Proposed Action: Keeler Substation Electrical Reactor Replacement

Project No.: P01235

Project Manager: Charla Burke

Location: Hillsboro, Washington County, OR

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B4.11 Electric power substations and interconnection facilities

Description of the Proposed Action: BPA proposes to replace an electrical reactor and associated equipment that was damaged in a fire at BPA’s Keeler Substation in 2015. Equipment replaced would include a 230-kV reactor, a 230-kV circuit switcher, bus, bus pedestals, and cables. Work would also include relocating a disconnect switch, reinforcing a road spur (that was installed during the fire emergency) that runs from the reactor yard to just outside the fenced area on the north side of the substation, adding oil/water separator vaults, and installing a vehicle gate and an exterior road spur on the west side of the substation that would connect to an existing perimeter road. The road spurs are needed to improve access to the project area and would be the only elements of the project located outside of the substation yard fence.

Ground disturbance within the existing fenced area would include excavation for footings, ground mat work, and conduits. Expected ground disturbance would occur within a 0.3 acre area and include the following: oil vault digging depths up to 12 feet, footing depths of up to 6 feet, conduit digging up to 36 inches deep, and ground mat work over the entire 0.3 acre area of 18 inches deep.

Road work would require blading by dozer to a depth of approximately 12 inches and would disturb an approximate 0.1 acre area. It is expected that less than 500 cubic yards of soil would require disposal off-site at a BPA-approved facility.

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/ Michael J. O’Connell  
Michael J. O’Connell  
Environmental Protection Specialist

Concur:

/s/ Stacy L. Mason  
Stacy L. Mason  
NEPA Compliance Officer  

Date:  March 18, 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.

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**Project Site Description**

The project would take place on BPA fee-owned property in and around the Keeler Substation in Hillsboro, Washington County, Oregon. Located 165 feet from State Highway 26, the substation is in a highly suburbanized and industrial area. The site consists of the rocked substation yard, transmission lines and associated structures, and graveled areas for vehicle access and equipment storage. The substation perimeter area is relatively flat terrain and is comprised of regularly mowed grasses and forbs.

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**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>
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<tbody>
<tr>
<td>1. Historic and Cultural Resources</td>
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**Explanation:** BPA has performed multiple cultural resource surveys within the APE of this undertaking over the last five years. These previous surveys consisted of intensive pedestrian surveys augmented by the excavation of shovel test probes. These previous surveys showed that no cultural resources are located within the APE and due to the disturbed nature of the subsurface soils caused by previous construction activities there is no potential for the existence of intact or significant sub-surface cultural deposits. The Cowlitz and Grande Ronde Tribes were consulted and indicated they had no concerns with work proceeding in this area.

**Mitigation:**

- Potential discoveries of archeological materials would be treated with the ‘inadvertent discovery’ guidelines: Stop work, contact BPA ECT lead and BPA ECC archeologists for further notifications, and: ensure integrity of site and materials until further instructions.

| 2. Geology and Soils | ✗ | |

**Explanation:** The project area is in a previously-disturbed industrial setting of the substation property. The excavation required for road spur installation would be about 12 inches in depth. Surface topsoil loss would be around 0.1 acre, with no damage to geological resources.

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

**Explanation:** Most project work would occur within the existing graveled, vegetation-free, fenced substation yard.

Road work outside the fenced area would occur in an existing transmission line corridor and on substation perimeter grounds that are regularly maintained to eliminate tall-growing plant species. The area of the new road spur on the west side of the substation was surveyed for habitat and occurrences of four special-status species (federally-listed threatened Nelson’s checker-mallow, federally-listed threatened Kincaid’s lupine, state-listed endangered white rock larkspur, and state-listed threatened white-topped aster) on October 5, 2015. The BPA botanist confirmed no occurrences of the special-status species were found, and that the area does not support remnant native prairie based on the lack of species commonly associated with remnant native prairie.
4. **Wildlife** (including federal/state special-status species and habitats)

**Explanation:** There are no special-status species and no designated habitat present. About 0.1 acre of fairly low quality habitat typical of the area would be disturbed. The streaked horned lark is a Willamette Valley federally-listed threatened species, but the site does not offer a key attribute of suitable habitat: wide open spaces that are flat and treeless and at least 300 acres in size, or otherwise adjacent to sites of this open character. Also, the high levels of industrial and transportation activity on the properties surrounding the 37-acre vegetated perimeter of the 2.3-acre project area would most likely prevent the bird from nesting in the project area.

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

**Explanation:** Approximately 0.5 mile from the project area, Rock Creek is a spawning and rearing stream for steelhead trout (an Upper Willamette River ESU winter run federal T&E), and provides rearing and migration for coho salmon. Pond and lake reservoirs are also within 0.5 mile. However, no in-water work is proposed for the project, and sediment would be controlled per the following mitigation measures.

**Mitigation:**
- Design, build, and implement construction phase stormwater mitigation measures. This would entail obtaining the National Pollutant Discharge Elimination System (NPDES) permit for Construction activities. Develop and implement a Stormwater Pollution Prevention (SWPP) Plan/Temporary Erosion Sediment Control (TESC) Plan to limit project impacts.
- Design, build, and implement post-construction stormwater mitigation measures to ensure no effect on the water quality and potential increased flow generated by the project. BPA stormwater discharges are covered by the local NPDES Permit issued to Clean Water Services and implemented through the City of Hillsboro. Design would meet and or exceed these local requirements. Long-term maintenance of the stormwater assets would be required under the NPDES permit.
- Develop and implement oil pollution prevention measures as outlined under the Clean Water Act (CWA). Emergency release planning would be met through development/implementation of a professional engineer-designed and signed SPCC Plan that gets reviewed and approved by EP.

6. **Wetlands**

**Explanation:** No wetlands would be disturbed and any potential runoff of compromised quality would be minimized with the BMPs described for erosion control to water bodies, floodplains, and fish.

7. **Groundwater and Aquifers**

**Explanation:** All new equipment installations with potentially hazardous liquids would be outfitted with containment vessels, and construction would be accomplished with spill prevention BMPs.
- Do not allow petroleum products or other deleterious materials to enter groundwater by using adequate Spill Prevention Control and Countermeasures (SPCC).

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

**Explanation:** All work is planned for BPA fee-owned property. The project area has been previously disturbed for construction of substation and associated access roads and transmission line corridors.

9. **Visual Quality**

**Explanation:** The additional equipment would be visually consistent with existing structures and equipment already located at the substation.
10. **Air Quality**

| ☒ | | ☐ |

**Explanation:** There would be dust and vehicle emissions during construction activities. Such impacts would be minimal due to the nature of the surrounding industrialized setting.

11. **Noise**

| ☒ | | ☐ |

**Explanation:** There would be temporary, intermittent noise from construction activities during daylight hours that would not be inconsistent with the surrounding area. Operation noise would be in compliance with BPA’s audible noise policy.

12. **Human Health and Safety**

| ☒ | | ☐ |

**Explanation:** There would be no impact to human health and safety from the proposed project. Temporary risks during construction would be minimized by use of BMP’s for substation and transmission line construction.

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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:**

- ☒ 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: All work would be completed on BPA fee-owned property; the visual or noise impacts to adjacent landowners would not be significant and would be consistent with the industrialized setting.

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

Signed: /s/ Michael O’Connell  Date: March 18, 2016
Michael O’Connell, ECT-4