Categorical Exclusion Determination
Bonneville Power Administration
Department of Energy

Proposed Action: Richland Substation Improvements and Equipment Upgrades at Red Mountain and White Bluffs Substations

Project Manager: Vincent “Charley” Majors – TEPF-CSB-2

Location: Benton County, WA

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B4.11 Electric Power Substation and Interconnection Facilities

Description of the Proposed Action: Bonneville Power Administration (BPA) proposes to modernize its Richland Substation, located in Richland, Washington. The work would largely consist of expanding the substation yard to install new equipment and removal of equipment from the existing control house and installation of new equipment in the new control house. The equipment is outdated and inadequate for providing reliable power to BPA’s service region.

A substation yard expansion is required on the northeast side of the substation yard to create space for the proposed larger area for new capacitor banks and to accommodate the proposed parking area for the east side of the substation property. A new ground mat would be installed under the expansion area and parking lot. The parking area would be temporarily backfilled with size A4 gravel for the duration of the construction activities and would be paved upon completion of construction work.

BPA is proposing to remove all equipment from the current control house at the site and install new equipment inside the new control house, which was already constructed at the site. The existing 14-foot-wide by 35-foot-long control house, along with a duct bank to the existing control house, would be demolished on site and disposed of at a BPA-approved landfill.

The substation equipment to be added or replaced in the electrical yard and new control house consists of relays, meters, disconnect switches, power circuit breakers, capacitor banks, circuit switchers, potential transformers, surge arresters, current transformers, and seismic risers. The existing Station Equipment Records/Supervisory Control and Data Acquisition (SER/SCADA) would be upgraded per current standards. Conduit and associated wiring would be installed from the new power circuit breaker foundations to the existing manhole system via trenching. All indoor and outdoor cables and wiring associated with this project would be replaced. All existing footings and foundations would be reused, to the extent possible. If footings or foundations must be replaced, excavation of a maximum of 2,500 cubic yards of soil and concrete would be required. Footings would be backfilled with up to 1,000 cubic yards of size A4 gravel.

During construction, a temporary mobile capacitor bank would be used to maintain electricity and voltage support. A new 75-foot-tall galvanized steel pole would be installed on the northwest side of the electrical yard to support overhead ground wire. Security equipment, including associated conduit and cables, would be installed at the substation and within the new control house. New
substation equipment and construction materials would be stored at BPA’s Ross Maintenance Headquarters (MHQ) in Vancouver, WA, or at BPA’s Nekitpe MHQ in Pasco, WA. These staging areas would be on pre-disturbed ground that is graveled or paved. Retired surfacing, concrete walks, and drain pipes would be disposed of per the Disposal Plan and Erosion and Sediment Control Plan. Electronic relay replacements would also occur inside the control houses at Red Mountain Substation and White Bluffs Substation.

Findings: In accordance with Section 1021.410(b) of the Department of Energy’s (DOE) National Environmental Policy Act (NEPA) Regulations (57 FR 15144, Apr. 24, 1992, as amended at 61 FR 36221-36243, Jul. 9, 1996; 61 FR 64608, Dec. 6, 1996, 76 FR 63764, Nov. 14, 2011), BPA has determined that the proposed action:

1) fits within a class of actions listed in Appendix B of 10 CFR 1021, Subpart D (see attached Environmental Checklist);
2) does not present any extraordinary circumstances that may affect the significance of the environmental effects of the proposal; and
3) has not been segmented to meet the definition of a categorical exclusion.

Based on these determinations, BPA finds that the proposed action is categorically excluded from further NEPA review.

/s/ Beth Belanger
Beth Belanger
Environmental Protection Specialist

Concur:

/s/ Sarah T. Biegel        July 11, 2022
Sarah T. Biegel        Date
NEPA Compliance Officer

Attachment: Environmental Checklist
Categorical Exclusion Environmental Checklist

This checklist documents environmental considerations for the proposed project and explains why the project would not have the potential to cause significant impacts on environmentally sensitive resources and would meet other integral elements of the applied categorical exclusion.

**Proposed Action:** Richland Substation Improvements and Equipment Upgrades at Red Mountain and White Bluffs Substations

**Project Site Description**

The project location is at BPA’s Richland Substation on Thayer Drive, in Richland, Washington; located in Section 15, Township 9 North, Range 28 East. Residential properties are located to the north and east of the substation. A paved walking path that is open to the public is located on the northwest side of the substation property. Washington State Highway 240 is located approximately 150 feet southwest of the substation and an off-ramp of the highway borders the property on the southeast side. The Yakima River is located on the opposite side of Highway 240, approximately 0.08 miles southwest of the project location.

White Bluffs Substation is located in Section 7, Township 10 North, Range 28 East, on the Hanford Nuclear Reservation, approximately eight miles northwest of the Richland Substation. The Red Mountain Substation is located in Section 11, Township 9 North, Range 27 East, approximately six miles to the west of Richland Substation.

**Evaluation of Potential Impacts to Environmental Resources**

1. **Historic and Cultural Resources**
   - **Potential for Significance:** No
   - **Explanation:** The Richland Substation was determined eligible for listing in the National Register of Historic Properties in 2018. BPA and Washington Department of Archaeology and Historic Preservation (DAHP) determined that the demolition of the eligible control house would result in an adverse effect. Mitigation for this adverse effect to historic properties was described in a Memorandum of Agreement between BPA and DAHP, which was signed and fully executed on October 23, 2018. In 2017, the entire substation parcel was surveyed for cultural resources for another project and no resources were detected. The current undertaking was reviewed by the BPA archaeologist and determined that there was no potential to cause effects to cultural resources.

   **Notes:**
   - Staging of materials would occur on previously-disturbed ground that is graveled or paved.

2. **Geology and Soils**
   - **Potential for Significance:** No
   - **Explanation:** Approximately two acres of ground would be disturbed during project activities at Richland Substation. Erosion control best management practices would be utilized during construction activities to prevent sediment transport off site. All proposed work at Red Mountain and White Bluffs Substations would be inside the existing control houses.
3. Plants (including Federal/state special-status species and habitats)

   Potential for Significance: No

   **Explanation:** Work would occur indoors or within previously disturbed areas, including the Richland substation yard and the front lawn of the substation. There are no federally protected or special-status species or habitats at the sites. Some existing landscape plants would be removed for the Richland substation expansion.

4. Wildlife (including Federal/state special-status species and habitats)

   Potential for Significance: No

   **Explanation:** The project areas have no Federal or state special-status species or habitats. Noise from construction activities at the Richland Substation may temporarily disturb some urban wildlife but the project would not permanently remove any habitat.

5. Water Bodies, Floodplains, and Fish (including Federal/state special-status species, ESUs, and habitats)

   Potential for Significance: No

   **Explanation:** The project locations and surrounding area have no water bodies, floodplains, or fish habitat that would be affected by project activities.

6. Wetlands

   Potential for Significance: No

   **Explanation:** There are no wetlands at the project locations.

7. Groundwater and Aquifers

   Potential for Significance: No

   **Explanation:** The nearest EPA sole-source aquifer, Lewiston Basin Aquifer, is over 85 miles east of the Richland Substation project area and would not be impacted by project activities. The majority of the depths of disturbance would be 24 to 36 inches. Excavation for the installation of the new pole for overhead groundwire would be to a depth of 14 feet. Geotechnical testing predicted groundwater levels at the site are 70-feet-below-ground.

   **Notes:**
   - Chemical/petroleum spill clean-up kits would be required onsite.

8. Land Use and Specially-Designated Areas

   Potential for Significance: No

   **Explanation:** The proposed substation upgrades and expansion are consistent with the present land use as a substation. There are no specially-designated areas at the project location.

9. Visual Quality

   Potential for Significance: No

   **Explanation:** The proposed work would be consistent with the existing visual landscape of the substation property.
10. Air Quality

Potential for Significance: No

_Explanation:_ A temporary increase of dust and vehicle emissions would occur during construction activities; however, there would be no long-term impacts to air quality.

11. Noise

Potential for Significance: No

_Explanation:_ A temporary increase in noise would occur during construction activities, but work would be limited to daylight hours.

12. Human Health and Safety

Potential for Significance: No with conditions

_Explanation:_ Testing of existing building materials has determined that asbestos and lead are present in the Richland Substation control house. Construction activities may limit the use of Thayer Drive.

**Notes:**

- Any disturbance to materials containing lead (drilling, cutting, or similar activities) shall be performed by persons trained in the removal, packaging, labeling, storage, and disposal of materials containing lead and/or asbestos.
- Materials containing lead and/or asbestos would be disposed of at a hazardous waste landfill approved by BPA.
- The construction contractor would develop and implement a traffic control plan in accordance with local regulations.

**Evaluation of Other Integral Elements**

The proposed project would also meet conditions that are integral elements of the categorical exclusion. The project would not:

**Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders.**

_Explanation:_ N/A

**Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators) that are not otherwise categorically excluded.**

_Explanation:_ N/A

**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.**
Explanation: Existing construction material at the site has been tested for asbestos, lead, and polychlorinated biphenyls (PCBs). Asbestos was found in regulated quantities (<1%-5%), lead was found in quantities <1%, and PCBs were found in non-regulated quantities. Removal of materials containing asbestos shall be performed by persons trained in the removal, packaging, labeling, storage, transportation, and disposal of asbestos-containing materials. Disposal shall be at a landfill permitted to accept asbestos and must be approved by BPA prior to disposal.

Any surfaces containing lead that would be disturbed shall be addressed by persons trained in the removal, packaging, labeling, storage, transportation, and disposal of hazardous wastes as defined by the Resource Conservation and Recovery Act. Any painted building material that is removed during this project is assumed to contain hazardous concentrations of lead and shall be disposed of at a Subtitle C hazardous waste landfill approved by BPA. All documentation associated with disposal of these wastes shall be provided to BPA including waste profiles, certificates of disposal, weight receipts, etc.

Excavated soils from removal of equipment and footings in the electrical yard would be stockpiled and sampled for hazardous substances. Contaminated material would be required to be disposed of at an approved Subtitle C hazardous waste landfill approved by BPA.

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.

Explanation: N/A

Landowner Notification, Involvement, or Coordination

Description: The property is on BPA fee-owned land. Adjacent neighbors would be notified prior to commencement of construction activities. A traffic control plan would be implemented to re-route traffic due to road closures.

Based on the foregoing, this proposed project does not have the potential to cause significant impacts to any environmentally sensitive resource.

Signed: /s/ Beth Belanger _________________________ July 11, 2022
Beth Belanger – ECT-4 Date
Environmental Protection Specialist