Proposed Action: Steel Lattice Corrosion Inspection & Repair for Chehalis-Covington No. 1 and Longview-Chehalis No. 1

PP&A No.: 3,520

Project Manager: Martin Flores-Sanchez TELP-TPP-3

Location: King County, WA, Pierce County, WA, and Cowlitz County, WA

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B 1.3 Routine Maintenance

Description of the Proposed Action: BPA is proposing to conduct inspection & repair of transmission tower steel lattice legs and concrete footings at transmission structures of the Chehalis-Covington No. 1 230 kV transmission line and the Longview-Chehalis No. 1 230 kV transmission line. The action is to address underground corrosion of the steel lattice and degradation of concrete footings, which may be impacting the structural integrity of the towers and putting the transmission lines at risk. The project would involve inspection of the steel lattice legs, and hand excavation approximately 24 – 48 inches deep in the immediate vicinity of the concrete and plate footings to inspect the concrete and steel lattice below ground surface. At some sites, a corrosion resistant coating would be painted on to the lattice steel to protect the steel. At other sites, the corroded steel would be removed, and steel supports would be attached to the lattice and painted with the corrosion resistant coating to maintain structural integrity of the structure. At other locations, metallic anodes would be dug in to an approximately 1 ft. diameter vertical hole or lateral trenches and attached to the steel lattice to provide protection from corrosive electrochemical forces. Soil sampling for redox potential and pH testing may also occur at select tower sites. All excavated and disturbed areas would then be backfilled with the native material and reseeded with an appropriate seed mix, and mulched with weed-free straw.

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, Jul. 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 Siemers  
Aaron Siemers  
Environmental Protection Specialist

Concur:

/s/ Sarah T. Biegel  
Sarah T. Biegel  
NEPA Compliance Officer

Date: October 11, 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.

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**Project Site Description**

The project area is located in western Washington and spans from near the Columbia River at BPA’s Longview Substation, to Covington Substation in the Puget Sound, Seattle metro area.

Inspections and repairs would be conducted on the Longview-Chehalis No. 1 transmission line from structure 1/1 to 17/1. These structures are located in the Cowlitz Chehalis Foothills and the Willapa Hills ecoregions of western Washington. The Cowlitz Chehalis Foothills ecoregion is characterized by rolling to steep foothills, and lands historically forested with hemlock and western red cedar. The Willapa Hills ecoregion farther to the north consists of erodible silt and clay soils with underlying sedimentary rock. Today, most of these areas that the transmission line passes through have been converted to industrial timberland, with some urban and suburban areas near the City of Longview, and some tracts cleared for small ranching operations and rural residential homes.

The Chehalis-Covington No. 1 project area runs from structure 31/4 to structure 70/2, and crosses the Southern Puget Prairies ecoregion, the Eastern Puget Riverine Lowlands ecoregion, and the Eastern Puget Upland ecoregion. The Southern Puget Prairies ecoregion is characterized by flat to rolling glacial outwash plains and ground glacial moraines. Vegetation includes Douglas-fir and hemlock forests, oak woodlands, and well as lands converted to cropland and pasture. The Eastern Puget Riverine Lowlands ecoregion is comprised of floodplains and terraces, with cedar forests, western hemlock, and riverine and wetland habitats prior to development in the 19th century. The area is now primarily urban and suburban, with pasture lands, croplands, and managed forests in the rural areas. The Eastern Puget Uplands ecoregion is a transitional ecoregion between the Puget Lowlands and the Cascade Mountains, with vegetation from both ecoregions, with greater elevation and precipitation than the Puget Lowlands.

In general, the steel lattice towers of the Longview-Chehalis No. 1 and Chehalis-Covington No. 1 are located in cleared transmission line right-of-way (ROW), in large high voltage corridors ranging from 250 to 650 feet wide, consisting in most areas of several BPA transmission lines. The vegetation in the ROW is managed periodically to promote low-growing shrubs and grasses, and to remove trees. Native and introduced grasses and invasive weeds such as Scotch broom and Himalayan blackberry typically dominate the landscape. The steel lattice structure sites are in areas previously excavated and backfilled during the original line construction.
## 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. Historic and Cultural Resources</td>
<td>✓</td>
<td></td>
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</tbody>
</table>

**Explanation:**

On December 13, 2018, BPA engaged in consultation with the Nisqually Indian Tribe, the Puyallup Tribe of Indians, the Snoqualmie Indian Tribe, Joint Base Lewis-McChord, the Washington Dept. of Archaeology & Historic Preservation (DAHP), the Cowlitz Indian Tribe, and the Muckleshoot Indian Tribe. BPA conducted field surveys of the area of potential effect.

On June 11, 2019, BPA sent a determination letter stating that the undertaking would have no adverse effect to historic properties. On June 12, 2019, BPA received a concurrence letter from the Washington Dept. of Archaeology and Historic Preservation. Responses were not received from tribes consulted.

**Note:**
- In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity must stop, the area secured, and the concerned tribe’s cultural staff and cultural committee and DAHP notified.

| 2. Geology and Soils | ✓                           |                                               |

**Explanation:**

The project would involve excavations approximately 24-48 inches in depth into the soils surrounding steel lattice tower footings, which would include plate footings, grillage footings, and concrete footings. The excavations would be approximately 3–5 feet in diameter. In some scenarios, 24-48 inch trenches would be installed immediately adjacent to the steel lattice legs for anode installation. The disturbed soil associated with this planned activity was excavated, backfilled, and compacted around the steel lattice footings during the original line construction, and likely consists of native soils and some select backfill.

**Note:**
- During the course of the project activities, soil would be excavated and staged on site, then backfilled into the excavated area, compacted, and stabilized with native seed and weed-free straw.

| 3. Plants (including Federal/state special-status species and habitats) | ✓                           |                                               |

**Explanation:**

Excavation and construction activity around and immediately adjacent to the steel lattice tower legs would disturb vegetation, including native grasses, shrubs, and forbs, as well as invasive Himalayan blackberry, Scotch broom, and reed canary grass. These areas would be reseeded with a native grass seed mix upon project completion.

BPA obtained a species list for the project from the US Fish and Wildlife Service (USFWS) on August 12, 2019. No critical habitat for Endangered Species Act (ESA)-listed plant species is present in the project area. An effects determination was conducted for golden paintbrush, Kincaid’s lupine, marsh sandwort, Nelson’s checker-mallow, and water howellia. BPA determined that the project would have no effect on special-status plants and habitat. Please review the project’s Effect Determination Memo for more information.
4. **Wildlife** (including Federal/state special-status species and habitats)

**Explanation:**
Excavation and construction activity around the steel lattice towers would likely temporarily disturb wildlife such as deer, birds, and small mammals due to the presence of human activity, vehicular traffic, and noise. However, the footprint of the project is limited to the area immediately surrounding the steel lattice tower, and disturbance would be temporary.

BPA obtained a species list for the project from the USFWS on August 12, 2019. No critical habitat for Endangered Species Act (ESA)-listed wildlife is present in the project area. Field surveys in September of 2019 did not identify ESA-listed species in the work area. An effects determination was conducted for Columbian white-tailed deer, gray wolf, North American wolverine, Roy Prairie pocket gopher, marbled murrelet, northern spotted owl, streaked horned lark, yellow-billed cuckoo, Oregon spotted frog, and Taylor’s checkerspot. BPA determined that the project would have no effect on special-status wildlife and habitat. Please review the project’s Effects Determination memo for more information.

**Note:**
For project sites located near Roy Prairie pocket gopher potential areas (structures 36/2-38/1 & 50/5-51/4 of Chehalis-Covington No. 1), the following mitigation measures would be implemented:
- All digging will be done between July 1st and February 14th.
- Any work requiring the use of equipment will be scheduled for late summer to minimize rutting and compaction.
- All vehicles must stay on existing access roads.

For project sites located in or near Oregon spotted frog potential habitat (structures 31/4-58/2 on the Chehalis-Covington No. 1), the following mitigation measures would be implemented:
- No driving would be allowed through standing water/flooded roads.
- All vehicles used to access the project area would stay on established access roads and routes of travel.
- All equipment would be cleaned prior to entering ROW to reduce the potential spread or introduction of noxious weeds or other exotic species (this means trucks/ATVs/etc.).
- Disinfection procedures would be performed prior to conducting in-water work within Oregon spotted frog potential habitat.
- All work requiring crews to enter standing water would occur between July 1st and October 15th.
- Except for inspections, no work would occur during or immediately after (within 2 hours) a major precipitation event (>0.50 inch).

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

**Explanation:** The overall project area includes several streams; some with endangered species act (ESA)-listed species. However, no structure sites where the work would be conducted are located in an ESA-listed stream and no-in-water work is planned; therefore, fish would not be impacted by project activities. Several structure sites are located within a FEMA-designated floodplain. Project activities would not limit or restrict floodplain conductivity, or add additional material to floodplains.
6. **Wetlands**

**Explanation:** Several project work sites are located near national wetland inventory (NWI) designated wetlands. Approximately 10 work sites are located within NWI wetlands. No additional fill material would be placed in waters of the state or the U.S., including jurisdictional wetlands; therefore, no specific Clean Water Act permitting would be required for the planned work. Impacts to wetlands would be temporary and isolated to the immediate area near structure locations. Excavated soil would be backfilled and reseeded post construction, restoring the wetlands to pre-construction condition.

**Note:**
- All work requiring crews to enter standing water would occur between July 1st and October 15th.

7. **Groundwater and Aquifers**

**Explanation:** Depth of excavation (approximately 24 – 48 inches deep) would not intercept groundwater or aquifers in the project area.

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

**Explanation:** Project activity is not located in any specially-designated areas. Existing land use consists of high voltage transmission ROW, agricultural, ranching, rural residential, silviculture, suburban residential, commercial, and industrial. Existing land use would not be impacted by project activities.

9. **Visual Quality**

**Explanation:** Temporary excavated areas would be backfilled and revegetated. Proposed steel repairs of corroded lattice and corrosion resistant coatings are consistent with existing visual quality.

10. **Air Quality**

**Explanation:** Some dust may be generated due to construction activities, including excavation and backfill, as well as construction traffic. However, impacts to air quality would be minimal and temporary.

11. **Noise**

**Explanation:** Temporary noise may be generated due to construction activities such as vehicular traffic and excavation. However, noise impacts would likely be negligible and blend with normal ambient noise in the project area.

12. **Human Health and Safety**

**Explanation:** A site-specific job safety plan would be developed and implemented in the field by construction crews. Daily safety meetings would be held to discuss safe work practices on the construction site and when working in public areas.

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**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:** Not applicable

- 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:** Not applicable
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:** Not applicable

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:** Not applicable

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**Landowner Notification, Involvement, or Coordination**

Description: Project location land is federally-owned, state-owned, and privately-owned. BPA would coordinate project activities with the underlying landowners at each work location, notifying landowners of the project's schedule, and solicit comments for site restoration and revegetation as necessary.

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

**Signed:** /s/ Aaron Siemers

Aaron Siemers, EPR-4

Physical Scientist (Environmental)

**Date:** October 11, 2019