

# memorandum

DATE: July 21, 2010

REPLY TO  
ATTN OF: KEC-4

SUBJECT: Environmental Clearance Memorandum

TO: Glenn Van Bergen  
Project Manager – TEP-TPP-3

**Proposed Action:** Augspurgen Fiber Replacement Project

**Budget Information:** WO# 00253034, Task 01

**Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021):**

B4.7 Adding fiber optic cable to transmission structures or burying fiber optic cable in existing transmission rights-of-way....

B1.7 Acquisition, installation, operation, and removal of communication systems, data processing equipment, and similar electronic equipment....

**Location:** Skamania County, Washington  
Township 3 North, Range 8 East, Sections 13, 23, 24, 26  
Township 3 North, Range 9 East, Sections 15, 17, 18, 20, 21, 22

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

**Description of the Proposed Action:** During the past three winter seasons snow and icy conditions along BPA's North Bonneville-Midway transmission line have resulted in breaks along the overhead fiber line, causing outages that compromise BPA's system reliability. In the event of an outage, BPA must send out line crews to repair the communication backbone fiber systems which meet Western Electric Coordinating Council Class I and BPA Service Class B functional availability requirements. Typically, line crews are dispatched during the worst winter weather conditions. When crews are dispatched, BPA places personnel in hazardous conditions which may cause serious physical harm or death.

To address this safety concern for BPA personnel and to ensure fiber reliability, BPA proposes to bury approximately 7 miles of existing aerial fiber along the North Bonneville-Midway No. 1 transmission line right-of-way (ROW) between towers 12/4 and 20/1. The existing aerial fiber would be replaced with two reels of 72-strand loose tube fiber optic cable (maximum reel length is 39,370 feet). Two 2-inch diameter High Density Poly Ethylene conduits would be buried approximately 48 inches below ground.

Several burial methods would be employed for this project based on environmental concerns, topography, and other limitations. On steep slopes without trees and sensitive habitat, a cat would winch down a mini excavator to excavate an approximate 48 inch deep, 18 inch wide

trench to accommodate the new fiber. Materials excavated for trenching would be used to backfill the trench and secure the new conduit.

In relatively flat portions of the project where trees are not present and terrain is suitable, open trench and plow methods would be employed. A plow would be used to open a 48 inch deep seam for fiber placement. The plow would then backfill the seam as fiber is placed, leaving less than a foot of surface disturbance width.

Environmentally sensitive areas, major drainages, and treed areas (areas with conifers greater than 8-inch diameter at breast height (dbh)) would be avoided using the directional drill method. Directional drilling typically requires that a temporary bore pit be excavated and lined to capture drilling muds and and bored materials. The drilling muds are a mixture of water and bentonite clay which is pumped through the drill shaft to the cutting head. The drilling mud is collected in a bore pit where it is re-used.

As part of the proposed project, approximately six bore pits would be needed to avoid treed, wetland, and riparian areas along the ROW. Bore pits would be placed at the beginning of the bore adjacent to the boring machine set up. Due to the large size of some of the bores, bore pits could be as large as 20 feet by 20 feet in size, and up to four feet deep. An additional staging area would be needed at each bore site to accommodate bore machine placement, water trucks, and other construction-related vehicles and equipment. When the bores are completed, reclaimed cutting fluid would be taken offsite and the bore pits would be backfilled using materials previously excavated from them.

A 4 foot wide by 4 foot long by 4 foot deep splice vault would be installed next to several tower structures along the proposed route. Vaults are typically positioned at ground level and provide a splice location for the underground fiber. Approximately 15 vaults would be installed within the new underground fiber route at approximately 1,000 to 2,000-foot intervals.

**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). 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, 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, or (iv) adversely affect environmentally sensitive resources.

### **National Historic Preservation Act Compliance**

On February 1, 2010, BPA initiated Section 106 consultation with the Washington Department of Archaeology and Historic Preservation (DAHP), the Confederated Tribes of Warm Springs, Nez Perce Tribe, Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes and Bands of the Yakama Nation, and the United States Forest Service. A cultural resource survey was conducted by a qualified archaeologist along the proposed project route in April 2010. The subsequent cultural resource report determined that the proposed project would have no effect to historic properties. Concurrence from the consulted parties was sought on June 14, 2010. The Washington DAHP concurred with report findings June 17, 2010, the USFS concurred on June 25, 2010. No response was received from consulted tribes during the 30 day response period.

### **Endangered Species Act (ESA) Compliance**

The only ESA species that is known to utilize the area surrounding the project area is the Northern spotted owl. Other ESA-listed species for Skamania County include Canada lynx, gray wolf, grizzly bear and bull trout. None of these species are documented near the project area and will not be impacted by the proposed project. Chinook salmon and steelhead occupy the lower portion of Dog Creek several miles downstream of the transmission line; however the fiber line would be installed under Dog Creek using a directional drill method, resulting in no impact to either species.

Impacts to Northern spotted owls will be avoided by delaying the start of construction until after the critical nesting period ends on July 15<sup>th</sup>. Furthermore, no trees larger than 8 inches dbh will be removed during project-related activities to avoid impact to designated critical habitat. Only a limited number of trees smaller than 8 inches dbh will be removed, mostly along the road margins to prevent equipment damage.

A Biological Assessment (BA) was completed along the study area for the purpose of evaluating potential impacts to the Northern spotted owl. A May Affect but Not Likely to Adversely Affect determination was made by the United States Fish and Wildlife Service (USFWS) on July 15, 2010.

### **Clean Water Act Compliance**

BPA identified potential waters of the United States (U.S.), as defined in 33 CFR 328.3, through field reconnaissance surveys. Potential waters of the U.S. identified included wetlands (palustrine emergent, scrub-shrub, and forested) and streams (intermittent and perennial). BPA developed a list of provisions that specify the location of the potential waters of the U.S. within the proposed project and measures to be taken during construction by the contractor. Specifically, the provisions direct BPA's contractor to directionally bore all potential water of the U.S. crossings and implement erosion control measures to further reduce potential impacts to waters of the U.S.

Based on the provisions identified on the attachment, this proposed action meets the requirements for the Categorical Exclusions referenced above. We therefore determine that the proposed action may be categorically excluded from further NEPA review and documentation.

### **Consistency with applicable Federal Laws & Regulations**

#### *Columbia River Gorge National Scenic Area Act*

The proposed project is consistent with the NSA exemptions for certain uses, activities, and rights. Relevant to the proposed project, the Scenic Act states that: Nothing in [this Act]

shall...affect or modify the ability of the Bonneville Power Administration to operate, maintain, and modify existing transmission facilities.

*Gifford Pinchot National Forest Land & Resource Management Plan*

The proposed project is consistent with the Gifford Pinchot National Forest Land Resource Management Plan of 1997 and complies with the Management Plan's objectives to: (1) maintain the existing forest conditions; and (2) maintain the accommodation of utility proposals "within existing corridors to the maximum extent feasible."

/s/ Claire Bingaman

Claire Bingaman

Environmental Project Manager – KEC-4

Concur:

Katherine S. Pierce

Katherine S. Pierce

NEPA Compliance Officer – KEC-4

DATE: July 21, 2010

Attachment:

Provisions

## ATTACHMENT

### PROVISIONS

This categorical exclusion will meet the following provisions:

- An environmental specialist will be appointed who will be responsible for ensuring all Best Management Practices (BMPs) are met.
- Impacts to Northern spotted owls will be avoided by delaying the start of construction until after the critical nesting period ends on July 15<sup>th</sup>. No trees larger than 8 inches dbh will be removed during project-related activities to avoid impact to critical habitat.
- In the unlikely event that archaeological material is encountered during the implementation of this project, a BPA archaeologist will immediately be notified and work halted in the vicinity of the finds until they can be inspected and assessed. Washington DAHP and the appropriate Tribes will be notified of any future findings.
- In sensitive areas that will be directionally drilled, there will be continuous monitoring to detect any hydraulic fracturing (frac-out) that could have the potential to impact any water resources. Foot surveys of the drilling path must be conducted at least twice daily regardless of any other monitoring efforts to ensure no frac-out is present on the surface. Releases may be indicated by loss of drilling pressure, visible drilling mud pooling in water, visible turbid plume, etc. If a frac-out is detected within 300 feet of a water resource, (and could reasonably be expected to impact the resource) operations will cease, the frac-out will be completely contained using sediment controls, and the BPA inspector, BPA environmental contact, and a US Forest Service representative will be notified immediately. Sediment controls including sediment fences and sorbent materials will be in place on either side of the resource area to be drilled at all times during drilling operations, and a crew will be available to install sediment controls at all times during drilling operations.
- A plan will be in place and discussed between the contractor and BPA inspector prior to any directional drilling to outline procedures that will take place in the event of a frac-out to avoid any impact to water resources.
- Construction vehicles and equipment will be washed before entering the construction area to minimize the spread of noxious plants.
- BPA's contractor will directionally bore all potential water of the U.S. crossings and/or utilize existing disturbed access roads in areas where boring is not feasible.
- BMPs will be employed where applicable to minimize erosion, soil sloughing, and other surface alterations during the construction and restoration phase.
  - In areas near wetlands or waterways, trench plugs will be installed to prevent wicking or dewatering.
  - BPA's contractor will restore trenched areas on steep slopes by seeding with approved seed mix; straw and/or mulch; tackifier and/or matting. BPA's contractor will install straw wattles perpendicular to flow direction at appropriate intervals to prevent channeling.
  - BPA's contractor will restore bore pit locations and equipment staging areas to original contours and revegetate with approved seed mix and mulch.

- Refueling equipment will take place at least 150 feet away from natural or manmade drainage conveyance including ditches, catch basins, ponds, wetlands, and pipes.
- Appropriate emergency spill response materials will be maintained at each active work area to control unexpected releases of petroleum-based products or other hazardous materials. Emergency spill response materials will also be provided in each piece of equipment and in each vehicle on the project. Emergency supplies will be in an easily accessible location and clearly marked. Any spill material will be disposed of in accordance with applicable state and Federal requirements.
- Any spilled petroleum-based products or other hazardous materials will be immediately cleaned up and properly disposed of. The BPA inspector and BPA environmental contact will be notified immediately.
- Where possible, vegetation and soil resources will be preserved by minimizing disturbance to the vegetative cover and root system. Construction vehicles and equipment will be kept on access roads, structure sites, and work areas.
- All waste/trash generated during construction will be collected, removed, and disposed legally off-site.
- The provisions of the BPA Manual Chapter 188: BPA Fire Protection Program apply to all BPA offices and contractors performing work for BPA as provided by law and/or contract and as implemented by the appropriate contracting officer.
- The provisions of the BPA Manual Chapter 180: Safety and Health Program apply to all BPA offices and contractors performing work for BPA as provided by law and/or contract and as implemented by the appropriate contracting officer.