**Categorical Exclusion Determination**
Bonneville Power Administration
Department of Energy

**Proposed Action:** Ross-John Day Fiber Optic Replacement Project

**PP&A No.:** 2066

**Project Manager:** Glenn Van Bergen

**Location:** Clark, Skamania, and Klickitat Counties, Washington, and Wasco and Sherman Counties, Oregon

**Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021):** B4.6 Additions and modifications to transmission facilities

**Description of the Proposed Action:** As part of BPA’s ongoing operation and maintenance of its communication system, BPA is proposing to replace the existing fiber optic cable that is attached to transmission lines that stretch between BPA’s Ross and John Day Substations, a total of 107 line miles.

BPA proposes to replace the existing overhead dispersion 36 count fiber optic cable with a non-dispersion shifted 72 count fiber optic cable, to improve BPA’s transmission system communication needs. The new cable has the same color and finish of the current fiber optic cable but will be 0.09 inches larger in diameter.

The existing fiber would be removed and the new fiber would be attached to the existing transmission line towers. In addition, 84 single wood-pole structures holding the existing fiber would be removed, nine existing wood-pole structures would be replaced in kind, three new wood-pole structures would be installed, and seven concrete vaults would be installed.

The 84 wood-pole structures that would be removed are along a 19-mile stretch of the McNary-Ross #1 Transmission line—the fiber optic cable would be placed on the adjacent steel-lattice transmission line structures. To prevent uplift due to the additional weight of the new fiber cable, up to 1 cubic yard of rock would be mounded at the two outer legs at 29 of the steel structures.

The nine wood-pole structures that would be replaced are located along the Chenoweth-Goldendale #1 Transmission line and are over 60 years old. Under revised strain loading models, these structures would not be capable of supporting the new fiber cables and would be replaced in kind at their current locations. Other wood pole structures along this alignment will be reinforced with cross bracing or anchors instead of being replaced.

The three new wood-pole structures would be located within the transmission line rights-of-way between existing structures, will range from 50 to 70 feet tall, and will be embedded 7 to 9 feet deep depending on subsurface conditions.

The vaults would primarily be located at existing substations and would be 4-foot-by-4-foot-by-4-foot-square concrete enclosures placed next to a wood-pole structure. Vaults would either be placed on the ground or partially buried in the ground.
This project also calls for the burial of multiple short runs of fiber optic cable totaling approximately 2,797 feet. These runs would be used to bring fiber optic cable into and out of vaults connecting to substations and to relieve congestion points in high traffic corridors.

Thirty temporary pulling/tensions sites would be needed to remove and install the fiber optic cables, and 71 temporary guard structures, imbedded, non-imbedded, and aerial guard structures would be utilized. No new access roads would be needed; however, approximately 4.8 miles of the existing access roads would be improved. Improvements would include adding rock and shaping roads. Some brush clearing may be necessary to establish pulling/tensioning sites depending on conditions at the time of construction.

No tree clearing or in-water work will be necessary for this maintenance project.

**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/ Kevin George  
Kevin George  
Environmental Protection Specialist

Concur:

/s/ Stacy L. Mason  
Stacy L. Mason  
NEPA Compliance Officer  
Date: January 14, 2016

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:** Ross-John Day Fiber Optic Cable Replacement Project

**Project Site Description**

The project traverses a combination of land that is either privately owned or managed by the Washington Department of Natural Resources, Washington Department of Fish and Wildlife, US Forest Service, US Army Corps of Engineers, Washington and Oregon State Parks, tribal land trust, and/or the BPA. Portions of the project run through the Columbia Gorge National Scenic Area. Land uses in the area include: farmland, timber, graveled substation yards, rural residential, and industrial. Land cover types crossed include: pasture lands, forest, riverine, riparian, and steppe/scrub shrub.

**Evaluation of Potential Impacts to Environmental Resources**

<table>
<thead>
<tr>
<th>Environmental Resource Impacts</th>
<th>No Potential for Significance</th>
<th>No Potential for Significance, with Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Historic and Cultural Resources</strong></td>
<td>![ ]</td>
<td>![ ]</td>
</tr>
</tbody>
</table>

**Explanation:**

WA DAHP concurrence with BPA no adverse effect determination 01/20/15; Monitors to be present for work activities at N. Bonneville Substation, specific locations along; N. Bonneville-Ross No. 1, N. Bonneville-Midway No. 1, McNary-Ross No. 1, Spearfish Tap-Chenoweth-Goldendale No. 1, and Big Eddy-Spring Creek and Big Eddy-Chenoweth No. 2. Submit a monitoring report when work has been completed.

OR SHPO concurrence on no effect determination 10/06/2014; Monitor should be present during construction at recommend site on John Day-Big Eddy No. 2 to insure no inadvertent impacts.


2. **Geology and Soils**

**Explanation:**

Minimal soil disturbance, no new roads, a project Stormwater Pollution Prevention Plan will be developed and implemented and will address erosion control measures, restoration, and management of work within sensitive areas. Non-imbedded guard structures to be used within the National Scenic Area (NSA). Any disturbed soils on project site will be properly stabilized. See WA State plants below for additional ground protection measures on USFS land.

3. **Plants** (including federal/state special-status species)

**Explanation:** This project requires no tree clearing. All construction equipment will be thoroughly cleaned prior to coming onto project sites to remove weed seeds, vegetative matter, soils, oil and greases.

Bradshaw’s desert parsley (federally listed- threatened) is present but not affected with mitigation to include working from and limiting access (including vehicles) to the existing access roads and landings. Additionally,
highway guard structures will be either set-up on roads or aerial road guard systems will be used.

WA State listed sensitive plants identified as present on USFS land in the project area include: Few Flowered Collinsia, Barrett’s Beardtongue, Marigold pincushionplant, Common Bluecup. In discussions with the USFS Ecologist, in the vicinity of McNary-Ross #1 Structures 111/5-109/4, plant species in this area would be protected by limiting ground disturbances, soil compaction, and direct impacts to flowering plants.

By beginning work in this area no sooner than July 1 plants will have had the opportunity to flower and to have gone to seed and for roads to dry out sufficiently to be able to support vehicle use. Work in this area would need to cease at the on-set of the wet season (October 1) to prevent damage to work sites and the road system.

Construction mats, track matting, using low ground pressure (high flotation) vehicles, and walking to work sites would be utilized to provide access to, and to limit compaction and ground disturbance. In addition, ground disturbances and compaction at pulling/tensions sites would be limited by using cribbing to level reel trailers. Work areas would be restricted to the minimum area that is needed to work safely.

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

   **Explanation:**

   Northern spotted owl (federally listed-Threatened) is known in the area. However, discussions with the USFW Biologist confirm that the project areas present a low risk for spotted owls. However, because the project may include use of helicopters, it is recommended that the seasonal timing restriction (no activity from March 1 - July 15) be observed for those corridor sections of the N. Bonneville-Ross No. 2 and the N. Bonneville-Midway No. 1 corridors within 0.25 miles of the NSO critical habitat. Seasonal timing restrictions are also to be applied to Washington State spotted owl management circles along the N. Bonneville-Midway No. I near Stevenson and east of Carson.

   Bald eagle (Bald and Golden Eagle Migratory Bird Act): Along the McNary-Ross No. 1 Transmission Line three bald eagle nesting sites have been documented within 0.5 miles of the project area. The nearest site is approximately 753 feet from the transmission corridor. No construction activities are proposed within 660 feet of known bald eagle exclusion zones, though a light helicopter may be used for stringing, as such BPA would implement a “no fly zone” which would direct helicopter traffic not to overfly the known eagle exclusion zones.

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

   **Explanation:** This project will have no riparian or in-water work. One existing serviceable ford on Catherine Creek will be used. Catherine Creek provides EFH for Coho salmon and habitat for Winter Steelhead for migration.

   No in-water work is proposed in this creek however, an existing well maintained ford crossing (approx. 0.55 miles from the Columbia River) will be used for this project. Conservation and avoidance measures to be used at the ford crossing include:

   - Utilizing the ford only during the WDFW approved in-water work window for Klickitat County of July 15-September 30 and,
   - Install steel plates to protect ford bottom.

   Populations of bull trout and steelhead, Chinook and Chum salmon, as well as CH for bull trout are identified as present in the Wind River which this project crosses over. Currently a pulling/tensioning (P/T) site has been identified near the eastern bank of the Wind River back-on-line of structure 26/3 of the N. Bonneville-Midway No. 1 Transmission Line. Conservation and avoidance measures to be used at the P/T site include:

   - Utilize Best Management Practices (BMPs) to ensure the localized soil disturbance is minimized and then restored upon project completion.
   - Restore area to the same standards as planting scheme implemented by Pacific Power in area adjacent to and BOL 26/3.
   - Set up ahead-on-line P/T site on road. For P/T site BOL 26/3 utilize lagging to level tensioning trailer, no
## Wetlands

**Explanation:** Should new treated wood poles be placed within or adjacent to wetlands, plastic base wraps will be utilized on to limit the potential for vertical or horizontal leaching of wood treating chemicals.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6.</strong> Wetlands</td>
<td>✅</td>
<td></td>
</tr>
</tbody>
</table>

## Groundwater and Aquifers

**Explanation:** Project would not result in any ground water withdrawals nor provide a pathway for groundwater contamination.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7.</strong> Groundwater and Aquifers</td>
<td>✅</td>
<td></td>
</tr>
</tbody>
</table>

## Land Use and Specially Designated Areas

**Explanation:** WA DNR lands near N. Bonneville-Ross No. 1 Structures 7/3-8/5: To prevent ground disturbances, pulling/tensioning sites will be set-up on existing roads using non-ground disturbing leveling systems; work from existing roads and landings; cut or crush vegetation with no root removal; and clean equipment prior to coming on-site. For fiber optic wood-pole structure removals along McNary-Ross No. 1, flush cut poles and remove in environmentally sensitive manner.

WA State Park lands to include Beacon Rock State Park, Klickitat Trail, and Doug’s Beach State Park: Clean all equipment thoroughly prior to entry. Utilize aerial fiber cable guard structure if guard needed over Klickitat Trail. For wood-pole structure removal at Doug’s Beach, flush cut and remove pole environmentally protective way.

OR State Parks (Deschutes State Park): clean equipment thoroughly prior to entry. Set up P/T site on road if possible, if must be set up off of road, use non-grounding leveling methods.

This project is partially located in Columbia River Gorge National Scenic Area (NSA). In consultation with the Gorge Commission, this project is consistent with the Savings Provisions 5 & 6 of the National Scenic Area Act (CRGNSA letter of consistency 01/05/15).

USFS Lands work requirements include (McNary-Ross No. 1 Str. 109/4 through Str. 111/5):

- **Timing restrictions:** work must be completed in the DRY season (July 15-Sept. 30) to prevent rutting and plant disturbance.
- **All vehicles must be cleaned to remove weed seeds, include interior vehicle floor boards.** Other than to reach the pulling/tensioning site at McNary-Ross No. 1 Str. 110/2 site, use only low ground pressure (high floatation) vehicles such as ATVs’ to access structures and wood poles or walk in.
- **For setting up PT trailer back-on-line of structure 110/2, use track matting to reach set-up site.** Set-up P/T site on the existing access road ahead-on-line of structure 110/2, use track mats where necessary for setting up equipment, and use lagging to level tensioning trailer so there is no ground disturbance. Limit vehicle trips into this area.
- **For uplift rock, hand place 1-2 man fracture faced basalt rocks in low mound at footing site (weed free local source).** Deliver rock to structures using low ground impact equipment.
- **Flush cut wood poles, buck poles to smaller sections and remove.** Capture wood shavings. Remove pole pieces with using low ground impact methods and equipment.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8.</strong> Land Use and Specially Designated Areas</td>
<td></td>
<td>✅</td>
</tr>
</tbody>
</table>

## Visual Quality

**Explanation:** There would be no significant changes in fiber appearance—the fiber will be the same color and finish and about 0.09 inches larger than the existing fiber cable. Removing the 84 existing fiber optic single wood pole structures and using the adjacent steel lattice structures will improve the view scape. The rock piles placed at 19 existing steel lattice structures legs will be small and close to ground using locally quarried materials to match native rock in the area. New wood poles, buried concrete vaults, and buried fiber optic cable runs at existing substations would not significantly change the view quality in these areas. Replacement and rebuilt wood pole structures would be similar in appearance, color, and location to the current structures.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9.</strong> Visual Quality</td>
<td>✅</td>
<td></td>
</tr>
</tbody>
</table>
Although located in Columbia River Gorge National Scenic Area, project takes place in existing corridors and visually would not appear significantly different from structures and appaertuences currently in those corridors.

10. **Air Quality**

   **Explanation:**
   Small amount of dust and vehicle emissions due to construction. Dust control best management practices including water for dust suppression would be utilized.

11. **Noise**

   **Explanation:**
   Temporary construction noise during daylight hours may include helicopter use. Operational noise would not change.

12. **Human Health and Safety**

   **Explanation:**
   There will be no changes to human health and safety with the replacement of this fiber optic cable.

---

**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:

Letters describing the project and requesting comments were sent to landowners and land managers within and along the rights-of-way on November 1, 2015. Six comments were received and were responded to by BPA. In addition, BPA worked with land managing agencies—Washington (WA) State Parks, WA Fish & Wildlife, WA Dept. of Natural Resources, USFS, ACOE, and Oregon State Parks—to address land specific issues.

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

Signed: /s/ Kevin George

Date: January 14, 2016

Kevin George/EPI-4
Environmental Protection Specialist