Draft Environmental Impact Report

San Bernardino County Overnight Solar Project

VOLUME 2 OF 2

SCH No. 2024010434

October 2024

Lead Agency:



Land Use Services Department 385 N. Arrowhead Avenue, First Floor San Bernardino, CA 92415-0187 Contact: Jon Braginton

Preparer:



17885 Von Karman Avenue, Suite 500 Irvine, CA 92614

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APPENDIX A: NOTICE OF PREPARATION AND	D SCOPING
COMMENTS	

County of San Bernardino

NOTICE OF PREPARATION OF A DRAFT EIR AND SCOPING MEETING



DATE: January 18, 2024

To: Responsible Agencies and Interested Parties

Subject: Notice of Preparation of a Draft Environmental Impact Report and Scoping

Meeting

Pursuant to the California Environmental Quality Act (CEQA), the County of San Bernardino (County) must conduct a review of the environmental impacts of the Overnight Solar Project (project). Implementation of the project will require discretionary approvals from state and local agencies, and therefore, the project is subject to the environmental review requirements of CEQA. As the lead agency under CEQA, and due to the involvement of potentially significant impacts to the environment, the County is therefore issuing this Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the project.

PROJECT TITLE: OVERNIGHT SOLAR PROJECT

PROJECT APPLICANT: OVERNIGHT SOLAR LLC

ASSESSOR'S PARCEL NUMBERS: 0490-183-65 AND 0490-121-49 (GEN-TIE)

PROJECT DESCRIPTION:

The project includes development of a utility scale, solar photovoltaic (PV) electricity generation and energy storage facility that would produce up to 150 megawatts (MW) of solar power and include a 150 MW battery energy storage system (BESS) on approximately 822 acres, plus a generation interconnect (gen-tie) corridor approximately 1.1 miles in length and approximately 80 feet in width, connecting the proposed facility to another existing gen-tie line associated with the Mojave Solar Facility and just south of the existing Alba Substation. The project would eventually connect to the existing Southern California Edison (SCE) Kramer Junction Substation via existing electrical infrastructure as described below. The project will be processed under a single Conditional Use Permit (CUP) and would include a Zoning Amendment and Policy Plan Amendment as described below. The project site is bordered to the north by the existing Lockhart Solar Facility, to the east by the existing Mojave Solar Facility, and to the west and south by undeveloped land. The project would be monitored remotely and would not require any full-time employees on-site; however, occasional operations and maintenance visits would occur. Namely, panel washing would occur at least once per year and potentially up to 4 times per year. Panel washing would require up to 12 employees with water trucks and would take approximately 20 days to complete. Additionally, infrequent site visits would occur during project operation for equipment repair or replacement, or for vegetation control. In the case of unanticipated issues arising, staff would be available to respond and be on site within 15 minutes.

Project components would include solar arrays, battery storage, inverters and switchgear, an onsite project substation, on-site access roads, perimeter fencing, lighting and signage, and a 230 kilovolt (kV) gen-tie line. The project site is primarily flat and contains desert vegetation. The project site is also currently vacant and undeveloped but contains several dirt roads scattered throughout the site and illegal dumping along the eastern and southeastern boundary. Additionally, several transmission lines transect the northernmost portion of the project parcel from east to west; however, these are located north of the proposed facility footprint.

PROJECT OBJECTIVES:

The project would provide San Bernardino County and the State of California with additional renewable energy sources that would assist the state in complying with the Renewables Portfolio Standard (RPS) under Senate Bill 100, which requires that by December 31, 2030, 60 percent of all electricity sold in the state shall be generated from renewable energy sources. The following are the project objectives:

- Site PV solar power-generating facilities and energy storage near existing utility infrastructure, including existing City of Los Angeles Department of Water and Power and SCE transmission lines, thereby achieving economies of scale to maximize shared transmission facilities with existing solar operations.
- Establish solar PV power-generating facilities and energy storage of sufficient size and configuration to produce reliable electricity at a competitive rate.
- Use proven and established PV and energy storage technology that is efficient and requires low maintenance.
- Assist the State of California in achieving or exceeding its RPS and greenhouse gas emissions reduction objectives by developing and constructing new California RPSqualified solar power generation facilities producing approximately 150 MW of renewable electrical energy.
- Provide a new source of energy storage that assists the state in achieving or exceeding its energy storage mandates.
- Promote the County's Renewable Energy and Conservation Element (RECE) policies and be sited in an area identified as suitable for utility oriented renewable energy generation projects and be consistent with County land use regulations.
- Develop a solar power generation facility in San Bernardino County, which would support
 the economy by investing in the local community, creating local construction jobs, and
 increasing tax and fee revenue to the County.

PROJECT SITE:

The project site is in unincorporated Hinkley, California, approximately 6 miles north of the intersection of Harper Lake Road and State Route 58 (Figure 1). The project site consists of one vacant and undeveloped parcel consisting of desert vegetation. The project site is bordered to the north by the existing Lockhart Solar Facility, to the east by the existing Mojave Solar Facility, and to the west and south by undeveloped land. The project is also bordered by Kramer Road to the west, Hoffman Road to the north, and Lockhart Ranch Road to the east. As shown in Figure 3, the project gen-tie line would run along property already owned and operated by Overnight Solar immediately south of the existing Mojave Solar Facility along the north side of an existing

service roadway. From there, the proposed gen-tie line would connect with an existing gen-tie line approximately 1.1 miles east of the proposed solar facility. Vehicular access to the project site would be provided from Lockhart Ranch Road extending eastward to Harper Lake Road via State Route 58.

On April 8, 2017, the San Bernardino County Board of Supervisors adopted the General Plan RECE. The policies in this element, along with the County's Solar Ordinance (amending Development Code Chapter 84.29, Renewable Energy Generation Facilities), consist of specific goals, policies, and standards for renewable energy projects and specifically solar projects.

The County Board of Supervisors adopted an amendment to the RECE on February 28, 2019, to include RE Policy 4.10, prohibiting utility-scale renewable energy development on lands designated as RL (Rural Living) or on lands within the boundary of an existing community plan, unless an application for development of a renewable energy project has been accepted as complete in compliance with California Government Code Section 65943 before the effective date of the resolution.

The project site is zoned as RL and is also designated RL in the Countywide Plan/County Policy Plan. Given the project site's current zoning and land use designation of RL, the project would undergo a Zoning Amendment and Countywide Plan/County Policy Plan Amendment as part of the approval process to not conflict with RE Policy 4.10. The project site would be rezoned from RL to Resource Conservation (RC) and redesignated from RL to Resource/Land Management (RLM) in the Countywide Plan/County Policy Plan. The County's Development Code Section 82.03.040 determines that renewable energy generation facilities are allowed on RC-zoned land with the facilitation of a CUP.

PROJECT OVERVIEW AND DESIGN:

The project is subject to CUP approval in the RC zone and would require a Zoning Amendment and Policy Plan Amendment as described below:

- **Zoning Amendment**: The project includes a Zoning Amendment to change the zoning designation from RL to RC in order to be in compliance with the Countywide Plan/Policy Plan adopted October 27, 2020, and the RECE adopted August 8, 2017 (amended February 28, 2019).
- Countywide Plan/County Policy Plan Amendment: The project includes a Countywide Plan/Policy Plan Amendment to change the County Policy Plan land use designation from RL to RLM in order to be in compliance with the Countywide Plan/Policy Plan adopted October 27, 2020, and the RECE adopted August 8, 2017 (amended February 28, 2019).
- CUP and Variance: The project requires a CUP, which would cover the approximately 822-acre project site and include the installation of solar facilities capable of generating up to 150 MW of renewable electrical energy via solar PV modules mounted on a single-axis tracking racking system or a fixed-tilt racking system. Panels are proposed to be a maximum of 20 feet in height. The solar array would be connected to inverters and the project BESS. The inverters and transformers would be anywhere from 5 to 10 feet in height. The CUP would also include an on-site, fenced-in substation that would occupy an area of approximately 300 feet by 300 feet. Within the substation fence, the electrical

equipment would be approximately 70 feet in height at their highest points, and because of exceeding the maximum allowable height for RC designation (35-feet), a Variance will be required. A small one-story, rectangular control building, housing the communication and Supervisory Control and Data Acquisition (SCADA) system equipment (if required), would also be located within the substation footprint.

The 150 MW BESS is expected to be adjacent to the substation. Batteries adjacent to the substation would be contained within either steel enclosures similar to a shipping container or a freestanding building, approximately 10 feet in height. Individual lithium-ion cells form the core of the BESS. Individual cells are assembled either in series or parallel connection, to make up sealed battery modules. The battery modules would be installed in self-supporting racks electrically connected either in series or parallel to each other. The BESS enclosure would house the batteries and the BESS controller. The BESS controller is a multilevel control system and includes the battery modules, power conversion system (PCS), and medium-voltage (MV) system where the BESS input would connect at the point of interconnection (POI) with the electrical grid. The BESS enclosure would also be equipped to house required heating, ventilation, and air conditioning (HVAC) and fire protection/suppression systems.

The BESS enclosure would have a fire rating in conformance with County standards and specialized fire suppression systems. The BESS safety system typically includes a fire detection and suppression control system that would be triggered automatically when the system senses imminent fire danger. A fire suppression control system will be provided within each on-site battery enclosure. Components of the system would include a fire panel, aspirating hazard detection system, smoke/heat detectors, strobes/sirens, and suppression tanks.

- Power Conversion System: The PCS typically consists of an inverter, protection
 equipment, circuit breakers, air filter equipment, equipment terminals, and cabling.
 Electricity is transferred from the PV array (or power grid) to the project batteries during a
 battery charging cycle and from the project batteries to the power grid during a battery
 discharge cycle.
- Gen-Tie Line: From the project substation at the PV plant site, the proposed gen-tie line would be constructed to connect the proposed solar facility's output to the POI, which is an existing Mojave Solar Facility gen-tie line located 1.1 miles to the east, near the existing Alba Substation. After the POI, the existing gen-tie line then connects to the existing Sandlot Substation, which then connects with the Kramer Junction Substation via the existing 230-kV Kramer-Coolwater Transmission Line. Once connected with the Kramer Junction Substation (12 miles to the west) via existing transmission infrastructure, the power is ultimately delivered to the SCE power grid.

The new gen-tie line would be approximately 1.1 miles in length and would run within the existing Mojave Solar Facility, along the northern or southern side of an existing drainage canal. No easements or rights-of-way (ROW) would be required.

The gen-tie poles are expected to be sufficient in height and rating to accommodate the electric circuit(s) necessary to interconnect the PV plant alternating current (AC) output with the existing gen-tie line just south of the Alba Substation. The on-site substation tie-in pole would be up to 65 feet in height while the gen-tie poles would be a maximum of up to 80 feet tall. The project would obtain a height variance for these poles and would be designed to meet all the latest National Electric Safety Code (NESC) requirements for high-voltage transmission lines.

No expansion of the existing Alba or Sandlot Substations' footprints is anticipated. SCE would conduct a limited scope of work within and surrounding the existing substations, as needed, to facilitate connection of the solar project to the SCE system.

- **Telecommunication Facilities:** Telecommunications equipment, such as a fiber-optic line, a SCADA system, and auxiliary power, would be installed throughout the project site at each inverter equipment pad, substation, and security system. Telecommunications equipment would be brought to the project from existing telecommunications infrastructure in the project vicinity and may be co-located on aboveground structures, such as transmission lines. Trenching could be required to install some of the telecommunications equipment. Fire protection would also be included in accordance with applicable requirements.
- Site Access, Perimeter Fencing, and Lighting: On-site access routes, with a minimum width of 26 feet, may be constructed along the project's fence line. All interior access roads would also be a minimum of 20 feet wide. All on-site roads would consist of compacted native soil in accordance with San Bernardino County Fire Department requirements. All roads would be stabilized with soil stabilization material, if necessary. Improvements to off-site access roads, including potential paving and widening, would be completed as required according to County standards and in consultation with the County Department of Public Works and Land Development Division.

Fencing is proposed along the perimeter of the project site or set back a minimum of 15 feet from the existing/proposed ROW, as required by the County Development Code. Fencing shall be at least 7 feet tall, in compliance with the NESC around the PV plant. Fence construction can be 6 feet in height with a 1-foot extension of three rows of barbed wire to give an overall fence height meeting the 7-foot requirement. Chain-link fencing is likely to be used, potentially topped with 1 foot of barbed wire as mentioned above. In consultation with the County, slats or mesh may be added to the chain-link fence, as appropriate and in areas where needed, to manage windblown sand. Access gates would be installed at each site entry point. The on-site substation site would be separately fenced due to the high voltage presence of exposed electric equipment and to meet the safety clearance requirements of the NESC.

Manual, timed, and motion sensor lights will be installed at access gates, equipment pads, and substations for maintenance and security purposes. Lighting would be shielded and aimed downward to the ground. In addition, remote-controlled cameras would be installed.

No other lighting is planned. Signage is proposed in compliance with all County regulations.

Construction

Timing and Phasing

Construction of the project is expected to occur over an approximately 27-month period, from approximately September 2024 until the end of October 2026. The project would be constructed in multiple phases: 1) site preparation and grading (including mobilization, fencing, preparation of laydown areas, and trenching); 2) solar array installation (including the installation of solar array structural components including cables, piles, racking systems, inverters, modules, and panels); and 3) BESS construction (including BESS installation, commissioning, and testing).

Site Preparation and Grading

Site preparation may consist of clearing, grubbing, scarifying, recompacting, and grading to level the project site and removing any mounds or holes that remain from the previous land use. Though grading is expected to occur throughout the project site, the project site's cut and fill would balance, and no importing or exporting of materials would be necessary. Actual quantities of earth to be moved are unknown at this time but would be determined once the engineering is started and completed. Approximately 200 acre-feet of water would be used during the first year of construction. Water would be pumped from local wells.

After grading, temporary fences would be placed around the project site, which would allow materials and equipment to be securely stored on-site and prevent theft and vandalism. Storage containers may be used to house tools and other construction equipment. In addition, security guards would regularly monitor the project site. In accordance with Mojave Desert Air Quality Management District requirements, the project would develop a dust control plan that describes all applicable dust control measures to address and suppress construction-related dust. Components of the plan are likely to include water trucks to spread water, as well as road stabilization with chemicals, gravel, or asphaltic pavement to mitigate visible fugitive dust from vehicular travel and wind erosion.

Construction Activities and Equipment

Construction of the project would be accomplished in multiple phases. Project construction for each phase is expected to consist of multiple stages.

- 1. The first stage would include fencing, site preparation, grading, and preparation of staging areas and on-site access routes.
- 2. The next stage would involve installation of the racking system, and equipment pads and foundations.
- 3. The next stage would include installation of solar panels and other electrical components.
- 4. The next stage would involve installation of site substation equipment and the gen-tie transmission line and all other balance of systems equipment including the BESS system.
- 5. The next stage would include the interconnection at the POI.

6. The final stage would include startup, testing, and placing the solar array facility into operation.

An average of 150 workers would be on-site during each phase of construction, depending on the activities. The peak number of workers on the project site at any one time is anticipated to be 300. The workforce would consist of laborers, craftspeople, supervisory personnel, and support personnel. On average, it is anticipated that each worker would generate one round trip to the project site per workday. Most workers would commute to the project site from nearby communities, such as Boron and Barstow, with some traveling from more distant areas, such as Victorville, Hesperia, and San Bernardino. Construction would generally occur during daylight hours, though exceptions may arise because of the need for nighttime work. Workers would reach the project site using Harper Lake Road to Lockhart Ranch Road. Portable toilet facilities would be installed for use by construction workers. Waste disposal would occur in a permitted off-site receiving facility. Domestic water for use by employees would be provided by the construction contractor through deliveries to the project site.

Solid and Nonhazardous Waste

The project would produce a small amount of solid waste from construction activities. This may include paper, wood, glass, plastics from packing material, waste lumber, insulation, scrap metal and concrete, empty nonhazardous containers, and vegetation waste. These wastes would be segregated, where practical, for recycling. Nonrecyclable wastes would be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III landfill. Vegetation waste generated by site clearing and grubbing would be chipped/mulched and spread on-site or hauled off-site to an appropriate green waste facility.

Hazardous Materials

Hazardous materials used during project construction would be typical of most construction projects of this type. Materials may include small quantities of gasoline, diesel fuel, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliative, herbicides, and welding materials/supplies. A hazardous materials business plan would be provided to the County Environmental Health Services Division (EHS) that would include a complete list of all materials used on-site and information regarding how the materials would be transported and in what form they would be used. This information would be recorded to maintain safety and prevent possible environmental contamination or worker exposure. During project construction, material safety data sheets (MSDS) for all applicable materials present at the site would be made readily available to on-site personnel.

Hazardous Waste

Small quantities of hazardous waste may be generated during project construction. These wastes may include waste paint, spent construction solvents, waste cleaners, waste oil, oily rags, waste batteries, and spent welding materials. Workers would be trained to properly identify and handle all hazardous materials. Hazardous waste would be either recycled or disposed of, as allowed by permitting, at a permitted and licensed treatment and/or disposal facility.

Operations

Operations and Maintenance Activities

The project would generate solar electricity from the PV system during daylight hours and may discharge power for sale onto the power supply grid from the BESS at various times during the daytime and nighttime. In addition, the operations would be monitored remotely via the SCADA system.

Operational vehicles would include light-duty trucks (e.g., flatbed pickup) and other light equipment for maintenance and PV module washing. Heavy equipment would not be used during normal operation. Large or heavy equipment may be brought to the facility infrequently for equipment repair or replacement or for vegetation control.

Operational Water Use

Water would be required for panel washing activities and general maintenance. The frequency of panel washing would be determined based on soiling of the PV panels and expected benefit from cleaning. Should cleaning be necessary, water would be sprayed on the PV panels to remove dust. An estimated 7-10 acre-feet per year of water annually would be necessary for panel washing. This water would be obtained from existing and operational water wells located within the adjacent Mojave Solar Facility.

Decommissioning

If operations at the project site were permanently terminated, the facility would be decommissioned. Most components of the proposed system are recyclable or can be resold for scrap value. Numerous recyclers for the various materials to be used on the project site operate in San Bernardino and Riverside Counties. Metal, scrap equipment, and parts that do not have free-flowing oil can be sent for salvage. Equipment containing any free-flowing oil would be managed as waste and would require evaluation. Oil and lubricants removed from equipment would be managed as used oil, which is a hazardous waste in California. Decommissioning would comply with federal, state, and local standards and all regulations that exist when the project is decommissioned, including the requirements of San Bernardino County Development Code Section 84.29.070.

The average life of a PV plant is generally considered to be 30 years, after which decommissioning and removal would be considered. Decommissioning would be determined by the PV plant owner, who would pay the costs for dismantling and having the materials transported off-site to either recyclers or permitted disposal sites. After materials removal, the site would be restored to its original condition or better (specifically, the removal of existing illegal trash dumping) so the land can be reused for other useful purposes.

The decommissioning would be performed by Overnight Solar or at such a time by the successor owner of the PV plant in accordance with the RECE of San Bernardino County, CA Goal RE-4 Environmental Compatibility Policy in general, and Policy RE-4.5 in particular, which governs the decommissioning requirements. A bond would be provided at the outset of construction to cover the agreed-upon costs of decommissioning and would be returned when decommissioning is satisfactorily accomplished.

EIR SCOPE

As set forth in the California Public Resources Code Section et seq., and the CEQA Guidelines, codified in the California Code of Regulations, Title 14, Section 15000 et seq, the County has determined, based on substantial evidence and in light of the whole record before the lead agency, that the project may have a significant effect on the environment and that an Environmental Impact Report shall be prepared for the project. (PRC Sections 21080(d) and (e); 21802.2(d); 21083(b); and CEQA Guidelines Sections 15060(d) and 15081)

The lead agency has initially identified the following environmental considerations as potentially significant effects of the project:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions

- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

The EIR will assess the effects of the project on the environment, identify potentially significant impacts, identify feasible mitigation measures to reduce or eliminate potentially significant environmental impacts, and discuss potentially feasible alternatives to the project that may accomplish basic project objectives while lessening or eliminating any potentially significant project impacts.

The County conducted a preliminary review of the proposed project and has determined it is not likely to result in significant environmental effects to the following resources: Mineral Resources, Population and Housing, Public Services, and Recreation. Therefore, these topics will be discussed in the Effects Found Not to be Significant chapter of the EIR to the extent required to confirm the County's preliminary determination. If, during preparation of the EIR, an environmental effect is determined to result for one of these resources, a full analysis will be conducted for that resource topic in accordance with CEQA requirements.

RESPONSIBLE AGENCIES:

A responsible agency means a public agency other than the lead agency, which has permitting authority or approval power over some aspect of the overall project. This NOP provides a description of the project and solicits comments from responsible agencies, trustee agencies, federal, state and local agencies, and other interested parties on the scope and content of the environmental document to be prepared to analyze the environmental impacts of the project.

Comments received in response to this NOP will be reviewed and considered by the lead agency in determining the scope of the EIR. Due to time limits, as defined by CEQA, your response should be sent at the earliest possible date, but no later than thirty (30) days after publication of this notice. We need to know the views of your agency as to the scope and content of the

environmental information that is germane to you or to your agency's statutory responsibilities in connection with the project. Your agency may need to use the EIR prepared by our agency when considering your permit or other approval for the project.

OPPORTUNITY FOR PUBLIC REVIEW AND COMMENT:

The NOP is available for public review on the County's website at:

https://lus.sbcounty.gov/planning-home/environmental/desert-region/

Additionally, a copy of the NOP is available for public review at the following locations:

Jerry Lewis High Desert Government Center 15900 Smoke Tree Street, First Floor Hesperia, CA 92345

San Bernardino County Government Center 385 North Arrowhead Avenue, First Floor San Bernardino, CA 92415

San Bernardino County Library Barstow Branch 304 E. Buena Vista Street Barstow, CA 92311

We would like to hear what you think. Comments and/or questions should be directed to Jon Braginton, Planner, via U.S. mail or email by no later than 5:00 p.m. on February 19, 2024.

County of San Bernardino, Land Use Services Department

Attn.: Jon Braginton, Planner

385 North Arrowhead Avenue, First Floor

San Bernardino, CA 92415

Email: Jon.Braginton@lus.sbcounty.gov

(760) 776-6144

Please include name, phone number, and address of your agency's contact person in your response.

PUBLIC SCOPING MEETING:

The CEQA process encourages comments and questions from the public throughout the planning process. Consistent with Section 21083.9 of the CEQA statute, a Public Scoping Meeting will be held to solicit public comments on the scope and content of the EIR. A virtual scoping meeting will be held for this project. The date and meeting details are as follows:

Date and Time: January 31, 2024/4:00 PM PST

Place: Via Microsoft Teams

The Microsoft Teams meeting may also be accessed through the Microsoft Teams website by using the following Webinar ID:

Join on your computer, mobile app or room device

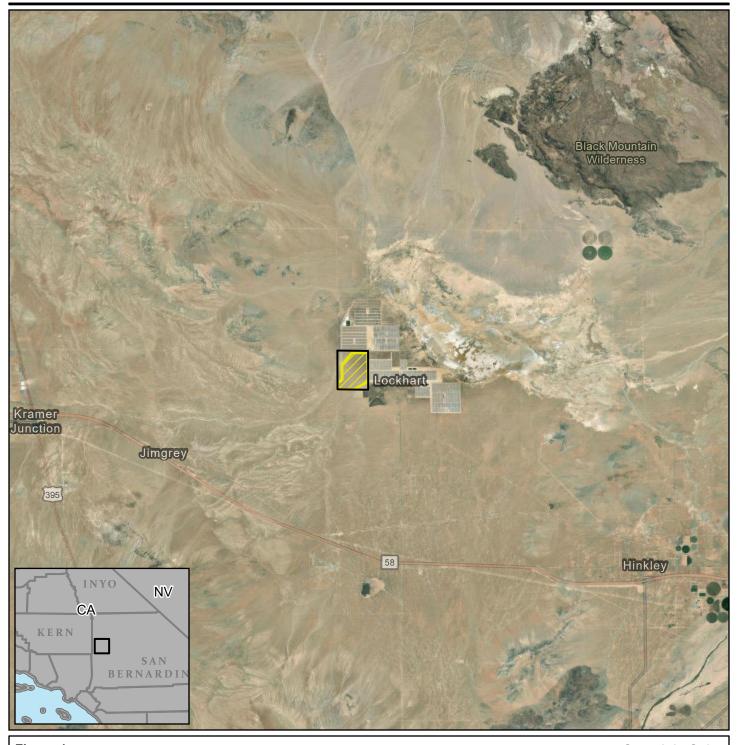
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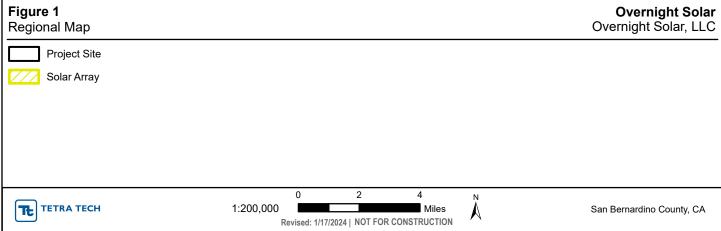
Or call in (audio only)

+1 213-357-2812,,975221363# United States, Los Angeles

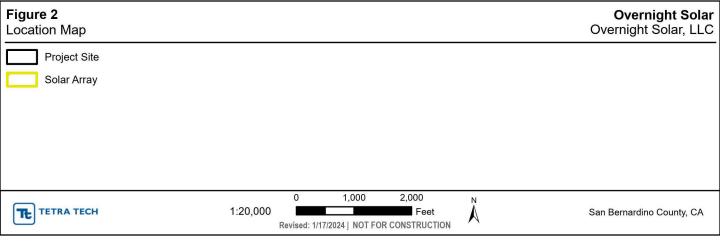
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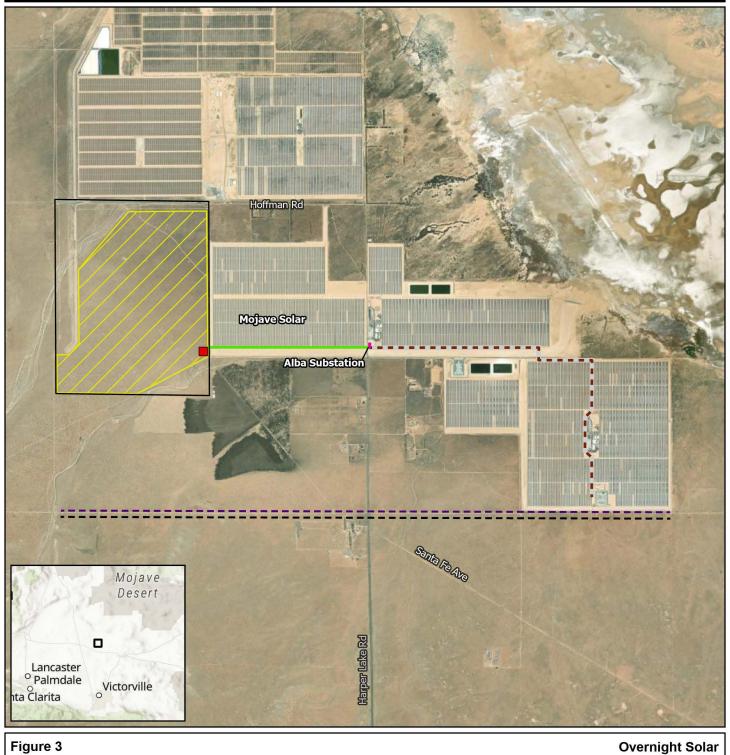
If you require additional information, please contact Jon Braginton, Planner, at (760) 776-6144.

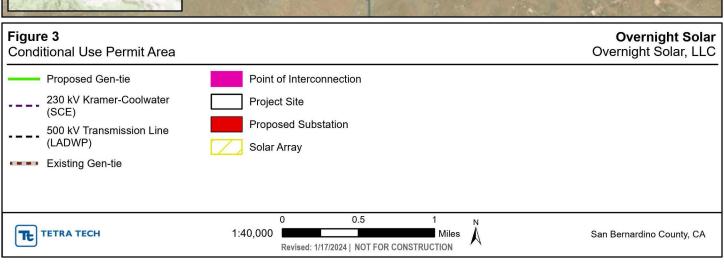














California Program Office

P.O. Box 401, Folsom, California 95763 | 916-313-5800 www.defenders.org

February 16, 2024

Jon Braginton, Planner
San Bernardino County
Land Use Services Department
385 North Arrowhead Avenue, First Floor
San Bernardino, CA 92415

Delivered via email to: jon.braginton@lus.sbcounty.gov

RE: Scoping Comments for Overnight Solar Project

(SCH 2024010434)

Dear Mr. Braginton:

Thank you for the opportunity to provide comments in response to the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the proposed Overnight Solar Project (Project). Defenders of Wildlife (Defenders) is dedicated to protecting all wild animals and plants in their natural communities and has nearly 2.1 million members and supporters in the United States, with more than 316,000 residing in California.

Defenders strongly supports generation of electricity from renewable energy sources. A low-carbon energy future is critical for California's economy, communities and environment. Achieving this future—and how we achieve it—is critical for protecting California's internationally treasured wildlife, landscapes and diverse habitats. We believe transitioning to a renewable energy future need not exacerbate the ongoing extinction crisis by thoughtfully planning projects while protecting habitat critical to species.

Project Description

The proposed 822-acre utility-scale solar photovoltaic (PV) facility would generate up to 150 MW of solar power and include 150 MW of energy storage. It is bordered on the north by the existing Lockhart Solar Facility and to the east by the existing Mojave Solar Facility. The Project site is in unincorporated Hinkley and is 6 miles north of the intersection of Harper Lake Road and State Route 58.

The Project site may provide habitat to several special-status wildlife species, including but not limited to the following:¹

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¹ California Natural Diversity Database. Accessed 01/31/2024. https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data

Table 1: Special Status Species' Habitat Within the Project Site

Common Name	Scientific Name	Status
American badger	Taxidea taxus	State Species of Special Concern
Burrowing owl	Athene cunicularia	State Species of Special Concern
Desert tortoise	Gopherus agassizii	Federal and State Threatened
Loggerhead shrike	Lanius ludovicianus	State Species of Special Concern
Mohave ground squirrel	Xerospermophilus mohavensis	State Threatened
Western Joshua tree	Yucca brevifolia	State Candidate Threatened
Yuma Ridgeway rail	Rallus obsoletus yumanensis	Federal Endangered and State Threatened

Comments

We offer the following comments on the scope of the DEIR for the proposed Project:

1. Conduct Protocol Level Surveys

Considering the sensitive species and habitat located on the Project site, the surveys must adhere to species-specific protocols to provide thorough and accurate results that support impact analysis and identification of appropriate mitigation measures for each species. We recommend consultation with the trustee and responsible wildlife agencies to determine the scope and protocols for the biological surveys. Species-specific surveys should cover 100 percent of the project area and adjacent habitat.

If the surveys find special-status species occurring on or near the Project site, we recommend consultation with state and wildlife agencies for recommended impact avoidance, minimization and mitigation measures, including compensatory mitigation.

a. Burrowing Owl

The Project site may provide a habitat for burrowing owls (BUOW) and are likely to occur given the surveys for the nearby Desert Breeze Solar Project observed four live owls and 29 suitable burrows. BUOWs are listed as a Species of Special Concern by the California Department of Fish and Wildlife (CDFW), and it is estimated that there are fewer than 10,000 breeding pairs in the state, with most existing on privately owned land.² Protocol-level surveys for BUOW should be performed across the entirety of the site and must conform to the current survey standards established in the *Burrowing Owl Survey Protocol and Mitigation Guidelines*³ and the *Staff Report on Burrowing Owl Mitigation*.⁴

² California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation.

³ California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines.

⁴ California Department of Fish and Game. 2012. *Staff Report on Burrowing Owl Mitigation*.

The compensatory mitigation ratio for BUOW habitat should be assigned in consultation with CDFW. Additionally, if the surveys find occupied burrows, artificial burrows shall be established at a 1:1 Ratio in adjacent suitable habitats as stated within BUOW guidelines.⁵

b. Desert Tortoise

The desert tortoise (DT) is continuing to decline throughout its range despite being under federal and state Endangered Species Act protection as threatened.⁶ The proposed Project area is located within the habitat for DT⁷, and ten live DTs were observed⁸, along with 45 DT burrows and six carcasses, on the nearby Desert Breeze Solar Project.

CDFW has previously stated that "[f]or desert tortoise ... compensatory mitigation ratios from 1:1 to 5:1 of mitigation acres to impacted areas are most typical. The higher mitigation ratios are often used for impacts that most affect the species, such as impacts of high quality, connected, other important habitat areas, and impacts to areas with greater distribution and presence of the species. The low mitigation ratios are often used for impact areas with low habitat value and low to very low presence of the species." Furthermore, CDFW stated that for the nearby Desert Breeze Solar Project, the final compensatory mitigation ratio will likely be higher than the minimum of 1:1 that was initially proposed for the project. Defenders requests that adequate ratios are assigned that accurately considers the habitat quality, connectivity value and the presence of species.

c. Mohave Ground Squirrel

The Mohave ground squirrel (MGS) is listed as threatened under the California Endangered Species Act and has been proposed for listing under the federal Endangered Species Act.¹¹ It is found only in the Mojave Desert in California and has one of the smallest geographic ranges of any North American ground squirrel. The proposed Project site is within the range of MGS and contains predicted habitat.¹² We recommend that MGS surveys be conducted utilizing appropriate protocol-level survey methods¹³ and mitigation measures developed in consultation with CDFW.

⁵ California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines.

⁶ Kissel, Amanda M., et al. 2023. Range-Wide Occupancy Trends for the Mohave Desert Tortoise (Gopherus Agassizii).

⁷ See https://databasin.org/maps/new/#datasets=47f02745fd9443b6962d5a759ac590a8

⁸ Kimley-Horn and Associates. 2023. Desert Breeze Solar Project Draft Environmental Impact Report, SCH #2022090646.

⁹ California Department of Fish and Wildlife. 2021. *Notice of Preparation of a Draft Environmental Impact Report Lockhart Solar PV II Project State Clearinghouse No. 2021070070.*

¹⁰ California Department of Fish and Wildlife. 2023. *Draft Environmental Impact Report Desert Breeze Solar (Project) State Clearinghouse No. 2022090646*.

¹¹ See https://defenders.org/sites/default/files/inline-files/Defenders%20et%20al.%20MGS%20Listing%20Petition%2012-13-23%20FINAL.pdf

¹² See https://databasin.org/datasets/063de529c9dd4635bb9f019cd0c0ca2a/

¹³ California Department of Fish and Wildlife. 2023. *Mohave Ground Squirrel Survey Guidelines*.

If compensatory mitigation is deemed warranted based on survey results, Defenders requests adhering to CDFW's MGS Conservation Strategy, which sets the compensation ratio for MGS at a 2:1 ratio.¹⁴

2. Incidental Take Permit

Desert tortoise and burrowing owl were observed during the 2022 field surveys on the nearby Desert Breeze Solar Project site. Furthermore, Mohave ground squirrel was determined to have a moderate potential to occur within the Desert Breeze Project site. Given these recent and nearby findings, it is reasonable to assume that these species may occur on the Project site and take may occur. We recommended consultation with CDFW and US Fish and Wildlife Service (USFWS) for the need to obtain an Incidental Take Permit, which will require submission of a Habitat Conservation Plan by the applicant and approval by USFWS.

3. Additional Plans Need to be Included in the DEIR

Any additional monitoring, management, preservation, or translocation plans that are included as a mitigation strategy should be available as a part of the DEIR for public analysis and review. As a recent court case stated, "[t]he point of an EIR is to inform decisionmakers and the public about the environmental consequences of a project before approving it." It is impossible for decisionmakers and the public to be fully informed on a project if key plans that aim to mitigate the environmental consequences are not available for review. Specifically, we request the inclusion of the following plans within the DEIR if they are deemed necessary following the protocol-level surveys and consultation with the appropriate wildlife agencies.

a. Raven Management Plan

Ravens are known predators of DT and are likely a significant impediment to desert tortoise recovery. Solar development and the associated infrastructure can be expected to increase raven threats to desert tortoises by providing raven perching, roosting and nesting sites. A Raven Management Plan should be included within the DEIR if DT or its sign is observed on the Project site.

b. Translocation and Monitoring Plan

If translocation of DT is deemed necessary, a translocation and monitoring plan shall be developed. However, the translocation of tortoises has an unproven track record of success. Therefore, any translocation plan included as an incidental take minimization strategy should be available as a part of the DEIR. The translocation plan should include methodologies for determining the success of the translocation and appropriate conservation measures for the

¹⁴ California Department of Fish and Wildlife. 2019. *A Conservation Strategy for the Mohave Ground Squirrel*. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=171301&inline

¹⁵ Make UC a Good Neighbor v. Regents of the University of California (February 24, 2023) 88 Cal.App.5th 656.

translocated DT, impacts on the existing population at the translocation site, when/how the tortoises will be translocated, how tortoise diseases will be addressed, a raven management plan for the translocation site and continued monitoring of host and translocated tortoises.

c. Joshua Tree Preservation Plan

If any Joshua trees are found on the Project site, a Joshua Tree Preservation Plan should be included within the DEIR. This plan should comply with the California Endangered Species Act or Western Joshua Tree Conservation Act (WJTCA) take requirements and compensatory mitigation. Furthermore, the plan should include preservation, restoration, enhancement and translocation methods. The plan should preserve and mitigate at the habitat level and not simply for individual trees.

In accordance with the WJTCA, CDFW is developing a western Joshua tree conservation plan. We request consultation with CDFW in the creation of a Joshua Tree Preservation Plan to ensure it includes measures that align with the goals of the upcoming plan.

4. Cumulative impact

The ever-increasing large-scale renewable energy footprint within the California desert is significantly impacting biological resources in the region. San Bernardino County has a significant number of proposed and completed solar PV projects. As of June 2023, there were ten active renewable energy projects that, if developed, would result in the conversion of an additional 5,484.5 acres of land to utility-scale PV facilities. Additionally, two previously approved solar project sites border the north and east of the Project: the Lockhart Solar Facility and the Mojave Solar Facility. The Desert Breeze Solar Project is also located in close proximity.

This proposed Project would significantly contribute to the cumulative loss of the region's important and declining biological resources, including but not limited to BUOW, DT and MGS. The cumulative analysis on biological resources must detail the potential impacts on the individual biological resource level and provide specific data on the loss of habitat. We request the analysis include a detailed map of all existing and planned development with the remaining habitat and connectivity for DT and MGS.

Furthermore, CDFW has stated in several previous comments on proposed solar projects that staff is available for consultation in support of cumulative impact analyses. ^{16,17} We recommend consultation with CDFW to identify an acceptable methodology to evaluate cumulative impacts at the resource level.

¹⁶ California Department of Fish and Wildlife. 2022. *Bullhead Solar Project by EDF Renewables, LLC Project (Project) Notice of Preparation (NOP) State Clearinghouse No. 2022110504*.

¹⁷ California Department of Fish and Wildlife. 2023. *Enterprise Solar Storage Project (Project) Notice of Preparation (NOP) of a draft Environmental Impact Report (EIR) State Clearinghouse No. 2023050214*.

5. Coordination with the Bureau of Land Management

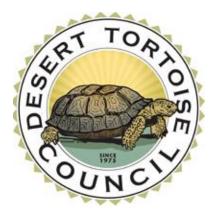
any adverse impacts. The Project site is adjacent to the Fremont-Kramer ACEC, and the Harper Dry Environmental Concern (ACECs), and ensure appropriate avoidance, minimization and mitigation of identify and analyze the potential impacts of the Project on BLM lands, specifically any Areas of Critical It is essential that the county closely coordinates with the Bureau of Land Management (BLM) to Lake and Superior-Cronese ACECs are located in close proximity.

feel free to contact me with any questions. look forward to reviewing the Draft EIR for the Project and request to be notified when it is available. Please Thank you once again for the opportunity to provide scoping comments for the Overnight Solar Project. We

Respectfully submitted,

Espriu-Markowoka

Sophia Markowska
Senior California Representative
408-603-4694
Smarkowska@defenders.org



DESERT TORTOISE COUNCIL

3807 Sierra Highway #6-4514 Acton, CA 93510

> www.deserttortoise.org eac@deserttortoise.org

Via email only

Date: February 12, 2024

Attn: Jon Braginton, Planner County of San Bernardino, Land Use Services Department 385 North Arrowhead Avenue, First Floor San Bernardino, CA 92415 Jon.Braginton@lus.sbcounty.gov

RE: Overnight Solar Project Scoping Comments

Dear Mr. Braginton,

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

Both our physical and email addresses are provided above in our letterhead for your use when providing future correspondence to us. When given a choice, we prefer to receive emails for future correspondence, as mail delivered via the U.S. Postal Service may take several days to be delivered. Email is an "environmentally friendlier way" of receiving correspondence and documents rather than "snail mail."

We appreciate this opportunity to provide comments on the above-referenced project, and that the San Bernardino County Planning Department (County) contacted the Council directly via email on 1/18/2024, which facilitated Ed LaRue's attendance at the project specific webinar on 1/31/2024. Given the location of the proposed project in habitats likely occupied by the Mojave desert tortoise (*Gopherus agassizii*) (synonymous with Agassiz's desert tortoise), our comments include recommendations intended to enhance protection of this species and its habitat during activities authorized by the County, which we recommend be added to project terms and conditions in the authorizing document (e.g., conditional use permit, right of way grant, etc.) as appropriate. Please accept, carefully review, and include in the relevant project file the Council's following comments and attachments for the proposed project.

The Mojave desert tortoise is among the top 50 species on the list of the world's most endangered tortoises and freshwater turtles. The International Union for Conservation of Nature's (IUCN) Species Survival Commission, Tortoise and Freshwater Turtle Specialist Group, now considers the Mojave desert tortoise to be Critically Endangered (Berry et al. 2021), "... based on population reduction (decreasing density), habitat loss of over 80% over three generations (90 years), including past reductions and predicted future declines, as well as the effects of disease (upper respiratory tract disease/mycoplasmosis). *Gopherus agassizii* (sensu stricto) comprises tortoises in the most well-studied 30% of the larger range; this portion of the original range has seen the most human impacts and is where the largest past population losses have been documented. A recent rigorous rangewide population reassessment of *G. agassizii* (sensu stricto) has demonstrated continued adult population and density declines of about 90% over three generations (two in the past and one ongoing) in four of the five *G. agassizii* recovery units and inadequate recruitment with decreasing percentages of juveniles in all five recovery units."

This status, in part, prompted the Council to join Defenders of Wildlife and Desert Tortoise Preserve Committee (Defenders of Wildlife et al. 2020) to petition the California Fish and Game Commission in March 2020 to elevate the listing of the Mojave desert tortoise from Threatened to Endangered in California. In its status review, California Department of Fish and Wildlife (CDFW) (2024a) stated: "At its public meeting on October 14, 2020, the Commission considered the petition, and based in part on the Department's [CDFW] petition evaluation and recommendation, found sufficient information exists to indicate the petitioned action may be warranted and accepted the petition for consideration. The Commission's decision initiated this status review to inform the Commission's decision on whether the change in status is warranted."

Importantly, in their February 2024 status review, CDFW concluded: "The Department's recommendation is that uplisting the Mojave Desert Tortoise is warranted." Receipt of this [status review] report is to be placed on the agenda for the next available meeting [expected in April 2024] of the Commission after delivery [at the February meeting]. At that time, the report will be made available to the public for a 30-day public comment period prior to the Commission taking any action on the petition."

Before providing our specific comments below, we would like to express our serious concern with the intended timing of the planning process. During the 1/31/2024 webinar when LaRue asked about the results of requisite surveys for plant and animal species of special concern (CDFW 2024) [this includes the tortoise], the Tetra Tech consultants indicated that some surveys had been performed without revealing which ones. We were told that scoping comments are due by 2/19/2024 and the draft environmental impact report (Draft EIR) would be released within a month, in March 2024. We find this scheduling to be problematic, that it may even be dismissive of public input.

It is absolutely essential that requisite surveys be performed before the Draft EIR is written so that survey results can be published in the environmental document. The County must ensure quality control in this matter, even if it means that the consultants perform the surveys this spring and the Draft EIR is published on a realistic schedule in the summer or fall of 2024. For example, Mohave ground squirrel surveys (CDFW 2023) must be performed from March through July of a given year. If these surveys have not already been performed, they must be performed and the results documented in the Draft EIR, which means it would need to be published sometime after July 2024. Other requisite surveys for rare plant communities, plants, and animals are listed herein, and must be performed *before* writing the Draft EIR for the analysis to be complete.

Comments Specific to the Notice of Preparation

In addition to the webinar presentation on 1/31/2024, the Council's sole source of project information is in the County's Notice of Preparation of a Draft Environmental Impact Report and Scoping Meeting, dated 1/18/2024 (herein "Notice;" all page numbers reference the Notice). Page 1 indicates: "The project includes development of a utility scale, solar photovoltaic (PV) electricity generation and energy storage facility that would produce up to 150 megawatts (MW) of solar power and include a 150 MW battery energy storage system (BESS) on approximately 822 acres, plus a generation interconnect (gen-tie) corridor approximately 1.1 miles in length and approximately 80 feet in width, connecting the proposed facility to another existing gen-tie line associated with the Mojave Solar Facility and just south of the existing Alba Substation...The project site is bordered to the north by the existing Lockhart Solar Facility, to the east by the existing Mojave Solar Facility, and to the west and south by undeveloped land."

The project description on page 1 indicates "The project would provide San Bernardino County and the State of California with additional renewable energy sources that would assist the state in complying with the Renewables Portfolio Standard (RPS) under Senate Bill 100, which requires that by December 31, 2030, 60 percent of all electricity sold in the state shall be generated from renewable energy sources." Unlike most solar projects that have been developed on leased public lands from the Bureau of Land Management (BLM), this project would be developed on private lands. When asked to analyze rooftop solar as an alternative to developing public lands, the BLM routinely says that it has no jurisdiction over private lands and that such an alternative is infeasible. For this project, we believe that considering a rooftop solar alternative is prudent, and ask that such an alternative be included in the Draft EIR. To be clear, we define "rooftop solar" as installing solar panels over areas that are already developed – commercial and industrial buildings, parking lots, farm fields used for growing shaded or partially shaded crops, etc.

Page 1 indicates, "...panel washing would occur at least once per year and potentially up to 4 times per year. Panel washing would require up to 12 employees with water trucks and would take approximately 20 days to complete." On page 6, we also read, "Approximately 200 acre-feet of water would be used during the first year of construction." Further, "Components of the plan are likely to include water trucks to spread water, as well as road stabilization with chemicals, gravel, or asphaltic pavement to mitigate visible fugitive dust from vehicular travel and wind erosion."

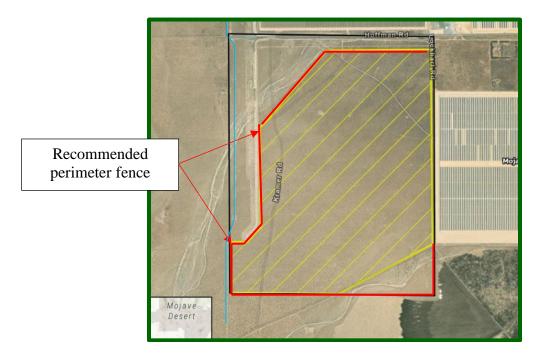
Please be sure the Draft EIR addresses current aquifer characteristics and how this project, combined with the other existing and proposed solar projects, including the Desert Breeze solar project, may affect the aquifer. Our relatively more pertinent concern with the use of so much water is the attraction of known predators, including common ravens and coyotes, into the project area, potentially increasing depredation of tortoises in adjacent areas. Panel washing and dust suppression if not applied in a conscientious manner will result in water puddling onsite and runoff into adjacent areas, which are both human-subsidized water sources for these predators.

The Draft EIR must analyze if this new use would result in an increase of common ravens and other predators of the desert tortoise in the region. Future operations must include provisions for monitoring and managing raven predation on tortoises as a result of the proposed action. A raven monitoring and management plan must include reducing human subsidies for food, water, and sites for nesting, roosting, and perching to address local impacts. The proponent must contribute to the National Fish and Wildlife Foundation's Raven Management Fund for regional and cumulative impacts. It is very important that for any of the gen-tie options the proponent should use transmission towers that prevent raven nesting. For example, the tubular monopole design with insulators on horizontal cross arms is preferable to lattice towers, which should not be used.

Please ensure that all standard measures to mitigate the local, regional, and cumulative impacts of raven predation on the tortoise are included in the Draft EIR, including developing a raven management plan for this specific project. USFWS (2010) provides a template for a project-specific management plan for common ravens. This template includes sections on construction, operation, maintenance, and decommissioning (including restoration) with monitoring and adaptive management during each project phase.

Page 6 indicates, "After grading, temporary fences would be placed around the project site, which would allow materials and equipment to be securely stored on-site and prevent theft and vandalism." We then read on page 6, under *Construction Activities and Equipment*, that "1. The first stage would include fencing, site preparation, grading, and preparation of staging areas and on-site access routes." These two statements seem to contradict one another, stating that fences would be installed after grading versus the "...first stage would include fencing."

Please clarify in the Draft EIR the timing of installation and the type of fence(s) that will be installed. We strongly recommend that the entire "solar array" be fenced as depicted by the yellow lines in the following aerial - as opposed to the "project site" depicted as a black line in the aerial - by a 1 x 2-inch mesh galvanized fence *before* any ground disturbance occurs.



For this project, the site itself and areas to the south and west are undeveloped, apparently intact habitats that likely support desert tortoises. We note that 10 tortoises were found on the nearby proposed Desert Breeze facility (see footnote above). Installing the tortoise exclusion fence before the vegetation is brushed will help accomplish two important things: (1) allow authorized biologists to perform clearance surveys (USFWS 2009) within the fenced area, and (2) prevent tortoises from entering the area before it is cleared and during construction. Since adjacent areas to the west and south will hopefully continue to support tortoises, it is important that the perimeter fence be installed before there is any ground disturbance to prevent tortoise immigration into the development footprint. If strategically planned, the proponent would be able to attach the tortoise exclusion fence, that is, the same 1 x 2-inch mesh that encloses the site to the bottom of the permanent perimeter fence before any grading occurs, which we assume would be chain-link or similar material to ensure it is visible to the public. Please be sure to consult Chapter 8 of the Desert Tortoise Field Manual (USFWS 2009) for the proper materials, specifications, and installation of tortoise exclusion fences.

Page 7 indicates, "An average of 150 workers would be on-site during each phase of construction, depending on the activities. The peak number of workers on the project site at any one time is anticipated to be 300. The workforce would consist of laborers, craftspeople, supervisory personnel, and support personnel. On average, it is anticipated that each worker would generate one round trip to the project site per workday. Most workers would commute to the project site from nearby communities, such as Boron and Barstow, with some traveling from more distant areas, such as Victorville, Hesperia, and San Bernardino. Construction would generally occur during daylight hours, though exceptions may arise because of the need for nighttime work. Workers would reach the project site using Harper Lake Road to Lockhart Ranch Road."

Harper Lake Road was fitted with a tortoise exclusion fence decades ago, but we have found that its maintenance has been problematic, that there are gaps, and that tortoises may still enter onto the asphalt surface. Even if no tortoises are found onsite and incidental take permits are not required (see discussion below), we recommend that tortoise awareness programs be administered to all construction and maintenance workers prior to and during construction and on an annual basis for maintenance workers. This recommendation is intended, in part, to be sure project-related personnel are aware of tortoises occurring along Harper Lake Road north of Highway 58 and particularly along the unfenced Helendale Road located south of Highway 58 with the objective of eliminating road mortality injury, and/or collection of tortoises by personnel associated with this project.

We superimposed a red line on the aerial photograph on the previous page to signify our recommendation for fence placement. We have intentionally placed the fence line along the "solar array" footprint rather than the "project site" denoted by the rectangular black line for several important reasons. That being said, if the areas to the west and northwest of the solar array are to be developed with ancillary features that need to be enclosed within the perimeter fence, we understand that a perimeter fence aligned with the "project site" would be required. And, if so, please consider the following.

We are concerned that a named road, "Kramer Road," would be blocked as the result of project development. There is also an unnamed road denoted by a light blue line in the aerial on the previous page that coincides with another existing, unimproved road. If the project site rather than the solar array is fenced, this road would also be blocked. In our experience, when existing roads are closed, if an alternative route is not provided, "social trails" will be created outside the perimeter fence. In many cases, these roads have a greater impact to air quality, soils, vegetation, wildlife than a well-defined graded road. So, please be sure the Draft EIR addresses the issue of vehicle access after the site is fenced. Please be sure that the perimeter fence right-of-way accommodates a public-use roadway immediately outside the fence to minimize the creation and impacts of social trails.

Additional Comments for Issues Not Given in the Notice of Preparation

Surveys

The Mojave desert tortoise is listed as threatened under the Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA). These legal designations prohibit the "take" of the tortoise by anyone without prior authorization (e.g., incidental take permit), and for this project, require mitigation for the "impacts of the taking." Note than "take" includes capture, harm, or harassment of tortoises.

To determine whether take would occur, the USFWS has two types of surveys for the Mojave desert tortoise, 100% coverage surveys (USFWS 2019) and tortoise clearance surveys (USFWS 2009). One-hundred-percent surveys specify transect width, approval of the biologist conducting the surveys, area to be surveyed (i.e., actions area), and in some cases, the time of year. Onehundred-percent surveys are conducted to determine whether tortoises/tortoise sign are present in the "action area" for the proposed project (USFWS 2019). The "action area" is defined in 50 Code of Federal Regulations 402.2 and the USFWS Desert Tortoise Field Manual (USFWS 2009) as "all areas to be affected directly or indirectly by proposed development and not merely the immediate area involved in the action" (50 Code of Federal Regulations §402.02). Thus, the 100% coverage survey area is larger than the project footprint/project site. CDFW has adopted the USFWS's 100% coverage survey the methodology as (https://wildlife.ca.gov/Conservation/Survey-Protocols#377281283-reptiles) to determine tortoise presence/use of the action area and whether take would occur. Please be sure that the proponent's consultants speak with the USFWS and CDFW to determine an appropriate action area for this project, the surveys are conducted following the protocols for each survey type, the biologist(s) conducting the surveys are approved by the USFWS and CDFW prior to conducting the surveys, and the survey results of the entire action area be documented in the Draft EIR.

The methodology and results of the 100% coverage survey are documented and submitted to USFWS and CDFW. If any tortoise sign is found, the project proponent should coordinate with USFWS and CDFW to determine whether "take" under the FESA and CESA is likely to occur from implementation of the proposed project. If USFWS or CDFW determines that the construction, operation/use, maintenance, or decommissioning of the proposed project is likely to result in take of the tortoise, the project proponent must obtain a Section 10(a)(1)(B) incidental take permit from the USFWS and a Section 2081 incidental take permit from the CDFW prior to conducting any ground disturbance.

The incidental take permit will require that the project proponent conduct clearance surveys (USFWS 2009). If any tortoises are found, the incidental take permit(s) will include instructions on moving tortoises, which is a type of take, from the area to be impacted as well as other measures to minimize and mitigate the impacts of the taking.

We remind the County that this and any other actions funded, carried out, or authorized by the County such as issuance of a permit, must comply with FESA and CESA. Therefore, the County should require the project proponent to comply with the USFWS (2019) and CDFW 100% coverage survey protocol for the tortoise, and if the agencies determine an incidental take permit is required, the project proponent must obtain these incidental permits prior to initiating any clearance surveys (USFWS 2009) or ground disturbing activities. The County should require the applicant to obtain incidental take permits if USFWS and/or CDFW determine that a permit is needed.

Prior to performing surveys, the proponent's consultant should access the California Natural Diversity Data Base (CNDDB; CDFW 2024c) to determine the special status species reported from the region, the results of which need to be published in the Draft EIR. The project proponent should implement focused surveys for **all** special status species that may use the project area (including gen-tie lines and other ancillary facilities) using the appropriate methodologies for each taxa as specified by the USFW and CDFW, as follows: Mojave desert tortoise (USFWS 2009, 2019); Mohave ground squirrel (CDFW 2023); Swainson's hawk (CDFW 2010); American badger (Wearn and Glover-Kapfer 2017); kit fox (USFWS 2011); burrowing owl (CDFG 2012); Mojave fringe-toed lizards (*Uma scoparia*) (University of California Riverside, Center for Conservation Biology 2005); and special status native plant populations and natural communities (e.g., Spine scale Scrub, Winterfat Scrubland, and Joshua Tree Woodland) (CDFG 2009, CDFW 2018).

A jurisdictional waters analysis should be performed for all potential impacts to washes, streams, and drainages. This analysis should be reviewed by the CDFW as part of the permitting process and a Streambed Alteration Agreement acquired, if deemed necessary by CDFW.

<u>Impacts Analysis to Tortoise Conservation Areas and Linkage Habitats</u>

To assist the County and proponent with their cumulative effects analysis in the Draft EIR of the direct, indirect, synergistic, and cumulative impacts of the Proposed Project on the Mojave desert tortoise, we provide Appendix A with current information on its status and trends.

The West Mojave Plan (BLM 2005, 2006) created an exclusion area within the surrounding Fremont-Kramer and Superior-Cronese Critical Habitat Units, which completely surrounded the single existing solar development at the time, referred to as the "LUZ facility." Since then, several thousand acres of new solar facilities have been developed (Mojave and Lockhart solar facilities) and proposed (Desert Breeze and this one). It is important that the Draft EIR analyze the direct, indirect, synergistic, and cumulative effects of this and other solar developments that are surrounded by the two critical habitat units, Areas of Critical Environmental Concern (ACEC), National Conservation Lands (NCL), and nearby Wilderness Areas to the north. We ask specifically that the Draft EIR analyze the potential heat sink effects (Sinervo et al. 2013) that this and adjacent solar projects may be having on the tortoise populations in critical habitat.

Wildlife corridors are areas that are used periodically, and may not be continuously occupied by wildlife species. Consequently, a one-day visit to a project site would not provide sufficient information that the project site or nearby areas would not interfere substantially with the movement of any native resident wildlife species or established native resident wildlife corridors.

An online search of scientific literature (e.g., Google Scholar) would reveal the existence of scientific papers on areas important for connectivity for species such as the Mojave desert tortoise. For example, for the tortoise, Averill-Murray et al. (2021) published a paper on connectivity of Mojave desert tortoise populations and linkage habitat. The authors emphasized that "[m]aintaining an ecological network for the Mojave desert tortoise, with a system of core habitats (TCAs = Tortoise Conservation Areas) connected by linkages, is necessary to support demographically viable populations and long-term gene flow within and between TCAs."

"Ignoring minor or temporary disturbance on the landscape could result in a cumulatively large impact that is not explicitly acknowledged (Goble, 2009); therefore, understanding and quantifying all surface disturbance on a given landscape is prudent." Furthermore, "habitat linkages among TCAs must be **wide enough** [emphasis added] to sustain multiple home ranges or local clusters of resident tortoises (Beier, et al., 2008; Morafka, 1994), while accounting for edge effects, in order to sustain regional tortoise populations." Consequently, effective linkage habitats are not long narrow corridors. Any development within them has an edge effect (i.e., indirect impact) that extends from all sides into the linkage habitat further narrowing or impeding the use of the linkage habitat, depending on the extent of the edge effect.

Averill-Murray et al. (2021) further notes that "To help maintain tortoise inhabitance and permeability across all other non-conservation-designated tortoise habitat, all surface disturbance could be limited to less than 5-percent development per square kilometer because the 5-percent threshold for development is the point at which tortoise occupation drops precipitously (Carter, et al., 2020a)." They caution that the upper threshold of 5-percent development per square kilometer may not maintain population sizes needed for demographic or functional connectivity; therefore, development thresholds should be lower than 5-percent.

The lifetime home range for the Mojave desert tortoise is more than 1.5 square miles (3.9 square kilometers) of habitat (Berry 1986) and, as previously mentioned, may make periodic forays of more than 7 miles (11 kilometers) at a time (Berry 1986).

For the Mohave ground squirrel, CDFW published "A Conservation Strategy for the Mohave Ground Squirrel, *Xerospermophilus mohavensis*" in CDFW (2019). This document contains a map with linkage areas among the identified populations of the Mohave ground squirrel. Information from documents like these should be used to support the existence or absence of wildlife linkages in the project area and nearby.

We add that the fundamentals of conservation biology include the need for gene flow between populations to maintain genetic diversity; this enables a species to more likely survive, especially during climate change, which enables biodiversity. Thus, linkage habitats are important as they provide connectivity among wildlife populations to maintain viability and biodiversity.

Indirect impacts

We request that the Draft EIR address the effects of the proposed action on global warming and the effects that global warming may have on the proposed action. For the latter, we recommend including: an analysis of habitats within the project that may provide refugia for tortoise populations; an analysis of how the proposed action would contribute to the spread and proliferation of nonnative invasive plant species; how this spread/proliferation would affect the desert tortoise and its habitats (including the frequency and size of human-caused fires); and how the proposed action may affect the likelihood of human-caused fires. We strongly urge the Proponent to develop and implement a management and monitoring plan using this analysis and other relevant data that would reduce the transport to and spread of nonnative seeds and other plant propagules within the project area and eliminate/reduce the likelihood of human-caused fires. The plan should integrate vegetation management with fire management and fire response.

Mitigation and Monitoring Plans

The Draft EIR should include appropriate mitigation and monitoring plans for all direct, indirect, and cumulative effects to the tortoise and its habitats; the mitigation and monitoring plans should use the best available science with a commitment to implement the mitigation commensurate to impacts to the tortoise and its habitats. Mitigation and monitoring should include a fully-developed desert tortoise translocation plan; tortoise predator management plan; non-native plants species management plan; fire prevention and management plan; compensation plan for the degradation and loss of tortoise habitat that includes protection of the acquired, improved, and restored habitat in perpetuity for the tortoise from future development and human use; a plan to protect tortoise translocation area(s) from future development and human use in perpetuity; and habitat restoration plan for the project site when the lease is terminated and the proposed project is decommissioned.

These mitigation and monitoring plans should include implementation schedules that are tied to key actions of the construction, operation, maintenance, decommissioning, and restoration phases of the project so that mitigation occurs concurrently with or in advance of the impacts. The plans should specify success criteria, include a monitoring plan to collect data to determine whether success criteria have been met, and identify actions that would be required if the mitigation measures do not meet the success criteria.

The Draft EIR, based on the results of the tortoise protocol surveys, must discuss the displacement of tortoises from the impact area. Will these tortoises be relocated into adjacent areas or are they to be translocated into distant areas? The Draft EIR should present the intended approach to relocating/translocating displaced tortoises. Additionally, there should be a discussion of previous translocation efforts, such as at Fort Irwin National Training Center and more recently at Twentynine Palms Marine Corps Base, to ensure that translocation standards are up-to-date and acceptable to both USFWS and CDFW.

We appreciate this opportunity to provide the above comments and trust they will help protect tortoises during any resulting authorized activities. Herein, we reiterate that the Council wants to be identified as an Affected Interest for this and all other projects funded, authorized, or carried out by San Bernardino County that may affect desert tortoises, and that any subsequent environmental documentation for this project is provided to us at the contact information listed above.

Please respond in an email that you have received this comment letter so we can be sure our concerns have been registered with the appropriate personnel and office for this Project.

Respectfully,



Edward L. LaRue, Jr., M.S.

Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

- cc. Heidi Calvert, Regional Manager, Region 6 Inland and Desert Region, California Department of Fish and Wildlife, Heidi.Calvert@wildlife.ca.gov
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Appendix A. Demographic Status and Trend of the Mojave Desert Tortoise (Gopherus agassizii)

We provide the following information on the status and trend of the listed population of the desert tortoise to assist the County with its analysis of the direct, indirect, and cumulative impacts of the proposed project on the Mojave desert tortoise.

BLM's implementation of a conservation strategy for the Mojave desert tortoise in its resource management plans through 2020 has resulted in the following changes in the status for the tortoise throughout its range and in Nevada from 2004 to 2014 (Table 1; USFWS 2015) and 2004 to 2020 (Table 2). There are 17 populations of Mojave desert tortoise described below that occur in the Critical Habitat Units (CHUs) and Tortoise Conservation Areas (TCAs); 14 are on lands managed by the BLM.

The Desert Tortoise Council (Council) has serious concerns about direct, indirect, and cumulative sources of human mortality for the Mojave desert tortoise given the status and trend of the species range-wide, within each of the five recovery units, and within the TCAs that comprise each recovery unit.

Densities of Adult Mojave Desert Tortoises: A few years after listing the Mojave desert tortoise under the Federal Endangered Species Act (FESA), the U.S. Fish and Wildlife Service (USFWS) published a Recovery Plan for the Mojave desert tortoise (USFWS 1994a). It contained a detailed population viability analysis. In this analysis, the minimum viable density of a Mojave desert tortoise population is 10 adult tortoises per mile² (3.9 adult tortoises per km²). This assumed a male-female ratio of 1:1 (USFWS 1994a, page C25) and certain areas of habitat with most of these areas geographically linked by adjacent borders or corridors of suitable tortoise habitat. Populations of Mojave desert tortoises with densities below this density are in danger of extinction (USFWS 1994a, page 32). The revised recovery plan (USFWS 2011) designated five recovery units for the Mojave desert tortoise that are intended to conserve the genetic, behavioral, and morphological diversity necessary for the recovery of the entire listed species (Allison and McLuckie 2018).

Range-wide, densities of adult Mojave desert tortoises declined more than 32% between 2004 and 2014 (Table 1) (USFWS 2015). At the recovery unit level, between 2004 and 2014, densities of adult desert tortoises declined, on average, in every recovery unit except the Northeastern Mojave (Table 1). Adult densities in the Northeastern Mojave Recovery Unit increased 3.1% per year (SE = 4.3%), while the other four recovery units declined at different annual rates: Colorado Desert (– 4.5%, SE = 2.8%), Upper Virgin River (–3.2%, SE = 2.0%), Eastern Mojave (–11.2%, SE = 5.0%), and Western Mojave (–7.1%, SE = 3.3%)(Allison and McLuckie 2018). However, the small area and low starting density of the tortoises in the Northeastern Mojave Recovery Unit (lowest density of all Recovery Units) resulted in a small overall increase in the number of adult tortoises by 2014 (Allison and McLuckie 2018). In contrast, the much larger areas of the Eastern Mojave, Western Mojave, and Colorado Desert recovery units, plus the higher estimated initial densities in these areas, explained much of the estimated total loss of adult tortoises since 2004 (Allison and McLuckie 2018).

At the population level, represented by tortoises in the TCAs, densities of 10 of 17 monitored populations of the Mojave desert tortoise declined from 26% to 64% and 11 have densities less than 3.9 adult tortoises per km² (USFWS 2015).

<u>Population Data on Mojave Desert Tortoise</u>: The Mojave desert tortoise was listed as threatened under the FESA in 1990. The listing was warranted because of ongoing population declines throughout the range of the tortoise from multiple human-caused activities. Since the listing, the status of the species has changed. Population numbers (abundance) and densities continue to decline substantially (please see Tables 1 and 2).

Table 1. Summary of 10-year trend data for 5 Recovery Units and 17 CHUs/TCAs for the Mojave desert tortoise, *Gopherus agassizii* (=Agassiz's desert tortoise). The table includes the area of each Recovery Unit and CHU/TCA, percent of total habitat for each Recovery Unit and CHU/TCA, density (number of breeding adults/km² and standard errors = SE), and the percent change in population density between 2004-2014. Populations below the viable level of 3.9 adults/km² (10 adults per mi²) (assumes a 1:1 sex ratio) and showing a decline from 2004 to 2014 are in red (Allison and McLuckie 2018, USFWS 2015).

Recovery Unit Designated CHU/TCA	Surveyed area (km²)	% of total habitat area in Recovery Unit & CHU/TCA	2014 density/km² (SE)	% 10-year change (2004– 2014)
Western Mojave, CA	6,294	24.51	2.8 (1.0)	-50.7 decline
Fremont-Kramer	2,347	9.14	2.6 (1.0)	−50.6 decline
Ord-Rodman	852	3.32	3.6 (1.4)	-56.5 decline
Superior-Cronese	3,094	12.05	2.4 (0.9)	-61.5 decline
Colorado Desert, CA	11,663	45.42	4.0 (1.4)	-36.25 decline
Chocolate Mtn AGR, CA	713	2.78	7.2 (2.8)	-29.77 decline
Chuckwalla, CA	2,818	10.97	3.3 (1.3)	-37.43 decline
Chemehuevi, CA	3,763	14.65	2.8 (1.1)	-64.70 decline
Fenner, CA	1,782	6.94	4.8 (1.9)	-52.86 decline
Joshua Tree, CA	1,152	4.49	3.7 (1.5)	+178.62 increase
Pinto Mtn, CA	508	1.98	2.4 (1.0)	-60.30 decline
Piute Valley, NV	927	3.61	5.3 (2.1)	+162.36 increase
Northeastern Mojave	4,160	16.2	4.5 (1.9)	+325.62 increase
Beaver Dam Slope, NV, UT, AZ	750	2.92	6.2 (2.4)	+370.33 increase
Coyote Spring, NV	960	3.74	4.0 (1.6)	+ 265.06 increase
Gold Butte, NV & AZ	1,607	6.26	2.7 (1.0)	+ 384.37 increase
Mormon Mesa, NV	844	3.29	6.4 (2.5)	+ 217.80 increase
Eastern Mojave, NV & CA	3,446	13.42	1.9 (0.7)	-67.26 decline
El Dorado Valley, NV	999	3.89	1.5 (0.6)	-61.14 decline
Ivanpah Valley, CA	2,447	9.53	2.3 (0.9)	-56.05 decline
Upper Virgin River	115	0.45	15.3 (6.0)	–26.57 decline
Red Cliffs Desert	115	0.45	15.3 (6.0)	-26.57 decline
Total amount of land	25,678	100.00		-32.18 decline

Density of Juvenile Mojave Desert Tortoises: Survey results indicate that the proportion of juvenile desert tortoises has been decreasing in all five recovery units since 2007 (Allison and McLuckie 2018). The probability of encountering a juvenile tortoise was consistently lowest in the Western Mojave Recovery Unit. Allison and McLuckie (2018) provided reasons for the decline in juvenile desert tortoises in all recovery units. These included decreased food availability for adult female tortoises resulting in reduced clutch size, decreased food availability resulting in increased mortality of juvenile tortoises, prey switching by coyotes from mammals to tortoises, and increased abundance of common ravens that typically prey on smaller desert tortoises.

Declining adult tortoise densities through 2014 have left the Eastern Mojave adult numbers at 33% (a 67% decline of their 2004 levels) (Allison and McLuckie 2018, USFWS 2015). Such steep declines in the density of adults are only sustainable if there are suitably large improvements in reproduction and juvenile growth and survival. However, the proportion of juveniles has not increased anywhere in the range of the Mojave desert tortoise since 2007, and in the Eastern Mojave Recovery Unit the proportion of juveniles in 2014 declined from 14 to 11 percent (a 21% decline) of their representation since 2007 (Allison and McLuckie 2018).

The USFWS and Utah Division of Wildlife Resources have continued to collect density data on the Mojave desert tortoise since 2014. The results are provided in Table 2 along with the analysis USFWS (2015) conducted for tortoise density data from 2004 through 2014. These data show that adult tortoise densities in most Recovery Units continued to decline in density since the data collection methodology was initiated in 2004. In addition, in the Northeastern Mojave Recovery Unit that had shown an overall increase in tortoise density between 2004 and 2014, subsequent data indicate a decline in density since 2014 (USFWS 2016, 2018, 2019, 2020, 2022a, 2022b).

Table 2. Summary of data for Agassiz's desert tortoise, *Gopherus agassizii* (=Mojave desert tortoise) from 2004 to 2021 for the 5 Recovery Units and 17 CHUs/TCAs. The table includes the area of each Recovery Unit and CHU/TCA, percent of total habitat for each Recovery Unit and CHU/TCA, density (number of breeding adults/km² and standard errors = SE), and percent change in population density between 2004-2014 (USFWS 2015). Populations below the viable level of 3.9 breeding individuals/km² (10 breeding individuals per mi²) (assumes a 1:1 sex ratio) (USFWS 1994a, 2015) or showing a decline from 2004 to 2014 are in **red.**

Recovery Unit: Designated CHU/TCA &	% of total habitat area in Recovery Unit & CHU/TCA	2014 density/ km ² (SE)	% 10- year change (2004– 2014)	2015 density/ km²	2016 density/ km²	2017 density/ km²	2018 density/ km²	2019 density/ km²	2020 density/ km²	2021 density/ km ²
Western Mojave, CA	24.51	2.8 (1.0)	-50.7 decline							
Fremont- Kramer	9.14	2.6 (1.0)	-50.6 decline	4.5	No data	4.1	No data	2.7	1.7	No data
Ord-Rodman	3.32	3.6 (1.4)	-56.5 decline	No data	No data	3.9	2.5/3.4*	2.1/2.5*	No data	1.9/2.5*
Superior- Cronese	12.05	2.4 (0.9)	-61.5 decline	2.6	3.6	1.7	No data	1.9	No data	No data
Colorado Desert, CA	45.42	4.0 (1.4)	-36.25 decline							
Chocolate Mtn AGR, CA	2.78	7.2 (2.8)	-29.77 decline	10.3	8.5	9.4	7.6	7.0	7.1	3.9
Chuckwalla, CA	10.97	3.3 (1.3)	-37.43 decline	No data	No data	4.3	No data	1.8	4.6	2.6
Chemehuevi, CA	14.65	2.8 (1.1)	-64.70 decline	No data	1.7	No data	2.9	No data	4.0	No data
Fenner, CA	6.94	4.8 (1.9)	-52.86 decline	No data	5.5	No data	6.0	2.8	No data	5.3
Joshua Tree, CA	4.49	3.7 (1.5)	+178.62 increase	No data	2.6	3.6	No data	3.1	3.9	No data

Recovery Unit: Designated CHU/TCA	% of total habitat area in Recovery Unit & CHU/TCA	2014 density/km² (SE)	% 10- year change (2004– 2014)	2015	2016	2017	2018	2019	2020	2021
Pinto Mtn, CA	1.98	2.4 (1.0)	-60.30 decline	No data	2.1	2.3	No data	1.7	2.9	No data
Piute Valley, NV	3.61	5.3 (2.1)	+162.36 increase	No data	4.0	5.9	No data	No data	No data	3.9
Northeastern Mojave AZ, NV, & UT	16.2	4.5 (1.9)	+325.62 increase							
Beaver Dam Slope, NV, UT, & AZ	2.92	6.2 (2.4)	+370.33 increase	No data	5.6	1.3	5.1	2.0	No data	No data
Coyote Spring, NV	3.74	4.0 (1.6)	+ 265.06 increase	No data	4.2	No data	No data	3.2	No data	No data
Gold Butte, NV & AZ	6.26	2.7 (1.0)	+ 384.37 increase	No data	No data	1.9	2.3	No data	No data	2.4
Mormon Mesa, NV	3.29	6.4 (2.5)	+ 217.80 increase	No data	2.1	No data	3.6	No data	5.2	5.2
Eastern Mojave, NV & CA	13.42	1.9 (0.7)	-67.26 decline							
El Dorado Valley, NV	3.89	1.5 (0.6)	-61.14 decline	No data	2.7	5.6	No data	2.3	No data	No data
Ivanpah Valley, CA	9.53	2.3 (0.9)	-56.05 decline	1.9	No data	No data	3.7	2.6	No data	1.8

Recovery Unit: Designated CHU/TCA	% of total habitat area in Recovery Unit & CHU/TCA	2004 density/ km²	2014 density/km² (SE)	% 10- year change (2004– 2014)	2015	2016	2017	2018	2019	2020	2021
Upper Virgin River, UT & AZ	0.45		15.3 (6.0)	-26.57 decline							
Red Cliffs Desert**	0.45	29.1 (21.4- 39.6)**	15.3 (6.0)	-26.57 decline	15.0	No data	19.1	No data	17.2	No data	
Range-wide Area of CHUs - TCAs/Range- wide Change in Population Status	100.00			-32.18 decline							

^{*}This density includes the adult tortoises translocated from the expansion of the MCAGCC, that is resident adult tortoises and translocated adult tortoises.

^{**}Methodology for collecting density data initiated in 1999.

Abundance of Mojave Desert Tortoises: Allison and McLuckie (2018) noted that because the area available to tortoises (i.e., tortoise habitat and linkage areas between habitats) is decreasing, trends in tortoise density no longer capture the magnitude of decreases in abundance. Hence, they reported on the change in abundance or numbers of the Mojave desert tortoise in each recovery unit (Table 2). They noted that these estimates in abundance are likely higher than actual numbers of tortoises, and the changes in abundance (i.e., decrease in numbers) are likely lower than actual numbers because of their habitat calculation method. They used area estimates that removed only impervious surfaces created by development as cities in the desert expanded. They did not consider degradation and loss of habitat from other sources, such as the recent expansion of military operations (753.4 km² so far on Fort Irwin and the Marine Corps Air Ground Combat Center), intense or large scale fires (e.g., 576.2 km² of critical habitat that burned in 2005), development of utility-scale solar facilities (as of 2015, 194 km² have been permitted) (USFWS 2016), or other sources of degradation or loss of habitat (e.g., recreation, mining, grazing, infrastructure, etc.). Thus, the declines in abundance of Mojave desert tortoise are likely greater than those reported in Table 3.

Table 3. Estimated change in abundance of adult Mojave desert tortoises in each recovery unit between 2004 and 2014 (Allison and McLuckie 2018). Decreases in abundance are in red.

Recovery Unit	Modeled	2004	2014	Change in	Percent
	Habitat (km ²)	Abundance	Abundance	ance Abundance Cha	
					Abundance
Western Mojave	23,139	131,540	64,871	-66,668	-51%
Colorado Desert	18,024	103,675	66,097	-37,578	-36%
Northeastern	10,664	12,610	46,701	34,091	270%
Mojave					
Eastern Mojave	16,061	75,342	24,664	-50,679	-67%
Upper Virgin River	613	13,226	10,010	-3,216	-24%
Total	68,501	336,393	212,343	-124,050	-37%

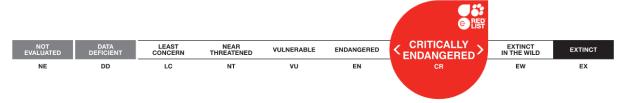
Habitat Availability: Data on population density or abundance does not indicate population viability. The area of protected habitat or reserves for the subject species is a crucial part of the viability analysis along with data on density, abundance, and other population parameters. In the Desert Tortoise (Mojave Population) Recovery Plan (USFWS 1994a), the analysis of population viability included population density and size of reserves (i.e., areas managed for the desert tortoise) and population numbers (abundance) and size of reserves. The USFWS Recovery Plan reported that as population densities for the Mojave desert tortoise decline, reserve sizes must increase, and as population numbers (abundance) for the Mojave desert tortoise decline, reserve sizes must increase (USFWS 1994a). In 1994, reserve design (USFWS 1994a) and designation of critical habitat (USFWS 1994b) were based on the population viability analysis from numbers (abundance) and densities of populations of the Mojave desert tortoise in the early 1990s. Inherent in this analysis is that the lands be managed with reserve level protection (USFWS 1994a, page 36) or ecosystem protection as described in section 2(b) of the FESA, and that sources of mortality be reduced so recruitment exceeds mortality (that is, lambda > 1)(USFWS 1994a, page C46).

Habitat loss would also disrupt the prevailing population structure of this widely distributed species with geographically limited dispersal (isolation by resistance Dutcher et al. 2020). Allison and McLuckie (2018) anticipate an additional impact of this habitat loss/degradation is decreasing resilience of local tortoise populations by reducing demographic connections to neighboring populations (Fahrig 2007). Military and commercial operations and infrastructure projects that reduce tortoise habitat in the desert are anticipated to continue (Allison and McLuckie 2018) as are other sources of habitat loss/degradation.

Allison and McLuckie (2018) reported that the life history of the Mojave desert tortoise puts it at greater risk from even slightly elevated adult mortality (Congdon et al. 1993; Doak et al. 1994), and recovery from population declines will require more than enhancing adult survivorship (Spencer et al. 2017). The negative population trends in most of the TCAs for the Mojave desert tortoise indicate that this species is on the path to extinction under current conditions (Allison and McLuckie 2018). They state that their results are a call to action to remove ongoing threats to tortoises from TCAs, and possibly to contemplate the role of human activities outside TCAs and their impact on tortoise populations inside them.

Densities, numbers, and habitat for the Mojave desert tortoise declined between 2004 and 2014 and densities continue to decline in most Recovery Units since 2014. As reported in the population viability analysis, to improve the status of the Mojave desert tortoise, reserves (area of protected habitat) must be established and managed. When densities of tortoises decline, the area of protected habitat must increase. When the abundance of tortoises declines, the area of protected habitat must increase. We note that the Desert Tortoise (Mojave Population) Recovery Plan was released in 1994 and its report on population viability and reserve design was reiterated in the 2011 Revised Recovery Plan as needing to be updated with current population data (USFWS 2011, p. 83). With lower population densities and abundance, a revised population viability analysis would show the need for greater areas of habitat to receive reserve level of management for the Mojave desert tortoise. In addition, we note that none of the recovery actions that are fundamental tenets of conservation biology has been implemented throughout most or all of the range of the Mojave desert tortoise.

<u>IUCN Species Survival Commission</u>: The Mojave desert tortoise is now on the list of the world's most endangered tortoises and freshwater turtles. It is in the top 50 species. The International Union for Conservation of Nature's (IUCN) Species Survival Commission, Tortoise and Freshwater Turtle Specialist Group, now considers Mojave desert tortoise to be Critically Endangered (Berry et al. 2021). As such, it is a "species that possess an extremely high risk of extinction as a result of rapid population declines of 80 to more than 90 percent over the previous 10 years (or three generations), a current population size of fewer than 50 individuals, or other factors." It is one of three turtle and tortoise species in the United States to be critically endangered. This designation is more grave than endangered.



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Lahontan Regional Water Quality Control Board

February 8, 2024

File: Environmental Doc Review San Bernardino County

Jon Braginton
Land Use Services Department
385 N. Arrowhead Avenue, First Floor
San Bernardino, CA 92415
Jon.Braginton@lus.scbounty.gov

Comments on the Notice of Preparation of a Draft Environmental Impact Report, Overnight Solar Project, San Bernardino County

The California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the above-referenced Project (Project) on January 24, 2024. The NOP was prepared by San Bernardino County (County) and submitted in compliance with provisions of the California Environmental Quality Act (CEQA). Based on our review of the NOP, we recommend the following: (1) natural drainage channels and flow paths should be maintained through the Project site to ensure no net loss of function and value of waters of the state; and (2) a site-specific Storm Water Pollution Prevention Plan (SWPPP) should be prepared that identifies a combination of sediment and erosion control best management practices (BMPs) to effectively treat storm water runoff during the life of the Project. Our comments are outlined below.

WATER BOARD'S AUTHORITY

All groundwater and surface waters are considered waters of the State. All waters of the State are protected under California law. State law assigns responsibility for protection of water quality in the Lahontan Region to the Lahontan Water Board. Some waters of the State are also waters of the United States. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the United States.

The Water Quality Control Plan for the Lahontan Region (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State within the Lahontan Region. The Basin Plan sets forth water quality standards for surface water and groundwater of the Region, which include designated beneficial uses as well as narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan can be accessed via the Water Board's web site at

DR. AMY HORNE, ACTING CHAIR | MICHAEL R. PLAZIAK, PG, EXECUTIVE OFFICER

http://www.waterboards.ca.gov/lahontan/water issues/programs/basin plan/references.shtml.

WATER QUALITY CONCERNS

Our comments on the Project are outlined below.

- 1. In general, the installation of Photovoltaic (PV) grid systems for these types of projects has the potential to hydrologically modify natural drainage systems. Of particular concern is the collection of onsite storm water runoff and the concentrated discharge of that storm water to natural drainage channels. Design alternatives that are compatible with low impact development (LID) should be considered. LID components include: maintaining natural drainage paths and landscape features to slow and filter runoff and maximize groundwater recharge; managing runoff as close to the source as possible; and maintaining vegetated areas for storm water management and onsite infiltration. We recommend natural drainage channels and flow paths be maintained through the Project site to avoid no net loss of function and value of waters of the state as a result of Project implementation.
- 2. A Project-specific SWPPP and implementation of site-specific erosion and sediment control BMPs is an effective way to reduce potentially significant water quality impacts to a less than significant level. To that end, we recommend the development and implementation of a Project-specific SWPPP during both the construction and post-construction phases of the Project. The SWPPP should be applicable to all areas of the Project site, including the solar fields, access roads to and through the site, and the gen-tie line. Please note that temporary BMPs need to be implemented for the Project until such time that vegetation has been restored to pre-Project conditions or permanent BMPs are in place and functioning.
- 3. The DEIR should identify post-construction storm water management as a significant Project component, and a variety of BMPs that effectively treat post-construction storm water runoff, particularly maintaining native vegetation, should be evaluated as part of the Project. Based on our experience with other solar developments in the Mojave Desert, native vegetation is the most efficient and cost-effective post-construction BMP to treat storm water runoff. Because revegetating disturbed soils in the desert is particularly challenging due to low rainfall, extreme climatic conditions, and relatively slow growth rates, we strongly encourage Project proponents to maintain and mow existing vegetation rather than clear and grub the entire site during construction. For those projects where native vegetation is maintained, we have observed that the need to implement temporary BMPs is greatly minimized and the costs associated with implementation and maintenance of post-construction BMPs is significantly reduced.

4. The Project site is located within the Lockhart Hydrologic Area (628.40) of the Harper Lake Hydrologic Sub Unit (628.42), and groundwater beneath the Project site is contained within the Middle Mojave River Valley Groundwater Basin (6-47). The beneficial uses of these water resources are listed either by watershed (for surface waters) or by groundwater basin (for groundwater) in Chapter 2 of the Basin Plan. We request that the DEIR identify and list the beneficial uses of the water resources within the Project area and include an analysis of the Project's potential impacts to water quality and hydrology with respect to those beneficial uses.

PERMITTING REQUIREMENTS

A number of activities associated with the proposed Project may have the potential to impact waters of the State and, therefore, may require permits issued by either the State Water Board or Lahontan Water Board. The required permits may include the following.

- 1. Streambed alteration and/or discharge of fill material to a surface water may require a CWA, section 401 water quality certification for impacts to federal waters (waters of the U.S.), or dredge and fill waste discharge requirements for impacts to non-federal waters, both issued by the Lahontan Water Board. All unavoidable permanent impacts to waters of the State must be mitigated to ensure no net loss of beneficial use and wetland function and value. Water Board staff coordinate mitigation requirements with staff from federal and other state regulatory agencies. In determining appropriate mitigation ratios for impacts to waters of the State, we consider Basin Plan requirements (minimum 1.5 to 1 mitigation ratio for impacts to wetlands) and utilize 12501-SPD Regulatory Program Standard Operating Procedure for Determination of Mitigation Ratios, published December 2012 by the US Army Corps of Engineers, South Pacific Division.
- Land disturbance of more than 1 acre may require a CWA, section 402(p) storm water permit, including a National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit, Water Quality Order (WQO) 2022-0057-DWQ, obtained from the State Water Board, or individual storm water permit obtained from the Lahontan Water Board.

We request that the draft DEIR recognize the potential permits that may be required for the Project, as outlined above, and identify the specific activities that may trigger these permitting actions in the appropriate sections of the environmental document. Information regarding these permits, including application forms, can be downloaded from our web site at http://www.waterboards.ca.gov/lahontan/. Early consultation with Water Board staff regarding potential permitting is recommended.

Thank you for requesting our consultation. If you have any questions regarding this letter, please contact me at (760) 313-1295 (Luis.Gomez@waterboards.ca.gov) or Christina Guerra, Senior Engineering Geologist, at (760) 241-7333

(Christina.Guerra@waterboards.ca.gov). Please send all future correspondence regarding this Project to the Water Board's email address at Lahontan@waterboards.ca.gov and be sure to include the Project name in the subject line.

Luis Gomez

Engineering Geologist

cc: CA Dept. of Fish and Wildlife (AskR6@wildlife.ca.gov)

State Clearinghouse (SCH 2018041007) (state.clearinghouse@opr.ca.gov)

Mojave Desert Air Quality Management District

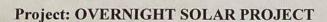
Brad Poiriez, Executive Director 14306 Park Avenue, Victorville, CA 92392-2310 760.245.1661 • Fax 760.245.2022 www.MDAQMD.ca.gov • @MDAQMD

2024 FEB -6 AM 7: 48

LAND USE SERVICES ADMINISTRATION

January 30, 2024

County of San Bernardino, Land Use Services Department Attn.: Jon Braginton, Planner 385 North Arrowhead Avenue, First Floor San Bernardino, CA 92415



Dear Mr. Braginton:

The Mojave Desert Air Quality Management District (District) has received a request for comments on the proposed Overnight Solar Project. The proposed project includes development of a utility scale, solar photovoltaic (PV) electricity generation and energy storage facility that would produce up to 150 megawatts (MW) of solar power and include a 150 MW battery energy storage system (BESS) on approximately 822 acres, plus a generation interconnect (gen-tie) corridor approximately 1.1 miles in length and approximately 80 feet in width, connecting the proposed facility to another existing gen-tie line associated with the Mojave Solar Facility and just south of the existing Alba Substation.

We have reviewed the project as proposed and based on the information available to us at this time, the District recommends that the County requires the owner/operator obtain Solar Permits as listed in District Rule 302 and a Dust Control Plan (DCP) for the planned solar facility. The most current Dust Control Plan Requirements and Dust Control Plan Submission Form are available at https://www.mdaqmd.ca.gov/permitting/compliance-forms.

Other District requirements include:

- Signage compliant with Rule 403 Attachment B shall be erected at each project site entrance not later than the commencement of construction.
- Use a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes to minimize visible fugitive dust emissions. For projects with exposed sand or fines deposits (and for projects that expose such soils through earthmoving), chemical stabilization or covering with a stabilizing layer of gravel will be required to eliminate visible dust/sand from sand/fines deposits.
- All perimeter fencing shall be wind fencing or the equivalent, to a minimum of four feet of height or the top of all perimeter fencing. The owner/operator shall maintain the wind fencing as needed to keep it intact and remove windblown dropout. This wind fencing



requirement may be superseded by local ordinance, rule or project-specific biological mitigation prohibiting wind fencing.

- All maintenance and access vehicular roads and parking areas shall be stabilized with chemical, gravel or asphaltic pavement sufficient to eliminate visible fugitive dust from vehicular travel and wind erosion. Take actions to prevent project-related trackout onto paved surfaces, and clean any project-related trackout within 24 hours. All other earthen surfaces within the project area shall be stabilized by natural or irrigated vegetation, compaction, chemical or other means sufficient to prohibit visible fugitive dust from wind erosion.
- Obtain District permits for any miscellaneous process equipment that may not be exempt under District Rule 219 including, but not limited to: Internal Combustion Engines with a manufacture's maximum continuous rating greater than or equal to 50 brake horsepower.
- Comply with all applicable provisions listed in Rule 403 Fugitive Dust Control.

Thank you for the opportunity to review this planning document, the District looks forward to reviewing the DEIR. If you have any questions regarding this letter, please contact me at (760) 245-1661, extension 1846, or Bertrand Gaschot at extension 4020.

Sincerely,

Chris Anderson

Planning and Air Monitoring Supervisor

CJA/bg

OverNight Solar Project 2024 30 Jan



Mohave Ground Squirrel Conservation Council P.O. Box 1660

Wrightwood, CA 92397

Email: ed.larue@mgsconservation.org

Via email only

Draft version #2 as of 2/13/2024 Date: 16 February 2024

Attn: Jon Braginton, Planner County of San Bernardino, Land Use Services Department 385 North Arrowhead Avenue, First Floor San Bernardino, CA 92415 Jon.Braginton@lus.sbcounty.gov

RE: Overnight Solar Project Scoping Comments

Dear Mr. Braginton,

The Mohave Ground Squirrel Conservation Council (MGSCC) is a nonprofit organization established to assure the perpetual survival of viable populations of Mohave Ground Squirrels (MGS) throughout their historical range and any future expansion areas. The MGS, for the purposes of the MGSCC, means the mammal species known scientifically as *Xerospermophilus mohavensis*. Among our objectives pertinent to this letter is to support and to advocate for such legislative, policy, and conservation measures as will contribute to ensuring the continued survival of viable MGS populations, the connectivity of these populations, and the maintenance of their habitats in a natural condition.

We appreciate this opportunity to provide comments on the above-referenced project, and that the San Bernardino County Planning Department (County) contacted MGSCC directly via email on 1/18/2024, which facilitated Ed LaRue's attendance at the project specific webinar on 1/31/2024. Given the location of the proposed project in habitats likely occupied by the MGS, our comments include recommendations intended to enhance protection of this species and its habitat during activities authorized by the County, which we recommend be added to project terms and conditions in the authorizing document (e.g., conditional use permit, right of way grant, etc.) as appropriate. Please accept, carefully review, and include in the relevant project file the Council's following comments and attachments for the proposed project.

The plight of the MGS is dire, which led the MGSCC to coauthor a petition with the Defenders of Wildlife in October 2023 to federally list the MGS as Threatened and to designate critical habitat for the species (Defenders of Wildlife et al. 2023¹). We expect that the Draft EIR will document the status and trends of the MGS using available information, to document the plight of the species and how this project will contribute to or detract from the conservation of the species. For the MGS, CDFW (2019) published "A Conservation Strategy for the Mohave Ground Squirrel, Xerospermophilus mohavensis." That document contains a map with linkage areas among the specific MGS regions. Information from documents like this should be used to identify the nearest MGS Core Population Areas and linkage corridors relative to the subject property.

https://www.dropbox.com/scl/fi/7h890e4r25ljpyyhvwq5c/Defenders-et-al.-MGS-Listing-Petition-12-13-23-FINAL.pdf?rlkey=f7ln6at8apxcovi8qgtr5g2qk&dl=0

Before providing our specific comments below, we would like to express our serious concern with the intended timing of the planning process. During the 1/31/2024 webinar when LaRue asked about the results of requisite surveys for plant and animal species of special concern that may occur in the area (CDFW 2024) [this includes the MGS], the Tetra Tech consultants indicated that some surveys had been performed without revealing which ones. We were told that scoping comments are due by 2/19/2024 and the draft environmental impact report (Draft EIR) would be released within a month, in March 2024. We find this scheduling to be problematic, that it may even be dismissive of public input.

It is absolutely essential that requisite surveys be performed *before* the Draft EIR is written so that survey results can be published in the environmental document. The County must ensure quality control in this matter, even if it means that the consultants perform the surveys this spring/summer and the Draft EIR is published on a realistic schedule in the summer or fall of 2024. For example, MGS surveys (CDFW 2023) must be performed from March through July of a given year. If these surveys have not already been performed, they must be performed and the results documented in the Draft EIR, which means it would need to be published sometime after July 2024.

It is our strong recommendation that the site be live-trapped and that tissue be collected from any captured MGS to determine if any of them have hybridized with round-tailed ground squirrels (*Xerospermophilus tereticaudis*). In 2014 at a site located approximately four miles south of the proposed site, an adult female MGS and four juveniles were captured by eight live traps placed in the vicinity of an incidental observation. When the tissue was analyzed, the female and three of the juveniles were determined to be MGS and the fourth juvenile was a hybrid. Given the proximity of the site to this location, we feel that it is scientifically important to determine if the squirrels captured are MGS or hybrids.

Further with regards to MGS surveys, as we stated above, when asked about existing surveys during the webinar, the Tetra Tech biologists were not forthcoming with what types of surveys had been performed. If MGS surveys were performed in 2023 and no MGS were captured, those surveys must be repeated in 2024 to determine if MGS continue to be absent; i.e., the validity of a negative survey is one year. As per the CDFW (2023) Guidelines for compliance with CESA, "negative survey results are valid until the start of the next survey season (March of the subsequent year)." So, even if MGS surveys were performed in 2023 and no MGS were captured, new surveys must be performed in 2024 to meet CDFW standards. Given these observations, we believe that it is critical that the proponent perform MGS trapping surveys in 2024, using the recently revised survey protocol (CDFW 2023), and that the release of the Draft EIR be postponed until those studies are completed in July 2024 so that results can be documented in the Draft EIR.

Note that the proponent also may implement the alternative approach of assuming presence and mitigating accordingly. Although the CDFW ultimately decides what the mitigation ratio would be for replacing lost habitats, the proponent can expect a minimum compensation ratio of 3:1; for each acre of land developed, three acres of occupied habitats must be purchased and protected in perpetuity. If this alternative is selected, it is advisable that the proponent's biologist performs a search of the California Natural Diversity Database (CDFW 2024; CNDDB), document the nearest known locations of MGS records to the subject property, and use that information in the Draft EIR to analyze the potential direct, indirect, synergistic, and cumulative impacts of the proposed project on the species and its habitats.

The West Mojave Plan (BLM 2005, 2006) created an exclusion area within the surrounding Fremont-Kramer and Superior-Cronese Areas of Critical Environmental Concern (ACEC), coinciding with the Mohave Ground Squirrel Conservation Area (MGSCA), which completely surrounded the single existing solar development at the time, referred to as the "LUZ facility." Since then, several thousand acres of new solar facilities have been developed (Mojave and Lockhart solar facilities) and proposed (Desert Breeze and this one). It is important that the Draft EIR analyze the direct, indirect, synergistic, and cumulative effects of this and other solar developments that are surrounded by the MGSCA, ACEC, and National Conservation Lands (NCL), and nearby Wilderness Areas to the north as well as proposed/planned solar projects in the area. We ask specifically that the Draft EIR analyze the potential heat sink effects (Sinervo et al. 2013) that this and adjacent solar projects may be having/will have on the MGS populations in the MGSCA.

The Draft EIR should include appropriate mitigation and monitoring plans for all impacts to the MGS and its habitats; the mitigation and monitoring plans should use the best available science with a commitment to implement the mitigation commensurate to impacts to the MGS and its habitats. Mitigation and monitoring should include a fully-developed MGS translocation plan; MGS predator management plan; non-native plants species management plan; fire prevention and management plan; compensation plan for the degradation and loss of MGS habitat that includes protection of the acquired, improved, and restored habitat in perpetuity for the MGS from future development and human use; a plan to protect MGS translocation area(s) from future development and human use in perpetuity; and habitat restoration plan for the project site when the lease is terminated and the proposed project is decommissioned.

These mitigation and monitoring plans should include implementation schedules that are tied to key actions of the construction, operation, maintenance, decommissioning, and restoration phases of the project so that mitigation occurs concurrently with or in advance of the impacts. The plans should specify success criteria, include a science-based monitoring plan to collect data to determine whether success criteria have been met, and identify actions that would be required if the mitigation measures do not meet the success criteria and require their implementation quickly.

The Draft EIR, based on the results of the MGS protocol surveys, must discuss the displacement of MGS from the impact area. Will these MGS be relocated into adjacent areas or are they to be translocated into distant areas? The Draft EIR should present the intended approach to relocating/translocating displaced MGS. We ask that this translocation plan and, in fact, all the mitigation/monitoring plans listed above be published as appendices to the Draft EIR. It is unacceptable to promise or allude to plans in the Draft EIR that "will be developed in the future," which precludes the public from having an opportunity to provide feedback on how to minimize and mitigate impacts in those mitigation and monitoring plans.

We appreciate this opportunity to provide comments on this project and trust they will help protect MGS during any resulting authorized activities. Herein, we reiterate that the Mohave Ground Squirrel Conservation Council wants to be identified as an Affected Interest for this and all other projects funded, authorized, or carried out by the County that may affect the species, and that any subsequent environmental documentation for this project is provided to us at the contact information listed above. Additionally, we ask that you respond in an email that you have received this comment letter so we can be sure our concerns have been registered with the appropriate personnel and office for this project.

Respectfully,



Edward L. LaRue, Jr., M.S. Ecosystems Advisory Committee, Chairperson Mohave Ground Squirrel Conservation Council

cc. Heidi Calvert, Regional Manager, Region 6 – Inland and Desert Region, California Department of Fish and Wildlife, <u>Heidi.Calvert@wildlife.ca.gov</u>

Brandy Wood, Region 6 – Desert Inland Region, California Department of Fish and Wildlife, Brandy.Wood@wildlife.ca.gov

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