



U.S. Department of Energy Categorical Exclusion Determination Form

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Proposed Action Title: Gila Substation Stage 07 Rebuild Project and Related Communication and Protection Equipment Replacement - Updated construction schedule and laydown yard location

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

Location(s) (City/County/State): Yuma, Yuma County, Arizona and Imperial County, California

Proposed Action Description:

At Gila Substation, WAPA proposes to build a new 161-kV switchyard using 230-kV standards and dismantle the existing one. The new switchyard would cover 6.3 ac and the existing yard is 5.3 ac. In support of this effort, WAPA plans to add or modify communication and protection equipment and improve control buildings at Knob, Kofa, and Wellton Mohawk Substations and Black Mountain and Telegraph Pass Communication Sites. WAPA plans to provide technical assistance regarding communications equipment at customer-owned Siphon Drop and Winterhaven facilities.

The purpose of the work is to ensure the safety and reliability of the bulk electric system. WAPA needs to rebuild the 161-kV switchyard in a manner and location to accommodate future equipment upgrades and additions. For example, WAPA doesn't have room to rebuild the 34.5-kV or 69-kV yards, because the 161-kV equipment blocks the way. WAPA's 34.5-kV yard, which contains 1950s equipment nearing the end of its useful life, is the sole path for power to irrigation district relay pumps and other customers.

WAPA plans to start construction of the new switchyard on August 29, 2018 and complete it by February 10, 2020. WAPA previously executed a categorical exclusion for this action on July 20, 2015 and subsequently completed the asbestos removal tasks. The project was then put on hold.

SEE CONTINUATION SHEET

Categorical Exclusion(s) Applied:

B4.11 - Electric power substations and interconnection 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:

Date Determined:

5-25-18

Categorical Exclusion Determination Form – Continuation Sheet
Gila Substation Stage 07 Rebuild Project and Associated Communications Work
Updated construction schedule and laydown yard location

Project Description (continued):

Gila Substation occurs on WAPA-owned land located at 9600 East Araby-Blaisdale Road in Yuma, Yuma County, Arizona. Knob Substation is situated on WAPA-owned land near Sidewinder Road and Interstate 8 in Imperial County, California. Kofa Substation occurs on Department of Defense land along US Route 95 north of Yuma, Yuma County, Arizona. Wellton Mohawk Substation is located on Bureau of Reclamation land along old US 80 west of Wellton, Yuma County, Arizona. Black Mountain Communications Site occurs on Bureau of Land Management (BLM) land near State Route 78 and County Highway S34 in Imperial County, California. Telegraph Pass Communication Site occurs on BLM land north of Interstate 8 in Yuma County, Arizona. Siphon Drop and Winterhaven are customer-operated facilities located near Winterhaven, Imperial County, California.

At Gila Substation, WAPA plans the following:

- 1) Build a new 8-bay 161-kV switchyard to 230-kV standards, add 9 to 12 new Sulphur Hexafluoride (SF6) gas breakers, and demolish the old 161-kV yard.
- 2) Reuse the existing 161-kV transformers in place, and change the high-side connections so that they can be isolated and protected separately.
- 3) Install a new 34.5-kV transformer and concrete pad in the existing yard.
- 4) Modify 0.4 mi of existing transmission line as follows
 - a. Modify the Gila Knob 161-kV transmission line in order to connect it to a bay on the north side of the new yard. This entails removing 4 wood poles structures, installing 3 new steel monopoles, replacing conductors, and placing a marker ball on the overhead ground wire.
 - b. Modify the Gila Wellton Mohawk 161-kV transmission line in order to connect it to a bay on the south side of the new yard. This entails removing 1 wood-pole structure, adding 1 new steel monopole structure, and replacing conductors. In addition, guy wires will be attached to existing wood-pole Structure 0/2 situated across the street from Gila Substation.
 - c. Modify the Parker Gila 161-kV transmission line in order to connect it to a new bay on the south side of the new yard. This entails removing 1 wood pole structure, adding 1 new steel monopole structure, replacing conductors, and placing a marker ball on the overhead ground wire.
- 5) Adjust the height of the Gila North Gila 69-kV transmission line as needed for any transmission line crossings.
- 6) Build a new slab-on-grade control building (48 x 94 ft) inside the new switchyard and install metering and communications equipment, as well as backup batteries.
- 7) Remove unsalvageable equipment from existing control building, and remove asbestos flooring as needed.
- 8) Install temporary fiber optic cables between old and new control buildings using existing cable trays to the extent possible.

- 9) Install permanent fiber optic cables between new control building and existing office building using existing vaults and conduit to the extent possible.
- 10) Build a new 160-ft-tall, 3-legged, self-supporting communication tower situated next to new control building, and install three, 6 or 10-ft-diameter solid parabolic dishes at the 95, 145, and 155 ft levels and two antennae at the 150 and 160 ft levels. This entails constructing a wave guide structure with concrete footings to support cables between the tower and the control building.
- 11) Install lighting and security cameras.
- 12) Add fill, grade the new 161-kV yard, and install 5 pipe drains and concrete pipe culverts along the switchyard perimeter.
- 13) Remove fill and grade existing on-site spoils/dirt pile located on WAPA property and the adjacent Bureau of Reclamation property.
- 14) Cover the new yard with 6 in of gravel surfacing and apply herbicides.
- 15) Install an underground ground mat for the new 161-kV yard.
- 16) Erect a 7-ft-high, chain-link fence with 3-strand barbed wire or razor wire on top around the new 161-kV switchyard. Fence posts will be embedded in concrete and connected to the ground mat.
- 17) Improve grade and surfacing of existing access roads and create new road between the new 161-kV switchyard gate and existing roads.
- 18) Resolve an easement boundary discrepancy with the Bureau of Reclamation regarding a triangularly shaped, 0.5 ac area located along the west edge of the existing switchyard.

At other facilities, WAPA plans the following supporting actions:

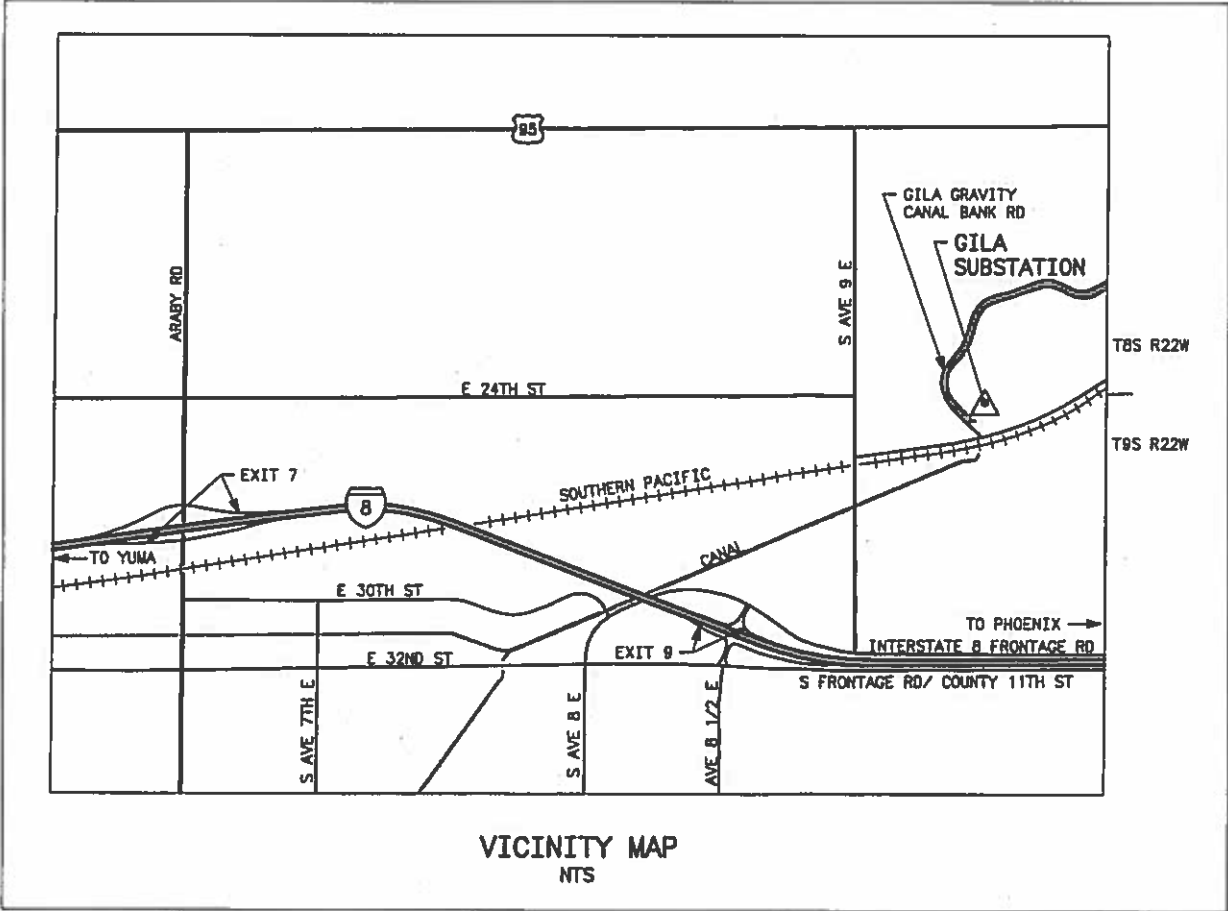
- 19) At Knob, Kofa, and Wellton Mohawk Substations, change panels and switches and replace radio equipment in control buildings. This may entail drilling holes in walls, floors, and ceiling for new conduit or to secure new racks. WAPA will also install temporary jumpers to existing transmission line structures.
- 20) At Knob Substation, remove asbestos containing materials, such as flooring, in the control building. (Completed)
- 21) At Knob Substation, install new junction boxes and lay new cables in the existing yard.
- 22) At Wellton Mohawk Substation, remove asbestos containing materials, such as flooring, in the control room. (Completed)
- 23) At Black Mountain and Telegraph Pass Communication Sites as well as at Knob Substation, adjust microwave dishes and radio antennae or add new ones and remove the old ones when bypassed. The waveguide structures located between towers and control buildings may also be replaced.
- 24) At customer-owned Siphon Drop and Winterhaven facilities, provide technical assistance to realign antennae and dishes to point to the new communication tower at Gila Substation.
- 25) At the southeast corner of Araby Road and East 24th Street in Yuma, Arizona, use an empty lot owned by Bureau of Reclamation as a temporary laydown yard for equipment and material during construction. This entails blading a 1.5 ac area, spreading gravel, and erecting a temporary fence. It occurs next to a laydown yard WAPA is using for a different project. (Update)

Special Conditions:

- 1) WAPA will conduct a pre-construction survey for burrowing owls prior to on-site ground-disturbing activities. Surveys will be conducted per the *Burrowing Owl Project Clearance Guidance for Landowners* (Arizona Burrowing Owl Working Group, 2009). If active burrows are detected in the project area, workers will avoid a 100-ft-wide buffer around any suspected active burrow entrance. If burrows cannot be avoided, WAPA will implement suitable conservation measures, such as translocation.
- 2) WAPA or WAPA's construction contractor shall not cause injury or death to nesting birds, active nests, eggs, or nestlings. In general, breeding birds and active nests are likely to be encountered between February 15 and August 1. If evidence of a nesting bird is discovered in the project area:
 - a. WAPA or the Contractor shall immediately stop work within 40 ft of the nest and notify the Contracting Officer's Representative (COR) with the location and nature of the findings. The Contractor shall suspend work in the avoidance area until directed to continue by the COR;
 - b. The COR will coordinate with WAPA's Environmental Section relative to active nest discoveries and any recommended actions; the COR shall provide notice to proceed to the Contractor after WAPA's internal coordination is complete.
- 3) WAPA's construction contractor shall obtain any required air-quality permits.
- 4) WAPA will and WAPA's construction contractor shall use construction machinery that meets air emission requirements.
- 5) WAPA will and WAPA's construction contractor shall report SF6 gas quantities and avoid leakage or venting.
- 6) WAPA's construction contractor shall obtain a Storm Water Construction General Permit from Arizona Department of Environmental Quality and submit a Notice of Intent.
- 7) WAPA's construction contractor shall develop and implement a Storm Water Pollution Prevention Plan because the project will disturb more than one acre of land.
- 8) WAPA will provide the construction contractor with a copy of the Lead-based paint inspection and asbestos survey reports for Gila, Knob and Wellton Mohawk control buildings, if they plan to perform work in those buildings. Persons working in areas where lead based paint and asbestos containing materials have been identified will follow appropriate safety measures.
- 9) WAPA will follow the following in the event of a discovery:
 - a. Do not remove or alter cultural artifacts or paleontological resources (fossils). Cultural artifacts are of potential scientific or cultural importance and include bones, tools, historic buildings, and features. Paleontological resources can be of scientific importance and include mineralized animals and plants or trace fossils such as footprints. Both cultural and paleontological resources are protected by Federal Regulations during Federal construction projects.
 - b. If archaeological materials are discovered as a result of any activity, the discovery will be protected, all earth-disturbing activities will cease within 100 ft of the discovery, and heavy equipment will be removed from the area until the discovery is assessed and documented by a professional archaeologist and/or Regional Preservation Official.

- c. **If human remains are discovered work will cease within 100 ft of the discovery. If remains are discovered on federal or tribal land, WAPA will follow the regulations implementing the Native America Graves Protection and Repatriation Act (43 CFR 10), such as notifying the land managing agency or Bureau of Indian Affairs within 24 hours of the discovery. If human remains are found on state or private lands, WAPA will comply with state procedures as appropriate.**

Project Location Map:



bcc.

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