Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy

Proposed Action: Eagle Creek Fire Emergency Transmission Line Maintenance and Repair

PP&A No.: 3,756

Project Manager: Chad Hamel – TEP-TPP-1

Location: Multnomah and Hood River counties, OR

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B1.3 Routine Maintenance

Description of the Proposed Action: Bonneville Power Administration (BPA) will continue emergency maintenance and repair activities needed along two high voltage transmission lines affected by forest fires in Multnomah and Hood River counties, Oregon. The Eagle Creek fire started on September 2nd, 2017 and burned approximately 49,000 acres, including through areas where BPA owns and operates the 115-kV Bonneville-Hood River transmission line—which runs from the Bonneville Dam powerhouse in Multnomah County, Oregon, to Hood River Substation in Hood River County, Oregon—and the 500-kV Knight-Ostrander transmission line, which runs from Knight Substation in Klickitat County, WA, to Ostrander Substation in Clackamas County, Oregon. Both of these transmission lines are critical components to the Northwest's transmission system.

The fire left burned and damaged trees standing adjacent to the transmission lines, creating direct threats to the reliability of the power grid. In addition, access roads became in danger of washing out and had been degraded by the fire where culverts melted or collapsed.

Immediate repair actions included removing (felling in place) about 2000 burned trees in danger of falling into the transmission lines. On the Bonneville-Hood River line, a danger tree fell on span 1/8 – 2/1, knocked-out power and damaged the steel lattice structure 2/1. In order to address this emergency, the access road to structure 2/1 was improved, and a landing was constructed to allow for the appropriate heavy equipment to install a replacement H-frame wood-pole structure. Power was restored to that section of the line in the following days.

Work on the transmission line structures of the Bonneville-Hood River line to ensure they remain stable will occur at structures 3/3, 5/3, 5/9, 6/4, 6/8. Work will include removing and replacing guy wires and anchors, installing additional guy wires and anchors, adding cross braces and steel cross arms, and potentially replacing one wood pole at structure 5/9.

Also, access road repairs were conducted in select locations along miles 1 – 7 of the Bonneville-Hood River line in order to maintain power to the city of Cascade Locks and ensure access to the structures during inclement weather. Access road improvements began Friday, October 6th, and are expected to continue for 4 to 6 weeks. Improvements include the addition of base rock, surface rock, water bars, drain dips, cross drain culverts, and ditching to help the roads withstand the anticipated additional surface water flows post-fire.

Prior to the fire, an environmental assessment (EA) was prepared for a project to rebuild the Bonneville-Hood River (Bonneville-Hood River Transmission Line Rebuild-DOE/EA-1981). The rebuild construction was planned to begin in 2018. The mitigation measures identified in the EA, as well as the access road plan that was developed, are and will be used as appropriate for the emergency repair actions along damaged sections of the Bonneville-Hood River line.

The Knight-Ostrander transmission line runs south after crossing the Columbia River into the Mt. Hood National Forest, through some of most severely burned areas within the Eagle Creek Fire. The area is characterized by significant topographic expression and numerous small waterways that comprise the east side of the Tanner Creek watershed. Due to the severity of the burn in this location and the topography, significant tree fall, localized floods and debris flows are anticipated in upcoming winter storms. In order to ensure access to the transmission line during winter conditions, road construction began on October 6th, including the addition of base rock, surface rock, water bars, drain dips, cross drain culverts, stream culverts, and ford crossings. Road work is located on the access roads that run from structure 62/3 of Knight-Ostrander to structure 65/1, which is known as Tanner Creek Road, or USFS Road 777.

In addition to ongoing access road work, BPA is planning on topping approximately 450 burnt trees near the Knight-Ostrander right-of-way and conducting work at several structures of the Bonneville-Hood River line. The trees near the Knight-Ostrander right-of-way are severely burnt, and the trees pose a direct threat to falling onto the transmission line. Tree topping would be conducted by a helicopter. Trees would be topped until they are below line height, or to 30 inches diameter which is the cutting limits of the helicopter saw. Snags would be left in place as habitat. A helipad and staging area would be established in a USFS-approved location at Toothrock Trailhead near Interstate 84. Tree topping would begin October 28th, and last approximately 7 days.

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/ *Aaron C. Siemers*
Aaron C. Siemers
Environmental Scientist

Concur:

/s/ *Stacy L. Mason* Date: *October 25, 2017*
Stacy L. Mason
NEPA Compliance Officer

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: Eagle Creek Fire Emergency Transmission Line Maintenance and Repair

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Project Site Description

The transmission line repair work is located in the Columbia River Gorge in the Western Cascades Lowlands & Valleys ecoregion. This ecoregion is characterized by a Pacific marine, mild, wet climate and forests of western hemlock and Douglas fir. The work areas range from the Bonneville-Hood River transmission and access road right-of-way (ROW), which runs generally parallel to the Columbia River and is approximately 0.25 miles from Interstate 84, to more remote access roads and transmission right-of-way along Tanner Creek Road and the Knight-Ostrander line. Vegetation includes native grasses, sword fern, and oxeye daisy, along with big leaf maple, Oregon grape, vine maple, Douglas fir and hemlock. Invasive Himalayan blackberry and Scotch broom are also present in the work area.

In general, the Eagle Creek fire has significantly altered the ecosystem and environment of the work area. While some areas along the Bonneville-Hood River access road and transmission right-of-way show low-to-moderate soil burn severity and many Douglas fir and hemlock trees will survive, upland burn areas will impact lower, less severely burned areas due to increased surface water run-off and the potential for debris flows. The work area along Tanner Creek Road was severely burned, removing the majority of the surface vegetation, leaving large fir and hemlock trees completely defoliated and unstable, and combusting the organic material within the soil. The habitat and hydrology of this area will be changed for the foreseeable future.

Township		Range		Section	County	Site Characteristics
2	N	7	E	12, 13, 14, 21, 22, 23, 27, 28, 33, 34	Multnomah Co., OR, Hood River Co., OR	Western Cascades Lowlands & Valleys ecoregion
2	N	8	E	5, 7, 8		
1	N	7	E	3		

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**	☐	☑

Explanation: Due to the emergency nature of the situation, a BPA Archaeologist has been in correspondence with the U. S. Forest Service (USFS), the Oregon State Historic Preservation Office (SHPO), and the Confederated Tribes of the Grande Ronde via phone calls and emails to keep interested parties informed on the work in-progress and planned activities. On October 18, 2017, BPA received a letter from OR SHPO acknowledging the informal consultation regarding emergency actions, and recommending archaeological monitoring in work areas with ground disturbance. Since the Bonneville-Hood River rebuild project was planned to start in 2018, formal Section 106 consultation was already ongoing and was nearing completion for access road work along the transmission line. A historic and cultural resource mitigation plan was developed, which included monitoring. That plan is being

implemented now. Archaeological monitoring is also being conducted on the Tanner Creek Rd. work areas near the Knight-Ostrander line. With construction monitoring and ongoing correspondence with USFS, the OR SHPO, and the Confederated Tribes of the Grande Ronde, potential impacts to historic and cultural resources would be avoided.

2. **Geology and Soils** ☐ ☑

Explanation: The repairs primarily involve road work along existing BPA access road footprints. Roads would be bladed if necessary and rocked, and drainage features such as water bars, drain dips, and culverts would be added. Some side cast material would be generated, which is usually tracked and seeded as the project nears completion. Due to the emergency nature of this project, additional ground disturbance has been required. For instance, the emergency action to restore Bonneville-Hood River structure 2/1 after emergency failure resulted in construction of a landing and access road that could accommodate large transmission line equipment. In other locations, such as near structure 2/4 on the Bonneville-Hood River line, a slide area was cleared in the access road, which enlarged a cut slope adjacent to the road. BPA and access road contractors are making efforts to stabilize and revegetate disturbed soils as much as possible. Exposed soils in work areas will be mulched and seeded in accordance with standard BPA construction specifications. Erosion and sediment control best management practices will be installed, especially near waterways, to minimize erosion as much as possible. However, due to the nature of the emergency, exposed soils both up slope and downslope from BPA transmission right-of-way and access roads will be subject to increased erosion and sedimentation. BPA would proceed with repair work utilizing best management practices to limit impacts to geology and soils, understanding that the scope of the fire will inevitably increase erosion and sedimentation in the burned areas and downstream waterways.

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

Explanation: The majority of the repairs involve road work along existing BPA access road footprints which are already developed and rocked. Some staging areas and turn-arounds for heavy equipment would be cleared. Prior to the fire, no federal special status species were present in the work area. USFS sensitive plants had been identified in the Bonneville-Hood River right-of-way. A relatively small population of Multnomah bluegrass was identified near the access road near structure 3/3 within the right-of-way. No other sensitive plants were mapped within the planned work area. Overall, emergency response activities would not significantly impact Multnomah bluegrass populations in Mt. Hood National Forest or within the Columbia River Gorge Scenic Area.

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

Explanation: BPA obtained an official species list from the U.S. Fish & Wildlife Service on October 19th, 2017. Northern spotted owl is listed as threatened in the work area, and Northern spotted owl critical habitat is present near the Knight-Ostrander work area. Due to tree topping in designated critical habitat, BPA has determined that the project may effect, but is not likely to adversely affect Northern spotted owl critical individuals and critical habitat. An Effects Determination Memo has been drafted for the project.

The U.S. Forest Service is engaged in emergency consultation with U.S. Fish & Wildlife for fire response actions and effects to endangered species and critical habitat, including Northern spotted owl. The USFS has agreed to include BPA's actions within the emergency consultation. Therefore, no further consultation with U.S. Fish & Wildlife will be required. BPA will provide a report to USFS following completion of project activities that documents tree removal within Northern spotted owl critical habitat.

U.S. Forest Service sensitive species including Pika and Oregon salamander are present in the Bonneville-Hood River work area. Peregrine falcon and bald eagle are also known to be present in the Bonneville-Hood River work area. These special status species will not be significantly impacted by the project activities. All work is being conducted outside of the nesting and breeding period for Pika, Bald eagle, and Peregrine falcon. The scope and extent of the Eagle Creek Fire has disrupted the local ecology and habitat, and impacts of BPA's planned emergency response activities will be relatively negligible.

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

Explanation: The project area drains the slopes of the Cascades in the Columbia River Gorge. Numerous seasonal, intermittent and perennial fish-bearing waterways are present nearby. Eagle Creek, Ruckel Creek, Herman Creek, and Tanner Creek and associated watersheds drain into the Columbia River and provide habitat for protected fish such as endangered anadromous salmonids. Please see the attached Effects Determination Memo for an analysis of effects from project activities on these species.

Project activities include significant work in intermittent to ephemeral drainages, as well as some perennial streams. The majority of this work involves replacing existing access road cross drain culverts, adding drain dips, water bars, etc., however five stream culverts along Tanner Creek Road will be repaired and/or replaced during the project. For the Bonneville-Hood River section of the project, all impacts to jurisdictional waterways have been permitted with the U.S. Army Corps of Engineers (USACE) under a Nationwide 12 Section 404 Clean Water Act permit and an Oregon Dept. of State Lands (DSL) Removal Fill permit. For culvert replacement in jurisdictional waters along Tanner Creek Road near the Knight-Ostrander line, the road work meets maintenance exemption and emergency response criteria, and no USACE or DSL permitting is required.

6. **Wetlands** ☑ ☐

Explanation: One small wetland is present near the access roads to structure 5/8 on the Bonneville-Hood River line. No impacts or fill material within the wetland is planned. The wetland will be avoided during project activities.

7. **Groundwater and Aquifers** ☑ ☐

Explanation: The work would not involve new groundwater wells or ground disturbance that would impact aquifers.

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

Explanation: The repair work areas are located in the Columbia Gorge National Scenic Area (Scenic Area) and Mt. Hood National Forest. A portion of the work is also within the protected Bull Run Reservoir watershed.

BPA has notified the U.S. Forest Service who manages activity within the Scenic Area of the project scope and timeline. The work along the Bonneville-Hood River transmission line has already been discussed at length with the USFS during the NEPA process and special use permit negotiations for the rebuild project. Road construction and danger tree removal would not alter existing land use in either the Scenic Area or Mt. Hood National forest.

Danger tree removal and topping near the Knight-Ostrander right-of-way is within the Bull Run Reservoir watershed, which provides drinking water to the City of Portland. Access to this area is typically restricted to preserve the quality of Portland's water supply. BPA and the USFS have notified the City of Portland which manages the Bull Run Reservoir of the project plan. All work will proceed in accordance with City of Portland's guidance regarding activities in the restricted Bull Run watershed area. No helicopter landing or fueling is planned within the Bull Run watershed.

Long term land use would not be changed by the emergency repair activities. There is no potential for significant impacts to land use or specially designated areas.

9. **Visual Quality** ☑ ☐

Explanation: The proposed work would not impact visual quality. All work would be conducted on existing high voltage transmission access roads on existing right-of-ways. Due to the severity of the fire, planned tree topping near the Knight-Ostrander line will not significantly change visual quality. The majority of the trees in this area will be falling naturally within the next several years.

10.	**Air Quality**	☑	☐

Explanation: The project would create temporary dust and vehicle emission due to construction; however, no significant impacts would occur.

11.	**Noise**	☑	☐

Explanation: The project would create temporary noise due to construction; however, no significant impacts would occur.

12.	**Human Health and Safety**	☑	☐

Explanation: During project activity, all standard safety protocols would be followed. Helicopter activities would follow standard, BPA-approved safety practices. In general, emergency response project activities are being conducted and additional actions are planned in an effort to avoid emergency outages and additional emergency response activities in inclement winter weather which could put BPA employees and the general public at risk.

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: NA

☑ 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: NA

☑ 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: NA

☑ 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: NA

Landowner Notification, Involvement, or Coordination

Description: The proposed project is located on public land owned by the U.S. Forest Service and managed by the U.S. Forest Service and the City of Portland Water Bureau. BPA will continue ongoing coordination with the landowners and land management agencies during repair activities.

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

Signed: /s/ *Aaron C. Siemers* Date: *October 25, 2017*
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