Categorical Exclusion Determination
Bonneville Power Administration
Department of Energy

Proposed Action: Department of Energy Richland 451B Disconnect Switch Replacements

Project No.: P03627-N0639

Project Manager: Mike Henjum TEPS-TPP-1

Location: Benton County, WA

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B4.11 Electric power substations and interconnection facilities; B4.13 Upgrading or rebuilding existing powerlines

Description of the Proposed Action: The Bonneville Power Administration (BPA) is responsible for acting as Transmission Owner and Transmission Operator for Department of Energy Richland (DOE-RL). Because of the current system configuration, DOE-RL’s 451-B 115 kV substation bus is considered a Bulk Electric System (BES) facility. The substation would be reconfigured and BPA would own and operate the new disconnect switches at the substation and on the structure. The existing disconnect switches do not meet BPA standards and would be replaced. Once DOE-RL no longer owns BES elements at 451-B substation, BPA would no longer need to serve as TO/TO in their behalf for that facility.

BPA proposes to remove and replace switches B-1407 and B-1409 and remove the ground switches associated with B-1411 and B-1425 located at the DOE-RL’s 451B Substation in Benton County, Washington. The associated footings and support structures would also be replaced for B-1407 and B-1409. BPA also proposes to replace the existing switch B-158 on Structure 2/7 of the Benton-451B 115-kV transmission line, located in Benton County, Washington. The substation and transmission line are both located within the boundary of the U.S. Department of Energy’s Hanford Nuclear Reservation. The existing switch on Structure 2/7 of the Benton-451B 115-kV transmission line would be replaced by climbing the pole and installing a more reliable switch referred to as a Vacuum Interrupter. The existing switch stand and support structure would be reused and no ground-disturbing activities would occur for the switch replacement on Structure 2/7.

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/ Christopher H. Furey  
Christopher H. Furey  
Environmental Protection Specialist

Concur:

/s/ Sarah T. Biegel  
Sarah T. Biegel  
NEPA Compliance Officer  
April 7, 2022

Attachment(s): 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:** DOE RL 451B Disconnect Switch Replacements

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**Project Site Description**

The removal and replacement of switches B-1407 and B-1409 and removal of the ground switches associated with B-1411 and B-1425 would occur in the fenced gravel area of the Department of Energy’s 451 B Substation in Benton County, WA. The associated footings and support structures for B-1407 and B-1409 would also be replaced in the substation. The replacement of existing switch B-158 would occur on Structure 2/7 of the Benton-451B 115-kV transmission line in Benton County. The structure is accessible from an existing access road near the rail line. The substation and transmission line structure are both located within the boundary of the U.S. Department of Energy’s Hanford Nuclear Reservation. The area around the substation and transmission line is arid with limited vegetation with no residences nearby. The Columbia River and the closest wetland are over 1.9 miles east of Structure 2/7 and over 4.4 miles east of the substation. Irrigated farming parcels are located over 2 miles east of Structure 2/7 and 4.5 miles from the substation.

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**Evaluation of Potential Impacts to Environmental Resources**

1. **Historic and Cultural Resources**

   Potential for Significance: No

   **Explanation:** BPA archaeologist and historian reviewed the proposed activities and determined, per 36 CFR 800.3(a)(1), that this undertaking is a type of activity that does not have potential to cause effects on historic properties, assuming such historic properties were present.

2. **Geology and Soils**

   Potential for Significance: No

   **Explanation:** Some ground-disturbing work would take place within the fenced substation to replace the ground switches. No ground disturbance for the switch replacement on Structure 2/7 on the transmission line. No specific geological concerns with no adverse impacts to soils and geology. Soil handling at the substation would follow appropriate protocols.

   **Notes:**
   - Use of BMPs for dust and soil control would be expected to be used. Coordinate with the EP environmental lead for soil handling at the substation located on the Hanford Nuclear Reservation.

3. **Plants (including Federal/state special-status species and habitats)**

   Potential for Significance: No
Explanation: The project area at the substation is a fenced area with no plants. The area around Structure 2/7 is next to an access road with limited to no vegetation. No adverse impacts to plants are expected.

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

Potential for Significance: No

Explanation: The project area at the substation is a fenced area. The area around Structure 2/7 is next to an access road with limited to no vegetation. No adverse impacts to wildlife or habitat are expected.

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

Potential for Significance: No

Explanation: No stream or other water bodies are within 1.9 miles of the project area. No adverse impacts to waterbodies, floodplain, or fish are expected.

Notes:
- Use of BMPs for dust and erosion control would be expected to be used at the project site.

6. Wetlands

Potential for Significance: No

Explanation: The project area is arid, with no wetlands on or adjacent to it. No adverse impacts to wetlands are expected.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: The shallow digging within the substation for replacement of the ground switches is not expected to affect groundwater or the aquifer. No adverse impacts to groundwater or aquifers are expected.

Notes:
- Any excess soil would need to be handled and disposed of appropriately in coordination with the EP environmental lead.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: The proposed action to replace the disconnect switches would not change the existing land use.

9. Visual Quality

Potential for Significance: No

Explanation: There would be limited visual changes to the project area or surrounding environment by the installation of the new equipment at the substation and on transmission line Structure 2/7.
10. Air Quality

Potential for Significance: No

Explanation: A small amount of dust and vehicle emissions would occur during installation.
Notes: Soil disturbance and handling should be coordinated with the EP environmental lead to avoid any air quality issues for workers.

11. Noise

Potential for Significance: No

Explanation: Some temporary noise from equipment and vehicle use during installation. No adverse impacts from noise are expected.

12. Human Health and Safety

Potential for Significance: No

Explanation: No direct impacts expected for this work to be conducted by qualified personnel. Soil handling shall be coordinated with the EP environmental lead.

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: Radiation (RAD) surveys/testing will need to be performed for any soil, concrete, asphalt, wood poles, or similar that requires disposal from the project area. Wood poles will need to be RAD tested and cleared before they can be removed from Hanford for disposal. All soils, concrete, and asphalt are managed by Hanford and disposed within Hanford at Pit 9. Coordination of these surveys and disposal processes must occur through BPA’s Substation Operations and Pollution, Prevention, and Abatement team.

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: BPA Transmission will be in coordination with Department of Energy personnel for this work at the Hanford Nuclear Reservation.

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

Signed: /s/ Christopher H. Furey  April 7, 2022  
Christopher H. Furey  Date  
Environmental Protection Specialist