

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: VHF System Upgrade at Teakean Butte Radio Station

Project No.: P01237

Project Manager: Molly Kovaka, TEP-CSB-2

Location: Clearwater County, ID

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 is proposing to replace the aging VHF radio system at its Teakean Butte Radio Station in Clearwater County, Idaho with a modern VHF radio system. The replacement would help improve voice coverage across BPA's service area and is coordinated with similar efforts at many VHF stations under BPA's "Mobile-REDI" project.

The project site consists of two existing BPA communication facilities. The older facility includes "building 1," a radio equipment and control shelter that was constructed in 1971, and the 75-foot-tall "tower 1," a steel-lattice self-supporting communication tower that was built in 1996. The newer facility includes "building 2" and the 140-foot-tall "tower 2," both of which were constructed in 2014. Work would be conducted in phases from 2019 through 2020 and involve both facilities.

Four (4) 3-inch-diameter, 20-foot-tall VHF straight rod ("whip") antennas would be installed on tower 2 at approximately the 140-foot and 100-foot heights. Inside building 2, AC and DC power system circuitry and associated circuit breakers in the existing AC panel would be installed. In addition, a standard communication equipment rack and fuse panel would be installed along with a new VHF radio ("repeater") and associated equipment.

To transmit the VHF antenna signal, four coaxial cables would be run from the new whip antennas (one cable for each antenna on tower 2) to the new radio equipment inside building 2. New metal supports would be installed underneath the existing ice bridge (a horizontal metal frame spanning between the tower and the building) to suspend the coaxial cables between tower 2 and building 2. Two existing entry ports would be utilized to route the new coaxial cables through the exterior wall into building 2.

The system would be grounded for lightning protection. This would entail hand-excavating at several spots around the facility and welding grounding connections from newly installed equipment to the ground ring or mat buried 18 inches below the station yard.

After commissioning and testing to bring the new VHF system into operation, the existing VHF equipment would be removed from building 1 and tower 1.

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.

/w/ W. Walker Stinnette

W. Walker Stinnette

Contract Environmental Protection Specialist

Portland State University – Hatfield Resident Fellow

Reviewed by:

/s/ Katey Grange

Katey Grange

Supervisory Environmental Protection Specialist, Acting

Concur:

/s/ Sarah T. Biegel

Sarah T. Biegel

NEPA Compliance Officer

Date: March 14, 2019

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 System Upgrade at Teakean Butte Radio Station

Project Site Description

The project site encompasses two BPA fee-owned properties located near the summit of Teakean Butte (approximate elevation 4,140 feet) in Clearwater County, Idaho. BPA has communication facilities on both properties, which are adjacent to several additional communication facilities operated by other entities. The project site is within a gently-sloping area of mixed herbaceous cover and shrub surrounded by mixed conifer forest. The closest water feature is an unnamed headwater of Cedar Creek located approximately 600 feet west of the project site.

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 archaeologist completed a desktop review of the proposed project and determined that the actions have no potential to impact historic properties. The project site would be accessed via an existing and well-maintained gravel road, and minor ground disturbance would be limited to previously-disturbed areas within existing communication facilities. The new antennas would not be observable from any meaningful distance; this, in addition to the presence of several existing communication facilities in the communication site's footprint, ensures that there would be no appreciable change to the viewshed. No additional review under Section 106 of the National Historic Preservation Act (36 CFR 800.3(a)(1)) is required for this proposed action.</p>		
2. Geology and Soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><u>Explanation:</u> The project would temporarily displace previously-installed gravel fill material to support the hand-digging of approximately five, 18-inch-deep holes for the lightning protection. Excavated material would be backfilled and BPA would implement best management practices (BMPs) to address temporary erosion and sediment control, if needed.</p>		
3. Plants (including federal/state special-status species)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><u>Explanation:</u> The project site is covered by crushed rock surfacing with no vegetation. Therefore, the proposed project would not affect plant species.</p>		
4. Wildlife (including federal/state special-status species and habitats)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><u>Explanation:</u> No ESA-listed or special-status wildlife species are expected to occur at the project site. The gray wolf has been documented about 7 miles from the project site, but the species is not ESA-listed in Idaho. Minor disruption of normal wildlife behavior in and around the project site could occur from temporary elevated noise and human presence. Though the level of activity and noise (metallic impact sounds from tower work) may rise above typical maintenance at the site, it would be brief (not greater than two days). Therefore, the proposed project would have a small, temporary noise impact on wildlife.</p>		

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



Explanation: Ground disturbance would be limited to within the existing communications facilities and not be located near any waterbodies or floodplains. To prevent transport of sediment to any nearby water resources, BPA would implement erosion and sediment control BMPs during project construction.

6. **Wetlands**



Explanation: No wetlands are present in the project site, and ground disturbance would be limited to communications station grounds. There would be no impacts to wetlands.

7. **Groundwater and Aquifers**



Explanation: Ground disturbance would not reach depths that would impact groundwater or aquifers. BPA would implement BMPs to reduce the potential for inadvertent spills of hazardous materials that could enter groundwater or aquifers. Therefore, the project would not impact groundwater or aquifers.

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



Explanation: There are multiple existing communication facilities on Teakean Butte that are operated and maintained by various entities. The proposed project is an upgrade of existing BPA-owned and operated communication facilities, and no land use changes are being proposed. Therefore, the project would not impact land use or specially designated areas.

9. **Visual Quality**



Explanation: The proposed project would not significantly change the visual quality of the area. The four whip antennas and supporting equipment would be less visible than the tower frame itself. All other proposed activities would involve removing equipment or would be completed inside the existing communications buildings. Since there would be only slight changes to the visual appearance of the site, the project would not alter the visual quality of the area for observers outside of the facility.

10. **Air Quality**



Explanation: Project-related activities would only slightly and temporarily increase dust and vehicle emissions above baseline conditions. Because of this, the proposed project would have only slight short-term impacts to air quality.

11. **Noise**



Explanation: Project-related activities would temporarily increase noise in and around the project site. Construction noise levels are expected to remain within the normal range for manual construction activities.

12. **Human Health and Safety**



Explanation: Public health and safety would not be impacted from the work because it would be localized to access-restricted radio station facilities. OSHA and/or BPA safety guidelines would be followed for construction personnel. BPA employee safety during subsequent regional field operations should benefit from the project through better coverage and reliability of the two-way radio communication network.

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: All project-related activities would be carried out on BPA fee-owned property. BPA has the necessary rights needed to perform modifications, perform ground-disturbing activities, and use access roads to the site.

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

W. Walker Stinnette

Contract Environmental Protection Specialist

Portland State University – Hatfield Resident Fellow

Date: March 14, 2019