**Proposed Action:** Santiam-Albany No. 1 Tower Relocation Project (Structures 28/4 & 29/3)

**PP&A No.:** 3,784

**Project Manager:** Tina Edwards, (CONTR) - TEPO-TPP-1

**Location:** Linn County, Oregon

**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) owns and operates the 230 kV Santiam-Albany No. 1 electrical transmission line in Linn County, OR. The transmission line is approximately 30 miles in length and runs from BPA’s Santiam Substation in the foothills of the Cascade Mountains, to Albany Substation in the Willamette Valley of Linn County, Oregon. The transmission line was constructed in the early 1950s and is supported by steel lattice towers.

BPA is proposing to address risks to the transmission line in miles 28 and 29 of the line as it approaches Albany Substation. In mile 28 of the line, a cut bank of Oak Creek, a tributary to the Calapooia River, is eroding the bank near structure 28/4, and future additional erosion is a threat to the structural integrity of the steel lattice. BPA proposes to re-locate the structure approximately 130 ft. back-on-line to the southeast, away from the Oak Creek cut bank. To mobilize heavy equipment, including a large crane and an excavator, BPA would install a temporary road approach and bridge over Oak Creek at an upstream location on a nearby transmission line access road. The temporary bridge abutments would be installed outside of the ordinary high water mark of the creek, and would be removed upon project completion with minimal impacts to the surrounding vegetation. Some tree removal and trimming would likely be required to mobilize heavy equipment to the 28/4 work site, through the forested portions of the work area, adjacent to existing BPA access roads.

In line mile 29 of the transmission line, cut bank erosion on the Calapooia River is encroaching upon structure 29/3. BPA is proposing to move the steel lattice structure approximately 65 ft. ahead-on-line to the north, away from the eroding river bank. In the vicinity of the new tower location, an engineered ephemeral drainage channel is present. Due to siting constraints of the new tower location, BPA is proposing to re-align the ephemeral drainage channel orientation to create sufficient space for the new steel lattice and footings. Approximately 60 ft. of channel would be re-aligned. The new channel bed would be stabilized and revegetated, and other disturbed soils in the project area would be stabilized and seeded with a native seed mix.

BPA would install landings for heavy equipment to safely operate at structures 28/4, 29/2, 29/3, and 29/4. Landings may involve clearing and leveling existing grade and installing rock, or may involve leveling and clearing vegetation. The landing at 28/4 would be fully restored post construction. The
landings would be utilized during re-conductor work associated with the tower relocation at 29/3 and 28/4. Fall protection would also be installed on these four steel lattice towers.

Equipment would include heavy machinery such as track hoes, dump trucks, utility bucket trucks, and cranes, as well as trucks and smaller transportation vehicles.

**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 Siemers  
Aaron C. Siemers  
Environmental Protection Specialist

Concur:

/s/ Sarah T. Biegel  
Sarah T. Biegel  
NEPA Compliance Officer- EC-4

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:** Santiam-Albany No. 1 Tower Relocation Project (Structures 28/4 & 29/3)

**Project Site Description**

The project is located in the Prairie Terraces ecoregion of the Willamette Valley, central Oregon. The ecoregion is characterized by undulating to flat glacial-lacustrine soils, and drained by meandering streams and rivers. Native vegetation includes prairie grasses and oaks, with black cottonwood and Oregon ash present near waterways, but today much of the ecoregion has been converted to agricultural lands and urban/suburban development. The project is located in the Calapooia River watershed, near the confluence of Oak Creek. The Calapooia River is documented as an endangered steelhead and Chinook salmon stream. The transmission structure 28/4 project site is near the banks of Oak Creek, on the flood plain terrace between the two rivers. Vegetation in the cleared transmission right-of-way is dominated by invasive blackberry, teasel, and Reed canary grass. Low-cut vine maple is also present. To the north, the transmission line access road crosses Oak Creek. The existing bridge structure is privately owned and undersized for Oak Creek’s seasonal high flows. The bridge is anchored into the banks of the creek. Vegetation near the bridge site is primarily Reed canary grass and blackberry. During site visits, a beaver dam and a beaver were observed in the bridge area. Approximately one mile farther to the north, the structure 29/3 work site is on an elevated cut bank of the Calapooia River, about 350 ft. northwest of BPA’s Albany Substation. The Calapooia River runs approximately 30 ft. below the ground elevation from a steep, bare cut. Currently, structure 29/3 is approximately 13 ft. from the cut bank. Vegetation includes Scotch broom, teasel, curly dock, native bunch grasses such as Idaho fescue, and small trees. A vegetated ephemeral channel is present near the structure site, which provides overflow drainage to the river from a pond located approximately 500 ft. away. Railroad tracks run west of the substation, trending northeast by southwest. Approximately 500 ft. to the north, four additional high-voltage transmission lines emerge from Albany Substation.

The legal description for the work areas is listed below:

<table>
<thead>
<tr>
<th>Township</th>
<th>Range</th>
<th>Section</th>
<th>County</th>
<th>Ownership</th>
</tr>
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<tbody>
<tr>
<td>11</td>
<td>S</td>
<td>4</td>
<td>W 12</td>
<td>Linn, OR</td>
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<tr>
<td>11</td>
<td>S</td>
<td>4</td>
<td>W 13</td>
<td>Linn, OR</td>
</tr>
</tbody>
</table>

**Evaluation of Potential Impacts to Environmental Resources**

<table>
<thead>
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<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>
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</table>

**Explanation:**


BPA issued a Letter of Determination on April 2, 2019, that the undertaking will have no adverse effect to historic properties. No consulted parties responded during the stipulated 30-day waiting period. Therefore, according to Section 106 of the National Historic Preservation Act and 36 CFR Part 800, BPA’s consultation requirements have
been fulfilled.

At specific sensitive work sites, BPA would have an archaeological monitor in place to mitigate potential risks to historic properties. In addition, BPA would limit work areas, and install flagging to ensure specific locations near work sites are avoided during construction.

2. **Geology and Soils**

   **Explanation:**
   The project would have minimal soil disturbance. At structures 28/4 and 29/3, the existing footings of the steel lattice structures would be cut below grade and left in place to minimize soil disturbance. For the new footing locations, ground disturbance would be minimized by establishing work areas and turn-arounds, and employing shoring during excavation. Excavations for each footing would likely be 12’x12’x12’. Landing sites at 28/4, 29/2, 29/3, and 29/4 are all relatively flat and would not require significant regrading. All areas with disturbed soils would be stabilized and reseeded upon project completion. The new drainage channel cuts would be stabilized with erosion control blankets and coir wattles, seeded, and monitored for revegetation to mitigate erosion risks.

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

   **Explanation:**
   BPA obtained an official species list from U.S. Fish & Wildlife on March 1, 2019. Kincaid’s lupine, Bradshaw’s desert parsley, Nelson’s checker-mallow, water howellia, and Willamette daisy are listed as threatened or endangered in Linn County. BPA has conducted an effects determination and the project would have no effect on threatened and endangered (T&E) plants. Please review the Santiam-Albany No. 1 Tower Relocation Project (28/4 & 29/3) ESA Effect Determination Memo for additional detail. A follow-up ground survey would be conducted in the spring of 2019 to ensure that no T&E plants are present in the project area.

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

   **Explanation:**
   BPA obtained an official species list from U.S. Fish & Wildlife on March 1, 2019. Northern spotted owl, marbled murrelet, yellow billed cuckoo, streaked horned lark, and Fender’s blue butterfly are listed as threatened and/or endangered in the project area. No critical habitat is present in the project area. BPA has conducted an effects determination and the project would have no effect on threatened and endangered (T&E) wildlife. Please review the Santiam-Albany No. 1 Tower Relocation Project (28/4 & 29/3) ESA Effect Determination Memo for additional detail.
5. **Water Bodies, Floodplains, and Fish**  
    (including federal/state special-status species and ESUs)

The project area is located in a floodplain between the Calapooia River and Oak Creek, as well as the greater Calapooia River floodplain near structure 29/3. However, no significant volume of additional fill material would be placed within the floodplain during project implementation. The old steel lattice structures would be removed. The old steel lattice legs would be cut to three feet below ground surface and reburied. The project would have no potential for significant impacts to the floodplain.

An ephemeral channel is present near structure 29/3. The channel was installed to provide overflow drainage from ponds and wetlands approximately 500 ft. to the north, near the Albany Substation. The channel is engineered, with a vegetated bottom of native and invasive grasses, blackberry, and teasel. No bed or bank, or wetland vegetation is present. Due to siting constraints, this channel would be re-aligned during construction to allow for the installation of the new structure 29/3 footing. The channel would be stabilized and fully restored upon project completion, and monitored until final stabilization is achieved.

The Calapooia River flows approximately 20 ft. southwest of the current location of 29/3. Erosion from the cut bank is threatening the transmission structure. The water elevation is approximately 30 ft. below the surface elevation of the structure, down a near vertical cut bank. No in-water work is planned. The Calapooia River would be protected during construction by following standard stormwater best management practices.

Oak Creek is located approximately 12 ft. from structure 28/4, and erosion from the cut bank of the creek has the potential to put structure 28/4 at unnecessary risk. The water elevation is approximately 10 ft. below the surface elevation of the structure, down a near vertical cut bank. No in-water work is planned. Oak Creek would be protected during construction by following standard stormwater best management practices.

Oak Creek and the Calapooia River are endangered fish streams, with Chinook salmon and steelhead documented within the waterways. BPA has a programmatic biological opinion in place with the National Marine Fisheries Service (NMFS) for effects to endangered anadromous fish, and NMFS has been notified of the project activities and has authorized the project. Please see the Santiam-Albany No. 1 Tower Relocation Project Effects Determination Memo for more information on ESA consultation.

6. **Wetlands**

   **Explanation:**

Some fringe wetlands may be present near the banks of Oak Creek. No permanent impacts, including fill material, or removal of material is planned within wetlands. A temporary bridge and approach would be installed over Oak Creek during construction to allow for transport of a large crane to the structure 28/4 work site. The bridge would be installed on timber matting, and the bridge approach would be installed on geotextile material to be removed and restored upon project completion. Potential temporary fill volumes in wetlands, and temporary impact areas, do not meet the State of Oregon Removal-Fill Law and Clean Water Act thresholds for notification to the respective regulatory agencies. Any potential temporary impacts to fringe wetlands along Oak Creek would be restored upon project completion.

7. **Groundwater and Aquifers**

   **Explanation:**

There are no new wells or use of groundwater proposed for the project. Spill prevention and control measures would be present to reduce risks to surface water and groundwater.

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

   **Explanation:**

Existing land use would not be affected. The work would be conducted within the existing transmission easement, and there are no specially designated areas present.
9. **Visual Quality**

   **Explanation:**
   
   The visual quality of surrounding area and of the Santiam-Albany No. 1 line would not be significantly changed by the project activities. The project is located in an existing high-voltage transmission right-of-way. Though structures 28/4 and 29/3 would be moved, the existing steel lattice appearance of the line would not be altered, and the height increase would most likely not be apparent to the majority of observers.

10. **Air Quality**

    **Explanation:**
    
    The project may create temporary dust and vehicle emission due to construction, but no significant air quality impacts.

11. **Noise**

    **Explanation:**
    
    The project may create temporary noise due to road improvements and structure work; however, the additional noise would occur during normal working hours, and would not significantly impact the area.

12. **Human Health and Safety**

    **Explanation:**
    
    BPA and any contractors working on the project would implement standard safety protocols before and during the construction project. The project would not impact human health or safety and would help increase safety and power reliability in the area.

### 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:** BPA would carry out ongoing consultation with NOAA Fisheries for potential impacts to threatened fish species and critical habitat. Any work requiring notification to the Oregon Dept. of State Lands or the U.S. Army Corps of Engineers for activities in wetlands and waters of the U.S. and State would be postponed until appropriate notifications have been made and the work is authorized.

- 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:** N/A

- 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:** N/A
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: N/A

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**Landowner Notification, Involvement, or Coordination**

Description: The proposed project is located on private land and BPA-owned land. BPA would continue ongoing coordination with the landowners.

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

Signed: /s/ Aaron Siemers  Date: May 2 2019
Aaron C. Siemers
Environmental Protection Specialist