



U.S. Department of Energy

Categorical Exclusion Determination Form

Submit by E-mail

Proposed Action Title: Marana Upgrade Project

Program or Field Office: Western Area Power Administration (WAPA) - Desert Southwest Region

Location(s) (City/County/State): Pima County, Arizona

Proposed Action Description:

The Marana Upgrade Project (Project) is proposed by Arizona Electric Power Cooperative (AEPCO) to rebuild the existing Marana Substation within the existing fenced boundaries of the substation and replace existing transmission line structures. The Project will involve rebuilding the current substation within the existing property boundary to increase the current four-breaker ring design to a nine-breaker, breaker-and-a-half configuration. Rebuilding the existing Marana Substation will allow for a loop-in of the existing WAPA Electrical District 5 (ED5) – Rattlesnake 115-kilovolt (kV) transmission line. A loop in configuration will require the replacement of three existing transmission line structures with two new structures along AEPCO's existing Marana – Marana Tap 115-kV transmission line extending approximately 0.17 mile north of the substation.

The Project is necessary to support increased local electrical demand and provide reliability upgrades to the Marana Substation. This project replaces the WAPA tap connection north of the Marana Substation with a loop-in connection that increases reliability by sectionalizing the ED5-Rattlesnake line with multiple breakers protecting the line. The Project provides for increased reliability in the Marana area by eliminating certain contingencies currently resulting in low voltage and loss of load. The Project would also increase the load carrying capability of the transformers at the Marana Substation. Transformation at Marana is rated at 70 megawatts but is currently limited to 34 megavolt ampere during summer peak because of certain N-1 conditions.

Categorical Exclusion(s) Applied:

- B4.13 - Upgrading and rebuilding existing powerlines
- B4.11 - Electric power substations and interconnection facilities
- B4.6 - Additions and modifications to transmission facilities

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of [10 CFR Part 1021](#).

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

☒ The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D.

To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

☒ There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal.

☒ The proposal has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

NEPA Compliance Officer: **NATALIE ORTEGA**

Digitally signed by
NATALIE ORTEGA
Date: 2025.03.28
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Date Determined: 3/28/25