

FINDING OF NO SIGNIFICANT IMPACT

**Apache GT5 & GT6 Generation Project
Cochise County, Arizona**

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

Arizona Electric Power Cooperative, Inc.

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June 2025

A. INTRODUCTION

The Arizona Electric Power Cooperative, Inc. (AEPCO) plans to submit a financing request to the U.S. Department of Agriculture, Rural Utilities Service (RUS) for the Apache Gas Turbine (GT)5 & GT6 Generation Project (Project) in Cochise 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 U.S.C. §§4321-4347 and RD's NEPA implementing regulations, Environmental Policies and Procedures (7 CFR Part 1970).

An Environmental Assessment (EA) was drafted between January 2024 through November 2024 prior to the construction of Apache GT5 and GT6 Generation Project. However, the applicant withdrew the application due to a delayed environmental review process, saying that they would seek funding elsewhere, and began construction on the project. The EA went dormant. In response to the Executive Order (EO) 14156, Declaring a National Energy Emergency, applicants returned to the agency to again seek funding. The agency began reviewing this project's environmental compliance again, and it was determined to qualify as an emergency action pursuant to EO 14156 to facilitate the generation of electricity. The agency reviewed the project's progress as compared to the design analyzed in this EA. The applicant has procured and constructed two 42-megawatt (MW) simple-cycle gas turbines at the existing Apache Generating Station (AGS), which is within the project design analyzed as the proposed action in the EA. The EA is considered viable for the remaining activities.

After completing an independent analysis of an environmental report prepared by AEPCO 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 EA for the project. RUS finds that the EA is consistent with federal regulations and meets the standards for an adequate assessment.

RUS emergency regulations allow the agency to identify alternative arrangements for non-urgent actions that are not likely to have significant environmental effects. 7 CFR 1970.18(b). RUS consulted with the Council on Environmental Quality on March 7, 2025 for alternative arrangements for its actions under EO 14156 and agreed to use the 2020 CEQ emergency guidance¹ as its NEPA process for actions determined an emergency per EO 14156. Under that guidance, CEQ says that "agencies must comply with CEQ NEPA regulatory requirements for ...public involvement to the extent practicable." *Id.* at 3. The CEQ regulations have been rescinded, but the agency would look to them as guidance. However, the agency has determined that public involvement in the form of public comment is not practicable given the advanced state of project development, its imminent on-line date, and the public interest needs stated in EO 14156. See above for more information on the background of the project and the analysis. The emergency guidance also states that "Agencies must continue their efforts to notify and inform the affected public and relevant Federal, State, Tribal, and local agency representatives of the Federal agency activities and proposed actions." Thus, the Final EA and FONSI will be available on the agency's website to notify the public of the agency action.

¹ See Emergencies and the National Environmental Policy Act Guidance, at <https://ceq.doe.gov/docs/nepa-practice/emergencies-and-nepa-guidance-2020.pdf>. Last visited on 6/9/25.

In addition, RUS considers the proposed Project an undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. §§300101 – 306108, 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 meet projected load growth requirements and capacity shortfalls identified in the public version of AEPCOs 2020 Integrated Resources Plan (IRP). The 2020 IRP provided a 15-year forecast of projected electric load growth through 2035 and identified sources to meet growing demand needs and/or provide economic value to AEPCO’s members. The IRP identified that the development of flexible natural gas capacity in the mid-2020s was the least-cost option for meeting capacity needs between 50 MW and 120 MW. As summarized in the IRP, AEPCO demonstrated a need for new generation sources that meets future requirements for additional peaking resources; supports integration of further intermittent/renewable generation in the planning period; and modernizes AEPCO’s generating mixture. AEPCO’s members need new, reliable, and cost-effective sources of capacity to serve its members in rural areas as the demand for power grows over the next 15 years. But for illiquid and high-priced market purchases, AEPCO would have a shortfall in available power capacity in comparison to the peak demand on its system as early as 2024. AEPCO and their member’s yearly peak demand and available capacity for the 15-year period between 2020 and 2035. RUS has reviewed the purpose and need for the Project and determined that the proposal will meet the present and future needs of AEPCO.

C. ALTERNATIVES EVALUATED

1. No Action

Under the No Action Alternative, RUS would not provide financial assistance to AEPCO, and/or the proposed Project would not be constructed. This alternative would not assist AEPCO in meeting the capacity needs between 50 MW and 120 MW of power identified in the 2020 IRP.

2. Action Alternative (Preferred Alternative)

Under the Action Alternative, RUS would consider financing the proposed Project, and AEPCO would construct the Project. The Project would install two refurbished aero-derivative General Electric (GE) LM6000 simple-cycle gas turbines at the existing Apache Generating Station (AGS) to provide an additional 84 megawatts of capacity to the existing power plant. The turbines and associated equipment would be installed on an approximately 2-acre area of the existing AGS property and on approximately 2 acres of land owned by Western Area Power Administration (WAPA), with a total disturbed footprint of approximately 12 acres. WAPA is a federal power-marketing agency within the U.S Department of Energy (DOE). The Proposed Action would include construction of the power plant, associated equipment, relocation of three transmission structures and transmission segment owned by WAPA to accommodate the new equipment, and an update to a license outgrant provided by WAPA to AEPCO.

3. Alternatives Eliminated from Further Consideration

In addition to the No Action Alternative and Action Alternative, AEPCO considered other

technology and siting alternatives, which are documented in the Alternatives section of the EA. These alternatives were not carried forward as viable alternatives for analysis.

D. SUMMARY OF ENVIRONMENTAL EFFECTS

The analyses in the EA documented that the proposed Project would have no significant effects to land use, wetlands, floodplains, wildlife, vegetation, threatened and endangered species, socioeconomics and community resources, and transportation. A summary of anticipated impacts on the human environment is provided below, including any mitigation measures deemed necessary to avoid or minimize impacts. AEPCO is responsible for implementing these measures.

Land Use

Construction of the Proposed Action will take place within the existing site on previously disturbed land. Since electric generation units are existing within the area surrounding the Proposed Action, there will be no changes to the existing land use, geology, or soils (including no change to soil erosion) will occur as a part of the Proposed Action. The Proposed Action will not have any impact to formally classified lands.

The total conversion score for Important Farmlands for the Proposed Action is 24.18 points, which is below the 160-point threshold identified in 7 CFR 658.4(c)(2).

Water Resources

The Proposed Action is expected to use approximately 220 gallons of water per minute at maximum operation. The expected minimal increase of water withdrawal is not anticipated to cause or exacerbate any existing groundwater quality or quantity issues. The Proposed Action will not result in any discharged liquids other than to the already permitted surface impoundments. A drainage study in support of the County permitting process will be completed to maintain no offsite discharges. There will be no well permit modifications or need for additional wells to support the Project's water usage or discharge. Thus, the Proposed Action will have no effect on the water quality or the impairment status of the surrounding area.

No impacts on wetlands or jurisdictional waters of the US or waters of the State of Arizona are anticipated for construction or operation of the Proposed Action.

Floodplains

The Proposed Action would have no impact on floodplains. All construction will take place within the existing Project Site and will not result in any impacts to any surrounding floodplains. No future impacts to surrounding floodplains are anticipated during operation of the Proposed Action. The Proposed Action will not result in any additional runoff or impedance of flood flows.

Biological Resources

The site of the proposed action has been previously disturbed due to prior and on-going, industrial electrical generation operations at AGS. Because the land has already been altered prior to the proposed action, the proposed action is anticipated that minimal on-site vegetation clearing.

The Proposed Action is anticipated to have no effect on ESA-listed wildlife species. It was also determined that the bald eagle has no potential to occur on the Project Site and golden eagle is unlikely to occur. Therefore, the Proposed Action is anticipated to have no effect on bald or golden eagles.

Historic and Cultural Resources

In accordance with Section 106 of the National Historic Preservation Act (54 USC 306108), tribal consultation letters were sent on July 7, 2023 to the Indian tribes listed below in order to solicit feedback on the Proposed Action. The AZSHPO concurred with the RUS's finding of no adverse effect. Per the reports, and as summarized by the AZSHPO, there were 15 cultural resources identified within the APE, including two sites that intersect the construction footprint for the Project Site. These two sites were recommended eligible for inclusion in the NRHP under Criterion (d) according to WestLand. Additionally, the two sites will be avoided as they are outside of the Proposed Action APE. Additionally, all Section 106 reports and correspondences are on file at RUS. The reports and findings were presented to the following tribes for concurrence:

- Fort Sill Apache Tribe of Oklahoma
- Hopi Tribe of Arizona
- Mescalero Apache Tribe of the Mescalero Reservation (New Mexico)
- San Carlos Apache Tribe of the San Carlos Reservation (Arizona)
- Tohono O'odham Nation of Arizona
- White Mountain Apache Tribe of the Fort Apache Reservation (Arizona)
- Ak-Chin Indian Community of the Maricopa Indian Reservation
- Gila River Indian River Community of the Gila River Indian Reservation
- Pascua Yaqui Tribe
- Salt River Pima-Maricopa Indian Community of the Salt River Reservation
- Tonto Apache Tribe
- Yavapai-Apache Nation
- Pueblo of Zuni

The tribes that confirmed receipt of Section 106 consultation requests included: Fort Sill Apache Tribe, Mescalero Apache Tribe of the Mescalero Reservation (New Mexico), San Carlos Apache Tribe of the San Carlos Reservation (Arizona), Tohono O'odham Nation of Arizona, White Mountain Apache Tribe of the Fort Apache Reservation, Arizona, Ak-Chin Indian Community of the Maricopa Indian Reservation, Gila River Indian Community of the Gila River Indian Reservation, Pascua Yaqui Tribe, Salt River Pima-Maricopa Indian Community of the Salt River Reservation, Tonto Apache Tribe, Yavapai-Apache Tribe, and the AZSHPO. The responding Indian tribes concurred that the Proposed Action did not pose any adverse effects to known cultural resources. The two remaining Tribes did not respond within the 30-day comment period. Therefore, construction and operation of the Proposed Action are expected to have no adverse effect on any historic or cultural properties.

Construction and operation of the Proposed Action will have no impact on any historic or cultural properties because it will fully lie within the footprint of the Apache Generation Site.

Aesthetics

Construction of the Proposed Action will change the visual characteristics of the Project Site to

include the addition of GT5>6 facility/building, two 85-foot stacks, a 355,000-gallon water tank, and three new transmission structures and associated transmission line. During construction, temporary visual features will likely include cranes and other heavy equipment and activity consistent with building a major industrial facility. While there will be additional visual contrast from the new Facility, the overall nature of the Proposed Action will remain consistent with the existing views in the area.

Air Quality

The Project will result in the emission of criteria pollutants regulated under the Clean Air Act including Nitrogen Oxides (NO_x), Carbon Monoxide (CO), Sulfur Dioxide (SO₂), Volatile Organic Compounds (VOC), Particulate Matter, and Carbon Dioxide (CO₂e). The single cycle turbines will be fired solely on natural gas and operation will be restricted to complying with the New Source Performance Standard (NSPS) Subpart TTTT capacity limitations. Additionally, it is expected that the turbines will have approximately 730 total combined startup/shutdown events per year. The combustion turbines will install Continuous Emission Monitoring Systems (CEMS) to monitor emissions of NO_x. In addition, air impacts from an operating pipeline may occur in the form of fugitive emissions from pipe connections.

The combustion turbines will each have a selective catalytic reduction (SCR) system to control emissions of NO_x and an oxidation catalyst to control emissions of CO and VOC emissions. To minimize the emissions of SO₂ and Particulate Matter (PM)/PM₁₀/PM_{2.5}, the SCCT emissions will be controlled through the use of pipeline quality natural gas and good combustion practices as specified by the manufacturer.

Because the potential emissions of criteria pollutants are below the respective significant emission rate for prevention of significant deterioration (PSD), the Proposed Action does not trigger the PSD permitting process. Accordingly, no Best Available Control Technology (BACT) analysis was required. However, as the potential emissions for PM/PM₁₀/PM_{2.5} are above the permitting exemption threshold and the turbines are being installed at an existing site, the Proposed Action does require a permit revision of the Facility's Class I permit, as required by Arizona Administrative Code. R18-2-304 and R18-2-334(B), prior to commencing construction of the Proposed Action. AEPCO has elected to meet the requirement of R18-2-334(C) with an ambient air quality assessment of PM_{2.5} emissions. Air emissions modeling was submitted with the air permit application in summer 2023 to demonstrate compliance with the PM₁₀ and PM_{2.5} National Ambient Air Quality Standards. AEPCO received a completeness determination of its application from Arizona Department of Environmental Quality (ADEQ) on July 26, 2023 (Appendix D). A draft air permit was issued for public comment on February 21, 2024, with a virtual hearing held on March 21, 2024. The final draft permit was issued by ADEQ on June 5, 2024.

Noise

Net changes in sound levels resulting from the Proposed Action are expected to be minimal except in very localized areas next to the new equipment. Because the Proposed Action will occur within a much larger property with existing sources of noise and will be located between an existing highway and a railroad, the new equipment is not expected to appreciably change the sound levels experienced offsite. There are no major operational noise impacts expected from the operation of the metering station itself.

Human Health and Safety

EMF will be strongest directly under the transmission line and will decrease with increasing distance from the transmission line ROW. There are no residences or businesses within 2,000 feet of the Project Site boundary. The Proposed Action will not require modifications of the transmission lines outside of the Project Site boundary; therefore, it will not increase risk due to EMF along the current transmission ROW.

During construction, the Project Site will be managed to prevent harm to the general public. The general public will not be allowed to enter any construction areas associated with the Proposed Action. The major risk to the general public will be from an increase in traffic volume on the roadways near the Project Site as a result of commuting construction workers and transportation of equipment and materials.

Construction and operation of the Proposed Action will also involve the use and storage of regulated and hazardous materials. During construction, diesel fuel, gasoline, and lubricating oils from heavy equipment and vehicles may accidentally leak or spill. Hydraulic fluid, paints, and solvents will likely be used during the construction phase as well. Additionally, the presence of aboveground fuel storage tanks and oil-filled equipment present the potential to release into the environment. Any contaminated soils as a result of the construction or future operation of the Proposed Action would be identified and handled as appropriate in accordance with state and federal laws. Any excavated soil is tested and then handled by an appropriate third-party contractor who takes the material to an appropriate landfill.

E. PUBLIC AND AGENCY INVOLVEMENT

In order to respond to the Energy Emergency as outlined in EO 14156, RUS has determined that it is practicable to move forward without public notice of the EA draft to allow immediate operations of Apache GT5 and GT6.

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, cultural resources, threatened and endangered species, water resources, the surrounding community, air quality, noise, transportation, aesthetics, 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.

In accordance with the National Environmental Policy Act, as amended (42 U.S.C. §§4321-4347), 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 issuance of a FONSI.

H. APPROVAL

After considering the effects of the actions analyzed, I have determined that these actions will not have a significant effect on the quality of the human environment. Therefore, an environmental impact statement will not be prepared.

Dated:

CHRISTOPHER A. MCLEAN
Assistant Administrator, Electric Programs
Rural Utilities Service

Contact Person

For additional information on this FONSI and EA, please contact Damon Armstrong at damon.armstrong@usda.gov.