

**FINDING OF NO SIGNIFICANT IMPACT**

**Anadarko Power Plant Combustion Turbine  
Caddo County, Oklahoma**

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

**Western Farmers Electric Cooperative**

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

**April 2024**

## **A. INTRODUCTION**

Western Farmers Electric Cooperative (WFEC) plans to submit a financing request to the U.S. Department of Agriculture, Rural Utilities Service (RUS) to construct the proposed Anadarko Power Plant Combustion Turbine (Project) in Caddo County, Oklahoma. 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 U.S.C. §§ 4231–4347), 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 Western Farmers Electric Cooperative 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. Western Farmers Electric Cooperative published newspaper notices, 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**

The overall purpose of the Project is to construct the Anadarko Power Plant Combustion Turbine in Caddo County, Oklahoma. The Project will install new turbines at the existing Anadarko Power Plant in Anadarko, with approximately 28.5 acres of land disturbance. It includes construction of a new 0.94-mile single-circuit 69 kilovolt (kV) transmission line within the plant boundaries to connect the turbines to the existing 69 kV substation located there. The Project will consist of two simple-cycle combustion turbines (SCCTs) that will be designed to burn natural gas exclusively as the primary fuel, with total net output of 98.4 megawatts (MW). An evaporative cooling or wet compression system will be used to increase the efficiency of the combustion turbines. Water injection will be used to reduce the formation of nitrogen oxide (NOx) emissions and an oxidation catalyst system will be used to reduce carbon monoxide (CO) emissions from the combustion turbines.

Fuel for the SCCTs will be provided by the existing natural gas infrastructure at the Anadarko Power Plant. No new off-site natural gas pipelines will be constructed as part of the Project. An adequate supply of natural gas is currently available at the plant as the proposed new SCCT units will replace three less efficient existing gas-fired boilers that are slated for permanent retirement. RUS have 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 Western Farmers Electric Cooperative, and/or the proposed Project will not be constructed. This alternative will not assist Western Farmers Electric Cooperative in providing electricity to rural residents.

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

Under the Action Alternative, RUS will consider financing the proposed Project, and Western Farmers Electric Cooperative will construct the Anadarko Power Plant Combustion Turbine Project. The proposed Project will be two new natural gas-fired combustion turbines, which will replace three gas-fired boilers, at the existing Anadarko Power Plant. The project will impact approximately 28.5 acres in Anadarko, Oklahoma. It will include construction of a new 0.94-mile single-circuit 69 kilovolt (kV) transmission line within the plant boundaries.

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

In addition to the No Action Alternative and Action Alternative, Western Farmers Electric Cooperative considered alternate energy generation technologies and alternate sites, which are documented in the Alternatives section of the EA.

## **D. SUMMARY OF ENVIRONMENTAL EFFECTS**

The analysis in the EA documented that the proposed Project will have no adverse effects to land use, farmland, floodplains, wetlands, water resources, coastal resources, biological resources, cultural resources & historic properties, aesthetics, air quality, socioeconomic & environmental justice, noise, transportation, human health & safety, and corridors. In accordance with the requirements of § 1970.104(b), a summary of anticipated impacts on the human environment is provided below, including any mitigation measures deemed necessary to avoid, minimize, or mitigate impacts. Western Farmers Electric Cooperative is responsible for implementing these measures.

There are no federal lands or formally classified lands within the Project. The Project site is zoned and developed for industrial use, so it is exempt from the Farmland Protection

Policy Act. Therefore, the Project will have no significant impact to formally classified lands or important farmland.

The Project plant site is outside of the 500-year floodplain. There are no wetlands at the Project site. The Project area will not impact water resources (including sole source aquifers) or coastal resources. The two new turbines will use less water than the three old boilers that will be retired. Therefore, the Project will have no significant impact to floodplains, wetlands, water resources, or coastal resources.

The Project will have no effect to federally listed, proposed, or candidate species. There are no critical habitats or known eagle nests within the Project area. The Project will use best management practices to prevent bird collision with utility lines and vegetation clearing outside of bird nesting season. The Project will have no significant impact to biological resources.

A cultural resources survey was conducted in the Project Area of Potential Effect (APE). Consultation was conducted with the State Historic Preservation Officer (SHPO) and Indian Tribes. Nine Indian Tribes were contacted, and three Tribes responded. The Project will not affect historic properties and cultural resources.

The Project will not negatively affect minority or low-income populations. The Project may have temporary impacts during construction to aesthetics, noise, and transportation. The Project has comprehensive health, safety, and environmental plans. Hazardous materials are not expected to be generated during Project construction. Any hazardous materials will be managed in accordance with applicable federal and state regulations. Therefore, the Project will have no significant impact to aesthetics, socioeconomic & environmental justice, noise, transportation, and human health & safety.

The Project area is in attainment for criteria air pollutants. WFEC will permanently retire three old gas-fired boilers following Project construction. The two new turbines will be more efficient than the three old boilers, with an overall efficiency improvement of approximately 35 percent. The improved efficiency directly translates to a 35 percent reduction in fuel use and Green House Gas (GHG) emissions for each Megawatt hour produced.

Project emissions during operation will be subject to all applicable federal and state emission standards. The Project will be subject to permitting for criteria air pollutants, hazardous air pollutants (HAP), and GHG emissions. WFEC will be required to control emissions using Best Available Control Technologies (BACT) and conduct ambient air quality impact modeling. WFEC has submitted a PSD Construction Permit Application to the Oklahoma

Department of Environmental Quality (DEQ) which included a BACT and ambient air quality impact modeling analyses demonstrating compliance with the applicable requirements based on current guidance. Within 180 days from initial startup, WFEC will submit a TV Operating Permit Application that will incorporate the PSD Construction Permit requirements. The Project will not result in adverse air quality impacts, as the air permitting process includes the requirement to control emissions using BACT and air quality impact modeling.

The Project will not achieve reliable replacement capacity at the Anadarko Plant and continued compliance with reserve requirements by adding additional wind and solar capacity or battery storage. Renewable energy resources are not dispatchable, so they will not be available to respond to fluctuations in demand and power by new or existing renewable energy generation resources. Natural gas generation results in the lowest total GHG emissions of the available generating technologies. Therefore, the proposed natural gas generating technology results in significantly less GHG emissions than other fossil-based generating technologies. The Project will have no significant impact to air quality and GHG.

#### **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 April 4, 6, & 9, 2024, in the Anadarko Daily News, Caddo County, Oklahoma. A copy of the EA was available for public review at the Anadarko Public Library and <https://www.rd.usda.gov/resources/environmental-studies/assessment/anadarko-power-plant-combustion-turbine>. The 14-day comment period ended on April 17, 2024. RUS received no comments on the EA during the public review period.

#### **F. FINDING OF NO SIGNIFICANT IMPACT**

Based on its EA, RUS has concluded that the proposed Project will have no significant effects to land use & important farmland, floodplains, wetlands, water resources, coastal resources, biological resources, cultural resources & historic properties, aesthetics, air quality, socioeconomic/environmental justice, miscellaneous issues (noise, transportation), human health & safety, and corridors. 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 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 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. 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 FONSI or the agency's other environmental determinations. 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 Digitally signed by CHRISTOPHER MCLEAN  
Date: 2024.04.29 18:10:25 -04'00'

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For additional information on this FONSI and EA, please contact Terry Czerwien, Environmental Protection Specialist, at [terry.czerwien@usda.gov](mailto:terry.czerwien@usda.gov).