



U.S. Department of Energy Categorical Exclusion Determination Form

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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 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: *Lois Mowatt*

Date Determined: 3-31-15

Tucson Substation Rebuild, Stage 02

Tucson, Pima County, Arizona

Categorical Exclusion Continuation Sheet

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) inside the substation 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 service building;
- Install a cable trench and cable pull box with accessing the new service 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 July 2015 and will be completed by spring 2017.

<http://www.azdeq.gov/environ/water/permits/cgp.html>

- 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 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 Regional Preservation Officer (RPO, 602-605-2842) must be notified immediately. Western's RPO will consult with the Arizona State Historic Preservation Office and tribes to determine the appropriate course of action.

Checklist for Categorical Exclusion Determination, revised Nov. 2011

Application of Categorical Exclusions (1021.410)	Disagree	Agree	Unknown
(b)(1) The proposal fits within a class of actions that is listed in appendix A or B to subpart D.		X	
(b)(2) There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal, including, but not limited to, scientific controversy about the environmental effects of the proposal; uncertain effects or effects involving unique or unknown risks; and unresolved conflicts concerning alternate uses of available resources		X	
(b)(3) The proposal has not been segmented to meet the definition of a categorical exclusion. Segmentation can occur when a proposal is broken down into small parts in order to avoid the appearance of significance of the total action. The scope of a proposal must include the consideration of connected and cumulative actions, that is, the 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 § 1021.211 of this part concerning limitations on actions during EIS preparation.		X	
B. Conditions that are Integral Elements of the Classes of Actions in Appendix B. :	NO	YES	UNKNOWN
(1) Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety and health, or similar requirements of DOE or Executive Orders.	X		
(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;	X		
(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;	X		
(4) Have the potential to cause significant impacts on environmentally sensitive resources. An environmentally sensitive resource is typically a resource that has been identified as needing protection through Executive Order, statute, or regulation by Federal, state, or local government, or a federally recognized Indian tribe. An action may be categorically excluded if, although sensitive resources are present, the action would not have the potential to cause significant impacts on those resources (such as construction of a building with its foundation well above a sole-source aquifer or upland surface soil removal on a site that has wetlands). Environmentally sensitive resources include, but are not limited to:	X		

(i)	Property (such as sites, buildings, structures, and objects) of historic, archaeological, or architectural significance designated by a Federal, state, or local government, or property determined to be eligible for listing on the National Register of Historic Places;	X		
(ii)	Federally-listed threatened or endangered species or their habitat (including critical habitat) or Federally- proposed or candidate species or their habitat (Endangered Species Act); state-listed or state-proposed endangered or threatened species or their habitat; Federally-protected marine mammals and Essential Fish Habitat (Marine Mammal Protection Act; Magnuson-Stevens Fishery Conservation and Management Act); and otherwise Federally-protected species (such as under the Bald and Golden Eagle Protection Act or the Migratory Bird Treaty Act);	X		
(iii)	Floodplains and wetlands (as defined in 10 CFR 1022.4, —Compliance with Floodplain and Wetland Environmental Review Requirements: “Definitions,” or its successor);	X		
(iv)	Areas having a special designation such as Federally- and state-designated wilderness areas, national parks, national monuments, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, scenic areas (such as National Scenic and Historic Trails or National Scenic Areas), and marine sanctuaries;	X		
(v)	Prime or unique farmland, or other farmland of statewide or local importance, as defined at 7 CFR 658.2(a), —Farmland Protection Policy Act: Definitions, or its successor;	X		
(vi)	Special sources of water (such as sole-source aquifers, wellhead protection areas, and other water sources that are vital in a region); and	X		
(vii)	Tundra, coral reefs, or rain forests.; or	X		
(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 of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.	X		

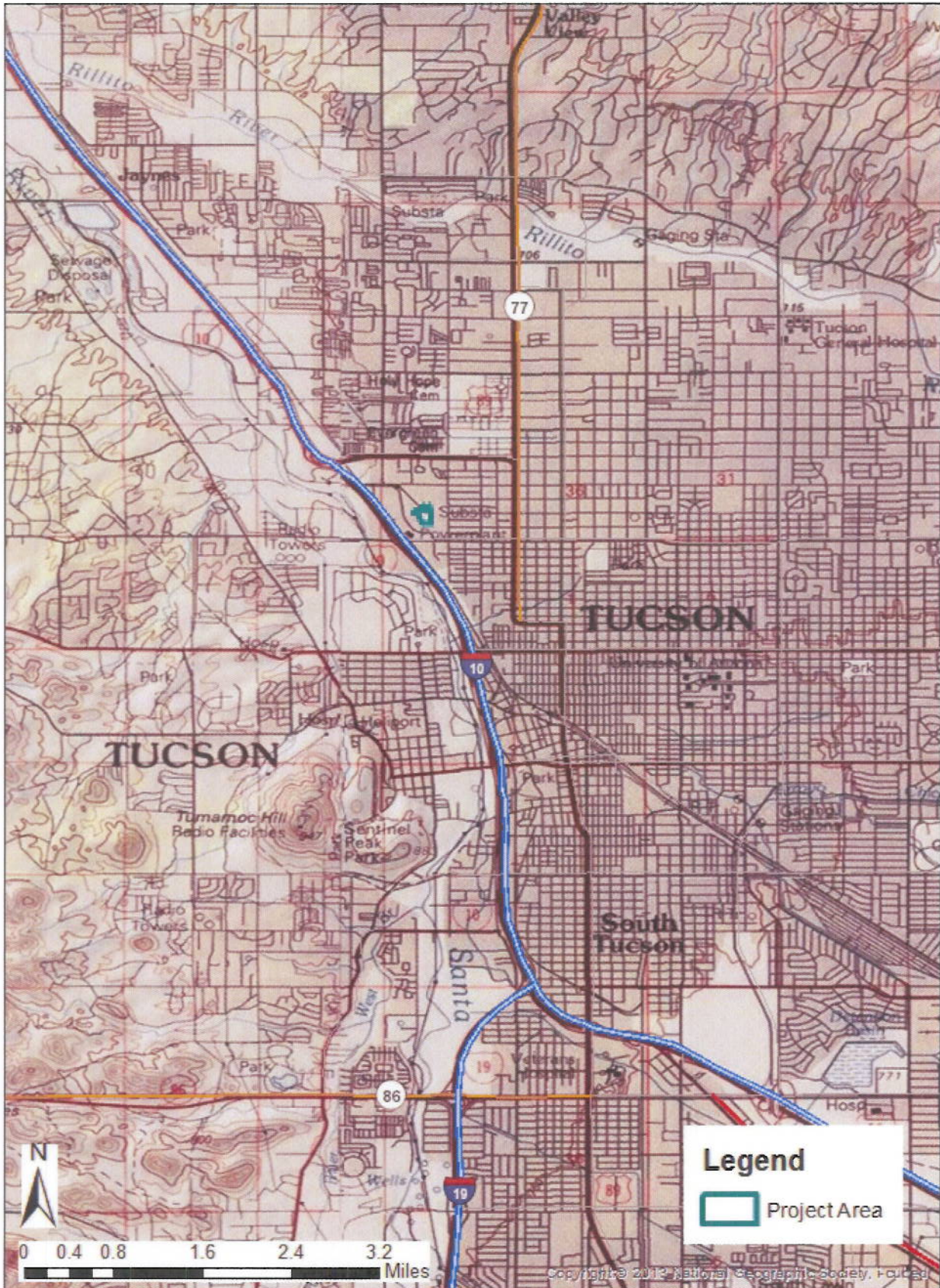


Figure 1. Project Location

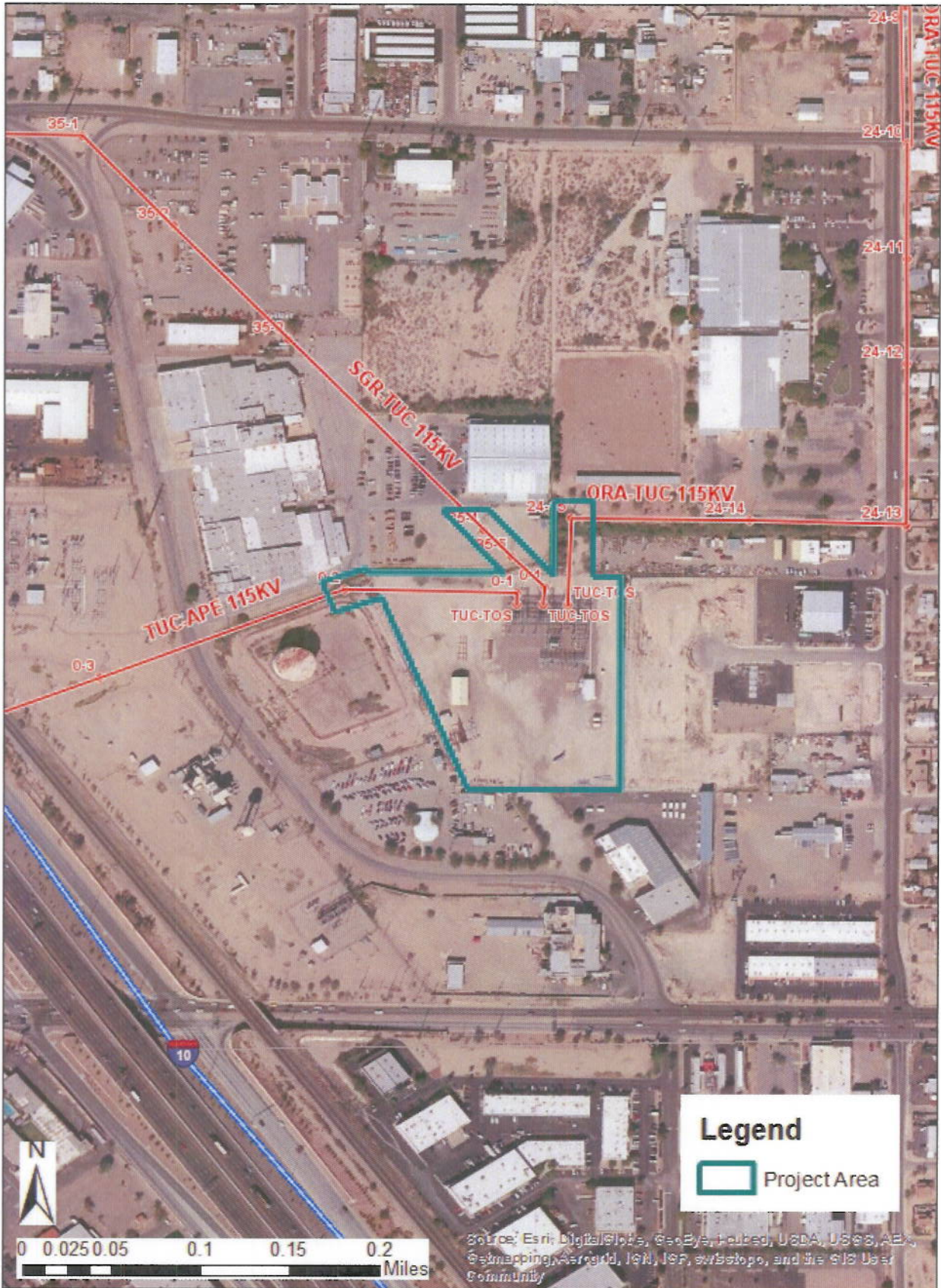


Figure 2. Project Area