

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: Maple Valley Substation Transformer Installation and Yard Expansion

Project No.: P05738

Project Manager: Darin Bowman, TEPS-TPP-1

Location: King County, Washington

Categorical Exclusion Applied (from 10 C.F.R. Part 1021): B1.3 Routine maintenance; B4.6 Additions and modifications to transmission facilities

Description of the Proposed Action: Bonneville Power Administration (BPA) proposes to replace aging substation equipment and to reconfigure and expand the substation yard at BPA's Maple Valley Substation on BPA fee-owned property in King County, Washington. One phase of Bank 1 transformer at Maple Valley Substation has failed and the other two banks do not meet current BPA operational standards. Additionally, the bank transformers are past the end of their functional life and are due for replacement.

The proposed action would replace, modify, and/or install new substation equipment in the yard and new electronic equipment in the control house. The substation yard would be expanded by approximately 0.5 acre within the current BPA fee-owned property to contain the new equipment. The existing substation perimeter fence would be modified to include approximately 245 feet of new perimeter fencing with a 20-foot-wide access gate.

Additionally, BPA would replace, modify, and/or install new substation equipment and structures, including:

- Three 345-kV transformers
- Main bus potential transformers
- Rigid bus work
- Station service yard panels

New foundations for all new and replaced substation equipment would be installed throughout the existing and expanded yard, and the existing foundations would be removed.

To accommodate the new bay, the substation yard would be expanded by approximately 0.5 acre to the east. Expanding the substation yard would require clearing vegetation, importing approximately 2,000 cubic yards of material, compacting and grading the fill, and resurfacing with crushed rock. Within the expansion area, BPA would install grounding, a new pre-cast trench or conduit system to house cable and/or piping, stormwater piping, underground oil and water separator vaults, and outdoor lighting.

Inside the existing Maple Valley Substation control house, BPA would replace and reconfigure electronic equipment, racks, cable trays, and associated wiring. The equipment would include protective relaying and control equipment, alarms, GPS clocks, meters, AC panels, battery chargers, and printers.

In total, expanding the substation yard would cause up to approximately 0.5 acre of permanent ground disturbance and approximately 0.2 acre of additional temporary ground disturbance. Temporarily disturbed areas would be re-seeded with a native, regionally appropriate seed mix. No additional property rights would be required for the substation expansion. Completion of the project would require the use of heavy equipment, such as an excavator, dump truck, grader, compactor, crane, and boom truck. Materials and equipment would be temporarily staged in existing gravel areas.

The Federal Columbia River Transmission System Act directs BPA to construct, acquire, operate, maintain, repair, relocate, and replace the transmission system, including facilities and structures appurtenant thereto. (16 United States Code [U.S.C] § 838i(b)). The Administrator is further charged with maintaining electrical stability and reliability, selling transmission and interconnection services, and providing service to BPA's customers. (16 U.S.C § 838b(b-d)). The Administrator is also authorized to conduct electrical research, development, experimentation, tests, and investigation related to construction, operation, and maintenance of transmission systems and facilities. (16 U.S.C § 838i(b)(3)).

Findings: In accordance with Section 1021.102 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; 89 FR 34074, April 30, 2024; 90 FR 29676, July 3, 2025 [Interim Final Rule]) and *DOE National Environmental Policy Act (NEPA), Implementing Procedures* (dated June 30, 2025), BPA has determined the following:

- 1) The proposed action fits within a class of actions listed in Appendix B of 10 CFR 1021;
- 2) The proposal has not been segmented to meet the definition of a categorical exclusion; and
- 3) There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal (see attached Environmental Evaluation).

Based on these determinations, BPA finds that the proposed action is categorically excluded from further NEPA review.¹

Justin M. Olmsted
Environmental Protection Specialist

Concur:

Katey C. Grange
NEPA Compliance Officer

Attachment(s): Environmental Checklist

¹ BPA is aware that the Council on Environmental Quality (CEQ), on February 25, 2025, issued an interim final rule to remove its NEPA implementing regulations at 40 C.F.R. Parts 1500–1508. Based on CEQ guidance, and to promote completion of its NEPA review in a timely manner and without delay, in this CX BPA is voluntarily relying on the CEQ regulations, in addition to the interim final rule to revise DOE NEPA regulations implementing NEPA at 10 C.F.R. Part 1021 and NEPA Implementing Procedures (dated June 30, 2025), to meet its obligations under NEPA, 42 U.S.C. §§ 4321 et seq.

Categorical Exclusion Environmental Evaluation

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: Maple Valley Substation Transformer Replacement and Yard Expansion

Project Site Description

The project site is located at BPA's Maple Valley Substation off SE Royal Hills Drive on BPA fee-owned property in Renton, King County, Washington (Township 21 North, Range 5 East, Sections 20 and 21). The yard expansion would occur on the undeveloped northeast corner of the substation within an area of previous ground disturbance. The Arents soil series is mapped within the project site, which is not hydric. No wetlands or surface waters are present within or near the project site. Existing vegetation includes native and non-native shrubs and grasses, along with bordering tree stands consisting of coniferous and deciduous species. The surrounding area is urbanized with a mix of residential properties, isolated tree stands, public parks, and other recreational areas, including Ginger Creek, Tiffany, and Philip Arnold parks.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No

Explanation: Pursuant to its responsibilities under Section 106 of the National Historic Preservation Act and implementing regulations 36 CFR 800, BPA initiated consultation with the Puyallup Tribe, the Snoqualmie Indian Tribe, the Tulalip Tribe, the Muckleshoot Indian Tribe, and the Washington Department of Archaeology and Historic Preservation (DAHP) on August 27, 2025.

DAHP concurred with BPA's delineation of the Area of Potential Effects (APE) and concurred with its determination of No Historic Properties Affected on August 28, 2025. The Snoqualmie Tribe reviewed the project and had no substantive comments. No other responses were received within 30 days. In the unlikely event that cultural material is inadvertently encountered during the implementation of this project, BPA would require that work be halted in the vicinity of the finds until they can be inspected and assessed by BPA and in consultation with the appropriate consulting parties.

Notes:

- Ensure BPA and its Contractors have a copy of BPA's Inadvertent Discovery Protocol during construction.

2. Geology and Soils

Potential for Significance: No

Explanation: The proposed action could cause approximately 0.5 acre of permanent soil removal on previously disturbed ground. Standard construction best management practices (BMPs) would be implemented to minimize soil erosion, sedimentation, and fugitive dust. A silt fence would be installed on the eastern edge of the project site for erosion control. Temporarily disturbed soil would stabilize as vegetation is reestablished after reseeding following project completion. The proposed action would not impact geology.

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

Potential for Significance: No

Explanation: The proposed action would permanently remove approximately 0.5 acre of common grasses, shrubs, and non-native blackberry. Additional vegetation bordering the new yard may temporarily be crushed, stripped, or buried during construction. Standard construction BMPs would be implemented to stabilize soils, re-establish vegetation, and minimize the spread of noxious weeds. Temporarily disturbed areas would be seeded and would eventually return to near pre-existing conditions following completion of the proposed action. There are no documented occurrences of any special-status plant species, including plants listed under the federal Endangered Species Act (ESA), near the project site.

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

Potential for Significance: No

Explanation: The proposed action would permanently remove up to approximately 0.5 acre of habitat. Additional minor and temporary wildlife disturbance could occur from elevated noise and human presence during construction. It is expected that most wildlife species that could be present would be able to avoid the project site during construction and would likely reoccupy temporarily disturbed areas once vegetation is re-established. No special-status wildlife species or wildlife species protected under the federal ESA are expected to occur near the project site.

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

Potential for Significance: No

Explanation: No water bodies, floodplains, or fish-bearing streams are located within 500 feet of the project site. The proposed action would not impact these water bodies or floodplains and would have no effect on special-status fish species or habitats.

6. Wetlands

Potential for Significance: No

Explanation: No wetlands are present within 500 feet of the project site. Therefore, the proposed action would not impact wetlands.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: Ground excavation would not reach depths to ground water, and standard construction BMPs would reduce the potential for inadvertent spills of hazardous materials that could contaminate groundwater or aquifers. Therefore, the proposed action would not impact groundwater or aquifers.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: The proposed action would convert approximately 0.5 acre of undeveloped land to a substation yard, which would be consistent with the existing transmission infrastructure land use at the site. The proposed action would not impact nearby housing developments, and the project site is not located in a specially-designated area.

9. Visual Quality

Potential for Significance: No

Explanation: During construction, the presence of construction equipment and general construction activities, including vegetation disturbance, would cause temporary visual impacts.

Expanding the substation would cause permanent visual impacts; however, the majority of the project site would be hidden from public view due to trees and vegetation which would not be impacted by the proposed actions. Following project completion, the visual quality of the substation would be visually consistent with the existing utility infrastructure at the site.

10. Air Quality

Potential for Significance: No

Explanation: The proposed action would cause a minor and temporary increase in dust and emissions in the local area from general construction activities. However, standard construction BMPs would suppress dust. There would be no significant long-term changes in air quality following completion of the proposed action.

11. Noise

Potential for Significance: No

Explanation: The proposed action would result in temporary noise associated with construction activities, which would intermittently exceed current ambient conditions. Construction noise could be audible from surrounding residents within the general vicinity; however, construction would only occur during daylight hours (approximately 7:00am to 7:00pm). Following construction, noise would return to near pre-existing conditions. Overall, the proposed actions would have minimal impact on noise.

12. Human Health and Safety

Potential for Significance: No

Explanation: All standard safety protocols would be followed throughout implementation of the proposed action to minimize the risk to human health and safety. Therefore, the proposed action would not be expected to impact human health and safety.

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: The proposed action would occur on BPA fee-owned property.

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

Signed:

Justin M. Olmsted
Environmental Protection Specialist