U.S. Department of Energy
Categorical Exclusion Determination Form

Proposed Action Title: Tucson Substation Rebuild, Stage 02

Program or Field Office: Western Area Power Administration, Desert Southwest Region

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

Proposed Action Description:
Western proposes to rebuild the existing Tucson substation located in Tucson, Pima County, Arizona. The project is located on Western fee-owned lands in Township 13 South, Range 13 East, Section 35 (Gila and Salt River Baseline and Meridian). The current proposed work will be completed as listed below. The demolition of the 115-kV and 14.4-kV electrical equipment, control house, and any other associated equipment will be completed at a later date under a separate construction project.

Western will construct a new 230-kV equipment yard in the west side of the existing Tucson substation property. As part of the Stage 02 work, Western will conduct the following activities:
- Install 230-kV power circuit breakers, switches, and associated equipment;
- Install 115-kV coupling capacitor voltage transformers, switches, fuses, voltage transformers, and associated equipment;
- Install switchboards, station batteries, and battery chargers;
- Install a pad-mounted station service transformer;
- Install a grounding system, bus system, conduit system, insulated conductor and cables, fiber optics, terminal boxes, outdoor lighting units, and substation signs;

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 releases 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: [Signature]
Date Determined: 3.30.16
Project Description (continued)

- Install foundations for electrical structures;
- Replace structures 35/4 and 35/5 associated with the Saguaro-Tucson 115-kV transmission line outside the northern boundary of the substation with a new, single, steel 3-pole structure in the same location of 35/4;
- Construct a 50-foot-tall steel monopole transmission pole structure (24/16) outside the north substation fence line for the Oracle-Tucson transmission line;
- Replace equipment on the existing Oracle-Tucson structure 24/15;
- Replace Tucson-Apache 115-kV transmission line structure 0/2 (a 3-pole wood structure) with a 45-ft-tall, 3-pole steel structure;
- Install new approach span conductor, overhead ground wire, and associated assemblies;
- Install new gravel surfacing;
- Construct a security chain link fence with razor wire;
- Construct a new control building;
- Install approximately 300 linear feet of buried 4-inch conduit for fiber optic cable between the new control building and Tucson-Apache structure 0/2.
- Install a cable trench and cable pull box with accessing the new control building;
- Install drainage improvements within the fenced yard, including a drainage swale in the southeast corner and a retention basin in the northwest corner of the substation;
- Install a temporary shoo-fly for the existing Tucson-Apache 115-kV transmission line.

Western will also conduct the following demolition activities:

- Remove and dispose of the existing pump house, warehouse, and associated foundations and equipment;
- Remove and dispose of existing underground utilities;
- Remove and dispose of approximately 2,300 feet of existing substation fencing;
- Remove and dispose of approximately 0.25 miles of 115-kV transmission line (conductor and associated equipment).

In addition, Western will modify one existing transmission line steel structure. The new three-breaker ring will be expandable to a breaker-and-a-half if future electrical demands warrant. The new yard will be built to 230 kV specifications, but energized at 115 kV until the rest of the regional system is upgraded to 230 kV. The new equipment yard will serve one 115-kV transmission line to Saguaro substation, one 115-kV line to Oracle substation, and one 115-kV line to Del Bac switchyard.

Project activities are anticipated to begin no sooner than August 2016 and will be completed by May 2018.
Special Conditions

1) **AIR QUALITY**
   
a) Western’s Contractor shall complete and submit a Fugitive Dust Activity Permit Application and a Dust Control Plan Application Form plus pay any permit fees to Pima County Department of Environmental Quality (PDEQ) before construction activities begin within Pima County. The Contractor shall submit copies of all permit applications and plans to the Contracting Officer’s Representative (COR) 14 days prior to the start of work. Information on dust control permitting can be found at the following website:
   

   b) Oil shall not be used as a dust suppressant. Dust suppressants shall be approved by the COR prior to use.

2) **HAZARDOUS MATERIALS**
   
a) Western’s contractor shall obtain the appropriate Federal, State, Tribal or local licenses or certifications prior to demolish activities. The Contractor shall submit copies of all licenses or certifications to the COR 14 days prior to demolition activities. If a building or portion of a building will be demolished, the Contractor shall obtain an Asbestos NESHAP Notification & Activity Permit from PDEQ. The Contractor shall ensure 1) worker and public safety requirements are fully implemented and 2) proper handling and transportation. All notifications must be postmarked or delivered at least 10 working days prior to beginning activities to PDEQ. The Contractor is responsible for all fees associated with submittal of NESHAP permit application. Information on NESHAP permitting is available online:
   

   b) All Asbestos-Containing Material (ACM) shall be handled and removed by appropriately licensed and certified workers.

   c) If new subsurface materials are discovered (e.g., water pipes, electrical conduit), the Contractor shall immediately notify the COR. The Contractor shall provide for appropriate sampling, handling, and analysis of these materials prior to completing any demolition or construction activities of these materials.

   d) The Contractor shall dispose of all ACM waste at an approved landfill. A certified federal representative must be present to sign all manifests or bills of lading for waste disposal. The following ACM has been identified within the project area:

   i) Black roof mastic/tar on the parapet of the pump house has been identified as ACM. The Contractor shall double bag or burrito wrap ACM roofing materials during demolition of the pump house and dispose of those materials at an approved landfill.

   ii) Window glazing in the warehouse has been identified as ACM. The Contractor shall double bag or burrito wrap all ACM window materials (glass, framing, and glazing) and dispose of those materials at an approved landfill.
3) **WATER QUALITY**

   a) Because the project will disturb greater than 1 acre of soil, the Contractor shall obtain a Storm Water Construction General Permit from the Arizona Department of Environmental Quality (ADEQ). The Contractor shall submit a Notice of Intent Application and appropriate fees (depending on total surface area disturbed) to ADEQ. Information on storm water permitting is available online:


   b) Because the project will disturb greater than 1 acre of soil, the Contractor shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP) that satisfies the conditions of the General Permit (above). The SWPPP shall be kept on-site during construction activities. The SWPPP is site specific and shall meet the following conditions listed below:

      i) Identifies potential sources of storm water pollution at the construction site
      ii) Describes practices to reduce pollutants in storm water discharges from construction site. Reduction of pollutants is often achieved by controlling the volume of storm water runoff (e.g., taking steps to allow storm water to infiltrate into the soil).
      iii) Identifies procedures the operator will implement to comply with the terms and conditions of a construction general permit.

   c) The Contractor shall submit copies of permits and plans, approved by the appropriate regulating agencies, to the COR 14 days prior to the start of on-site work.

4) **CULTURAL RESOURCES**

   a) In the event of archaeological discoveries or discoveries of human remains during ground-disturbing activities, these activities must cease in the immediate vicinity of the discovery and Western’s Archaeologist (602-605-2842) must be notified immediately. Western’s Archaeologist will consult with the Arizona State Historic Preservation Office and tribes to determine the appropriate course of action.
Figure 1. Project Location
Figure 2. Project Area