



RIVERSIDE COUNTY PLANNING DEPARTMENT

John Hildebrand
Planning Director

COUNTY OF RIVERSIDE – NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT & SCOPING MEETING

DATE: May 12, 2023

TO: Responsible and Trustee Agencies, Interested Organizations, and Individuals

PROJECT CASE NO./TITLE: Sapphire Solar Project - Draft Environmental Impact Report Conditional Use Permit No. 220035/Public Use Permit No. 220002/Development Agreement No. 2200018

LEAD AGENCY: County of Riverside
TLMA Planning Department
4080 Lemon Street, 12th Floor
Riverside, California 92501

Contact Person: Tim Wheeler
Phone Number: (951) 955-6060
Email: TWheeler@rivco.org
Website: <http://planning.rctlma.org>

APPLICANT: Sapphire Solar, LLC
EDF Renewables Development Inc.
1445 Innovation Drive
San Diego California, 92128

Contact Person: Katie Kuplevich,
Associate Director Development
Phone Number: (925) 768-0800
Email: Katie.Kuplevich@edf-re.com

PROJECT LOCATION: The Sapphire Solar Project (Project) is located in Riverside County (County), approximately 5 miles north of Desert Center, approximately 40 miles west of the City of Blythe, and 3.5 miles north of Interstate 10. The Project consists of approximately 1,082 acres on private lands consisting of a solar site and battery storage. The Project also includes up to three “Linear Facilities Routes” including: two options for a 230-kilovolt (kV) generation tie (gen-tie) line alignment (only one of which would be constructed), two access roads, and a collector line. The Linear Facilities Routes, totaling 110 acres would be located on land administered by the United States Department of Interior, Bureau of Land Management (BLM). The Project solar site is bounded on the north, east, and west sides by BLM lands and to the south by Belsby Avenue. Melon Street runs along the west side of the Project boundary and Jojoba Street on the east. The east side of the Project site is located adjacent to California State Route 177/Rice Road. Refer to Figure 1 for the Project location and surrounding vicinity.

Two County roads intersect the interior of the Project site from east to west: Investor Avenue and Osborne Avenue. The portion of Osborne Avenue that intersects the Project site is approximately 0.6 miles long. Osborne Avenue is identified by the County as a road “accepted for public use” by the County. The portion of Investor Avenue that intersects the Project site is approximately 1 mile long. Investor Avenue is identified by the County as a road “accepted for public use.”

One County road intersects the interior of the Project site from north to south: Melon Street. The portion of Melon Street that intersects the Project site is approximately 0.5 miles long. Melon Street is identified by the County as a road “accepted for public use”. The portions of Osborne Avenue, Investor Avenue, and Melon Street that intersect the Project site would be removed from public use.

The Project would interconnect to the electrical grid by running its gen-tie west of the Project solar site along one of the Linear Facility Routes over BLM-administered federal public lands to intertie via line tap onto the existing

Desert Harvest solar project gen-tie line that follows Kaiser Road and connects into the larger electrical grid at the Southern California Edison (SCE) 230-kV Red Bluff Substation. An access road would be constructed west of the Project solar site to Kaiser Road along the same route as the gen-tie to serve a dual purpose as the main site access road and the maintenance road for the gen-tie. An additional access road for emergency services would be constructed from either Kaiser Road or California State Route 177/Rice Road to the Project site to meet Riverside County Fire Department Technical Policy #TP 15-002.

The Assessor's Parcel Numbers on which the Project is located are listed on the attached sheet titled "Assessor's Parcels for Project Site CUP 220035 Sapphire Solar Project."

PROJECT DESCRIPTION: EDF Renewables Development Inc. (EDFR) on behalf of Sapphire Solar, LLC ("Applicant") proposes to entitle, construct, operate, maintain, and decommission the Project. The Project would include a utility-scale solar photovoltaic (PV) electrical generating and storage facility and associated infrastructure to generate and deliver renewable electricity to the statewide electricity transmission grid.

The proposed Project would generate and store up to 117 megawatts (MW) of renewable electricity via arrays of solar PV panels, battery energy storage system (BESS), and appurtenant facilities.

As previously stated, the Project would include a 230-kV gen-tie line, access roads, and collector line routes, collectively referred to as "Linear Facility Routes." The Linear Facility Routes are located on federal public lands administered by BLM and designed to support the proposed Project, which is located on adjacent private lands. Each of the three 200-foot wide Linear Facility Routes has been included to provide flexibility as it relates to potential California Independent System Operator (CAISO) interconnection options and County Fire Department emergency access requirements. Refer to Figures 1 through 3 for locations of the three Linear Facility Routes. The locations and lengths of the three potential Linear Facility Routes are as follows: Linear Facility Route #1 is approximately 1.6 miles long and located along the top northwest corner of the Project site, Linear Facility Route #2 is approximately 1.6 miles long and located toward the northwest corner of the Project site (south of Linear Facility Route #1), and Linear Facility Route #3 is approximately 1.4 miles long and located along the east side of the Project site.

The Project is anticipated to be online in late 2025. The Applicant is seeking a minimum 39-year Conditional Use Permit (CUP) (CUP 220035) for the construction, operation, and decommissioning of the proposed solar facility, as well as a Public Use Permit (PUP) (PUP 220002) for portions of the Project that would traverse County Roads (State Route 177/Rice Road or Kaiser Road). The Applicant is also seeking cancellation of Williamson Act contracts within the Project site, which will be considered as part of the Project's permitting process. The Applicant is also seeking to vacate roadways dedicated to the public but not accepted by the County that traverse the internal portions of the Project. Roads along the Project perimeter on the outside of the solar facility would remain dedicated public access as applicable. Ancillary permits, including encroachment permits, grading and construction permits, and certificates of occupancy, are anticipated from the County. These permits and approvals are local ministerial actions that will follow California Environmental Quality Act (CEQA) compliance.

Pursuant to Riverside County Rules to implement CEQA, notice is given to responsible and interested agencies that the Riverside County Planning Department 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. The public review period is from May 12 to June 12, 2023.

PUBLIC SCOPING MEETING: A scoping session has been scheduled in order to bring together and resolve concerns of affected federal, State, and local agencies, the proponent of the proposed Project, and other interested persons; inform the public of the nature and extent of the proposed Project; and provide an opportunity to identify the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in the EIR and help eliminate from detailed study issues found not to be important. The scoping session is not a public

hearing on the merit of the proposed Project, and **no decision** on the Project will be made. Public testimony is limited to identifying issues regarding the Project and potential environmental impacts. The Project proponent will not be required to provide an immediate response to any concerns raised. The Project proponent will be requested to address concerns expressed at the scoping session through revisions to the proposed Project and/or completion of a Final EIR prior to the formal public hearing on the proposed Project. Mailed notice of public hearing will be provide to anyone requesting such notification.

Sapphire Solar Project Scoping Meeting

Date: Monday, June 5, 2023
Time: 1:30 p.m.
Location: Riverside County Planning
Department 4080 Lemon Street,
12th Floor Riverside, California
92501

Information on how to participate in the meeting will be available on the Planning Department website at <https://planning.rctlma.org>. If you wish to participate (speak or view meeting) remotely during the meeting, please contact the TLMA Commission Secretary, Elizabeth Sarabia, by phone at (951) 955-6021 or email at Esarabia@RivCo.org **at least 24 hours** prior to the meeting and provide your name, phone number, and agenda item. Once you provide the necessary information you will receive (either by phone or email) conformation of receipt of your request with the necessary meeting information to join.

For electronic documents and information related to the Notice of Preparation, please view the project webpage below:

<https://planning.rctlma.org/Home/Planning-Notices/CUP220035-PUP220002-and-DA2200018>

Please send all written correspondence to:

RIVERSIDE COUNTY PLANNING DEPARTMENT
Attn: Tim Wheeler, Project Planner
PO Box 1409; Riverside, California 92502-1409
Twheeler@rivco.org

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 Tim Wheeler at (951) 955-6060 or by email at Twheeler@RivCo.org.

Sincerely,

RIVERSIDE COUNTY PLANNING DEPARTMENT

Timothy Wheeler

Tim Wheeler
Project Planner for Sapphire Solar Project

Sapphire Solar Project

Assessor's Parcels for Project Site (CUP 220035/PUP No. 220002/DA 2200018)	
Private Land Parcels	BLM-Administered Parcels
807172010	807172015
807172011	807172027
808240001	811121007
808240002	811121008
808240003	
808240004	
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NOTICE OF PREPARATION

ATTACHMENT A

SAPPHIRE SOLAR PROJECT

A. Description of the Proposed Project

Project Location

The Sapphire Solar Project (Project) is located in Riverside County (County), approximately 5 miles north of Desert Center, approximately 40 miles west of the City of Blythe, and 3.5 miles north of Interstate 10. The Project consists of approximately 1,082 acres on private lands consisting of a solar site and battery storage. The Project also includes up to three “Linear Facilities Routes” including: two options for a 230-kilovolt (kV) generation tie (gen-tie) line alignment (only one of which would be constructed), two access road, and a collector line. The Linear Facilities Routes, totaling 110 acres would be located on land administered by the United States Department of Interior, Bureau of Land Management (BLM). The Project solar site is bounded on the north, east, and west sides by BLM lands and to the south by Belsby Avenue. Melon Street runs along the west side of the Project boundary and Jojoba Street on the east. The east side of the Project site is located adjacent to California State Route 177/Rice Road. Refer to Figure 1 for the Project location and surrounding vicinity.

Project Description

The Project consists of approximately 1,082 acres on private lands and approximately 110 acres of land administered by BLM within Riverside County (see Figures 1 through 3). The proposed Project would generate and store up to 117 megawatts (MW) of renewable electricity via arrays of solar photovoltaic (PV) panels, battery energy storage system (BESS), and appurtenant facilities located within private lands. The Linear Facility Routes are located on federal public lands administered by BLM.

The Project would interconnect to the electrical grid by running its gen-tie west of the Project solar site along one of the Linear Facility Routes over BLM-administered federal public lands to intertie via line tap into the existing Desert Harvest solar project gen-tie line that follows Kaiser Road and connects into the larger electrical grid at the SCE 230-kV Red Bluff Substation. An access road would be constructed west of the Project solar site to Kaiser Road along the same route as the gen-tie to serve a dual purpose as the main site access road and the maintenance road for the gen-tie. An additional access road for emergency services would be constructed from either Kaiser Road or California State Route 177/Rice Road to the Project site to meet the Riverside County Fire Department Technical Policy #TP 15-002 for secondary access.

The proposed Project consists of the solar site (located on private land) and three Linear Facility Routes (located on BLM Land). The proposed solar site components on private lands include the following:

- Solar field with a capacity of 117 MW ac
- Crystalline silicon panels, copper indium gallium selenide panels, bifacial panels, or cadmium telluride panels
- Single axis tracker components
- Direct current (DC) to alternating current (AC) power inverters at each solar block
- Transformer(s)
- Integrated, on-site BESS with a capacity of 117 MW ac
- On-site or off-site operations and maintenance (O&M) building
- On-site substation (including a generator and propane tank for emergency use)

- Standalone storage building
- Underground 34.5-kV collection system
- Underground or aboveground optical ground wire
- Up to three on-site groundwater wells
- Microwave/communications tower
- Meteorological station and albedometer weather station
- Staging area for construction trailers and construction parking
- Up to five temporary laydown areas throughout the Project site
- A roadway system consisting of internal and perimeter roadways
- Integrated Supervisory Control and Data Acquisition (SCADA) system
- Inverter stations and transformers
- Electrical collection system
- 12-kV distribution line for bringing permanent power to the on-site O&M and the substation

The proposed Project components on BLM lands include the following:

- 230-kV transmission line connecting the Project to the electrical grid
- Main and, potentially, secondary access road to the Project for construction and O&M
- 34.5-kV collection lines to bring power generated from the solar arrays to the Project substation

Applicant’s Project Objectives

The Applicant’s purpose of the Project is to generate, store, and transmit renewable energy to the statewide wholesale electricity grid. The Applicant’s identified Project objectives are:

- Utilize property within Riverside County for the placement of up to 117 MW of solar PV panels and up to 117 MW of battery storage.
- Support California’s efforts to reduce greenhouse gas (GHG) emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of GHGs to at least the 1990 emissions level by 2020.¹ This timeline was updated in 2016 under Senate Bill 32, which requires that statewide GHG emissions be reduced to at least 40% below the statewide GHG emissions limit by 2030.²
- Support California’s aggressive Renewables Portfolio Standard (RPS) Program consistent with the timeline established by Senate Bill 100 (De León, also known as the “California Renewables Portfolio Standard Program: emissions of greenhouse gases”), as approved by the California legislature and signed by Governor Brown in September 2018, which increases RPS in 2030 from 50% to 60% and establishes a goal of 100% RPS by 2045.³
- Develop an economically feasible and commercially financeable project.
- Provide solar-generated electricity to the California Independent System Operator (CAISO) grid.

¹ AB 32. Air pollution: greenhouse gases: California Global Warming Solutions Act of 2006, as approved September 27, 2006. California Assembly, 2006. www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf.

² SB 32. California Global Warming Solutions Act of 2006: emissions limit, as approved September 8, 2016. California State Senate. Bill No. 32. leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32.

³ SB 100. California Renewables Portfolio Standard Program: emissions of greenhouse gases, as approved September 10, 2018. leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100.

- Maximize the full potential of the solar resources on lands within the Project property.
- Lead technology advances of energy storage development models and contribute to California’s projected need for between 2 to 11 gigawatts of long-duration energy storage by 2030 and 45 to 55 gigawatts of long-duration energy storage by 2045.
- Expand the reach of renewable energy development through the creation of high-capacity BESS units.
- Increase energy storage opportunities to meet statewide renewable energy goals and support grid reliability.
- Assist Riverside County in promoting its role as a leading County producer of renewable energy.
- Provide green jobs to Riverside County residents and the state of California.
- Site and design the Project in an environmentally responsible manner consistent with current Riverside County guidelines.

Land Use Considerations

The solar facility site is located within the County of Riverside’s jurisdiction. The Project is located within the Desert Center Area Plan Boundary of the Riverside County General Plan. The private lands associated with the Project are designated as Open Space, Rural, and Agriculture per the Riverside County General Plan. The parcels are currently zoned A-1-20 Light Agriculture and W-2-10 Controlled Development Areas. Portions of the private lands associated with the Project are located within a County Agricultural Land Preserve Area and some parcels are located on lands subject to Williamson Act contracts.

In accordance with Riverside County Ordinance No. 348, solar power plants on lots 10 acres or larger are permitted through a Conditional Use Permit (CUP) within the A-1-20 Light Agricultural and W-2-10 Controlled Development Areas zoning designations.⁴ The majority of the Project, approximately 1,082 acres, would be located on private lands under Riverside County’s jurisdiction. The Applicant is seeking a minimum 39-year CUP for the construction, operation, and decommissioning of the proposed solar facility and gen-tie line, as well as a PUP for portions of the gen-tie line that would traverse County Roads (State Route 177/Rice Road).

The entirety of the 110-acre area associated with the up to three Linear Facility Routes are on BLM-administered lands located within a Development Focus Area (DFA) for solar, wind, and geothermal projects as designated by the Desert Renewable Energy Conservation Plan (DRECP). The DRECP Final Environmental Impact Statement (EIS) was approved by a Record of Decision (ROD) signed on September 14, 2016.

Project Components

The Project would consist of two major components: a solar site (located on private land) and the up to three Linear Facility Routes (located on BLM Land). The solar site would occupy approximately 1,082 acres on privately owned land. The Linear Facilities Routes total approximately 110 acres. The solar site would include a solar array field, BESS, a substation, an O&M building and storage building, ancillary facilities and several interior access roads. The gen-tie line would be located within a 200-foot right-of-way (ROW) on federal lands managed by BLM.

Solar Site (Private Lands)

Solar Generator

The proposed Project would use up to 117 MW PV-system blocks to convert solar energy directly to electrical power for export to the electrical grid. Solar power is generated by PV modules that convert sunlight striking the modules into low-voltage DC power. This DC power is subsequently transformed to AC power via an inverter that is placed on site. PV cells are located on panels that are mounted at a fixed angle facing south or on a tracking device

⁴ County of Riverside. 2022. Riverside County Ordinance No. 348: Providing for Land Use Planning and Zoning Regulations and Related Functions of the County of Riverside. As amended through Ordinance No. 348.4983. Effective May 25, 2022.

that follows the sun. The PV panel modules are mounted on steel support posts that are pile-driven into the ground. The arrays are typically placed on an aluminum rail such that with a maximum tilt of 60 degrees the top of the array would be a maximum of 15 feet above grade at the tallest point and minimum of 2 feet above the grade at the lowest point. Many solar panels on multiple rows are controlled by a single motor, creating one system called a solar tracker. For large electric utility or industrial applications, hundreds of solar trackers are interconnected to form a utility-scale PV system.

Inverters and Transformers

Within the proposed solar arrays, there would be inverters and transformers. Inverters and transformers are usually housed within an enclosed structure, which helps to reduce the resulting operational noise levels. The inverters would convert the DC electric input into grid-quality AC electric output. The AC electrical output would be transmitted from the inverter station to an adjacent transformer. The transformer would step up the voltage of the AC electrical input and then would transmit the power via the PV collection system to the Project substation.

Battery Storage

Battery storage systems absorb, hold, and then reinject electricity into the electrical system. Energy storage plays an increasingly important role in renewable energy and helps to create a more flexible and reliable grid system. Energy storage can smooth electricity prices through arbitrage or energy shifting, manage evening energy ramps, mitigate the risk of curtailment, provide black start capability, and provide backup power.

The proposed Project would use an AC-coupled centralized BESS configuration of up to 117 MW, which would include batteries housed within containers in a centralized location near the proposed on-site substation. The BESS would likely consist of containers housing batteries connected in strings and mounted on racks. AC-coupled BESS design standards typically include lighting, monitoring equipment, cooling units, active exhaust venting, multiple fire detection units including gas/heat/smoke detectors, and fire suppression systems, which adequately address fire risk associated with the unit.⁵ AC-coupled BESS units typically require their own inverters on their own skid. However, some BESS equipment (e.g., inverters, auxiliary transformer to control the HVAC system) may be adjacent to the container instead of within the container. A water storage tank will be installed to provide water supply needed for fire protection and operations, based on consultation with Riverside County Fire Department. AC-coupled BESS units would be incorporated and consolidated within or adjacent to the Project substation area within the substation yard. Different battery storage technologies, such as lithium-ion, sodium sulfur, and lead acid batteries, can be used for grid applications.

BESS enclosures would be accessed from the outside via cabinet doors for maintenance needs. Because the size of each battery enclosure varies widely by manufacturer, the total number of enclosures to be installed would not be known until a manufacturer has been selected. The batteries would be charged directly from the PV solar energy generated by the Project. Energy stored in the BESS would then be discharged into the grid when the energy is needed, providing important electrical reliability services to the local and regional area.

Batteries Housed within BESS Enclosures: While the final storage technology has not yet been selected, the BESS would include lithium-ion battery modules or another commercially available battery technology available at the time of construction. Batteries would be housed within outdoor BESS enclosures, which are typically made of metal. Each BESS enclosure would house hundreds of battery modules. Typical BESS enclosures are approximately 70 feet long by 13 feet wide by 15 feet high; however, these dimensions can vary widely by manufacturer. Each BESS enclosure is typically capable of storing between 2 to 5 MW-hours of energy.

Internal Roads

Internal roads would be constructed to allow fire and maintenance vehicle access. All internal access roads within the Project site would be up to 20 feet wide and cleared, graded, and compacted. A 20-foot-wide perimeter road

⁵ 24 CCR 9. 2022 California Fire Code. <https://codes.iccsafe.org/content/CAFC2022P1>.

separating the solar arrays from the perimeter fence would be constructed within the entire perimeter of the solar site. The roads would be constructed to allow fire and maintenance vehicle access.

Solar Facility Fencing, Site Security, and Lighting

The solar facility would be enclosed with fencing that meets National Electric and Safety Code (NEC) requirements for protective arrangements in electric supply stations and USFWS protocol for desert tortoise exclusion fencing⁶. The boundary of the solar site would be secured by a permanent security fence. The fence would be an 8-foot-high chain link fence and would have top rail, bottom tension wire, and three strands of barbed wire mounted on 45-degree extension arms. With the strands of barbed wire, it would have an overall height of no more than 12 feet from the bottom of the fabric to the top of the barbed wire. The posts would be set in concrete. The security fence would be installed near the start of construction but may be preceded by mowing and/or vegetation clearance as required. The ingress/egress would be accessed via a locked entrance gate. Security may be enhanced with motion detectors, facility lighting, and cameras in key locations.

Nighttime lighting would be limited to areas required for operation, safety, or security, such as the on-site substation and O&M building. Nighttime lighting would be directed or shielded from major roadways or possible outside observers. Motion sensitive, directional security lights would be installed to provide adequate illumination around the perimeter of the solar site. Exterior lights would be hooded, and lighting would be shielded and directed downward to minimize glare. No Project component is 200 feet tall or greater; thus, there would be no safety lighting required per Federal Aviation Administration regulations. Off-site security personnel could be dispatched during nighttime hours or could be on site, depending on security operating needs.

The Project would use portable lighting for any emergency work that must occur on panels at night. The level and intensity of lighting during operations would be the minimum needed. Portable lighting may be used occasionally and temporarily for maintenance activities during operations.

Staging Areas

The solar site would have several temporary construction staging areas for use throughout the approximate 12- to 18-month construction period. The main staging area would include temporary construction trailers for the management of construction, a parking area, site security facilities, and portable toilet facilities that would serve the Project's sanitation needs during construction. This area would accommodate delivery of materials, vehicles, etc. Material delivery for the solar field would be ongoing; panels and framing structures would be delivered throughout the solar field adjacent to the subunit locations.

Additional temporary staging areas for material laydown including boxes of solar panels, steel, aluminum framing, conduit for underground electrical, transformers, and other Project materials would be located throughout the Project area. The laydown areas would be subsumed by the build-out of the panel array with some exceptions. Materials such as boxes of panels, steel, and aluminum framing would be laid out between rows of panels and along the access roads.

Substation

The substation is anticipated to be located within the solar site and would cover approximately 15 acres (depending on collocation of the BESS facilities). The substation would be separately fenced off from the rest of the solar project facilities and would include a switchyard component within the internal substation fence line. The substation serves to interconnect an electrical generator to the grid. The substation would convert the energy produced by the solar panels from 34.5-kV to 230-kV. It would include transformers, breakers, switches, meters, and related equipment.

The substation will include a backup emergency generator for use if the regional transmission system fails. The substation would be surrounded by 12-foot security fencing and locked gates to comply with electrical codes.

⁶ U.S. Fish and Wildlife Service. 2009. Desert Tortoise (Mojave Population) Field Manual: (Gopherus agassizii). Region 8, Sacramento, California.

A small control enclosure would be located near the substation and would be accessible to authorized high-voltage personnel only. The control building would house electrical control equipment, battery/DC systems for device operation, safety relays, and other similar electrical equipment. This building would interconnect with the main control room in the operations building for monitoring of the substation.

The substation must have access to communication systems in the area to comply with Federal Energy Regulatory Commission/CAISO/Utility monitoring and control requirements. Compliance may be accomplished by underground lines, aboveground lines, and or wirelessly. Existing road(s) would be used to the extent possible. At the substation, the generated electricity would be routed via a new gen-tie line internal to Linear Facility Routes #1 or #2 interconnecting to the existing Desert Harvest Solar 230-kV transmission line for delivery to line tap location on the existing operational Desert Harvest Transmission line and into the larger electrical grid at the SCE Red Bluff Substation.

Power Purchase Agreement and Interconnection

The proposed Project has a fully executed Power Purchase Agreement with a utility and CAISO interconnection queue position Q1634 (cluster 13) with SCE. The Project would interconnect via a line tap on the existing Desert Harvest gen-tie line (likely at pole #11 or pole #13) located on lands administered by the BLM and within the County Kaiser Road ROW. Ultimately, the power would be provided on existing lines to SCE's Red Bluff Substation. SCE's substation equipment has been approved by the Public Utilities Commission. The Project is expected to have a fully executed Large Generator Interconnection Agreement by the third quarter of 2023.

Operations and Maintenance Building and Storage Building

The Project includes an O&M building and a storage building. The O&M building and storage building would be up to 3,600 square feet, up to 24 feet in height, and would be set on concrete slab-on-grade that would be poured in place within the solar site area.

The O&M building would contain a backup generator and a propane tank for emergency use or in the event of a blackout. The O&M building would consist of staff offices, restrooms, a break room, meeting rooms, and an office supply storage area and would include an HVAC system. A septic system would be located at the O&M building to serve sanitary wastewater treatment needs. Employee parking would be provided adjacent to the O&M building in accordance with Section 18.12, Off-Street Vehicle Parking of Riverside County Ordinance No. 348.⁷

The storage building would be designed for security and parts storage (i.e., panels, etc.).

Water Tank

The Project would include the installation of a water tank to provide a sufficient water reservoir for fire safety as required by the Riverside County Fire Department. The size of the water tank is pending confirmation from the Riverside County Fire Department.

Detention/Retention Basin

To meet current Riverside County site development requirements, a detention/retention basin or basins maybe required, depending on the change in hydrological conditions on site and, if necessary, based on an engineering-level hydrological assessment for the site at the base of each solar array block for stormwater management. The required storage would be provided via shallow ponding at the downstream limit of the sub-basin(s).

⁷ County of Riverside. 2022. Riverside County Ordinance No. 348: Providing for Land Use Planning and Zoning Regulations and Related Functions of the County of Riverside, Section 18.12, Off-Street Vehicle Parking. As amended through Ordinance No. 348.4983. Effective May 25, 2022.

Supervisory Control and Data Acquisition System

The SCADA system is critical to proper O&M of the Project and utilizes propriety software, a fiber optic transmission system, a telephone, radio and/or microwave communications network, and other means of communication such as radio-links and phase loop communication systems. The SCADA system functions as a remote start, stop, reset, and tag out for the facility, thus minimizing the manpower and site diagnostic information generated from the panels. The SCADA system would also control the proposed Project substation, allowing for fully centralized operation of the Project to meet all CAISO and utility interconnection requirements.

Microwave/Radio Tower

Supporting the solar site will be up to one microwave/communication tower, which will consist of up to three 6-foot (circumference) high-performance microwave dishes fixed to a steel monopole of up to 90 feet in height. A 12-foot by 20-foot equipment shelter would also be included within a fenced area. The shelter would have a maximum height of 8 feet. The existing Valentine Solar radio equipment would be located within the equipment shelter and be connected to the microwave dish(es) via coaxial or fiber optic cables. The area would be secured by a chain link fence (up to 8 feet high) with up to three strands of barbed wire for a total maximum height of 11 feet.

Meteorological Station

The solar meteorological station (met station) is used to measure irradiance (amount of solar resource), temperature, wind speed, precipitation, ground reflected irradiance (albedo), and other meteorological measurements. The station is autonomous and powered by a solar module and batteries with communication via cellular modem—thus, no utility or other services are needed to support the station. Met station height would be approximately 8 feet; it would be sited within the substation footprint. The total footprint of the met station would measure approximately 25 feet by 25 feet.

Linear Facility Routes (BLM Land)

As previously stated, the Project would include two 230-kV gen-tie line alignment options (only one of which would be constructed), two access roads, and a collector line, collectively referred to as “Linear Facility Routes.” The Linear Facility Routes are located on federal public lands administered by BLM and designed to support the proposed Project, which is located on adjacent private lands. Each of the three 200-foot-wide Linear Facility Routes has been included to provide flexibility as it relates to potential CAISO interconnection options and County Fire Department emergency access requirements.

The Project would interconnect to the electrical grid by extending its gen-tie west of the Project solar site along one of the Linear Facility Routes over BLM-administered federal public lands to line tap into the existing Desert Harvest solar project gen-tie line located on lands administered by the BLM and within the County Kaiser Road ROW. Ultimately, the power would be provided on existing lines to SCE’s Red Bluff Substation. The proposed Linear Facility Routes are not located within a BLM Renewable Energy Corridor but are located in a DRECP-designated DFA and would connect via a line tap on the existing Desert Harvest Solar 230-kV transmission line.

The three proposed Linear Facility Routes are described below and shown in Figures 1 through 3.

Linear Facility Route #1 – Located towards the northwest corner of the solar site, Route #1 would provide access from Kaiser Road and routes for transmission lines and associated infrastructure. This Linear Facility Route is approximately 1.6 miles long and may include a gen-tie line to interconnect with the existing Desert Harvest Solar 230-kV transmission line. This Linear Facility Route may also support ancillary facilities such as poles, electrical lines, access road, spur roads, temporary pulling and tensioning stations, and other associated infrastructure.

Linear Facility Route #2 – Located towards the northwest corner of the solar site (south of Linear Facility Route #1), Route #2 would provide access from Kaiser Road and routes for transmission lines and associated infrastructure. This Linear Facility Route is approximately 1.6 miles long and may include a gen-tie line to interconnect with the existing Desert Harvest Solar 230-kV transmission line. This Linear Facility Route may also

support ancillary facilities such as poles, electrical lines, access road, spur roads, temporary pulling and tensioning stations, and other associated infrastructure.

Linear Facility Route #3 – Located towards the east side of the solar site, Route #3 would provide access from California State Route 177/Rice Road. This Linear Facility Route is approximately 1.4 miles long. Apart from an access road, this Linear Facility Route would also support underground collection lines and associated infrastructure.

Table 1 provides a summary of the Project components that could be located within the three proposed Linear Facility Routes.

Table 1. Project Components to be Potentially Located Within Linear Facility Routes

Linear Facility Route	230-kV Gen-Tie Line	Access Road	Aboveground Electrical Lines, Spur Roads, and Temporary Pulling and Tensioning Stations, buried fiber optic lines	Underground Collector Lines	12-kV Distribution Line
Linear Facility Route #1	●	●	●		●
Linear Facility Route #2	●	✓	●		●
Linear Facility Route #3		●		✓	

Note:

- ✓ = Facilities that will be located in Linear Facility Route.
- = Facilities that may be located in Linear Facility Route.

230-kV Gen-tie Line

The gen-tie line is anticipated to be located within either Linear Facility Route #1 or Linear Facility Route #2, which both include a 200-foot ROW width. The gen-tie line would connect to the existing Desert Harvest Solar 230-kV transmission line for delivery to the SCE transmission system.

Access Roads

Access to the gen-tie line, distribution line ROW, and gen-tie pole structure sites would be required during construction and for the long-term maintenance of the gen-tie line and distribution line. For Linear Facility Routes #1 and #2, access to the new BLM ROW would be provided via Kaiser Road, an existing County-maintained paved road. Linear Facility Route #3 would provide access to the east from California State Route 177/Rice Road. Existing paved and unpaved roads would be used to the extent practical, to transport material and equipment to and from the locations within the ROW.

The access road within the Linear Facility Routes (Linear Facility Routes #1, #2, and/or #3) would be a compacted soil road up to 24 feet wide with 5-foot shoulders on either side. The access road within the Linear Facility Routes (Linear Facility Routes #1 or #2) containing the distribution line is proposed to be a compacted soil road up to 16 feet wide.

After Project construction, these permanent access roads would be used by maintenance crews and vehicles for inspection and maintenance purposes.

Aboveground Electrical Lines, Spur Roads, and Temporary Pulling and Tensioning Stations

Steel monopoles no taller than 160 feet would be used for the 230-kV gen-tie line. Typical spans between poles would be 900 feet to 1,100 feet. Self-weathering nonreflective steel would be used, which is intended to blend with the surrounding mountains. The tower foundations for the gen-tie line would require ground disturbance to a depth of 20 feet to 30 feet and a work radius of 45 feet to 60 feet. All fiber-optic communication lines necessary to support the on-site telecommunication equipment would be located on the same poles used to support the gen-tie line and/or buried in the maintenance road. Spur roads, approximately 24 feet wide, would be constructed to provide

access to each transmission pole. The spur roads would be unpaved dirt roads and would be located within the 200-foot-wide Linear Facility Routes.

Approximately five temporary construction pull-sites for purposes of stringing the 230-kV gen-tie line would be required. The number of temporary construction pull-sites may change pending final design of the gen-tie line.

12-kV Distribution Line

A 12-kV distribution line would be constructed to provide permanent power to the O&M building (if on site), back-up power to the on-site electrical substation, and temporary power during construction. The 12-kV distribution line would be installed as an overhead or underground line. If installed as an overhead line, the 12-kV distribution line would include new wood poles. The 12-kV distribution line would extend from the existing SCE distribution site and extend to the Project site. The anticipated location of the 12-kV distribution line is pending engineering design but is anticipated to be located within Linear Facility Routes #1 or #2 or from the existing line that runs perpendicular through the Project site. The 12-kV distribution line is anticipated to be installed by SCE. The alignment of the 12-kV distribution line and point of interconnection with the on-site electrical substation and O&M building (if on site) is pending.

General Construction Process

Construction Activities

The construction of the Project would begin once all applicable approvals and permits have been obtained. It would take approximately 12 to 18 months from the start of construction to completion of the Project.

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

- Phase 1: Mobilization
- Phase 2: Site preparation and grading
- Phase 3: Access road improvements, if needed
- Phase 4: Gen-tie line construction
- Phase 5: Internal roads construction
- Phase 6: Electrical substation and microwave tower construction
- Phase 7: Solar array structural, underground, and panel installation, battery storage
- Phase 8: PV and battery storage commissioning
- Phase 9: Project finalization (commercial operation)

The typical construction work schedule is expected to be from Monday through Friday between the hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May. However, to meet schedule demands or to reduce impacts, it may be necessary to work early mornings, evenings, or nights and on weekends during certain construction phases.

The work schedule may be modified throughout the year to account for changing weather conditions (e.g., changing to nightwork in the summer months to avoid work during the hottest part of the day for health and safety reasons). If construction work takes place outside these typical hours, activities would comply with Riverside County standards for construction noise levels. The Project would use restricted nighttime lighting during construction. Lighting would include only what is needed to provide a safe workplace, and lights would be focused downward, shielded, and directed toward the interior of the site to minimize light exposure outside the construction area.

The construction workforce would average 150 employees with a maximum daily workforce of 250 employees. The construction workforce would be recruited from within Riverside County and elsewhere in the surrounding region to the extent practicable.

Site Preparation

Vegetation would not be removed from the Project site until the onset of a given construction activity. When practical, the Applicant would minimize vegetation removal for the Project. When feasible, construction activities would implement drive and crush rather than grading. Construction equipment would drive over and crush native plants to minimize impacts to the roots of desert shrubs. Drive and crush is expected to reduce the recovery time of desert shrubs within the temporary construction areas. Mowing and/or trimming would be implemented when possible.

At a minimum, grading would be required for major access roads, the inverter pad locations, transmission tower foundations, internal roadways, and work areas. In addition, grading would be required for all ancillary facilities, including the O&M building, storage building, parking area, water storage facility, septic field, laydown area, and substation and BESS yard.

Vegetation would be allowed to re-grow within the solar panel field to the extent that it does not interfere with the panels themselves, to avoid growing into electrical connections and creating a fire hazard or disrupting the panel's performance. However, interference is relatively unlikely given the shading the panels would be providing on the soil. The access roads would be kept clear of vegetation through the use of targeted herbicide spraying, occasional scarifying, or weeding to reduce fire hazard and allow access to the panel arrays.

Water Requirements

Water would be needed primarily for dust control and soil compaction, with small amounts used for sanitary and other purposes during the 12 to 18 months of construction. The majority of the construction water use is anticipated to occur during site grading.

Water for construction-related dust control and operations could be obtained from several potential sources, including an on-site groundwater well, trucked from an off-site water purveyor, or a combination of both. During construction, restroom facilities would be provided by portable units to be serviced by licensed providers. On-site wells constructed for the purposes of providing construction water may be used for construction and operations. Temporary construction wells, if any, would be decommissioned upon the completion of construction unless required for an on-site O&M building and capped per applicable regulations.

Operation and Maintenance Activities

Maintenance activities generally include road maintenance; vegetation management; scheduled maintenance of inverters, transformers, and other electrical equipment; and occasional replacement of faulty modules or other site electrical equipment. The access roads would be regularly inspected, and any degradation due to weather or wear and tear would be repaired. The Project may apply a dust palliative on dirt access roads if indicated.

Water during O&M is anticipated for panel washing (expected to occur up to once annually) and for sanitary needs at the O&M building. Potable water needs are expected to be minimal (i.e., drinking, bathrooms, and hand washing) and would be met using up to three on-site wells (if treated to potable standards), an off-site municipal source (e.g., Lake Tamarisk), or a commercial bottled water supplier.

It is anticipated that O&M of the Project would require up to eight full-time and/or part-time workers to operate and maintain the plant, including performing daily visual inspections and minor repairs.

Overall, minimal maintenance requirements are anticipated. Maintenance and other operational staff would use standard size pickup trucks and vehicles.

Decommissioning

The Project has an anticipated operational life of up to 39 years. At the end of the proposed Project site's operational term, the applicant may determine that the proposed Project site should be decommissioned and deconstructed, or it may seek an extension of its CUP and PUP. All decommissioning and restoration activities would adhere to the requirements of the appropriate governing authorities and in accordance with all applicable federal, state, and County regulations. Because the PV arrays' supporting equipment would sit on the surface of the land, the land would be largely unaltered from its natural state when the arrays are removed after the proposed Project's lifetime. EDFR would work with the County to put an agreement in place to ensure the decommissioning of the proposed Project site after its productive lifetime. The proposed Project would use best management practices to ensure the collection and recycling of materials and to avoid the potential for modules and batteries to be disposed of as municipal waste.

B. Environmental Topics to be Addressed

Introduction

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

- Aesthetics
- Agricultural and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology/Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Paleontological Resources
- Population/Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems
- 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

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 designated 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.

Agricultural and Forest Resources

Portions of the private lands associated with the Project are located within County Agricultural Land Preserve Area and some parcels are on lands subject to Williamson Act contracts. Cancellation of the Agricultural Land Preserve and cancellation of the Williamson Act contracts for the Project parcels would be required. The potential impact on prime and unique farmlands, if any, and land subject to a Williamson Act contract 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, and air emissions are regulated by the South Coast Air Quality Management District. The Riverside County portion of the Mojave Desert Air Basin is designated as nonattainment for ozone and particulate matter under 10 micrometers in diameter 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

Cultural resource effects will be analyzed in the EIR, including a query of the Northwest Information Center of the California Historical Resources Information System and consultation with other interested parties (e.g., local historical societies). The evaluation will also address the potential impacts to historic resources.

Energy

The EIR will examine the potential for wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation and the Project's consistency with state or local plans for renewable energy.

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-, operation, and decommissioning-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/Water Quality

The EIR will include an analysis of existing drainage systems and will evaluate potential impacts to water resources.

Land Use/Planning

The Project would be located primarily on fallow agricultural land. The Project area is predominantly developed with proposed, under construction, and operational solar and energy facilities and there are scattered rural

residences located to the south near Lake Tamarisk. The Project is located within the Desert Center Area Plan Boundary of the Riverside County General Plan. The private lands associated with the Project are designated as Open Space, Rural, and Agriculture per the Riverside County General Plan. The private lands associated with the Project are located within lands zoned as A-1-20 Light Agriculture and W-2-10 Controlled Development Areas. In accordance with Riverside County Ordinance No. 348, solar power plants on lots 10 acres or larger are permitted through a CUP within the A-1-20 Light Agricultural and W-2-10 Controlled Development Areas zoning designations (County of Riverside 2021). The majority of the Project, approximately 1,082 acres, would be located on private lands under Riverside County's jurisdiction. The Applicant is seeking a CUP for the construction, operation, and decommissioning of the proposed solar facility and gen-tie line, as well as a PUP for portions of the gen-tie line that would traverse County Roads (State Route 177/Rice Road).

All private land adjacent to the Project site is designated as Open Space, Rural in the Riverside County General Plan Land Use Element. There are areas designated as Public Facilities to the east and west of the Project site including the Desert Center Airport/Chuckwalla Valley Raceway (located approximately 1 mile to the east of the Project site) and the Desert Center Landfill (located approximately 1.25 miles to the west of the Project site), respectively. In terms of zoning, the private parcels to the north, east, and south of the Project site are zoned as N-A Natural Assets Zone. Areas to the south and southeast of the Project site are zoned as A-1-20 Agricultural Zone and W-2-10 Controlled Development Areas. The area to the west of the Project site (west of Melon Street) are zoned as W-2-10 Controlled Development Areas.

The Applicant is also seeking to vacate portions of Osborne Avenue, Investor Avenue, and Melon Street, which traverse the internal portions of the Project. These roads are dedicated to the public and accepted by the County for public use. Roads along the Project perimeter on the outside of the solar facility would remain dedicated to public access as applicable.

The proposed Easley Solar project surrounds the Project on almost all sides. The existing Desert Sunlight and Desert Harvest solar projects are located directly north of the Project site; the Athos Solar Project is located south of the Project site; and the recently approved Oberon Solar Project is located to the south of the Project site and Lake Tamarisk. The EIR will evaluate potential environmental effects to land use that include compatibility with existing and proposed local zoning and consistency with land use plans, policies, or regulations of the applicable jurisdictions, which include the Riverside County General Plan and BLM's DRECP.

Mineral Resources

The Project site is neither designated as a mineral recovery area nor within a designated mineral and petroleum resource site by neither the Riverside County General Plan nor by the Desert Center Area Plan. Additionally, the site is not identified as a mineral resource zone by the Department of Conservation's State Mining and Geology Board, nor has it been designated by the California Geologic Energy Management Division (formerly known as the Department of Oil, Gas and Geothermal Resources (DOGGR)) as a recognized oil field. Construction and operation of the proposed Project would not interfere with mineral extraction and processing and would not have significant impacts on future mineral development. Therefore, the installation of the solar facilities would not preclude future mineral resource development, nor would it result in the loss of a locally important mineral resource recover site. There would be no impact and no further analysis is warranted in the EIR.

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.

Paleontological Resources

The EIR will address the occurrence of and potential impacts to paleontological (fossil) resources.

Population/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.

Public Services

With the accommodation of the construction workforce, there may be a temporarily increased demand for public services, 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.

Recreation

The EIR will address the potential impacts to recreational facilities.

Transportation

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

Tribal Cultural Resources

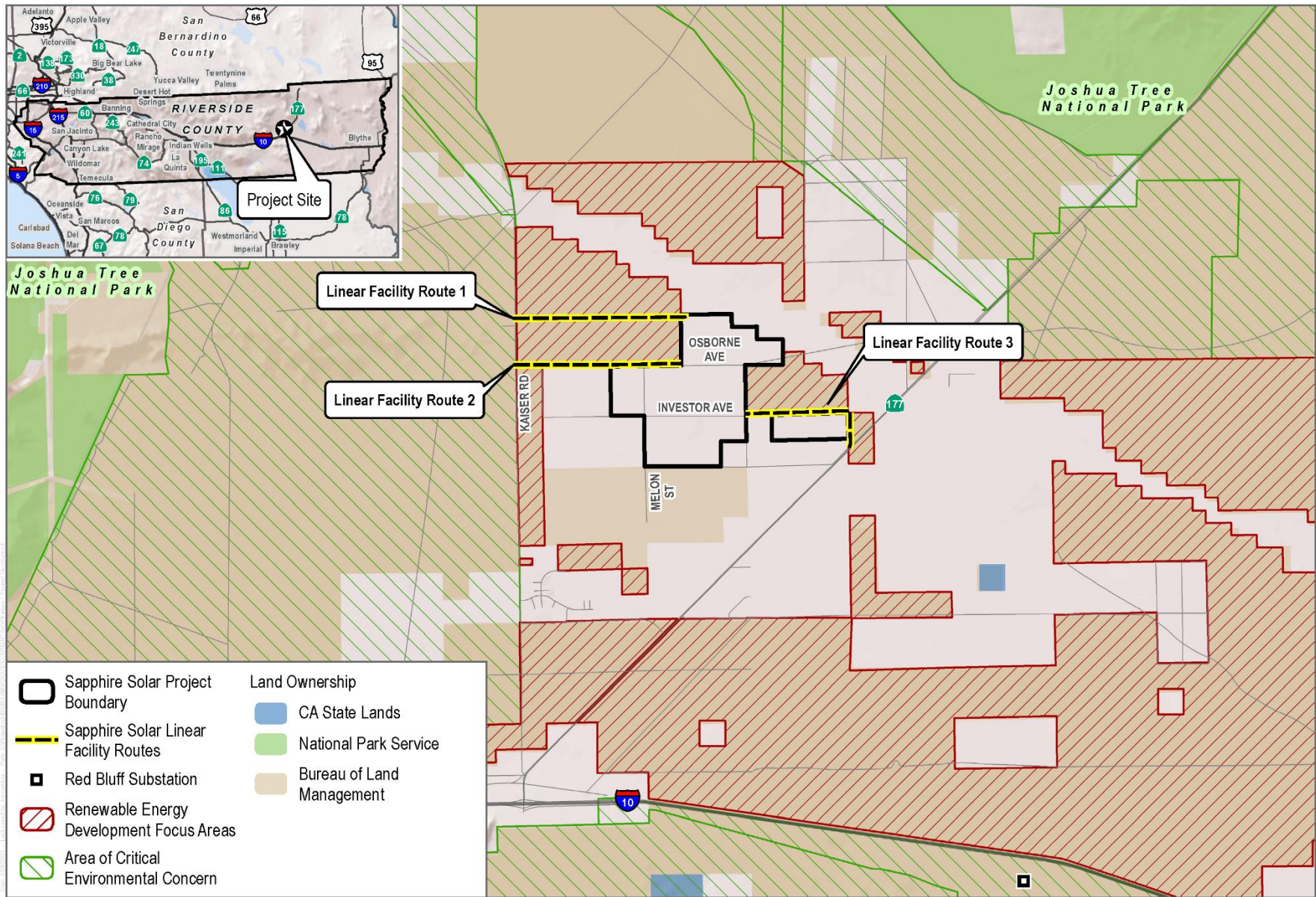
Cultural and tribal cultural resource effects will be analyzed in the EIR, including an analysis of sacred lands identified through consultation with the Native American Heritage Commission and consultation with Native Americans and other interested parties (e.g., local historical societies).

Utilities/Service Systems

The EIR will evaluate the potential for impacts on utilities and service systems including water, wastewater treatment, stormwater drainage systems, and water supply.

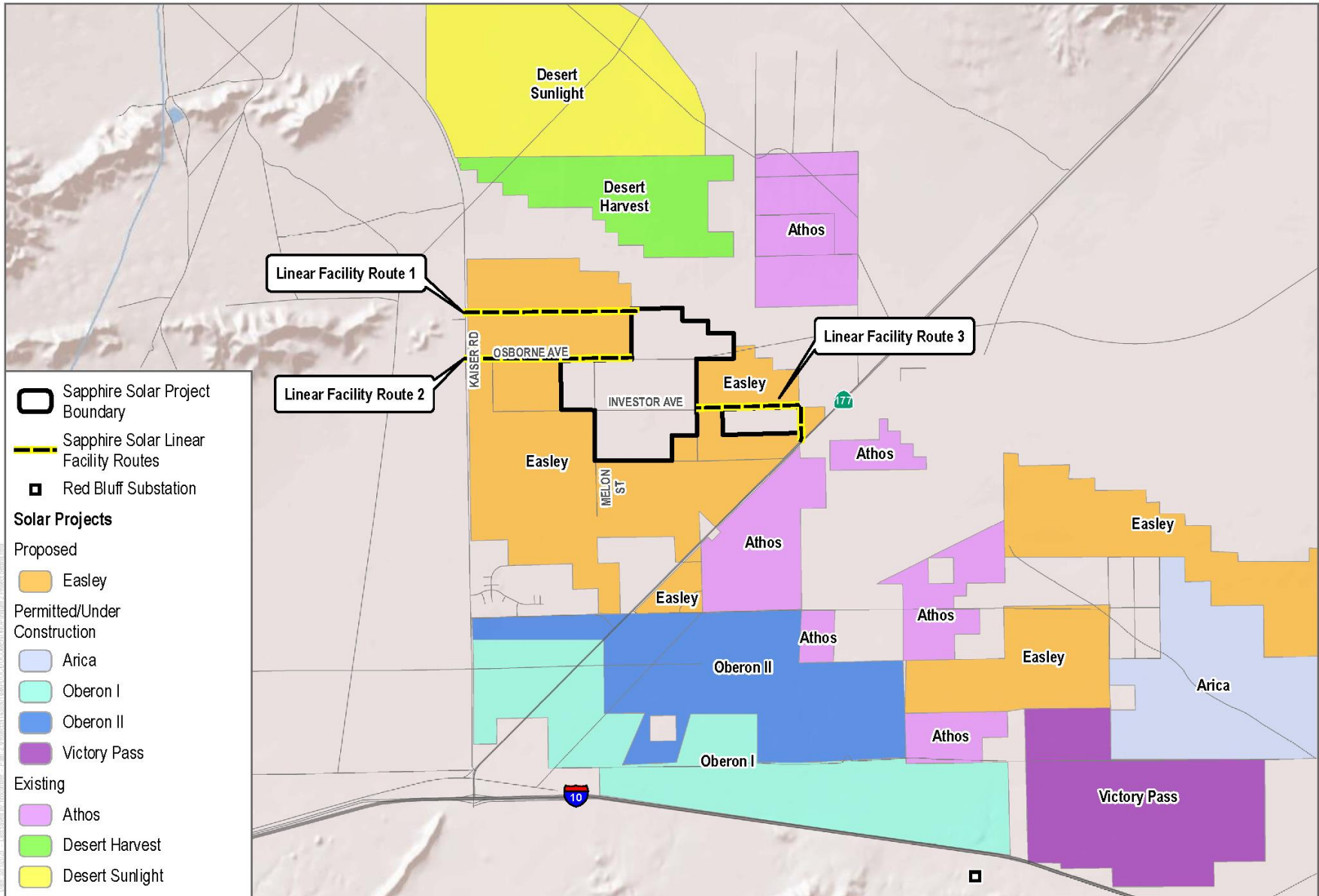
Wildfire

The EIR will address whether construction, operation, or decommissioning of the Project would impact emergency response, exacerbate wildfire risk, and/or expose people or structures to significant risk due to wildfires and/or post-fire effects.



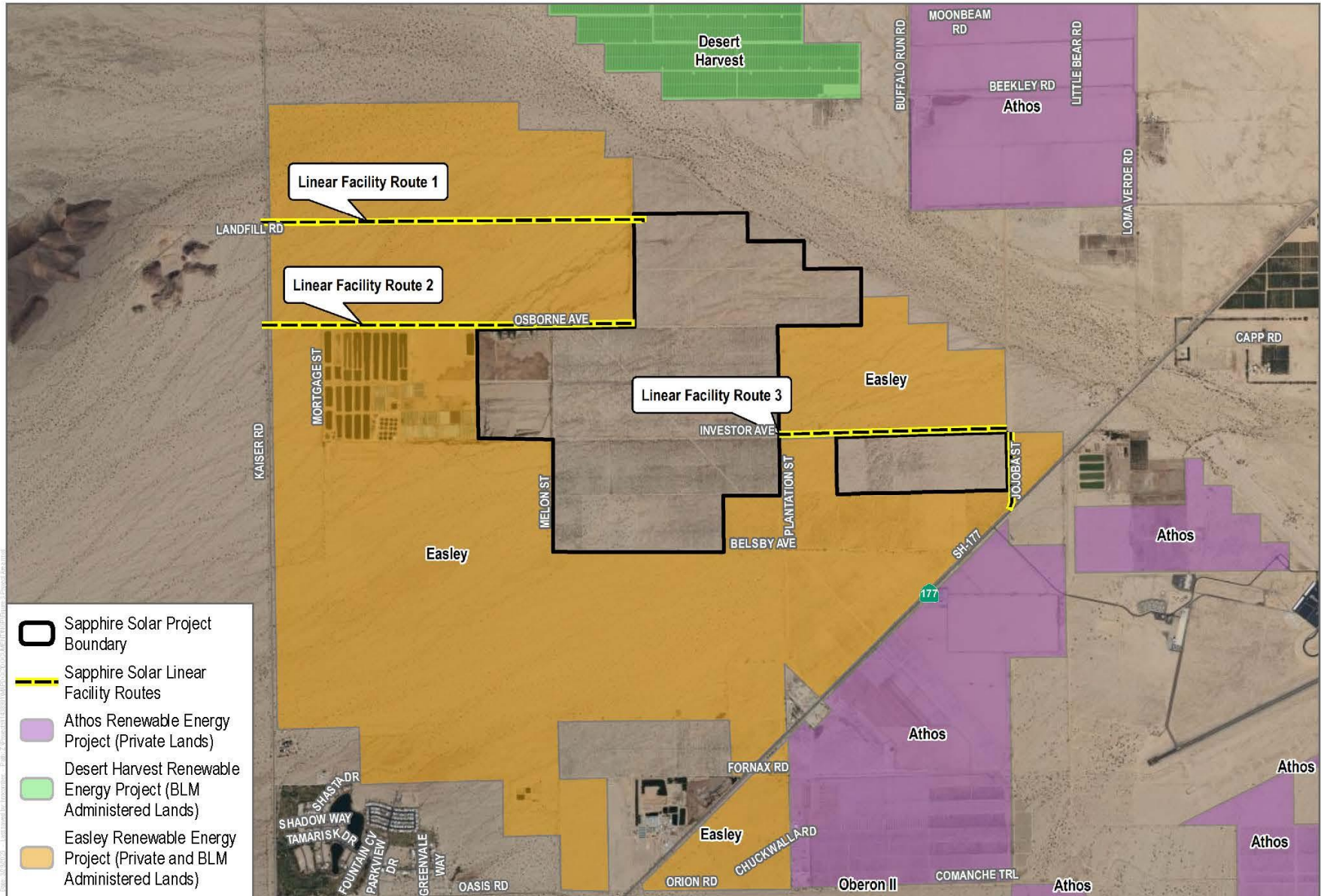
SOURCE: Esri World Imagery Basemap (accessed 2022); County of Riverside 2022; DRECP 2022; BLM 2021

FIGURE 1
Project Vicinity
Sapphire Solar Project



SOURCE: Esri World Imagery Basemap (accessed 2022); County of Riverside 2022; DRECP 2022; BLM 2021

FIGURE 2
Project Setting
Sapphire Solar Project



SOURCE: Esri World Imagery Basemap (accessed 2022), County of Riverside 2022, DRECP 2022, BLM 2021

FIGURE 3
Project Area
Sapphire Solar Project