

FINDING OF NO SIGNIFICANT IMPACT

**Avellana Solar and Broadband Project
San Bernadino County, CA**

**Rural Utilities Service
U.S. Department of Agriculture**

Avellana Properties Rural Electrical Cooperative

**Prepared by:
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Rural Utilities Service**

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A. INTRODUCTION

Avellana Properties Rural Electrical Cooperative (APREC) plans to submit a financing request to the U.S. Department of Agriculture, Rural Utilities Service (RUS) to construct the proposed Avellana Solar and Broadband Project (Project) in San Bernadino County, CA. RUS is considering this financing request. Prior to taking a federal action (i.e., providing financial assistance), RUS is required to complete an environmental impact analysis in accordance with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 et seq.), the Council on Environmental Quality's (CEQ) regulations for implementing NEPA (40 CFR Parts 1500-1508), and RD's NEPA implementing regulations, Environmental Policies and Procedures (7 CFR Part 1970). After completing an independent analysis of an environmental report prepared by APREC, RUS concurred with its scope and content. In accordance with 7 CFR § 1970.102, RUS adopted the report and issued it as the Agency's Environmental Assessment (EA) for the proposed Project. RUS finds that the EA is consistent with federal regulations and meets the standards for an adequate assessment. APREC published a newspaper notice, announcing the availability of the EA for public review, in accordance with 7 CFR § 1970.102. In addition, RUS considers the proposed Project an undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. 470(f), and its implementing regulation, "Protection of Historic Properties" (36 CFR Part 800).

B. PROJECT DESCRIPTION AND PURPOSE/NEED

The overall purpose of the Project is to generate and distribute sustainable solar-generated energy and broadband internet services to 400 cooperative homes, a community center, medical/dental clinic, convenience store, fire suppression system, wastewater treatment plant, streetlighting grid, and community security systems. This project would serve remote areas of Apple Valley, which includes the APREC service area, which faces an unstable and unreliable power grid that experiences frequent service outages for multiple days at a time. The APREC cooperative community is dominated by elderly, often medically challenged persons, who are the least capable of withstanding these power outages. In addition, the cooperative lacks broadband internet access. RUS has reviewed the purpose and need for the Project and determined that the proposal will meet the present and future needs of APREC.

C. ALTERNATIVES EVALUATED

1. No Action

Under the No Action Alternative, RUS would not provide financial assistance to APREC, and/or the proposed Project would not be constructed. This alternative would not assist APREC in providing Renewable energy to the project area to help meet increasing demand for electricity and reduce the need for fossil fuels. Elderly residents would continue to be subjected to unreliable electric utilities that cost substantially more than the state average.

2. Action Alternative (Preferred Alternative)

Under the Action Alternative, RUS would consider financing the proposed Project, and APREC would construct the Avellana Solar and Broadband Project. The proposed project would cover approximately 44.92-acres of private land in an unincorporated area of San Bernardino County. The Service Area consists of the area between Bear Valley Road and Las Piedras Road and between Circle 5 Road and Laguna Seca Drive. Solar project components would include solar arrays, inverters, 7.2 Megawatts (MW) of battery storage, associated switchgear, access roads, and a new distribution grid to supply power to members of the Avellana cooperative. Broadband services project components would include an IP-based network headend with bandwidth aggregation, VPN-provisioning engine, and a Network Operations Center, as well as a community distribution grid, last mile optical termination, and home-based Internet of Things with Ip-telephone sideband. Power and broadband services will be distributed to 400 new cooperative-member homes, a medical/dental clinic, community center,

convenience store, wastewater treatment plant, fire suppression system, and lighting grid. Lifespan of the solar and broadband project is expected to be 40 years.

3. Alternatives Eliminated from Further Consideration

In addition to the No Action Alternative and Action Alternative, APREC considered other technology and siting alternatives, which are documented in the Alternatives section of the EA (Ch. 2).

D. SUMMARY OF ENVIRONMENTAL EFFECTS

The analyses in the EA documented that the proposed Project would have no adverse effects to land use, floodplains, wetlands, water resources, coastal resources, biological resources, cultural and historic resources, aesthetics, air quality, environmental justice, noise, transportation, and health and human safety. A summary of anticipated impacts on the human environment is provided below, including any mitigation measures deemed necessary to avoid or minimize impacts. APREC is responsible for implementing these measures.

Resource	Impact Analysis
Land Use	The project Site is designated AV/RL 5 by the County of San Bernardino General Plan which allows for the proposed solar generation plant and service delivery to cooperative members with a Conditional Use Permit (CUP). The Cooperative Community (which is also a permitted use with a CUP) proposes incidental service uses of onsite First Aid Center, a Community Center, Park/detention basin, pond for reclaimed water storage for fire suppression and landscaping irrigation, and Wellness Convenience Shop to serve the Cooperative. The San Bernardino County Development Code allows for a Planned Development (PD) Permit for which APREC has applied. The CUP and the Planned Development Permit are not anticipated to result in conflicts with applicable land use plans; therefore, no impacts are anticipated. No prime farmland, unique farmland, or farmland of statewide importance; or formally classified lands occur at the project site.
Floodplains	The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Panel 06071C6510H effective August 28, 2008 was obtained for the project area. The proposed action would not take place within any FEMA-designated floodplains. The analysis area is not directly connected to floodplains or floodway passages, and therefore the Preferred Alternative would not result in direct or indirect impacts to floodplains.
Wetlands	The U.S. Fish and Wildlife Service’s (USFWS) National Wetlands Inventory was obtained for the project area; no current or historic wetlands were identified. A field survey was conducted on January 4, 2021 and confirmed the absence of wetlands, waters of the U.S., and riparian habitat within the project area. The U.S. Army Corps of Engineers was consulted during the California Environmental Quality Act (CEQA) and NEPA scoping process. No comments were received. No impacts are anticipated due to the lack of wetlands or potential waters of the U.S. in the project area.
Water Resources	No surface water exists within the project area or on adjacent properties. All water consumed within the area is derived from the Upper Mojave River Valley Groundwater Basin and managed by the Mojave Water Agency. Groundwater is pumped from wells and treated to remove sediments and potential harmful components. The project area does not

Resource	Impact Analysis
	<p>contain any sole source aquifers, recharge zones, or groundwater protection areas.</p> <p>Under the Preferred Alternative, an estimated 85,000 gallons of water would be required for dust control, soil compaction, and other development requirements during construction. Operation and Maintenance (O&M) of the solar facility and distribution grid, broadband services infrastructure, fire suppression system, and associated infrastructure will require substantial water usage, 100% of which will be water recycled from the on-site wastewater treatment plant. Although no surface water is present within the project area or surrounding area, storm-related surface water will be routed to drainage channels via 8" curbs placed along Las Piedras Road and Jackie Jane Lane to a 53,302 cubic foot detention basin. As a result, there are no anticipated impacts to surface waters.</p> <p>APREC has submitted a detailed Water Quality Management Plan (WQMP) to San Bernardino County Planning, Land Development Division that details the plan to implement environmental and water quality control standards based upon the National Pollutant Discharge Elimination System (NPDES) program. The 10-month construction period will implement dust control, erosion, and construction best management practices to minimize any impacts caused by ground disturbing activities consistent with the NPDES MS-4 permit. As a result of these controls, no direct or indirect impacts to water quality are anticipated.</p> <p>Under the Preferred Alternative APREC will drill a well and the water will be treated to provide potable water for maintenance, consumption, and to charge the fire suppression system within the project area. APREC will be required to participate in a state-regulated treatment and quality-control program (State Water Resources Control Board General Order #WQ2014-0153-DWQ). As a result, no direct or indirect impacts are anticipated to groundwater resources because of the proposed action.</p>
Coastal Resources	Coastal resources are not present within the project area; therefore, impacts to coastal resources will not occur as a result of the Preferred Alternative.
Biological Resources – Fish, Wildlife and Vegetation	<p>Biological, wildlife and wetlands surveys were performed on the site on January 4, 2021. Few wildlife species were observed during the field investigation (see Appendix B of the EA for additional details). Loss of about 44.92-acres of heavily disturbed desert scrub vegetation is not expected to have impacts on the overall biological resources in the region given the presence of similar habitat throughout the surrounding area.</p> <p>See Section 3.6 Biological Resources of the EA for additional details.</p>
Biological Resources – Threatened and Endangered Species	The project area is located within the documented Desert Tortoise habitat and supports some habitat for the desert tortoise based on the field investigations. No tortoises were observed within the property boundaries during the January 4, 2021 survey; no other federally listed threatened or endangered species or their habitats were observed. The Preferred Alternative will result in no effect to federally listed threatened or endangered species.

Resource	Impact Analysis
	See Section 3.6 Biological Resources of the EA for additional details.
Biological Resources - Migratory Birds and Bald Eagles	<p>No significant adverse effects to MBTA species or the bald eagle are anticipated as a result of the Preferred Alternative.</p> <p>See Section 3.6 Biological Resources of the EA for additional details.</p>
Historic and Cultural Properties	<p>There are no known historic properties in the project area. A determination of "No historic properties affected" was provided to the California State Historic Preservation Officer (SHPO) and interested Native American groups on August 4, 2022. The SHPO provided concurrence on September 8, 2022 and no further responses were received from the interested Native American groups. A Tribal Monitor will be present to observe initial ground-disturbance activities to monitor for any sensitive cultural material in response to a request made from the Chemehuevi tribe during Section 106 consultation.</p> <p>See Section 3.7 Cultural and Historic Resources of the EA for additional details.</p>
Aesthetics	<p>As part of the Preferred Alternative approximately 5,000 Bi-facial solar panels will be placed on ground-support mounts on the 4.72-acre parcel which is approximately 0.25 miles south of Bear Valley Road. The entire 44.92-acre parcel will be enclosed by a 6' privacy/security wall. The proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. The Project will be designed in accordance with the San Bernardino County Development Codes and all electrical and broadband distribution will be placed underground for additional safety, reliability, and aesthetic value. Light sources would be oriented towards the property and boxed. As such, no direct or indirect effects are anticipated.</p>
Air Quality	<p>The Mojave Desert Air Quality Management District (MDAQMD) is the California State Agency chartered with administrating and enforcing the National Ambient Air Quality Standards (NAAQS). The project area is EPA-designated as severe non-attainment for ozone and moderate non-attainment for PM10; it is in attainment or unclassified/attainment for the remaining criteria pollutants (PM2.5, carbon monoxide, nitrogen oxides, sulfur dioxide, and lead). The emissions of PM10 and ozone for the project fall below the National Ambient Air Quality Standards (NAAQS) <i>de minimis</i> thresholds. Therefore, project emissions would not cause new violations or exacerbate an existing violation of NAAQS standards, and the project does not require a general conformity analysis. Further, the project does not conflict with the California State Implementation Plan.</p> <p>Temporary and localized impacts to air quality will occur because of project construction which is expected to last ten months. Construction-generated emissions associated with the proposed project were calculated using the CARB-approved California Emissions Estimator Model version 2022 (CalEEMod), which is designed to model emissions for land use development projects, based on typical construction requirements. construction pollutant emissions would remain below their respective</p>

Resource	Impact Analysis
	<p>thresholds with implementation of required MDAQMD Rule 403.2. The project would also be required to comply with MDAQMD Rules 402 and 1113, which prohibit nuisances and limit VOC content in paints, respectively. Construction and operations emissions would not exceed MDAQMD impact thresholds, and no mitigation is necessary.</p> <p>The project would include direct and indirect greenhouse gas (GHG) emissions from project construction and operations. The project construction would result in 991 metric tons of CO₂-equivalent (approximately 25 MTCO₂e/year when amortized over 40 years). Projects that do not exceed 3,000 MTCO₂e per year are consistent with the County's GHG Plan and those that do not exceed 100,000 MTCO₂e per year are below the permitting threshold and as such do not require mitigation.</p> <p>See Section 3.9 Air Quality of the EA for additional details.</p>
Social Impact Assessment and Environmental Justice	No environmental justice communities exist in the analysis area; no disproportionately high or adverse effects to environmental justice communities would occur as a result of the Preferred Alternative.
Noise	The Preferred Alternative would result a direct, temporary increase in noise related to construction activities. Noise associated with operation of a solar farm comes from the use of inverters which convert direct current (DC) produced by the solar panels into alternating-current (AC) power. Under normal operating conditions the inverters will generate 53.7 dBA at the center of the solar farm and 19.2 dBA at the perimeter walls abutting sensitive receptors. Therefore, impacts from solar farm operation would be negligible beyond the fenced project area, and no permanent noise impacts would be associated with operation. No noise would result from the buried electrical distribution lines, or broadband infrastructure.
Transportation	A temporary increase in traffic (workers and heavy truck traffic) as a result of construction activities will occur and be temporary in nature (approximately 10 months); no long-lasting effects are anticipated. Operation of the APREC Solar/Broadband installation and other associated infrastructure is not expected to cause or create any changes in traffic patterns; no new external roadways, intersections, upgrades, or traffic signals would be required. As such, no impacts are anticipated as a result of the Preferred Alternative.
Human Health and Safety	No significant risks to human health and safety are anticipated as a result of the Preferred Alternative.

E. PUBLIC AND AGENCY INVOLVEMENT

A local newspaper advertisement announcing the availability of the EA and participation under Section 106 of the National Historic Preservation Act, was published on March 23-24 and 27, 2023, in the online Victorville Daily Press, San Bernardino County, California. A copy of the EA was available for public review at was available on the RUS project website at: <https://www.rd.usda.gov/resources/environmental-studies/assessment/avellana-solar-and-broadband-project>. The 14-day comment period ended on April 5, 2023. RUS received no comments.

F. FINDING OF NO SIGNIFICANT IMPACT

Based on its EA, RUS has concluded that the proposed Project would have no significant effects to land use, floodplains, wetlands, water resources, coastal resources, aesthetics, air quality, noise, transportation, and health and human safety. The proposed Project will have no effects on historic properties listed or eligible for listing on the National Register of Historic Places and no effects to federally listed species or designated critical habitat. The proposed Project would not disproportionately affect minority or low-income populations.

In accordance with the National Environmental Policy Act, as amended (42 U.S.C. 4321 et seq.), the Council on Environmental Quality Regulations (40 CFR 1500–1508), and RD's Environmental Policies and Procedures (7 CFR Part 1970), RUS has determined that the environmental impacts of the proposed Project have been adequately addressed and that no significant impacts to the quality of the human environment would result from construction and operation of the proposed Project. Any final action by RUS related to the proposed Project will be subject to, and contingent upon, compliance with all relevant federal and state environmental laws and regulations. Because RUS's action will not result in significant impacts to the quality of the human environment, RUS will not prepare an Environmental Impact Statement for its potential federal action associated with the proposed Project.

G. RUS LOAN REVIEW AND RIGHT OF ADMINISTRATIVE REVIEW

This FONSI is not a decision on a loan application and therefore not an approval of the expenditure of federal funds. Issuance of the FONSI and its notices concludes RUS's environmental review process. The ultimate decision on loan approval depends upon conclusion of this environmental review process in addition to financial and engineering reviews. Issuance of the FONSI and publication of notices will allow for these reviews to proceed. The decision to provide financial assistance also is subject to the availability of loan funds for the designated purpose in RUS's budget. There are no provisions to appeal this decision (i.e., issuance of a FONSI). Legal challenges to the FONSI may be filed in Federal District Court under the Administrative Procedures Act.

H. APPROVAL

This Finding of No Significant Impact is effective upon signature.

Dated:

CHRISTOPHER MCLEAN

Assistant Administrator
Electric Program
Rural Utilities Service

Contact Person:

For additional information on this FONSI and EA, please contact Elisa Albury, elisa.albury@usda.gov.