**Proposed Action:** North Bonneville Substation Grid Modernization Project

**PP&A No.:** 4416

**Project Manager:** Kelly Gardner – TEPS-TPP-1

**Location:** Skamania County, Washington

**Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021):** B4.11 Electric power substations and interconnection facilities

**Description of the Proposed Action:** Bonneville Power Administration (BPA) proposes to expand the North Bonneville Substation and to install substation equipment to support grid modernization. The North Bonneville Substation Grid Modernization project would upgrade communications, replace line relays for North Bonneville - Bonneville Powerhouse 2 Lines 1 & 2 and North Bonneville - Bonneville Powerhouse 1 Lines 2 & 4, replace SER/SCADA and add metering systems. Grid modernization upgrades to the North Bonneville Substation would also include installation of twelve current transformers and twelve surge arresters inside the existing substation. Some risers would be removed and replaced with more seismically stable risers.

To facilitate these additions, the substation would be expanded to the south of the southwest corner of the substation. The expansion area would measure approximately 100 feet by 150 feet and would be located between structures 1/4 and 1/5 of the Bonneville Powerhouse 1-Alcoa 1&2 No. 2 and Bonneville Powerhouse 1-North Camas No. 1 transmission lines. The expansion area would contain two dead end support structures, six each current and potential transformers, and twelve bus support structures. A ground grid, connected to the grid of the existing substation, would be installed in the expansion area. A communications line currently located in the proposed expansion area would be rerouted, which would include approximately ¼ mile of trenching (approximately 1 foot wide) and conduit installation extending from the corner of the expansion area to the west of the substation, following the existing pedestrian path along Cascade Drive. Inside the control house, six sets of meters and one terminal server would be installed; and four sets of line relays and SER/SCADA would be replaced.

**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/ Emma Reinemann  
Emma Reinemann  
Physical Scientist (Environmental)

Concur:

/s/ Katey C. Grange  
Date: June 11, 2021  
Katey C. Grange  
NEPA Compliance Officer

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:** North Bonneville Substation Grid Modernization Project

**Project Site Description**

The project would occur in North Bonneville Substation and would expand the substation fence into the right-of-way of the Bonneville Powerhouse 1-Alcoa 1&2 No. 2 and Bonneville Powerhouse 1-North Camas No. 1 transmission lines. The substation is situated between Greenleaf Creek (about 300 feet from work area) and Washington Highway 14 to the east of the town of North Bonneville Substation. The existing substation yard is rocked and the expansion area is currently maintained as a lawn. The project area is located within a designated Urban Area of the Columbia River Gorge National Scenic Area (CRGNSA).

**Evaluation of Potential Impacts to Environmental Resources**

1. **Historic and Cultural Resources**

   Potential for Significance: No with Conditions

   **Explanation:** Because this project is planned to be constructed concurrently with and in the same general area as the Bonneville Powerhouse Transfer Trip Replacement Project, Section 106 consultations for the two project areas were combined. The project area was surveyed by a BPA archaeologist and a determination letter which stated no historic properties would be affected by project activities was distributed to the Washington Department of Archaeology & Historic Preservation (DAHP), Cowlitz Indian Tribe, The Confederated Tribes of the Grand Ronde Community of Oregon, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon, National Park Service, Nez Perce Tribe, Oregon Heritage State Historic Preservation Office, U.S. Army Corps of Engineers, Washington State Department of Transportation, and Confederated Tribes and Bands of the Yakima Nation. Two addendums were issued due to scope changes. DAHP occurred with the final determination on April 30, 2021. No additional responses were received.

   **Notes:**
   - A cultural monitor must be present on site for all ground disturbing activities that extend below the surface of the substation.

2. **Geology and Soils**

   Potential for Significance: No

   **Explanation:** Localized soil disturbance would occur during construction. Standard erosion control measures would be implemented to prevent sediment migration off site. Any excess spoils generated during project activities would be disposed of off-site.
3. **Plants (including Federal/state special-status species and habitats)**

   Potential for Significance: No

   **Explanation:** The project would result in some minor permanent impacts to vegetation as the expansion area would rock over approximately 1,500 square feet of maintained grass lawn. There are no Federal or state special-status species or habitats in the project area. The work occurring inside the rocked substation would have no effect on plants.

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

   Potential for Significance: No

   **Explanation:** There are no Federal or state special-status species known to inhabit the project area. Project activities would temporarily disturb local wildlife during construction, but the disturbance would be limited to the area immediately adjacent to the substation where wildlife would already be habituated to operational noise.

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

   Potential for Significance: No

   **Explanation:** No in-water work is proposed for this project. Standard construction erosion control measures would be utilized to ensure sediment and other contaminants do not enter bodies of water; therefore, water bodies, floodplains, and fish would not be affected by the proposed project activities.

6. **Wetlands**

   Potential for Significance: No

   **Explanation:** There are no wetlands located in the vicinity of the project area.

7. **Groundwater and Aquifers**

   Potential for Significance: No

   **Explanation:** Project activities are not expected to impact groundwater or aquifers.

8. **Land Use and Specially-Designated Areas**

   Potential for Significance: No with Conditions

   **Explanation:** The substation is located within a designated Urban Area of the Columbia River Gorge National Scenic Area (CRGNSA); urban area designation areas do not require CRGNSA management plan consistency.

9. **Visual Quality**

   Potential for Significance: No

   **Explanation:** Although the substation can be seen briefly from highway 14, substation improvement and expansion would be consistent with the character of surrounding land use.

10. **Air Quality**

    Potential for Significance: No
Explanation: Exhaust and dust from utility and construction equipment may temporarily reduce air quality in the immediate project area.

11. Noise

Potential for Significance: No

Explanation: Temporary noise would occur during construction. There would be no change to the operational noise of the substation or transmission line.

12. Human Health and Safety

Potential for Significance: No

Explanation: A health and safety plan would be prepared by the contractor prior to construction and reviewed by the BPA safety office. The contractor would adhere to this safety plan during project activities.

**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: N/A

**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: All project activities would occur on BPA fee-owned land. BPA coordinated with the USFS on November 5, 2020 due to the project’s location in the CRGNSA.

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

Signed: /s/ Emma Reinemann
Emma Reinemann – EPR-4
Physical Scientist (Environmental)

Date: June 11, 2021