Proposed Action: Longview Substation Shunt Capacitor Group Relocation

Project Manager: Rasha M. Kroonen, TEPS-TPP-1

Location: Cowlitz County, Washington

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B4.6 Additions and modifications to transmission facilities; B4.11 Electric power substations and interconnection facilities

Description of the Proposed Action: Bonneville Power Administration (BPA) proposes to replace an existing 230-kilovolt (kV) shunt capacitor group and associated switching and protective equipment at Longview Substation near Longview, Cowlitz County, Washington (Township 8 North, Range 3 East, Donation Land Claim 38). The new shunt capacitors, which stabilize voltage fluctuations that could otherwise damage transmission equipment, are required to maintain transmission system reliability.

The existing capacitor group would be removed from Bay #10, and a new 230-kV capacitor group and associated equipment would be installed in Bay #4. Substation equipment would also be replaced in Bays #1, #6, and #9. In total, the new equipment would include:

- Two shunt capacitors
- Four power circuit breakers
- Twelve disconnect switches
- Twelve surge arrestors
- Three current transformers
- Six current limiting reactors

To accommodate the new equipment, the substation yard would be expanded by approximately 30,000 square feet on existing fill material to the northwest. Expanding the substation yard would require excavating up to three feet deep; installing grounding, foundations, conduit, cable trench, and piping; compacting fill material to the appropriate surface grade; adding crushed rock; and relocating the existing perimeter security fencing. BPA could also decommission and/or remove portions of the existing oil containment system, which is located in a grassy area north of the substation yard. New oil containment and stormwater management infrastructure would be installed primarily within the existing substation yard; although trenching to install a new stormwater outfall to an existing drainage ditch outside of the substation may be required.

Inside the control house, BPA would upgrade electronic protection and control equipment within existing equipment racks. The upgraded equipment would include relays, breaker differential relays, GPS and termination frame installations, a DC battery system, cable trays, and SCADA.
Completion of the project would require the use of heavy equipment, including an excavator, dump truck, grader, and compactor. Materials and equipment staging would be located on the previously-disturbed, compacted fill material that constitutes the substation yard and surrounding parking areas.

**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/ W. Walker Stinnette  
W. Walker Stinnette  
Contract Environmental Protection Specialist  
Salient CRGT

Reviewed by:

/s/ Carol P. Leiter  
Carol P. Leiter  
Supervisory Environmental Protection Specialist

Concur:

/s/ Sarah T. Biegel  
November 17, 2021  
Sarah T. Biegel  
Date  
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:** Longview Substation Shunt Capacitor Group Relocation

**Project Site Description**

The project site is located on Bonneville Power Administration (BPA) fee-owned property at BPA’s Longview Substation near Longview, Cowlitz County, Washington (Township 8 North, Range 3 East, Donation Land Claim 38). The site includes portions of the energized substation yard, a parking/staging area immediately northwest of the yard where the substation expansion would occur, and a small grassy area north of the yard where the existing oil containment would be removed. All ground-disturbing activities would be carried out within or immediately outside of the fenced substation yard in areas that are heavily disturbed and consist of compacted, non-native fill material. Although a small amount of weedy herbaceous vegetation is present within the project site (i.e., near the existing oil containment vault and the potential new stormwater outfall), the substation yard and the expansion area are largely maintained free of vegetation. The primary native soil type underlying the fill is Snohomish silty clay loam, which is hydric and associated with wetlands. Undeveloped wetlands are located approximately 400 feet north of the project site on the opposite side of Industrial Way. The closest water body is an artificial canal (Ditch Number Five) located approximately 1,300 feet west of the project site, and the Columbia River is located over 2,000 feet southwest of the project site. The surrounding area is a mix of industrial and commercial properties.

**Evaluation of Potential Impacts to Environmental Resources**

1. **Historic and Cultural Resources**

   Potential for Significance: No

   **Explanation:** Longview Substation is not eligible for inclusion on the National Register of Historic Places due to alterations and loss of integrity. Construction activities would not adversely impact the integrity of archaeological resources, as all ground-disturbing activities would occur within the previously-disturbed, compacted, and non-native fill material that constitutes the substation yard and surrounding areas. Therefore, the proposed undertaking would have no potential to cause effects to historic properties.

2. **Geology and Soils**

   Potential for Significance: No with Conditions

   **Explanation:** All soil disturbance would occur within the previously-disturbed, compacted, and non-native fill material that constitutes the substation yard and surrounding areas. Standard construction best management practices (BMPs) would prevent erosion and sedimentation. Therefore, the proposed action would not impact geology and soils.
Notes:
- Implement a BPA-approved Stormwater Pollution Prevention Plan (SWPPP), with an associated Erosion and Sediment Control Plan (ESCP), that is guided by Washington Department of Ecology’s Stormwater Management Manual for Western Washington.
- Test excavated material and foundations for hazardous materials. If hazardous materials are identified, then excavated material and foundations would be disposed of off-site according to all local, state, and Federal regulations.

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

Potential for Significance: No

Explanation: A small amount of weeds and grasses could be removed during the decommissioning of the existing oil containment vaults and installation of a new stormwater outfall. No special-status plant species or plant species protected under the Federal Endangered Species Act (ESA) are present near the project site. Therefore, the proposed action would have no effect on special-status plant species or habitats.

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

Potential for Significance: No

Explanation: In February 2020, BPA relocated an osprey (Pandion haliaetus) nest from a steel-lattice structure within the substation yard to an artificial nesting platform adjacent to the substation. The osprey has since occupied the relocated nest and is no longer nesting within the substation. Minor and temporary disruption of normal wildlife behavior could occur from elevated noise and human presence during construction. However, current ambient noise and disturbances are high in the area due to routine maintenance and operations at the substation and activities associated with surrounding industrial and commercial land uses. As such, wildlife species that could be present in the area would likely already be habituated to human activity. There are no other known occurrences of any special-status wildlife species or wildlife species protected under the Federal ESA, and no suitable species habitat is present. Therefore, the proposed action would have no effect on special-status wildlife species or habitats.

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

Potential for Significance: No with Conditions

Explanation: The proposed action includes installation of a new oil containment system and stormwater management infrastructure, which would be built in accordance with all applicable local, state, and Federal regulations. No waterbodies, floodplains, or fish-bearing streams are present within 1,000 feet of the project site. Standard construction BMPs would prevent indirect impacts to off-site waterbodies, floodplains, and fish. Therefore, the proposed action would not impact water bodies and floodplains and would have no effect on special-status fish species or habitats.

Notes:
- Implement a BPA-approved SWPPP, with an associated ESCP, that is guided by Washington Department of Ecology’s Stormwater Management Manual for Western Washington.
- Maintain a spill kit on-site during construction to address containment, cleanup, and disposal in the event of a spill.
6. **Wetlands**

Potential for Significance: No with Conditions

**Explanation:** No wetlands are present within the project site. Standard construction BMPs would prevent indirect impacts to off-site wetlands. Therefore, the proposed action would not impact wetlands.

**Notes:**
- Implement a BPA-approved SWPPP, with an associated ESCP, that is guided by Washington Department of Ecology’s Stormwater Management Manual for Western Washington.
- Maintain a spill kit on-site during construction to address containment, cleanup, and disposal in the event of a spill.

7. **Groundwater and Aquifers**

Potential for Significance: No with Conditions

**Explanation:** Ground excavation could reach a depth that would intersect groundwater. Standard construction BMPs would reduce the potential for inadvertent spills of hazardous materials that could contaminate groundwater or aquifers. No new wells or other uses of groundwater or aquifers are proposed. Therefore, the proposed action would not impact groundwater or aquifers.

**Notes:**
- Maintain a spill kit on-site during construction to address containment, cleanup, and disposal in the event of a spill.

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

Potential for Significance: No

**Explanation:** The proposed action would be consistent with current land uses, and the project site is not located in a specially-designated area. Therefore, the proposed action would not impact land use or specially-designated areas.

9. **Visual Quality**

Potential for Significance: No

**Explanation:** The proposed action would result in a perceptible change in the appearance of Longview Substation. However, these changes would be minor relative to the scale of existing structures and equipment and would be consistent with the existing visual quality of the area.

10. **Air Quality**

Potential for Significance: No

**Explanation:** Construction activities would result in a minor and temporary increase in dust and emissions in the local area. There would be no long-term change in air quality following completion of the proposed action.

11. **Noise**

Potential for Significance: No
Explanation: Current ambient noise levels are high given surrounding industrial and commercial land uses. During construction, use of vehicles and equipment and general construction activities could temporarily and intermittently produce noise at levels higher than current ambient conditions. There would be no long-term change in ambient noise following completion of the project.

12. Human Health and Safety

Potential for Significance: No

Explanation: Standard construction BMPs would minimize risk to human health and safety. Therefore, the proposed action would not be expected to impact human health and safety.

Notes:
- Test excavated material and foundations for hazardous materials. If hazardous materials are identified, then excavated material and foundations would be disposed of off-site according to all local, state, and Federal 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: Prior to construction, BPA would sample to identify any hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that could be present within the substation yard. If any such materials are identified, then BPA would appropriately manage them according to all local, state, and Federal regulations to ensure there are no uncontrolled or unpermitted releases.

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:** Longview Substation is BPA fee-owned property, and the proposed action would not impact adjacent properties. No landowner notification, involvement, or coordination would be required.

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

Signed: /s/ W. Walker Stinnette  
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Contract Environmental Protection Specialist  
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November 17, 2021  
Date