

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: VHF Radio System Upgrades, Ellis and Boistfort Peak Radio Stations

Project No.: P01237

Project Manager: Molly Kovaka, TEP-CSB-2

Location: Clallam and Lewis Counties, Washington

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B1.19 Microwave, meteorological, and radio towers

Description of the Proposed Action: BPA proposes to upgrade its VHF radio system at two existing sites in its Puget Sound and Longview Radio Regions. The upgrades would include the replacement and addition of equipment at Ellis Radio Station of BPA's Puget Sound Radio Region and Boistfort Peak Radio Station of the Longview Radio Region. The project would replace BPA's aging VHF radio system with a simple, modern radio system that would have improved voice coverage for remote field personnel. Work would start in summer 2018, and would be staged to complete by 2023.

At the Washington Department of Natural Resources (DNR)-owned **Ellis Radio Station** in Clallam County, WA, BPA would replace equipment in the communication building and on the radio tower. In and around the building, this would involve installing batteries (either vented lead-acid [VLA] or valve-regulated lead-acid [VRLA] batteries), racks and associated communications equipment, fuse panels, other electronics, and power supply-supporting equipment and hardware. AC power system circuitry would be upgraded. Minor alterations may be made to existing radio transmission line ports through building walls. A network communication cable would be replaced in existing conduit between the BPA building equipment and the Washington State Police (WSP) building about 45 feet away in which BPA leases network equipment. Interior and exterior grounding bars and lightning protection would be welded to equipment. Since there is no grounding mat at the BPA or WSP communication buildings, heavy equipment would be used to dig a narrow, 18-inch-deep trench from the buildings to the BPA tower's grounding mat. The WSP building is about 38 feet away from the tower, while the BPA building is just several feet from the tower mat. There could also be grounding mat repair or replacement in spots as needed.

On the 100-foot-tall BPA tower at Ellis, one (1) three-inch-diameter, 20-foot-tall VHF "whip" antenna would be installed at the top of the tower. Coaxial cables would be installed for transmission of the VHF radio signals to interior equipment. A safety climbing cable – the MSA Latchways system – would be installed on the tower to provide fall protection for technicians. The cable would be anchored to the tower at the top and bottom by new support beams and attached along its length by a series of new brackets. After testing is complete on the new radio system, the old equipment would be removed from the tower and the communication buildings.

The **Boistfort Peak Radio Station** is an existing facility owned by BPA on leased land through Weyerhaeuser Company in Lewis County, WA. The scope here is very similar to that described above for Ellis: internal communication building equipment would be replaced or added for VHF upgrades; associated new cabling would be run from external to internal equipment; and two new VHF whip antennas would be affixed at the 145-foot height and at the tower top (200 feet above ground), replacing the existing antenna at 178 feet above ground. As with Ellis, a network communication cable

runs between the BPA building and a WSP building. BPA would be entering into a new agreement with WSP to add new radio equipment inside the WSP building. Grounding of equipment would entail hand excavation of 18-inch-deep potholes in the yard between the towers and the communication buildings to access the ground mat and attach the ground wires by cadwelding. This would be the only ground-disturbing work at Boistfort Peak. While lathways would be added to the Boistfort Peak tower by the VHF Upgrade Program, this element had been analyzed under a separate CX signed on June 29, 2018.

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/ Michael J. O'Connell

Michael J. O'Connell
Environmental Protection Specialist

Concur:

/s/ Stacy L. Mason

Stacy L. Mason
NEPA Compliance Office

Date: August 8, 2018

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.

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Project Site Description

Ellis Radio Station is at 2,300 feet above sea level (ASL) on WA DNR land and just 750 feet west of USFS land and associated critical habitat for marbled murrelet and northern spotted owl. BPA is one of about six entities maintaining radio facilities at the site.

At 3,100 feet ASL, Boistfort Peak Radio Station is on privately owned timber land; there is a marbled murrelet detection section within two miles to the west. BPA shares the communication site with about four other entities.

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 checked="" type="checkbox"/>	<input type="checkbox"/>
<p><u>Explanation:</u> The BPA archeologist determined that: the project at both sites would consist of in-kind, or similar replacement of existing infrastructure with no ground disturbance other than in areas that have been previously disturbed (at the bases of, and between, existing towers and buildings, and in the gravel yard between BPA and WSP facilities); and would be located in an area with other similar facilities. Consequently, no potential exists for impacting cultural resources and no additional review under the National Historic Preservation act (NHPA) is called for.</p>		
2. Geology and Soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><u>Explanation:</u> The excavation and trenching to perform grounding operations would take place in the previously disturbed station grounds around and between the facilities. Best Management Practices (BMPs) would be required of all soil-disturbing activities, thereby sufficiently limiting soil loss by wind or water. No geological resources would be affected.</p>		
3. Plants (including federal/state special-status species)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><u>Explanation:</u> There could be disturbance to undesirable vegetation growing in the rocked station yards. The yards are periodically maintained to keep vegetation growth in check.</p>		

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

Explanation: Informal, web-based consultation with USFWS under Section 7 of the ESA identified the potential occurrence in the project area of eight proposed or threatened plant, animal or fish species. All work would be limited to radio station grounds and maintained access roads and there would be no potential to impact fish (bull trout and dolly varden) or their habitat since there are no ESA-species streams near the planned work.

The plants listed (Kincaid's Lupine and Nelson's checker-mallow) could be present along access roads. However, any contact with individuals would be isolated to the road prism that is already maintained to be clear of vegetation. The marbled murrelet is the one bird out of the three – streaked-horned lark and yellow-billed cuckoo are the other two – that could occur around the two radio sites. Implementation of nesting period timing restriction on the latchways installation and grounding work at Ellis would ensure no effects on any locally nesting birds.

The project elements at Boistfort would not produce noise at levels high enough, nor in durations long enough to disturb nesting birds were they to be in the vicinity. The mammal listed for the project, North American wolverine, may pass through near to the stations, but there are no records of the animal's presence this far west.

Mitigations

- ✓ Time noise-generating work on tower latchways and grounding efforts at Ellis to occur outside of the marbled murrelet breeding season of April through September.

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

Explanation: Since the sites are at high elevations with no perennial streams crossing work areas, and soil would be contained by BMPs, the proposed project would not affect fish or their habitat, water bodies in general, or floodplains.

6. **Wetlands**

Explanation: The work would be located entirely on ridges or hill-tops and no wetlands would be encountered.

7. **Groundwater and Aquifers**

Explanation: The work would be done inside previously cut, graded and compacted station yards atop hills or ridges. It is not anticipated that there would be perched water tables.

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

Explanation: The type of operations would not change at either location's existing radio stations, and the outward appearance of the facilities would remain largely the same. Leases would be in place at both sites that would stipulate parameters of BPA access and operations.

9. **Visual Quality**

Explanation: There would be largely imperceptible permanent changes to the building and tower appearances at the sites. There would be temporary additional heavy equipment at the sites during construction.

10. **Air Quality**

Explanation: There could be decreases in air quality at the work areas due to heavy equipment exhaust and increased dust from construction traffic on the gravel roads. Because of the localized and temporary nature of the decreases, there is no potential for significant reductions in air quality.

11. **Noise**

Explanation: Only localized and temporary increases in man-made noise would be expected with construction work. The greatest noise production would be expected with the latchways safety cable system and ground-wire trenching at Ellis. Installation of the latchways would require a line truck and up to three workers at the structure and up to two workers on the ground. Intermittent noise generation would occur from the use of hand tools to

install the support beam and lathways system and gear banging against the steel structures. Noise would occur over six to eight hours in a single day. For trenching the ground-wire, heavy machinery may be brought in to efficiently dig the routes.

12. Human Health and Safety



Explanation: BPA is committed to total fall-protection on its facilities. The WA DNR may upgrade the Ellis tower to Occupational Safety and Health Administration (OSHA) standards. BPA would independently upgrade fall protection here to its standards if WA DNR does no upgrades. There is also potentially unsafe radio frequency exposure that might exit at ground level of the site due to the new tower close to the WSP building. Minor exposure of asbestos or lead could occur with the described work. When work would be contracted, the contractor would have a current certified Class III Competent Person for asbestos operations and maintenance, and apply BPA-approved mitigation measures when cutting/drilling through potentially lead- or asbestos-containing materials. When the work would be performed by BPA personnel, BPA Work Standards and the Safety and Health Program Handbook for such hazards would be followed.

VLA batteries would be coupled with hydrogen detectors to monitor levels of the gas inside communications buildings. VLA and VRLA batteries would be handled in replacement procedures. Workers would take all necessary handling precautions to prevent spill or leakage. Evident spills or leaks would be neutralized using standard measures. Old batteries would be packed and shipped according to BPA Pollution Prevention and Abatement requirements.

Overall, the project would help BPA meet its goals of safe facilities maintenance and operations and uninterrupted power transmission.

Mitigations

- ✓ Perform no work on the Ellis tower until BPA fall protection standards are met
- ✓ Use caution while working around the WSP building at Ellis, limiting idle time and preferably wearing a radio frequency monitoring device to avoid overexposure to electromagnetic radiation

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: BPA has or would be finalizing lease agreements with WA DNR, Weyerhaeuser Company, and WSP that would define the scope of BPA operations and maintenance and cooperative actions with the other entities.

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

Signed: /s/ Michael J. O'Connell
Michael J. O'Connell, ECT-4

Date: August 8, 2018