

FINDING OF NO SIGNIFICANT IMPACT

**Lone Butte Solar Project
Maricopa County, Arizona**

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

Lone Butte Solar, LLC

Prepared by:

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**Rural Utilities
Service**

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A. INTRODUCTION

Lone Butte Solar, LLC plans to submit a financing request to the U.S. Department of Agriculture (USDA), Rural Utilities Service (RUS) to construct the proposed Lone Butte Solar Project (Project) located in Districts 4 and 6 of the Gila River Indian Community (GRIC) in Maricopa County, Arizona. RUS is considering this financing request. Prior to taking a federal action (i.e., providing financial assistance), RUS is required to complete an environmental analysis in accordance with the National Environmental Policy Act of 1969 (NEPA) (42 United States Code [U.S.C.] §§ 4231–4347), the Council on Environmental Quality’s (CEQ) regulations for implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and RD’s NEPA implementing regulations, Environmental Policies and Procedures (7 CFR 1970).

After completing an independent analysis of an environmental report prepared by Lone Butte Solar, LLC and its consultant, RUS concurred with its scope and content. In accordance with 7 CFR 1970.102, RUS will adopt the report and issue 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. Lone Butte Solar, LLC 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 800).

B. PROJECT DESCRIPTION AND PURPOSE/NEED

The overall purpose of the Project is to generate solar energy, support grid reliability, encourage future renewable-energy interest and investments, and reduce greenhouse gas emissions across the Community and Maricopa County.

The proposed facility will cover approximately 355 acres of tribal trust land in portions of District 4 and District 6 of the GRIC in Maricopa County, Arizona. The Project will consist of solar photovoltaic (PV) arrays and the following components: perimeter fencing, a battery energy storage system (BESS), a Project substation, collector lines and inverters, a step-up transformer, an overhead transmission line (i.e., generation-tie line [gen-tie]), and access roads. The 50-megawatt (MW) BESS may be constructed in the future if it is determined to be necessary based on future needs and is included in the EA for analysis. The purpose of the overhead transmission line is to interconnect the solar energy facility to the central Arizona transmission grid at the proposed point of interconnection at the Lone Butte Substation. The Project is expected to operate for 35 years. Lone Butte Solar, LLC is in the process of being sold to the Gila River Indian Community Utility Authority (GRICUA), who will retain ownership and operation of the project to serve the Community’s energy needs.

RUS has reviewed the purpose and need for the Project and determined that the proposal will meet the RUS purpose and need.

C. ALTERNATIVES EVALUATED

1. No Action

Under the No Action Alternative, RUS will not provide financial assistance to Lone Butte Solar and/or the proposed Project will not be constructed. This alternative will not assist Lone Butte Solar in providing renewable energy sourced from the Project area to help meet increasing demand for electricity and reduce the need for fossil fuels.

2. Action Alternative (Preferred Alternative)

Under the Proposed Action Alternative, RUS will consider financing the proposed Project, and Lone Butte Solar would construct a 50-megawatt (MW) solar photovoltaic (PV) generating facility. The Project will consist of up to three major components: a solar PV system and collection system, a BESS (if needed), and transmission interconnection facilities (a project substation and gen-tie that interconnects into the existing Lone Butte Substation). The BESS is not currently proposed but would be constructed after completion of the solar facility if it is determined to be necessary. The project also includes use of existing access roads and construction of new access roads within the project area.

3. Alternatives Eliminated from Further Consideration

In addition to the No Action Alternative and Action Alternative, Lone Butte Solar, LLC considered other technology and siting alternatives, which are documented in the Alternatives section of the EA.

D. SUMMARY OF ENVIRONMENTAL EFFECTS

The analyses in the EA documented that the proposed Project will have no adverse effects to Indian Trust assets, wetlands, air quality, socioeconomic resources, low-income and minority populations, noise, transportation, and human health and safety. A summary of anticipated impacts on the human environment is provided below, including any mitigation measures deemed necessary to avoid or minimize impacts. Lone Butte Solar, LLC is responsible for implementing these measures.

Land Use

The Project will convert 355 acres of vacant land to industrial use. The Project will not displace, preclude, or impact other residential, commercial, agricultural, or industrial land uses in the Project area. The land will be leased to Lone Butte Solar, LLC from the GRIC, and the land will continue to be tribal trust land at the end of the Project's 35-year lifetime. There will be no effect on land ownership, the Project conforms to the GRIC's General Land Use Plan and the Master Plans for Districts 4 and 6.

Important Farmland

The Project is subject to the Farmland Protection Policy Act (7 U.S.C. 4201 et seq) and will convert important farmland into nonagricultural use, reducing the potential land available for farmlands in Districts 4 and 6 of the GRIC. The Natural Resources Conservation Service (NRCS) classifies 255 acres of the Project area as Prime and Unique Farmland. The NRCS rated the relative value of the farmland to be 1.6 out of 100, with a total combined score of 56.6 of 260 points, below the 160-point threshold specified in 7 CFR Part 658(c)(2).

Floodplains

A road crossing of an ephemeral wash will be constructed within the portion of the Project area mapped as an area of “occasional flooding” by the NRCS Web Soil Survey. Hydrologic modeling completed for the project area also identified as an area with a potential for flooding. The project area is mapped on FEMA Flood Insurance Rate Maps as a Zone D area, with an undetermined flood hazard, which indicates a possible risk of flooding but that the level of risk is unknown. The access road will be unpaved, and the wash crossing will be constructed at the existing grade and use up to two at-grade crossings (i.e., Arizona crossings).

Of the approximately 1 acre within the Project area that lies within the occasional flooding limits, approximately 0.32 acres will be directly impacted by construction of the access road. Modifications that will be made to the floodplain for construction of the access road will allow for the continued downstream flow of floodwaters across the access road and will not result in impoundment of water above the road or slow flow rates or change the flooding frequency classification within the Project area.

To ensure the Proposed Action is consistent with EO 11988, the proposed development in the floodplain was evaluated using the eight-step decision-making process. The eight-step process did not identify any practicable alternatives to the Proposed Action. The eight-step document is provided in Appendix C of the EA.

A detailed hydrologic and hydraulic investigation meeting requirements set forth in the latest version of the *Draft Drainage Design Guidance Manual* administered by the GRIC’s Land Use Planning and Zoning Flood Control Section will be developed to ensure that downstream areas and structures are unaffected by construction of the access road.

Water Resources

Surface Waters

One ephemeral surface water feature is present in the Project area that will be crossed by an access road. The potential surface water exhibits ordinary high-water mark indicators, but the Project’s Aquatic Resources Assessment Report concluded that the feature is unlikely to be a Waters of the United States. The U.S. Army Corps of Engineers Los Angeles District (USACE) reviewed the Aquatic Resources Assessment but did not provide a formal jurisdictional determination for the project area. In the agency’s response on October 27, 2022, the USACE concurred with the overall findings of the report and that the delineated boundaries of the

aquatic features in the project area as a reasonable representation of the aquatic resources located on-site.

While some impacts will be created by the Project, no effect on surface water quantity will occur because improvements will allow for downstream flow across the access road and will not result in an impoundment. Ground-disturbing activities during construction have the potential to release contaminants (mostly sediment) through runoff and erosion through storm events. Implementation of avoidance and minimization measures, including maintaining existing landscape, where feasible; recontouring and revegetating temporarily disturbed areas after construction; and submittal of a Stormwater Pollution Prevention Plan and routine inspections will occur after storm events will be implemented.

Groundwater Resources

The water demand for the Proposed Action during construction will be approximately 80 acre-feet of water used for dust suppression, compaction, and other miscellaneous needs. The water will be made available through connections to existing GRIC water line infrastructure. Water will be used during operations for periodic dust suppression and will require less than 1 acre-foot per year. The water use associated with the Proposed Action will reduce the overall quantity of the GRIC's groundwater; however, given the GRIC's current water rights allotment, the GRIC has sufficient water supply to serve the Proposed Action without reducing availability of water resources for other GRIC needs.

Biological Resources

General Fish, Wildlife, and Vegetation

The Project will result in the removal of up to 355 acres of vegetation by mowing and limited grading activities during the initial site preparation phase. Up to 14 acres of existing vegetation will be permanently removed for installation of new infrastructure: 3 acres for the BESS, 3 acres for the substation, and 8 acres for new access roads. The remaining 341 acres will be actively maintained by mowing vegetation with herbicides and pesticides likely also being used. Construction activities may displace and disturb some wildlife species.

Construction will include an 8-foot-tall chain-link security fence that will exclude large mammals from the Project area. Smaller bodied or flying species will still be able to move through or over fencing and access habitats within the Project area. During construction and operation, security floodlights may disturb or disrupt wildlife movements in and around the Project area; lights will be motion-activated and downward-facing, the level of potential disturbance will be limited to the immediate area for intermittent periods of time.

Minimization measures, including filling of trenches and holes, escape ramps for wildlife, and minimizing areas of surface disturbance and restoring exposed soils, will be implemented. The Project will not result in significant adverse impacts to general fish, wildlife, and vegetation.

Threatened and Endangered Species

The Project will result in disturbance of up to 355 acres of potential foraging habitat and a small area of breeding habitat for the monarch butterfly (*Danaus plexippus*) which is currently a candidate species for listing under the Endangered Species Act (16 U.S.C. §§ 1531-1544). During the construction phase of the Project, construction activities and increased vehicle use in the area could result in direct mortality events. Up to 14 acres of suitable foraging area will be replaced by Project infrastructure and roads for the operational life of the Project. Given the limited area and location (within a wash that will be largely avoided) of suitable breeding habitat, the abundance of suitable foraging habitat for the species in the Project vicinity, implementation of avoidance and mitigation measures, and low likelihood for collisions with work vehicles, the Project may impact individuals but is not likely to result in a trend toward loss of viability for listed species that may live near or within the Project area.

To reduce impacts to the monarch butterfly, vegetation will be maintained as necessary to prevent risk of fire and/or overshadowing of solar panels. Mowing will be timed to avoid removal of nectar resources (flowering plants), as feasible. The use of herbicides and pesticides will be timed for when pollinators are not actively foraging (i.e., during evening or at night) and the application of bee-toxic pesticides during bloom will be avoided, if feasible. Low speed limits will be posted on access roads within the Project area, which will limit the potential for collisions. During Project decommissioning, milkweed species (*Asclepias sp.*) native to the Project area will be included in the seed mixes used for revegetation. The Project will not result in significant adverse impacts.

Gila River Indian Community Native Plant Ordinance and Culturally Significant Flora and Fauna

The GRIC Native Plant Law (GR-03-90 [Codified as Title 15, Chapter 3]) prohibits named protected plants from, “being dug up, collected, and/or removed from their original growing sites, or destroyed or mutilated, except by permit approved by the Natural Resources Standing Committee of the Gila River Community Tribal Council.” The ordinance lists 20 protected plant species, five plant families, and two plant genera as protected. The Project will remove or disturb all velvet mesquite (*Prosopis velutina*) and wolfberry (*Lycium fremontii*), and some California barrel cactus (*Ferocactus cylindraceus*), from the 355-acre Project area during construction. Suitable California barrel cactus (*Ferocactus cylindraceus*) at risk of destruction will be salvaged prior to construction. Disturbance or removal of vegetation for the 355 acres of the Project area will impact the desert cottontail (*Sylvilagus audubonii*), coyote (*Canis latrans*), and avian species such as red-tailed hawk (*Buteo jamaicensis*), black-throated sparrow (*Amphispiza bilineata*), mourning dove (*Zenaida macroura*), and Gambel’s quail (*Callipepla gambelii*). However, these species have large natural ranges and impacts are not expected to be severe or long-term. The Project will not result in significant adverse impact with regards to the GRIC Plant Ordinance and culturally significant species.

Invasive Species

The Project will increase the risk of invasive species due to ground disturbance and increased numbers of vehicles driving through the Project area. Implementation of a vegetation management plan and best management practices, which include washing construction equipment prior to entering the site, will reduce the potential for introduction or spread of noxious weeds and other non-native species. Avoidance and minimization measures include the following: inspecting and removing visible seeds, mud, and dirt from equipment; ensuring that construction materials imported to the Project area are free of invasive species; managing invasive species so that establishment and spread are avoided during operations; and using only EPA registered pesticides and/or herbicides that also comply with state and local regulations.

Cultural Resources

No historic properties listed in or eligible for listing in the National Register of Historic Places (NRHP), or Traditional Cultural Properties (TCPs) were identified within the project area. Two sites identified in the Area of Potential Effect (APE) are multicomponent artifact scatters that have been determined by RUS as not eligible for listing in the NRHP and the GRIC Tribal Historic Preservation Officer (THPO) has concurred with this determination. These two sites will be destroyed during construction activities. The GRIC Cultural Resource Management Program (CRMP) recommended that no further cultural resource investigations are necessary prior to project construction.

Considering the APE for the Proposed Action is entirely within GRIC tribal land and the GRIC THPO has assumed the responsibilities of the SHPO for Section 106 on tribal lands under Section 101(d)(2) of the NHPA (54 U.S.C. § 302702), RUS conducted consultation with the GRIC THPO. In addition to consulting the GRIC THPO, RUS consulted with other Indian tribes with interest in the area. RUS initiated Section 106 consultation with the following tribes: Ak-Chin Indian Community, Hopi Tribe of Arizona, Pascua Yaqui Tribe (PYT), Pueblo of Zuni, Salt River Pima-Maricopa Indian Community of the Salt River Reservation, Arizona (SRP-MIC), Tohono O'odham Nation of Arizona (TON), Tonto Apache Tribe, White Mountain Apache Tribe of the Fort Apache Reservation, Arizona (WMAT), and Yavapai Apache Nation. Section 106 consultation letters were sent to the tribes on November 6, 2023. Responses were received from SRPMIC, TON, WMAT, and PYT. None of the responding parties objected to the finding of effect. RUS has determined the Proposed Action will result in a finding of No Adverse Effect in accordance with 36 CFR Part 800.5(b). The GRIC THPO has concurred with this finding. All correspondence associated with Section 106 consultation is on file at RUS.

In order to avoid known historic properties, the APE for the Proposed Action will be surrounded with a fence that will provide adequate protection for the three adjacent archaeological sites. The fence will provide a buffer between the avoidance area that is adjacent to the APE and the actual site boundary which will serve as a setback. In the event that any previously unknown cultural resources are encountered during the proposed undertaking, all work will immediately cease within 50 feet of the encountered cultural resource, the area will be roped off, and Lone Butte Solar will contact the Community's CRMP for further consultation.

Aesthetics

The Project will introduce an approximately 355-acre solar facility, associated infrastructure, and a 69-kV transmission line interconnection in existing areas of rural agricultural development and open desert. Therefore, it is anticipated that impacts will result from the introduction of Project components during construction because these activities will dominate and change the existing landscape. The intactness, unity, and vividness of the agrarian landscapes in the analysis area will be impacted because the change from fallow agricultural fields and open desert to PV panels will encroach on and begin to diminish the overall visual composition of the landscape's existing character.

Avoidance and minimization measures to reduce impacts to aesthetics, will include use of minimum intensity lighting that meets safety criteria; permanent lighting, except for emergency lighting triggered by alarms, will be fully shielded and use low-sodium or LED lights; lighting will be mounted so that no light is emitted above an imaginary horizontal plane through the fixture; and, use of lighting control through timers with motion sensors, will be implemented.

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 February 15, 2024, in the *Gila River Indian News*, Maricopa and Pinal Counties, Arizona. A physical copy of the EA was available for public review at Gila River Indian Community's District No. 6 Service Center, 5230 West St. Johns Road, Laveen, Arizona 85339. The 14-day comment period ended on February 29, 2024. RUS received no comments on the EA.

F. FINDING OF NO SIGNIFICANT IMPACT

The RUS has concluded that the proposed Project will have no significant effects to the human environment as disclosed in the EA. The proposed Project will have no effects on historic properties listed in or eligible for listing in the NRHP and no effects to federally listed species or designated critical habitat.

The proposed Project will not disproportionately affect minority or low- income populations.

In accordance with the National Environmental Policy Act, as amended, the Council on Environmental Quality Regulations, and RD's Environmental Policies and Procedures, 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 will 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 Finding of No Significant Impact (FONSI) is not a decision on a loan application and therefore not an approval of the expenditure of federal funds. Issuance of this 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 this 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 FONSI or the agency's other environmental determinations. Legal challenges to this 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
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Contact Information

For additional information on this FONSI and EA, please contact Alan Hachey at email: RUSPublicComments@usda.gov.