

# memorandum

DATE: February 22, 2013

REPLY TO  
ATTN OF: KEC-4

SUBJECT: Environmental Clearance Memorandum

TO: Ben Deschuytter  
Project Manager –TEP-CSB-1

**Proposed Action:** Digital Communication System Upgrade Project: ‘D’ Analog System Retirement and #WC SONET Ring

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

**Location:** Chelan, Douglas, Spokane, and Pend Oreille counties, Washington

**Proposed by:** Bonneville Power Administration (BPA)

**Description of the Proposed Action:** BPA proposes to replace its WC D-analog communication system with a new digital communication system at 35 facilities in the State of Washington. Project components and activities would vary among the facilities. Twenty-six existing substations and radio stations would receive minor telecomm equipment installations, which would involve no ground disturbance, and for which all activities would take place within the existing facilities. More extensive digital communications equipment would be installed at nine other facilities, including Bell, Boundary, Cusick, Valhalla, and Columbia substations; Waterville, Malaga, and Mount Spokane radio stations; and a new radio station, Ruby Mountain.

One or more of the following would be installed or constructed at these nine sites: new radio towers and antennas, underground fiber, vaults, storm drains, new fencing, a new access road, and new radio control houses. Ice bridges would be built from new towers to the control houses. Project activities at all nine sites would include soil excavation and disposal. In all cases the existing access road has been deemed sufficient to accommodate construction vehicles without extensive improvements other than possible grading and graveling. At Ruby Mountain radio station, a short new access road would be built off of the existing access road to the new site. No helicopters would be used during construction. Most work would be located within BPA fee-owned property, although land would need to be acquired for Ruby Mountain, and beam path easements would need to be procured for certain sites. Construction would take place from approximately March to October 2013, depending on the site. Specific information regarding each site is given in the following paragraphs.

**Ruby Mountain**—The new Ruby Mountain radio station would be sited adjacent to an existing radio station. Land acquisition for the site and a beam path easement would be needed. The project would involve building or installing a 140-foot-tall quad-legged tower with a 1,024-square-foot foundation; a new 859-square-foot, one-story building; two 1,000-gallon propane tanks; an emergency generator; a new 12-foot-wide access road extending approximately 100 feet from the existing access road; and a 300-foot-long fence enclosing the site. The tower would hold four microwave antennas. An electrical line to power the radio station would be run overhead from the existing radio station to a new power pole erected

next to the building. Propane would be run in an underground trench. The fenced area would be 0.26 acre. With the road, the total site footprint would be 0.30 acre.

Additional project activities would include possible blasting and/or the use of a hydraulic hammer and rock cutting tools due to the rocky ground. In addition, nine trees would be cut down to make room for the radio station. Antennas would be installed in 2014, though the majority of the construction would take place in 2013.

**Waterville Radio Station**—The project at Waterville Radio Station would involve the construction or installation of a new 100-foot-tall quad-legged tower with a 729-square-foot foundation, and an expanded fence. One microwave antenna would be installed on the tower. The fence expansion would include 100 feet of new fence and add 0.03 acre to the fenced area, although this land is already part of BPA's property and would not need to be acquired.

**Malaga Radio Station**—The project at Malaga Radio Station would involve the construction or installation of a new 70-foot quad-legged tower with a 625-square-foot foundation, and an expanded fence. Three microwave antennas would be installed on the tower. The fence expansion would include about 95 feet of new fence and add 0.03 acre to the fenced area, although this land is already part of BPA's property and would not need to be acquired.

**Mount Spokane Radio Station**—The project at Mount Spokane Radio Station would involve the installation of three new microwave antennas on the existing 100-foot tower. The antennas would be placed at 55, 75, and 100 feet.

**Bell Substation**—The project at Bell Substation would involve the installation of a new overhead fiber optic cable from transmission line structure 1/1 to the dead end tower in substation bay #6, and then down the dead end tower to the existing underground cable vault. This would involve approximately 6 feet of trenching inside the substation area to access the vault.

**Boundary Substation**—The project at Boundary Substation would involve the construction of a new 120-foot quad-legged tower with a 900-square-foot foundation. Two microwave antennas would be installed on the tower at 115 feet. In addition, approximately 225 feet of underground fiber optic cable would be buried in a trench, and an underground cable vault would be installed to route the fiber into the substation.

**Cusick Substation**—The project at Cusick Substation would involve the construction of a new 120-foot tri-legged tower with a 324-square-foot foundation, a new 420-square-foot building, and an expanded fence. One microwave antenna would be installed on the tower at 115 feet. In addition, approximately 494 feet of underground fiber would be buried in a trench, and two underground cable vaults would be installed to route the fiber into the substation. The fence expansion would include about 100 feet of new fence and add 0.06 acre to the fenced area, although this land is already part of BPA's property and would not need to be acquired.

**Valhalla Substation**—The project at Valhalla Substation would involve the construction of a 20-foot monopole tower. One microwave antenna would be installed on the tower at 15 feet.

**Columbia Substation**—The project at Columbia Substation would involve the construction of a 120-foot tri-legged tower with a 324-square-foot foundation. The tower would hold two microwave antennas that would be placed at 115 feet. Twelve mature poplar trees would need to be cut down on the adjacent property for the beam path. Land acquisition would be required for the beam path.

### **Review of Environmental Effects:**

BPA found that the project may affect but would be unlikely to adversely affect two federally listed species under the Endangered Species Act: Canada lynx (*Lynx canadensis*) and grizzly bear (*Ursus arctos horribilis*). Effects to these species would be minor and due to the loss of 0.3 acre of potential foraging habitat and potential temporary disturbance during project construction at the new Ruby Mountain Radio Station, as documented in a Biological Assessment (WC-D\_Analog\_BA\_2013). Project activities at the other sites would have no effect on these species. No federally designated critical habitat for either species would be affected at any of the sites. To minimize potential impacts, mitigation measures would be followed as determined during informal consultation with the US Fish and Wildlife Service. The project would have no effect to any other federally listed species under the Endangered Species Act, as documented in a No Effect Memo (WC-D\_Analog\_NoEffectMemo\_2013).

BPA initiated Section 106 consultation with the State of Washington Department of Archaeology and Historic Preservation (DAHP), Confederated Tribes of the Colville Reservation, the Confederated Tribes and Bands of the Yakama Nation, the Kalispel Tribe of Indians, and the Spokane Tribe of Indians in 2011. In the fall of 2012, BPA conducted a cultural resource review and field survey. No archaeological resources were identified, and while five BPA properties were deemed eligible for inclusion in the National Register of Historic Places, BPA determined the project would have no adverse effect to these properties.

**Findings:** BPA has determined that the proposed action complies with Section 1021.410 and Appendix B of Subpart D 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). The proposed action does not present any extraordinary circumstances that may affect the significance of the environmental effects of the proposal. The proposal is not connected [40 C.F.R. 1508.25(a)(1)] to other actions with potentially significant impacts, has not been segmented to meet the definition of a categorical exclusion, is not related to other proposed actions with cumulatively significant impacts [40 C.F.R. 1508.25(a)(2)], and is not precluded by 40 C.F.R. 1506.1 or 10 C.F.R. 1021.211. Moreover, the proposed action would not (i) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, (ii) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities, (iii) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation and Liability Act-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases, (iv) have the potential to cause significant impacts on environmentally sensitive resources, or (v) 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.

Based on the provisions identified in the attachment, and contingent upon receiving concurrence with the determination of effects from the USFWS and DAHP, the proposed action meets the requirements for the Categorical Exclusion referenced above. We therefore determine that the proposed action may be categorically excluded from further NEPA review and documentation.

/s/ Kara Hempy-Mayer

Kara Hempy-Mayer  
Environmental Project Manager

Concur:

/s/ Katherine S. Pierce

Stacy Mason or Kathy Pierce  
NEPA Compliance Officer

*Date: February 22, 2013*

Attachments:

Provisions  
Environmental Checklist for Categorical Exclusions

## **PROVISIONS**

This categorical exclusion would meet the following provisions pertaining to:

### **Endangered Species Act**

- Apply mitigation measures as determined during informal consultation with USFWS to minimize potential impacts to Canada lynx and grizzly bear at Ruby Mountain radio station.
- In the event any federally threatened or endangered species are encountered during project activities, the following actions should be taken:
  - Stop work in the immediate vicinity and immediately notify the BPA environmental lead (Oden Jahn, 503-230-7501 or Michael Rosales, 509-358-7471)
  - Implement reasonable and prudent measures to protect the species found, if needed and safe to do so.

### **Cultural Resources:**

- Work will proceed contingent upon receiving concurrence with the determination of effects from DAHP.
- In the event any archaeological or historic materials are encountered during project activities, the following actions should be taken:
  - Stop work in the immediate vicinity and immediately notify the BPA environmental lead (Oden Jahn, 503-230-7501 or Michael Rosales, 509-358-7471). A BPA archaeologist, interested tribes, and the appropriate county, state, and federal agencies should also be notified.
  - 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 and restrict access to the site of discovery.

### **Noxious Weeds and Soil Erosion:**

- Restrict construction activities to the area needed to work effectively, and where possible, limit construction equipment to existing construction areas.
- Use an appropriate seed mix while reseeding disturbed ground to reduce erosion and weed recruitment. A native seed mix should be used in areas with high-quality habitat and low weed densities, including Ruby Mountain Radio Station.
- Use only certified weed free erosion and sediment control materials.
- Use only certified weed free gravel.

## Environmental Checklist for Categorical Exclusions

Name of Proposed Project: Digital Communication System Upgrade Project: 'D' Analog System Retirement and #WC SONET Ring

Work Order #: 304511

This project does **not** have the potential to cause significant impacts on the following environmentally sensitive resources. See 10 CFR 1021, Subpart D, Appendix B for complete descriptions of the resources. This checklist is to be used as a summary – further discussion may be included in the Categorical Exclusion Memorandum.

Environmental Resources	No Potential for Significance	No Potential, with Conditions (describe)
1. Historic Properties and Cultural Resources No effect determination: DAHP consultation letters sent on 8/13/12 and 12/17/12	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. T & E Species, or their habitat(s) Potential Canada lynx and grizzly bear foraging habitat affected at Ruby Mountain radio station: mitigation measures will be applied to minimize impacts. No critical habitat or other federally listed species affected by project.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Floodplains or wetlands None present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Areas of special designation None present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Health & safety Workers would follow BPA standards for Health and Safety during construction	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Prime or unique farmlands None present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Special sources of water None present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Other (describe)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Signed: /s/ Kara Hempy-Mayer

Date: February 22, 2013