

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: North Bonneville Substation 230-kV Line Retermination

Project No. (if applicable): xxxxx

Project Manager: Mike Marleau

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: BPA is proposing to install new equipment and reterminate BPA's existing North Bonneville-Troutdale No.2 and North Bonneville-Midway No.1 230-kilovolt (kV) transmission lines at BPA's North Bonneville Substation in Skamania County, Washington. Existing load imbalance between the east and west bus could cause thermal overload and compromise system reliability in the event of a west bus outage, which violates National Energy Safety Code (NESC) planning criteria standards. The transmission line retermination and installation of new equipment would provide the required load balance to ensure system reliability and compliance with NESC standards.

In order to reterminate the North Bonneville-Midway No.1 230-kV transmission line (NBON-MIDW-1 line), BPA would install a new single-circuit steel lattice structure built approximately 80 feet ahead-on-line. A drill rig would be used to auger holes 16 feet deep beneath each tower foot, footings would be installed in the holes, and the new steel structure would be attached to the footings. BPA would install new steel support, bus, conduit, footings, and three 2000 Ampere (A) disconnect switches in Bay 15, and relocate an existing 230-kV 2000A 40 thousand Ampere (KA) circuit breaker from Bay 9 to Bay 15. BPA would then move the conductor for the NBON-MIDW-1 line from structure 1/1 to the new structure, and reterminate the line from Bay 13 to new Bay 15.

In order to reterminate the North-Bonneville-Troutdale No.2 230-kV transmission line (NBON-TROU-2 line), BPA would install a new double-pole wood structure and two triple-pole wood structures between structure 1/1 and the substation. A drill rig would be used to auger holes 10 feet deep for each new pole to be directly embedded into the ground. BPA would then remove the conductor for the NBON-TROU-2 line at structure 1/1, attach the conductor to the 3 new wood structures and an existing steel lattice structure, and reterminate the line from Bay 9 on the west bus to Bay 13 on the east bus. One temporary H-frame wood pole structure would be installed to prevent contact between the NBON-TROU-2 line and the Underwood Tap – Bonneville Power House transmission lines, and would be removed following the completion of construction activities.

New overhead ground wire would be installed on the reterminated segments of both transmission lines. Prior to construction, BPA would first conduct a geotechnical study of the proposed structure locations using a track-mounted hollow-stem auger to drill 8 inch diameter borings from 5 to 20 feet in depth. All disturbed areas within the substation yard would be graded and rocked.

The proposed project would require that BPA temporarily disturb up to 8.0 acres for construction activities and equipment storage, and permanently disturb approximately 0.5 acre to accommodate the installation of new equipment within the limits of previously disturbed BPA fee-owned land. Disturbance would result from the movement of construction vehicles and heavy equipment, organics/soil/debris removal, structure installation, grading, and the addition and compaction of fill materials.

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, July 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/ Zach Gustafson

Zach Gustafson
Contract Environmental Protection Specialist
David Evans and Associates, Inc.

Reviewed by:

/s/ Gene Lynard

Gene Lynard
Supervisory Environmental Protection Specialist

Concur:

/s/ Katherine S. Pierce

Katherine S. Pierce
NEPA Compliance Officer

Date: October 14, 2014

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 230-kV Line Retermination**

Project Site Description

The project site is located on BPA fee-owned property northeast of the City of North Bonneville between Greenleaf Creek and State Route 14. The site consists of control houses, maintenance and equipment sheds, transmission lines and towers, substation equipment, and graveled and paved areas for vehicle circulation and equipment storage. The surrounding landscape includes a mixed broadleaf and conifer forest owned and managed by the United States Forest Service, and some rural residences. Much of the site has been cleared and is regularly mowed to accommodate the transmission lines and towers present on the site. Small forested areas are present in the eastern, northern, and western corners of the site. Greenleaf Creek, a tributary to the Columbia River, borders the project site from the northeast through the northwest. One jurisdiction wetland was identified in the northwestern corner of the project area.

Evaluation of Potential Impacts to Environmental Resources

Environmental Resource Impacts	No Potential for Significance	No Potential for Significance, with Conditions
1. Historic and Cultural Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: BPA’s North Bonneville-Midway No. 1 and North Bonneville-Troutdale No.2 230-kV transmission lines, and North Bonneville Substation have been recorded and recommended eligible to the National Register of Historic Places (NRHP) as a contributing element to the BPA Pacific Northwest Transmission System. The proposed project would not alter the integrity or character-defining features of the transmission lines or substation. Concurrence April 15, 2014 Washing State Department of Archaeology and Historic Preservation (DAHP). Tribes consulted: the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Cowlitz Indian Tribe, the Nez Perce Tribe of Idaho, and the Confederated Tribes of Grand Ronde.

Mitigation:

- ✓ Coordinate with the Cowlitz Indian Tribe to ensure a tribal monitor is present during all ground-disturbing activities.
- ✓ In the event any archaeological material is encountered during project activities, the following actions should be taken:
 - Stop work in the vicinity and immediately notify the BPA environmental lead, a BPA archaeologist, appropriate BPA project staff, interested Tribes, Washington State DAHP, and the appropriate county, state, and federal agencies.
 - Implement reasonable measures to protect the discovery site, including any appropriate stabilization or covering.
 - Take reasonable steps to ensure the confidentiality of the discovery site, including restricting acces.

2. Geology and Soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>
-----------------------------	-------------------------------------	--------------------------

Explanation: 8 acres of minor, temporary soil disturbance due to construction activities and equipment storage.

Total of 0.5 acre of disturbance from excavation, auguring, and installation of new equipment.

Mitigation:

✓ Implement erosion and sediment control best management practices (BMPs) immediately after clearing and prior to initiating ground disturbing activities to prevent erosion and runoff.

3. **Plants** (including federal/state special-status species)



Explanation: No federally-listed or state special-status plant species are present. Up to 0.5 acre of trees would be removed, and up to 7.5 acres of non-native forbs, grasses, and invasive weeds would be removed or temporarily disturbed.

Mitigation:

✓ Reseed disturbed areas with a regionally appropriate seed mix and apply mulch.
✓ Remove trees outside of the breeding season (February 1st through August 31st). If trees are to be removed between February 1st and August 31st, a qualified biologist must complete a nest survey immediately prior to removal.

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



Explanation: Northern spotted owl (NSO) critical habitat located within 0.25 mile of construction activities. Habitat suitability survey conducted September 2014 found no suitable nesting habitat. United States Fish and Wildlife Service concurred with BPA on September 26, 2014 that the proposed project would have no effect on NSO or its critical habitat. No other federally-listed or state special-status species are present.

Mitigation:

✓ Remove trees outside of the breeding season (February 1st through August 31st). If trees are to be removed between February 1st and August 31st, a qualified biologist must complete a nest survey immediately prior to removal.

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



Explanation: The project site is bordered from the northeast through the northwest by Greenleaf Creek, which contains bull trout, chinook salmon, chum salmon, coho salmon, and steelhead trout. Critical habitat is designated for chum salmon and steelhead trout in Greenleaf Creek, and critical habitat for bull trout and chinook salmon is designated downstream in the Columbia River and Hamilton Creek, respectively. No in-water work is proposed for the project.

Mitigation:

✓ Implement erosion and sediment control best management practices (BMPs) immediately after clearing and prior to initiating ground disturbing activities to prevent erosion and runoff.
✓ Do not allow petroleum products, sediment, and other deleterious materials (i.e. concrete wash out) to enter any stream, wetland, waterbody, or drainage conveyance.

6. **Wetlands**



Explanation: Wetland delineation conducted May 2014, one wetland identified in the project area.

Mitigation:

✓ Flag wetland no disturbance boundaries.

7. **Groundwater and Aquifers**

Explanation: No new wells or use of ground water proposed.

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

Explanation: Although located within the Columbia River Gorge National Scenic Area, the project site lies within an Urban Area and is exempt from consistency review (United States Forest Service December 5, 2014).

9. **Visual Quality**

Explanation: Although one new steel-lattice structure and three new wood pole structures would be installed, the additional equipment would be visually consistent with existing structures and equipment already located at the substation.

10. **Air Quality**

Explanation: Small amount of dust and vehicle emissions during construction activities.

11. **Noise**

Explanation: Temporary, intermittent noise from construction activities during daylight hours. Operation noise would not change.

12. **Human Health and Safety**

Explanation: No impact to human health and safety from the proposed project.

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, if necessary:

- Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators) that are not otherwise categorically excluded.

Explanation, if necessary:

- 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, if necessary:

- 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, if necessary:

Landowner Notification, Involvement, or Coordination

Description: Engaged the City of North Bonneville planner throughout the environmental review. Notification letters that construction will occur will be sent to landowners in the vicinity prior to commencement of work.

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

Signed: /s/ Zach Gustafson

Date: October 14, 2014