

**FINDING OF NO SIGNIFICANT IMPACT**

**Bailey Solar Project  
(also known as Woodruff County Solar Project)  
Woodruff County, Arkansas**

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

**Arkansas Electric Cooperative Corporation**

**Prepared by:  
Engineering and Environmental Staff  
Rural Utilities Service**

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## **A. INTRODUCTION**

Arkansas Electric Cooperative Corporation (AECC) plans to submit a financing request to the U.S. Department of Agriculture, Rural Utility Service (RUS) to construct the proposed Bailey Solar Project [(also known as Woodruff County Solar Project (Project))] in Woodruff County, Arkansas. 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 (U.S.C. 4231 et seq.)], the Council on Environmental Quality's (CEQ) regulations for implementing NEPA (40 CFR Parts 1500-1508), and Rural Development's (RD) NEPA implementing regulations, Environmental Policies and Procedures (7 CFR Part 1970). After completing an independent analysis of an environmental report prepared by AECC and its consultant, 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. AECC 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 USC 470(f), and its implementing regulation, "Protection of Historic Properties" (36 CFR Part 800).

## **B. PROJECT DESCRIPTION AND PURPOSE/NEED**

AECC is proposing to construct a new solar photovoltaic (PV) electrical power generation station, which will be located near the City of Augusta in Woodruff County, Arkansas. The proposed activity will result in transformation of the property from row crop agricultural to a solar photovoltaic PV electrical energy generation facility. The Project includes a 100-megawatt solar PV electrical power generation station, an approximate 0.5-mile 34.5-kilovolt transmission line, and related interconnection equipment. The Project will be on property adjacent to the existing Carl E. Bailey Generating Station (existing Bailey Generating Station). The output of the Project will connect to the grid at the existing Bailey Generating Station's switchyard. The Project will be a renewable energy source powered by energy generated from sunlight through PV. The new solar project will provide a renewable electrical energy generation resource to meet growing electrical energy needs in the area, improving availability of electric services to AECC's seventeen (17) member cooperatives. It will allow AECC to repurpose the existing Bailey Generating Station plant site which is planned for retirement and reuse the existing grid point of interconnection at that location. Studies done by AECC demonstrate the levelized cost of energy produced by the Project would be economically beneficial to AECC's members. RUS has reviewed the purpose and need for the Project and determined that the proposal will meet the present and future needs of AECC.

## **C. ALTERNATIVES EVALUATED**

### **1. No Action**

Under the No Action Alternative, RUS would not provide financial assistance to AECC, and/or the proposed Project would not be constructed. This alternative would not assist AECC in providing a replacement generation resource for an existing facility that is planned for retirement and seek to reuse the existing generator interconnection agreement.

### **2. Action Alternative (Preferred Alternative)**

Under the Action Alternative, RUS would consider financing the proposed Project, and AECC would construct the Bailey Solar Project. The proposed project would allow AECC to provide a 100-megawatt solar PV electrical power generating station, an approximate 0.5-mile 34.5-kilovolt transmission line, and related interconnection equipment. The Project would be built on property adjacent to the existing Bailey Generating Station. The design of the Project has a PV panel footprint of approximately 537 acres within a fenced area of approximately 630 acres.

### **3. Alternatives Eliminated from Further Consideration**

In addition to the No Action Alternative and Action Alternative, AECC 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 would have no significant impacts to the following analyzed resources; topography and climate, soils, water features, vegetation, wildlife, threatened and endangered species, land use, cultural and historic resources, urban, residential and recreation areas, transportation, population, noise, or air quality. A summary of anticipated impacts on the human environment is provided below, including any mitigation measures deemed necessary to avoid or minimize impacts. AECC is responsible for implementing these measures.

### **Topography and Climate**

The proposed Project would result in minor impacts to topography from grading of the site. The site will not require major grading. Utilization of a renewable resource for production of electrical energy will provide a positive benefit to the climate by reducing greenhouse gas generation associated with electrical energy production through burning of fossil fuels.

### **Soils**

The proposed Project would result in minor impacts to soils from grading of the site. Temporary impacts to the soil may result from construction access during the wet season when soils are saturated, resulting in potential rutting and exposing bare soils to precipitation and runoff waters. Implementation of sediment and erosion control measures will minimize the

transport of soil off site. Upon completion of construction, any disturbed areas will be restored and properly vegetated.

### **Water Features**

Construction and operation of the proposed Project are not expected to have significant impacts to floodplains, wetlands or other water resources. The solar array and supporting infrastructure will be designed to avoid wetlands and floodplains to the extent practicable. Field delineations of wetlands occurred on January 13, 2021 and March 11, 2021. The solar array and supporting infrastructure have been designed to avoid Waters of the U.S. to the extent practicable. Should plans change, further consultation will be required. The applicant will obtain any necessary state level permits and perform stormwater pollution prevention measures as applicable. Significant earthwork is not anticipated for the project as the Project site is already level. Best management practices and a stormwater pollution prevention plan will be utilized to ensure the streams and waterways within the Project area are not adversely affected by sediment runoff.

The location of the placement of pilings (mounting structures/poles for solar arrays) in floodplains will effect less than one-tenth of an acre in the 100-year floodplain and less than two-tenths of an acre in the 500-year floodplain. These pilings are in the southwest corner of the property, adjacent to the unnamed tributary that bisects the property, and in the northwest corner of the property adjacent to Caney Creek. In accordance with Executive Order 11988, Floodplain Management and USDA Departmental Regulation 9500-3, Land Use Policy, the Agency is notifying the interested public of this land conversion. It has been determined that there is no practicable alternative to avoiding this conversion or effect and that there is a significant need for the proposal. The use of pilings will not alter the hydrology or other beneficial qualities of the floodplain.

### **Vegetation**

Disturbance and loss of vegetation will result from the construction of the solar facility. However, by utilizing existing cleared property (i.e. agricultural fields) disturbances and losses will be minimized. Furthermore, many of these agriculture fields are routinely cultivated for row crop agriculture production and remain devoid of vegetation during prolonged periods of the year. Upon completion of construction, the Project area will be planted with herbaceous vegetation which will be maintained to provide year-round ground cover to stabilize the soil.

The transmission line will require clearing trees to control vegetation hazards growing beneath the line and to prevent tree falls on the line. Trees in the right-of-way will be cut at ground level, leaving the roots in place for erosion control. Once transmission line construction is complete, grasses and low-growth vegetation will be established in the right-of-way for permanent stabilization.

### **Wildlife**

The majority of the proposed Project is located in areas that are currently used for row crop farming. Temporary wildlife displacement resulting from disturbance during Project construction will likely be the most common occurrence. Following construction, the

herbaceous vegetation that is replanted will provide suitable habitat for small mammals, birds, and insects.

### **Threatened and Endangered Species**

Six federally protected wildlife species and one listed plant species have the potential to occur within the vicinity of the Project. Two plant species are on the Arkansas Natural Heritage Commission (ANHC) Elements of Special Concern as state threatened or endangered. However, the Project area lacks suitable habitat for any of the state or federally listed species. Native vegetation will be allowed to establish around the solar panels and along the fringes of the property. Vegetation around the solar panels will be mowed at a frequency to maintain such a level as to prevent encroachment or interference with the panels and allow easy access to the area for routine maintenance activities. Vegetation along the perimeter of the project area may be mowed less frequently to allow natural establishment of flowering vegetation, which will provide ground cover and benefit pollinator species such as honeybees and butterflies. Construction and operation of the Project will not likely have significant impacts on threatened and endangered species.

### **Cultural Resources**

Efforts to identify historic properties within the proposed Project's area of potential effects included background research, field survey, and consultation on the National Register of Historic Places (NRHP) eligibility of resources. The investigations identified 54 cultural resources. Of the 54 cultural resources, one cultural resource was recommended eligible for the NRHP. The one historic property will be avoided by project activities. The Arkansas State Historic Preservation Office (SHPO) concurred with these recommendations. Ten Native American tribes were contacted on June 2, 2021. Two tribes responded that the Project area is outside their area of interest. No responses were received from the remaining 8 tribes. On the basis of the Applicant's agreement to avoid the historic property, SHPO concurrence, and lack of responses from Native American tribes, RUS has determined that, the Project will result in no effect to historic properties.

### **Transportation**

There will be minor temporary adverse impacts to traffic due to the increased traffic with construction vehicles. However, when construction concludes, it is anticipated that traffic will decrease to below what occurs with typical farming practices.

### **Population**

Construction and operation of the proposed Project will not directly result in a long-term change in population size or demographics in the area. Construction may result in specialized workers relocating to the area. There will be no significant effect on employment and income by the construction and operation of the Project. Workers will likely commute to and from the work site on a daily or weekly basis or set up temporary residences in the area. The purchases of lodging, food, fuel, and other merchandise by the workers may result in a slight increase in retail sales in the general vicinity of the Project during the construction phase.

## Air Quality

Temporary minor impacts due to trucking and construction activities may effect air quality. Fugitive dust will be reduced by watering the construction area during construction activities if needed. Establishment of year-round vegetative groundcover in opposition to periods of exposed soil common with typical row crop agriculture practices may minimize the generation of airborne soil particles (dust) having a positive impact on air quality.

## E. PUBLIC AND AGENCY INVOLVEMENT

Local newspaper legal notices announcing the availability of the EA and participation under Section 106 of the National Historic Preservation Act were published on March 23, 2022 and March 30, 2022, in the Woodruff County Monitor in Woodruff County, Arkansas. The EA was posted on RUS's website at <https://www.rd.usda.gov/environmentalstudy/bailey-solar-facility> on March 23, 2022. A hard copy of the EA was available for public review at the following locations:

Augusta/Woodruff County Library 201 Mulberry Street Augusta, AR 72006-2633 (870) 347-5331	McCrary Branch Library 115 East Edmonds Avenue McCrary, AR 72101 (870) 731-0150
Cotton Plant Branch Library 124 Main Street Cotton Plant, AR 72036 (870) 459-1063	Woodruff Electric Cooperative Corporation 779 Highway 64 East Augusta, AR 72006 (870) 347-2419

The 14-day comment period ended on April 6, 2022. No comments regarding the Project were received by RUS or the Applicant during the public comment period.

## F. FINDING OF NO SIGNIFICANT IMPACT

Based on its EA, RUS has concluded that the proposed Project would have no significant impacts to water quality, wetlands, floodplains, land use, aesthetics, transportation, or human health and 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 A MCLEAN

Acting Administrator

Rural Utilities Service

#### **Contact Person**

For additional information on this FONSI and EA, please contact Kristen Bastis, Archaeologist at [Kristen.Bastis@usda.gov](mailto:Kristen.Bastis@usda.gov).