

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: VHF Radio System Upgrades, Mount Spokane and Schweitzer Mountain Radio Stations

Project No.: P01237

Project Manager: Molly Kovaka, TEP-CSB-2

Location: Spokane County, Washington and Bonner County, Idaho

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 sites in its Spokane Radio Region. The upgrades would include the replacement and addition of equipment at BPA's existing Mount Spokane Radio Station, establishment of a new BPA radio presence at Schweitzer Mountain Radio Station, and the establishment of a microwave beam path between the two radio sites. The upgrades would replace BPA's aging VHF radio system with a simple, modern radio system with improved voice coverage for remote field personnel. Work would start in summer 2018, and would be staged to complete by 2024.

At the **Mount Spokane** Radio Station facility on Washington State Parks land, BPA would remove and 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), communications racks, fuse panels, and associated communications equipment and hardware. The AC power system breaker and wiring would be upgraded. Minor alterations may be made to existing radio waveguide – elliptical copper tubing sheathed in polyethylene – entry ports through building walls. Interior, exterior grounding bars and lightning protection would be added and require cadwelding between connections. Hand excavation of the yard between the tower and the communication building would be needed to access the ground mat for cadwelding the ground wire to the mat.

On the 70-foot-tall tower at Mount Spokane, one eight-foot-diameter shielded-dish microwave antenna would be placed at the 66-foot height facing Schweitzer Mountain. Two VHF "whip" antennas (three-inch-diameter, 20-foot-tall) would be installed at the 70-, and 20-foot marks of the tower. Waveguide would be attached along the tower and under the icebridge (horizontal, steel 'bridge' from tower to building) to connect the microwave antenna to the interior radio equipment. Likewise, coaxial cables would be installed from the VHF antennas to the interior radio equipment allowing for transmission and receiving of VHF radio signals. All equipment would be grounded to the existing mat where possible; there could be grounding mat repairs or replacement in spots as needed.

The **Schweitzer Mountain Radio Station** is an existing facility owned by the State of Idaho (SOI) on leased land through Schweitzer Mountain Ski Resort. BPA and the SOI would cooperatively reinforce the existing 70-foot-tall radio tower to support the additional equipment needed for BPA VHF infrastructure. This would require excavation around the existing four tower piers in order to increase their diameter with new concrete and drill new anchors into the piers. There would be excavation of about two feet around the piers and about eight feet down from the surface. Additional reinforcement would include the grouting of the tower legs, and the replacement of existing bracing members and

associated bolts. There would also be excavation of about 60 cubic feet to install piers for the existing climbing ladder.

BPA would add an eight-foot-diameter shielded-dish microwave antenna at the 55-foot mark facing Mount Spokane, and a VHF whip at the 70-foot level on the tower. As described for Mount Spokane, cabling and waveguide would be installed to connect antennas and interior equipment, and grounding of all equipment to the existing below-ground grounding mat. The icebridge here would be replaced with a larger one to support the new BPA cabling and waveguide, and it would require two new four-inch-diameter support poles and associated excavation for their four-foot-deep foundations. A new port would need to be cut in the building wall for radio transmission line entry. In the Schweitzer Mountain communication building, BPA would install equipment and rack structures that would be similar to those at Mount Spokane described above.

In addition, one 38-mile long **microwave antenna-to-antenna beam path** would be established between the two sites to “backhaul” remote radio communication data back to the BPA communication network and the central processing control centers. The path needs to be clear of obstructions in order for the radio communications to work reliably. At this time, there are no obstacles or likely future obstructing tree growth in the 20-year planning window. The beam path would need to be monitored for possible future tree growth and other obstructions over its lifetime.

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: July 19, 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.

Proposed Action: VHF Radio System Upgrades, Mount Spokane and Schweitzer Mountain Radio Stations

Project Site Description

Schweitzer Mountain Radio Station is at the rim of the privately held Schweitzer Mountain Ski Resort in Bonner County, Idaho. At 6,400 feet above sea level (ASL), the station is within a complex of radio sites and is above a dense system of ski trails.

At 5,850 feet ASL, Mount Spokane Radio Station is near the summit of Mount Spokane on Washington State Parks land in Spokane County, Washington. It is adjacent to the Mount Spokane Ski and Snowboard Park and about 650 feet from the historic Vista House. There is fairly intact forest on the mountainside opposite the ski area. The microwave beampath between the sites traverses mainly forest land in various stages of regrowth.

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 consisted of in-kind, or similar replacement of existing infrastructure with no ground disturbance other than in areas that have been previously disturbed (at the feet of the existing tower structures and at buried grounding mats between the towers and buildings); and is located in an area with extensive similar facilities as well as additional buildings associated with the recreational use of the mountains. In addition, recent archaeological surveys had been carried out which showed no cultural resources present at the locations. 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> Most of the excavation would take place in the previously disturbed station grounds around the 1996-era radio tower at Schweitzer Mountain. The remaining excavation would be done at Mount Spokane (1953-1963 construction era) in order to ground equipment to the buried grounding mat. Best Management Practices (BMPs) would be required of all soil disturbance, 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 would only be disturbance to undesirable vegetation growing in the rockered 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: There are a total of five USFWS ESA-listed or proposed threatened or endangered wildlife species that could occur at the two sites. Of these, the two mammals – Canada lynx and North American wolverine – have a chance of being found in the vicinity of the active ski areas, but it would be unlikely. In light of the ongoing activities associated with maintaining multiple radio stations at each site, and with ski resort activity, the scope here would be unlikely to impact animals that may access the busy areas. State special status species in the vicinity of the sites include the Canada jay at Schweitzer Mountain and the Northern goshawk at Mount Spokane. The Canada (or, “gray”) jay would not be affected by the work because it would occur after the nesting season typically ends (June), and the Northern goshawk has a long-term record at Mount Spokane, exhibiting the localized population’s tolerance of disturbance.

Mitigations

- ✓ Time noise-generating work on the tower reinforcement to occur after Canada jay nesting ends in mid-June.

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, 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 mountaintops and no wetlands would be encountered.

7. **Groundwater and Aquifers**

Explanation: The work would be done inside previously cut and filled station yards atop mountains. It is not anticipated that there could be unknown 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. There would be a slight increase in overall activity at Schweitzer Mountain with the addition of BPA’s VHF presence, but this would not have the potential to impact the operations and functioning of the ski area. Permits 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 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 tower reinforcement at Schweitzer Mountain and this would occur outside the ski high season.

12. **Human Health and Safety**

Explanation: 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.

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 coordinated with the SOI to co-locate at Schweitzer Mountain and would maintain a separate lease with the ski resort. At Mount Spokane, WA DNR holds the BPA permit and lease under which the scope of work here would be covered, or to which amendments would be negotiated to cover new elements.

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: July 19, 2018