

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: Bonneville Powerhouse – North Bonneville Substation Transfer Trip Replacement

Project Manager: Kelly J. Gardner, TEPS-TPP-1

Location: Multnomah County, Oregon and Skamania County, Washington

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B1.7 Electronic equipment; B1.19 Microwave, meteorological, and radio towers; B1.24 Property transfers

Description of the Proposed Action: Bonneville Power Administration (BPA) proposes to establish a new communications path and to replace protective relays and control equipment associated with four 230-kilovolt (kV) transmission lines (Bonneville Powerhouse 1 – North Bonneville No. 1 and No. 2 and Bonneville Powerhouse 2 – North Bonneville No. 3 and No. 4) in Multnomah County, Oregon and Skamania County, Washington. Work would be carried out at United States Army Corps of Engineers' (USACE's) Bonneville Dam Powerhouse 1 (PH 1) and Bonneville Dam Powerhouse 2 (PH 2) and at BPA's North Bonneville Substation and Bradford Island Radio Station. The following specific activities are proposed:

Bonneville PH 1: BPA would install new equipment racks inside of PH 1 to house new telecommunications equipment and would replace protective relays, control equipment, and associated wiring and cabling. No exterior work or ground disturbance would be required at PH 1.

Bonneville PH 2: On the south side of PH 2, BPA would mount a new microwave dish on a pole attached near the roofline of the powerhouse. BPA would install new equipment racks inside of PH 2 to house new telecommunications equipment and would replace protective relays, control equipment, and associated wiring and cabling. To achieve an unobstructed microwave beam path between PH 2 and North Bonneville Substation, BPA would remove up to 10 black cottonwood trees (*Populus balsamifera ssp. trichocarpa*) and up to 10 Douglas-fir trees (*Pseudotsuga menziesii*) located near PH 2, Highway 14, and the BNSF railway. The trees would be cut at ground level and the stumps left in place to minimize ground disturbance. No other tree or vegetation removal would be required. BPA would acquire the necessary beam path easements from the underlying landowners.

North Bonneville Substation: In the substation yard, BPA would construct an approximately 60-foot steel monopole communications structure on an approximately 15-foot by 15-foot concrete foundation. Installing the new structure would require excavating up to three feet deep, installing grounding and foundations, and then backfilling and compacting to bring the surface to the appropriate grade. Coaxial cables would be routed from a new microwave dish mounted on the monopole through underground conduit to a new waveguide entrance through the back exterior wall of the control house. Inside the control house, BPA would install a new equipment rack to house new telecommunications equipment and would replace protective relays, control equipment, and associated wiring and cabling. Additional equipment, including a battery, circuit

breaker and panel, cable tray, and fiber basket, would be removed, replaced, and/or newly installed. An existing microwave dish would be removed from the exterior of the control house, and all remaining holes would be patched and painted. All ground disturbance would be contained within the existing substation yard.

Bradford Island Radio Station: BPA would retire its Bradford Island Radio Station. Two existing microwave dishes, the wave guide, and the ice bridge would be removed from structure 1/1 on the Bonneville Powerhouse 2 – Alcoa 1 & 2 No. 2 transmission line. BPA would also add fall protection to the structure, which would require removing an existing osprey (*Pandion haliaetus*) nest. The station service transformer, propane tank, and communications building and associated equipment would be removed from the site. To minimize ground disturbance, all foundations, footings, buried cables, piping, conduit, and any other underground infrastructure would be retired in place and/or cutoff at grade.

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 June 14, 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: Bonneville Powerhouse – North Bonneville Substation Transfer Trip Replacement

Project Site Description

Project activities would be carried out at the following locations:

Bonneville Dam Powerhouse 1 (PH 1): all proposed activities would occur indoors.

Bonneville Dam Powerhouse 2 (PH 2): all proposed activities would occur indoors or on the powerhouse roof.

North Bonneville Substation: all proposed ground disturbance would occur within the fenced substation yard, which was previously disturbed, covered in crushed rock, and is maintained with little to no vegetation. All other proposed activities would occur indoors or on the front façade of the existing control house, which would not require ground disturbance. Outside of the substation, the surrounding area is largely maintained transmission line right-of-way (ROW) consisting of regularly mowed grasses, with private residences (located approximately 900 feet west), Cascade Cemetery (located approximately 450 feet south), the BNSF railway, Highway 14, and a few isolated stands of conifer trees. Greenleaf Creek is located approximately 750 feet east of the site, and there are no wetlands present within the work area. The Pilchuck soil series is mapped within the work area, which is not hydric.

Bradford Island Radio Station: all proposed ground disturbance would occur within the fenced radio station, which was previously disturbed and covered in crushed rock. The site is largely maintained clear of vegetation, although some low-growing grasses and blackberry (*Rubus sp.*) are present. The surrounding area is largely maintained transmission line ROW consisting of regularly mowed grasses with recreational facilities, including public parking, picnic tables, and short walking trails providing access to the Columbia River. The Columbia River is located approximately 750 feet east of the site, and there are no wetlands present within the work area. Soils mapped within the work area include the Multnomah soil series and “urban” soils, which are not hydric.

Additional work would occur near PH 2, Highway 14, and the BNSF railway, where BPA would remove black cottonwood trees (*Populus balsamifera ssp. trichocarpa*) and Douglas-fir trees (*Pseudotsuga menziesii*). These trees are small (maximum 12-inch diameter at breast height), isolated, and located in disturbed areas within the maintained hydroelectric facility and highway and railway ROW.

All work areas are 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

Explanation: On July 29, 2020, BPA initiated National Historic Preservation Act, Section 106 consultation with the following parties:

- Confederated Tribes and Bands of the Yakama Nation
- Confederated Tribes of the Umatilla Indian Reservation
- Confederated Tribes of the Warm Springs Reservation of Oregon
- Cowlitz Indian Tribe
- Nez Perce Tribe
- Oregon State Historic Preservation Office (SHPO)
- The Confederated Tribes of the Grand Ronde Community of Oregon
- United States Army Corps of Engineers
- United States National Park Service
- Washington Department of Archaeology and Historic Preservation
- Washington State Department of Transportation

BPA conducted background research and an intensive field survey of the Area of Potential Effects (APE). No previously recorded archaeological resources were located within the APE, and no new archaeological resources were identified during the archaeological field survey.

North Bonneville Substation is considered eligible for inclusion in the National Register of Historic Places (NRHP), and Bonneville Dam and PH 1 are both located within the Bonneville Dam Historic District, a National Historic Landmark. The proposed project would not alter the integrity or character-defining features of the substation or historic district.

Demolition of Bradford Island Radio Station would have no effect to historic properties as the site is not considered eligible for listing in the NRHP.

Therefore, BPA determined that the proposed undertaking would result in no adverse effect to historic properties (BPA CR Project No.: WA 2018 054; DAHP Log No.: 2020-09-06004-BPA). WSDOT concurred with BPA's determination on October 21, 2020, DAHP concurred on October 28, 2020, the CTWSRO concurred on November 12, 2020, and Oregon SHPO concurred with BPA's determination on November 19, 2020. No other comments were received.

Notes:

- At North Bonneville Substation, a cultural resource monitor would be present during any excavations that extend below the substation gravel, including structure foundations and footings.
- At Bradford Island Radio Station, all foundations, footings, buried cables, piping, conduit, and any other underground infrastructure would be retired in place and/or cutoff at grade.
- All trees to be removed would be cut at ground level and the stumps left in place to minimize ground disturbance.
- 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 in consultation with the appropriate consulting parties.

2. Geology and Soils

Potential for Significance: No

Explanation: Construction activities (i.e., vehicle and equipment use, excavation for new foundations and footings, and tree removal) would result in ground disturbance at the tree removal areas, North Bonneville Substation, and Bradford Island Radio Station. All work at North Bonneville Substation would occur within the previously-disturbed substation yard. Excavated soils would be stored temporarily and then used for backfill, deposited elsewhere on-site, or disposed of off-site according to all local, state, and Federal regulations. BPA would implement additional measures to minimize soil disturbance associated with tree removal and demolition at Bradford Island Radio Station.

Notes:

- Implement erosion and sediment control best management practices (BMPs) prior to any ground-disturbing activities.
- Remove trees by cutting the trunks near ground level and leaving the stumps in place.
- Cut off at-grade and/or retire in place all foundations and other in-ground structures and equipment.

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

Potential for Significance: No

Explanation: BPA would remove black cottonwood trees and Douglas-fir trees to create an unobstructed microwave beam path between PH 2 and North Bonneville Substation. Construction-related activities (e.g. vehicle and equipment use) could also result in removal of herbaceous vegetation in small areas around Bradford Island Radio Station and the tree removal areas. These disturbance areas would be minimal and would be expected to naturally revegetate quickly after completion of the project. All other project activities would occur indoors or within the existing North Bonneville Substation yard, which is largely maintained clear of vegetation.

There are no documented occurrences of any state special-status plant species or plant species protected under the Federal Endangered Species Act (ESA) near the project site, and no such species or suitable habitat have been observed at the site. Therefore, the proposed project would have no effect on protected plant species.

Notes:

- Remove trees by cutting the trunks near ground level and leaving the stumps in place.
- Complete a nest survey prior to tree removal. If nests are identified, BPA would require that work be halted in the vicinity of the nest until it can be inspected and assessed by BPA.
- Reseed disturbed areas with a regionally appropriate native seed mix and apply mulch to stabilize the area until vegetation becomes established.
- Wash vehicles and equipment prior to mobilization to project sites to remove all soil and vegetative material and prevent the spread of noxious weeds.

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

Potential for Significance: No with Conditions

Explanation: Adding fall protection to structure 1/1 on the Bonneville Powerhouse 2 – Alcoa 1 & 2 No. 2 transmission line would require removing an existing osprey (*Pandion haliaetus*) nest. If possible, the nest would be relocated to a lower point on the structure, which would allow installation of fall protection and would reduce the risk of osprey coming into contact with live conductor. The nest would be removed only after it has been abandoned for the season and no osprey or eggs are present (i.e., between September 1 and December 31). There are no documented occurrences of any other state special-status wildlife species or wildlife species protected under the Federal ESA, and no such species or suitable habitat have been observed at the project site. Given surrounding land uses, any wildlife that could be present in the area would likely be habituated to the level of noise and human activity associated with the project. Furthermore, the project would be short in duration and would

not result in permanent alteration of suitable habitat for protected species. Therefore, the proposed project would have no effect on protected wildlife species.

Notes:

- Complete a nest survey prior to tree removal. If nests are identified, BPA would require that work be halted in the vicinity of the nest until it can be inspected and assessed by BPA.
- Complete work at Bradford Island Radio Station, including relocating the osprey nest, outside of the breeding/nesting season (i.e., between September 1 and December 31).

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

Potential for Significance: No

Explanation: Greenleaf Creek is within 750 feet of North Bonneville Substation, and the Columbia River is within 250 feet of Bradford Island Radio Station. Tree removal would also occur within 100 feet of the Columbia River. These waterbodies contain fish species protected under the Federal ESA, including bull trout (*Salvelinus confluentus*), Chinook salmon (*Oncorhynchus tshawytscha*), chum salmon (*Oncorhynchus keta*), coho salmon (*Oncorhynchus kisutch*), and steelhead trout (*Oncorhynchus mykiss*). Greenleaf Creek and the Columbia River are designated critical habitat for steelhead trout, Chinook salmon, chum salmon, and coho salmon.

No in-water work is proposed and no project activities would occur within a floodplain. Erosion and sediment control BMPs would prevent indirect impacts to water bodies, floodplains, and fish. Therefore, the proposed project would result in no impacts to these resources.

Notes:

- Implement erosion and sediment control BMPs prior to any ground-disturbing activities.
- Do not allow petroleum products, sediment, and other deleterious materials (e.g., concrete wash out) to enter any stream, wetland, water body, or drainage conveyance.
- Maintain spill response materials onsite to quickly address inadvertent spills.

6. Wetlands

Potential for Significance: No

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

Notes:

- Implement erosion and sediment control BMPs prior to any ground-disturbing activities.
- Do not allow petroleum products, sediment, and other deleterious materials (e.g., concrete wash out) to enter any stream, wetland, water body, or drainage conveyance.
- Maintain spill response materials onsite to quickly address inadvertent spills.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: At North Bonneville Substation, excavation for new foundations and footings could reach depths that would intersect groundwater. However, no new wells or other uses of groundwater or aquifers are proposed. Therefore, the proposed project would not impact groundwater or aquifers.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: The proposed project would be consistent with current land use. The project site is located entirely within a designated Urban Area of the CRGNSA, which means the project would be exempt from compliance with CRGNSA requirements, including those contained in the CRGNSA Management Plan. No consistency review by the U.S. Forest Service would be required.

9. Visual Quality

Potential for Significance: No

Explanation: The proposed project would result in a perceptible change in the appearance of North Bonneville Substation, Bradford Island Radio Station, PH2, and the areas where up to 20 trees would be removed. 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 project.

11. Noise

Potential for Significance: No

Explanation: During construction, use of vehicles and equipment and general construction activities would create noise above current ambient conditions. Construction-related noise could be audible from Cascade Cemetery and a few private residences near North Bonneville Substation and from recreational areas near Bradford Island Radio Station. Noise impacts would be temporary and intermittent and would only occur during daylight hours (approximately 7 AM to 7 PM). 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: Construction crews would follow appropriate safety precautions for working in a substation yard and at heights on transmission and communications structures. Prior to demolishing Bradford Island Radio Station, the site would be tested for hazardous materials, which if found, then would be disposed of off-site according to all local, state, and Federal regulations. No impacts to human health and safety are expected as a result of 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 proposed work would occur on BPA fee-owned property or within BPA's existing easements on USACE property. BPA has coordinated with USACE, and no other 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 June 14, 2021
W. Walker Stinnette, EC-4 Date
Contract Environmental Protection Specialist
Salient CRGT