's useful life, the solar arrays and gen-tie line would be decommissioned and dismantled. Upon ultimate decommissioning, a majority of Project components will be suitable for recycling or reuse, and Project decommissioning would be designed to optimize such salvage as circumstances allow and in compliance with all local, state, and federal laws and regulations as they exist at the time of decommissioning. Following removal of the above-ground and buried Project components, the site would be restored to its pre-solar facility conditions, or such condition as appropriate in accordance with county policy at the time of decommissioning.

Decommissioning activities would require similar equipment and workforce as construction but would be substantially less intense. The following activities would be involved:

- Dismantling and removal of all above-ground equipment (solar panels, track units, transformers, inverters, substations, O&M buildings, switchyard, etc.)
- Excavation and removal of all above-ground cables
- Removal of solar panel posts
- Removal of primary roads (aggregate-based)
- Break-up and removal of concrete pads and foundations
- Removal of septic system and leach field
- Removal of 34.5 kV distribution lines
- Dismantling of 500 kV gen-tie line
- Scarification of compacted areas

The panels could be sold into a secondary solar PV panel market. It is expected that a robust market for used PV panels will exist in the future because the panels can be used in various configurations and at various scales. Electricity demand is expected to continue to rise and electricity prices are projected to continue their steady increase. Demand for solar energy is rapidly accelerating and is expected to grow for decades to come.

The module's component materials lack toxic metals such as mercury, lead, cadmium telluride, or gallium, and the majority of the components of the solar installation are made of materials that can be readily recycled. If the panels can no longer be used in a solar array, the silicon can be recovered, the aluminum resold, and the glass recycled. Other components of the solar installation, such as the tracker structures and mechanical assemblies, can be recycled, as they are made from galvanized steel. Equipment such as drive controllers, inverters, transformers, and switchgear can be either reused or their components recycled. The equipment pads are made from concrete, which can be crushed and recycled. Underground conduit and wire can be removed by uncovering trenches and backfilling when done. The electrical wiring is made from copper and/or aluminum and can be reused or recycled, as well.

Following decommissioning and dismantling of the solar facility, the Oberon site would be made available for reversion to agricultural use or open space.

## 2.1 Environmental Topics to be Addressed

### Introduction

The Regional Water Board has determined that an Environmental Impact Report (EIR) shall be prepared to address the potential significant impacts of the proposed Oberon Renewable Energy Project. The EIR will involve research, analysis, and study of the following environmental topics:

- Aesthetics/Visual Resources/Reflection
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources and Paleontological Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Socioeconomics
- Traffic and Transportation
- Wildfire

The EIR will include all topical areas of content required by the California Environmental Quality Act (CEQA), including cumulative impacts, alternatives to the proposed Project, and growth-inducing impacts. For each resource topic, environmental impacts relating to construction, operations, and decommissioning phases of the Project will be identified. However, the level of analysis to be included may vary based on the complexity of the issues, public and agency input to this Notice of Preparation (NOP), and/or refinements to the Project description that may occur subsequent to the publication of this NOP. For impacts that are significant, mitigation measures will be proposed to alleviate or avoid the significant impact(s).

### Aesthetics/Visual Resources/Reflection

Placement of PV solar panels, the transmission line, and other Project facilities may alter the views of the Project area. Potential visual impacts of this Project on sensitive receptors and scenic resources will be further evaluated in the EIR, including consideration of construction of other solar projects in the surrounding Project area. Photo simulations of the proposed Project from key observation points will be provided to assist in the evaluation. The EIR will also analyze the possible impacts of reflection of the sun off the solar modules and nighttime lighting of portions of the solar facility.

### Agriculture Resources

The potential impact on prime and unique farmlands and lands zoned as such will be evaluated in the EIR, as will the potential impact of converting agricultural lands to non-agricultural uses.

### Air Quality

The proposed Project site is located in the Mojave Desert Air Basin (MDAB), and air emissions are regulated by the South Coast Air Quality Management District. The Riverside County portion of the MDAB is designated as nonattainment for the state ozone and particulate matter under 10 micrometers in diameter (PM10) standards. The EIR will address consistency with regional and local air quality plans and evaluate and quantify the short-term and long-term sources of air pollutants generated by the Project, including mobile, stationary, and area source emissions.

## **Biological Resources**

A biological resources assessment will be provided to evaluate the Project's effects on the area's vegetation communities, wildlife habitats, wildlife movement, wetlands and waters, habitat conservation plans/ protection ordinances, and sensitive and/or listed species.

## **Cultural Resources and Paleontological Resources**

Cultural resource effects will be analyzed in the EIR, including a query of the Northwest Information Center of the California Historical Resources Information System, analysis of sacred lands identified through consultation with the Native American Heritage Commission, and consultation with Native American Tribes and other interested parties (e.g., local historical societies). The evaluation will also address the potential impacts to historic resources and the occurrence of paleontological (fossil) resources.

## **Energy**

The EIR will examine the potential for wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation.

## **Geology and Soils**

The EIR will assess soil and geologic conditions of the Project area and address hazards related to seismic activity, including the potential for liquefaction, ground shaking, soil failure, soil stability, and erosion potential.

## **Greenhouse Gas Emissions**

The EIR will address the potential construction- and operation-related impacts relative to greenhouse gas emissions.

## **Hazards and Hazardous Materials**

The EIR will evaluate the presence of hazards or hazardous conditions that could affect construction and operation of the Project, including the location of nearby or on-site hazardous waste sites included on state or federal databases, airport and airstrip hazard zones, emergency response routes, and wildfire hazards.

## **Hydrology and Water Quality**

The EIR will include an analysis of existing drainage systems and will evaluate potential impacts to water resources. Consideration shall be given to mitigation measures and design alternatives that maintain the existing hydrology of the site or redirect excess flows created by hardscapes and reduced permeability from surface waters to areas where they will dissipate by percolation into the landscape.

## **Land Use and Planning**

The proposed Project may affect the use of the Project properties. The EIR will evaluate potential environmental effects to land use that include consistency with land use plans, policies, or regulations of the applicable jurisdictions, including the BLM's Desert Renewable Energy Conservation Plan (DRECP).

## **Noise**

The EIR will determine noise levels due to construction and operation of the proposed Project and will evaluate impacts for consistency with applicable laws, regulations, ordinances, and guidelines.

## **Public Services and Utilities**

With the accommodation of the construction workforce, there may be a temporarily increased demand for public services and utilities, including community facilities and schools, and an increased need for police and fire protection services. The EIR will evaluate the potential for impacts on these public services.

## **Socioeconomics and Population and Housing**

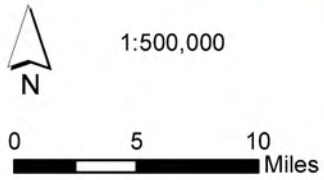
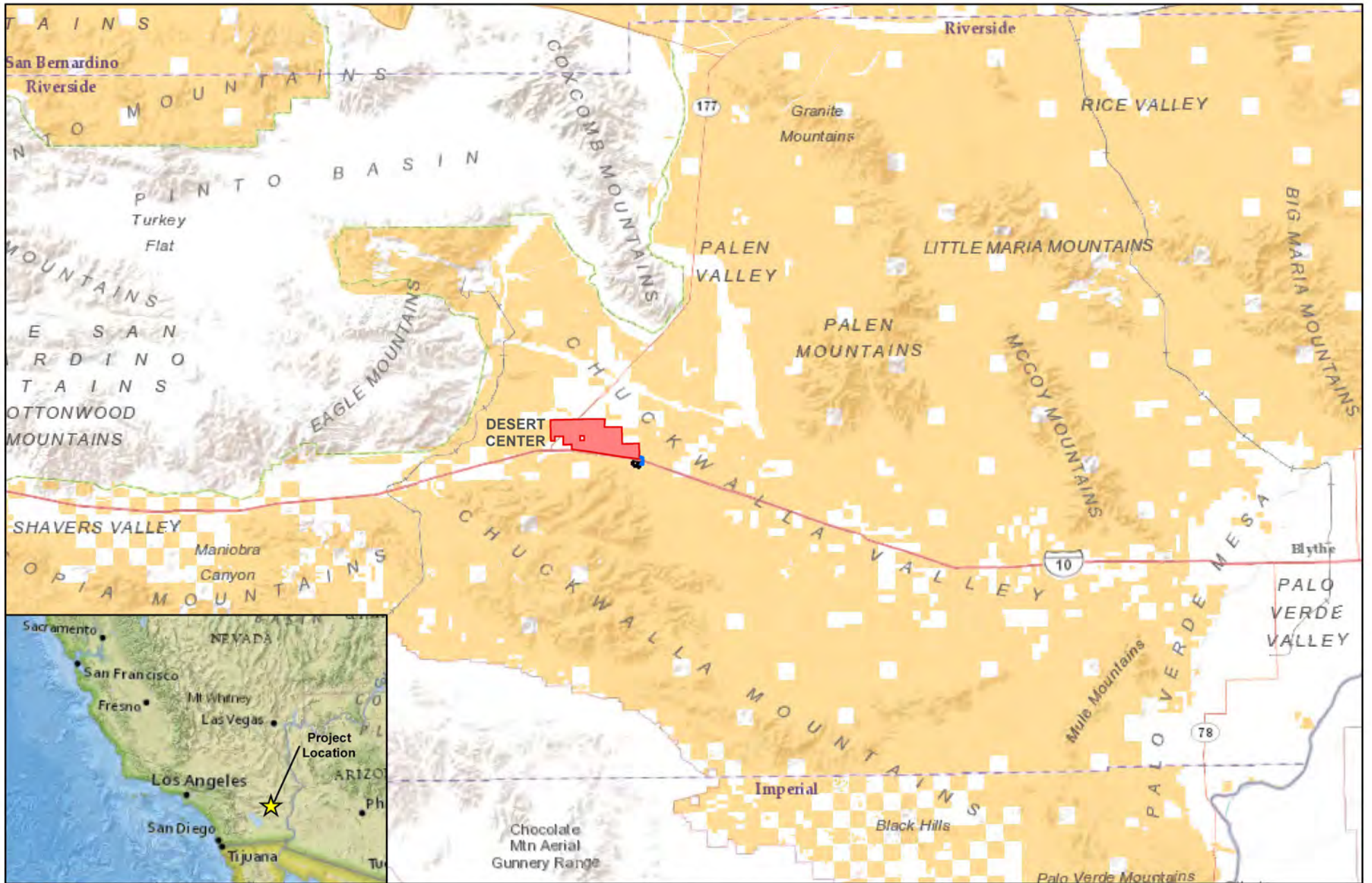
The EIR will address the short- and long-term population and housing impacts that would result from the construction workforce. These effects could include physical and service-related changes within area communities associated with demand for temporary housing.

## **Traffic and Circulation**

The EIR will include a traffic study that evaluates changes in circulation that could result from the proposed Project, focusing on effects during Project construction.

## **Wildfire**

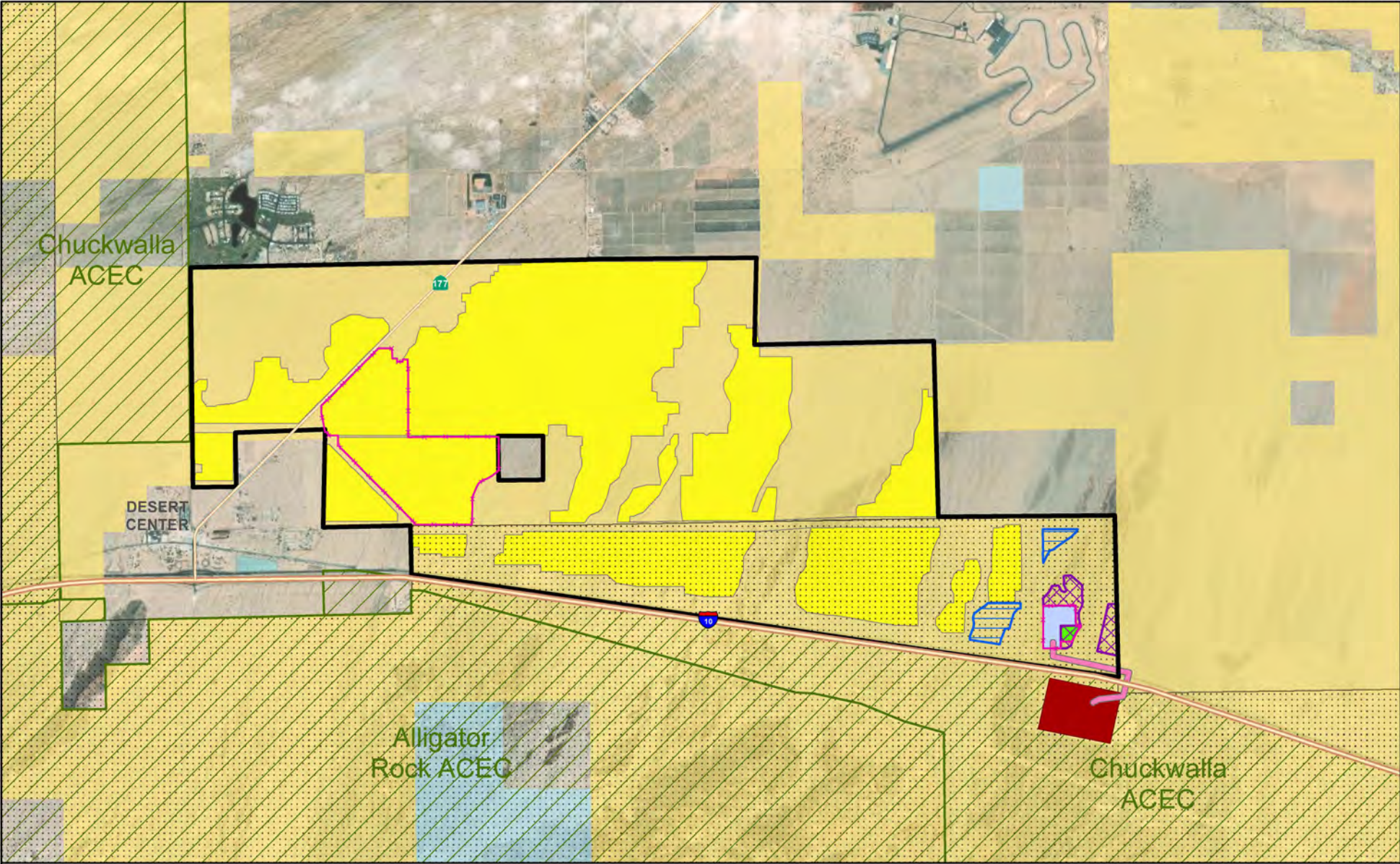
The EIR will examine Project impacts to emergency response and wildfire-related risks.



- Proposed Gen-Tie Line
- Proposed Solar Facility
- ▭ SCE Red Bluff Substation
- BLM-administered Land

**Figure 1**  
**Project Vicinity**





- |   |   |   |
|---|---|---|
| Oberon Project Boundary (approximately 4,700 acres) | Proposed 500 kV Gen-Tie Line Corridor       | Area of Critical Environmental Concern (ACEC) |
| Fenced Solar Array                                  | Battery Energy Storage System (BESS)        | Desert Tortoise Critical Habitat              |
| Proposed Early Desert Tortoise Clearance Areas      | Future Battery Energy Storage System (BESS) | <b>Land Ownership</b>                         |
|   | Proposed Substation                         | Bureau of Land Management                     |
|   | Laydown Area                                | State   |
|   | Existing SCE Red Bluff Substation           |   |

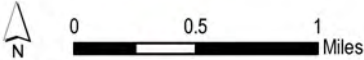


Figure 2

Oberon Renewable Energy Project Area



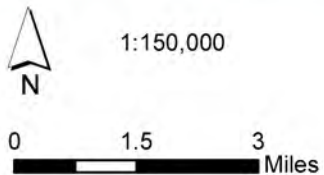
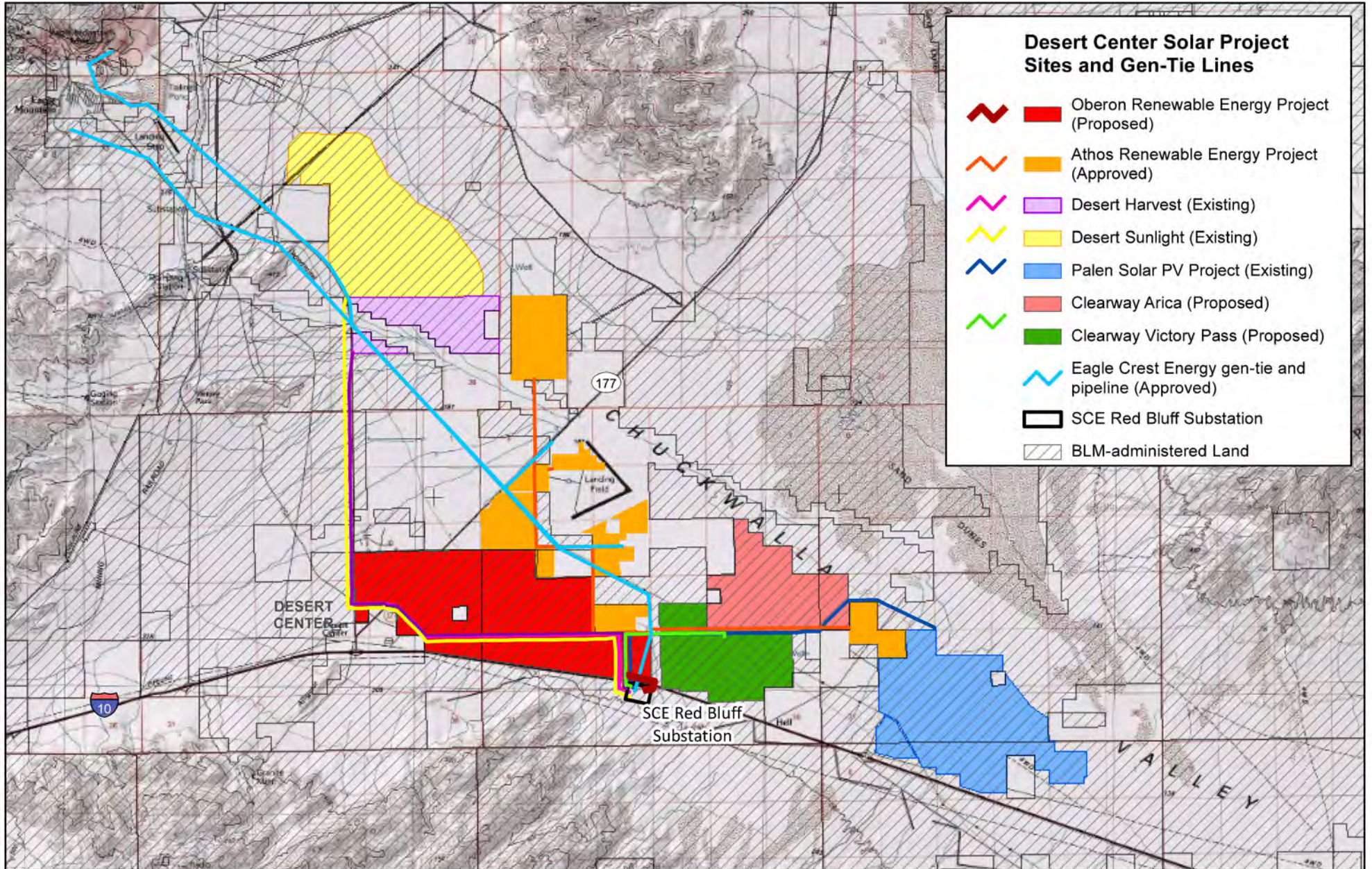


Figure 3

Desert Center Solar Projects