Proposed Action: Wendson Substation Bus Tie Addition and Control House Replacement Project

Project No.: P02230

Project Manager: Rasha Kroonen, TEPS-TPP-1

Location: Lane County, 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: Bonneville Power Administration (BPA) proposes to upgrade components of its Wendson Substation to increase equipment reliability and sustainability, providing operational flexibility that reduces the risk of outages to customers. Equipment replacement and substation upgrade activities include the following: installing a new bus tie breaker; replacing the existing control house; replacing disconnect switches, bus connections, circuit breakers, surge arresters, seismic risers, station service transformers, and yard panels.

These equipment upgrades would require an expansion of the substation to the east and to the west. The substation expansion areas would be backfilled using imported granular soils, graded flat and rocked. Any excess soils remaining would be disposed of offsite at an approved disposal site.

The eastern side of Wendson Substation yard would need to be expanded by up to 6,300 sq. ft. (0.14 acres) to accommodate the new bus tie breaker and new equipment. To expand the substation yard, a portion of the perimeter chain link fence would be removed, soil would be excavated to a depth of up to 2 feet, mature trees and shrub vegetation would be removed, and uneven ground would be filled with about 1,200 cubic yards of imported granular soils to create a level surface for the substation’s expansion and new equipment. Due to the steep topography of the area east of the substation, a mechanically stabilized earth retaining wall would be installed on the eastern side of the substation to increase soil stability. The retaining wall would be about 280 feet long, up to about 13 feet tall at its tallest point, and would be made up of 8 inch wide modular blocks.

Concrete footings would be installed for the new bus tie breaker and associated equipment, including a 115kV breaker, disconnect switches, and a sync Capacitive Voltage Transformer (CVT). Following installation of the bus tie breaker, an existing transmission line disconnect switch located (about 170 feet southwest of structure 1/1 on the Wendson-Tahkenitch No. 2 transmission line) outside of the substation fence would be removed from service.
To accommodate a new, larger control house, the Wendson Substation yard would be expanded by up to 4,000 sq. ft. (0.09 acres) to the west. The new control house would require sewer and water connections to the existing facilities. BPA would upgrade the primary and alternate station service source to serve the load of the new control house. The local utility would extend the station service from a utility vault to a new pad mount transformer about 70 feet south of the substation’s southern fenceline. Preparations for the substation’s western expansion include the removal of a portion of the perimeter chain link fence, demolishing the existing control house, excavating soils to a depth of up to 2 feet, removing low-growing grass vegetation, and filling in uneven ground with soil (about 90 cubic yards) to create a level surface.

A new grounded security fence would be installed to provide security to the newly expanded areas and where the old perimeter chain link fence was removed.

A new 2,100 sq. ft. stormwater detention pond and associated infrastructure would be installed northeast of the Wendson Substation’s expansion area.

A new temporary access road may be constructed on the north side of the substation to allow safe and stable passage for construction equipment to access the east side of the substation. The temporary access road would be about 10 to 12 feet wide and about 520 feet long. Upon project completion, the temporary access road would be removed and the area would be restored. Locally sourced, native seed appropriate to the region would be used to revegetate areas disturbed by the temporary access road and other construction activities.

All ground-disturbing activities and equipment and vehicle staging areas would be located on BPA fee-owned property associated with the Wendson Substation 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, 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/ Becky Hill  
Becky Hill  
Contract Environmental Protection Specialist  
Flux Resources, LLC
Reviewed by:

/s/ Carol Leiter  
Carol Leiter  
Supervisory Environmental Protection Specialist

Concur:

/s/ Sarah T. Biegel  
Sarah T. Biegel  
Date  
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:** Wendson Substation Bus Tie Addition and Control House Replacement Project

**Project Site Description**

The project area is located at BPA’s Wendson Substation, which is located about 6 miles east of the Pacific Ocean, and about 5 miles northeast of the coastal town of Florence, Oregon. The U.S. Forest Service Siuslaw National Forest manages the majority of the lands in this area of the Oregon Coast Range. The Siuslaw National Forest is bisected (east-west) by a corridor of privately-owned parcels of land, the Siuslaw River, and Highway 126 (Florence-Eugene Highway). The Wendson Substation is located on a 50 acre parcel of BPA fee-owned land, about 0.25 mile north of Highway 126. The Wendson Substation is about 300 feet above sea level on a hill, while Highway 126, rural residences, and an RV park are located at sea level adjacent to the Siuslaw River. The river's floodplain, various wetlands, and low elevation pastures are located in the Siuslaw River valley below the Wendson Substation. North Fork Siuslaw River, Haring Creek, Slover Creek, Karnowsky Creek, Patterson Creek, and several unnamed creeks and streams within a 3 mile radius flow into the Siuslaw River.

**Evaluation of Potential Impacts to Environmental Resources**

1. **Historic and Cultural Resources**

   **Potential for Significance:** No with Conditions

   **Explanation:** The BPA archaeologist initiated Section 106 consultation on May 18, 2021, with the Confederated Tribes of the Grand Ronde, the Confederated Tribes of Siletz Indians, the Coquille Indian Tribe, the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians, and the Oregon State Historic Preservation Office (SHPO). The Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians responded on May 20, 2021, that they have no objections to the proposed project. On August 3, 2021, the BPA archaeologist and historian determined that implementation of the proposed undertaking, including the demolition of an eligible historic property (i.e. the Wendson Control House) would result in an adverse effect to historic properties. SHPO concurred with BPA’s determination on September 1, 2021. BPA worked with SHPO to develop a Memorandum of Agreement for mitigation for the demolition of the Wendson Control House that was issued on October 19, 2021. No responses were received from the Confederated Tribes of the Grand Ronde, the Confederated Tribes of Siletz Indians, the Coquille Indian Tribe, or the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians.

   **Notes:**
   - An Inadvertent Discovery Plan with contact information for the BPA cultural resources lead would be supplied to the construction contractor prior to commencing construction work. Should any cultural resources be discovered during project activities, then all project work must stop in the area, and the cultural resources lead should be notified immediately.
2. **Geology and Soils**

Potential for Significance: No

**Explanation:** A site-specific Stormwater Pollution Prevention Plan has been developed to ensure that erosion and sedimentation from excavated soils do not enter waterways. Excess excavated soils that cannot be reused onsite as fill for the substation expansion, or spread around the site locally, would be disposed of at a BPA-approved disposal location. Standard construction erosion and sedimentation control plan best management practices (BMPs) would be implemented.

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

Potential for Significance: No

**Explanation:** There are no documented occurrences of any state-listed, special-status, or federally-listed plant species under the Endangered Species Act (ESA) in the project area; therefore, the proposed project would not have an effect on state-listed, special-status, or federally-listed ESA plant species.

**Notes:**
- Oregon Biodiversity Information Center (ORBIC) special-status plants and fungi (i.e. dwarf alkali grass, Henderson’s sidalcea, leaning and median red fescue, and two fungi species), have been documented greater than 1 mile away from the Wendson Substation, and would not be impacted by the proposed project.
- A native erosion control seed-mix would be sowed in disturbed areas after construction is completed.
- Vegetation that would be removed as a result of the substation’s expansion include the following: Douglas-fir, maple, and cedar trees; Scotch broom; reed canary grass; Himalayan blackberry; English holly; Tansy ragwort; bracken fern; salmonberry; and salal.

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

Potential for Significance: No with Conditions

**Explanation:** There are no documented occurrences of any state-listed, special-status, or federally-listed wildlife species or designated critical habitats under the Endangered Species Act (ESA) in the project area; therefore, the proposed project would not have an effect on state-listed, special-status, or federally-listed ESA wildlife species or designated critical habitats.

**Notes:**
- Up to 6,300 sq. ft. (0.14 acres) of moderate-quality, mixed conifer hardwood habitat would be removed as a result of the substation’s expansion to the east, while up to 4,000 sq. ft. (0.09 acres) of low-quality grass lawn habitat and low-growing shrubs would be removed as a result of the expansion to the west.
- The mixed conifer hardwood habitat and vegetation removal would only remove a relatively-small portion of the mixed conifer hardwood habitat that would remain available to wildlife species on the hill surrounding the substation. It is anticipated that wildlife would relocate to the remaining forest habitat after construction work is complete.
- The vegetation removal work would occur outside of the sensitive breeding/nesting season for most birds and wildlife species (February 15 through August 15), thereby reducing the potential impacts to wildlife species at their most vulnerable time of the year to a low level.
5. Water Bodies, Floodplains, and Fish (including Federal/state special-status species, ESUs, and habitats)

Potential for Significance: No

Explanation: The project area does not contain any water bodies, floodplains, or surface connectivity to fish streams. There would be no impacts to these resources due to the distance of the work areas from the waterbodies and the implementation of erosion control BMPs.

Notes:
- The Siuslaw River, and its associated sloughs, floodplains, and wetlands, are located 0.25 mile south of the Wendson Substation’s construction areas in the river valley, at about 300 feet lower elevation than the substation.
- The Siuslaw River is designated critical habitat for coho salmon.

6. Wetlands

Potential for Significance: No

Explanation: There would be no impacts to wetlands as a result of this project. A wetland investigation was performed on September 20, 2017, by a BPA Professional Wetland Scientist in the project work areas, and it was determined at that time that there were no wetlands present. Furthermore, there would be no impacts to wetlands located in the Siuslaw River valley located to the south due to the distance of the work areas from the wetlands and the implementation of erosion control BMPs.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: Spill prevention measures would be utilized during construction activities. The project would not provide a pathway for groundwater contamination.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: The Wendson Substation is not located in a specially-designated area and is situated within a larger parcel of land owned in fee by BPA. The limits of the BPA-owned parcel would not change as a result of the substation expansion and would not infringe upon nearby easements or adjoining properties. Land use of the expansion area would change from mixed forest habitat to developed substation property, as was BPA’s original intention when BPA acquired the lot. The substation expansion would be consistent with adjacent land uses such as the ongoing operation and maintenance of the Wendson Substation and transmission line corridors.

9. Visual Quality

Potential for Significance: No

Explanation: While there would be a reduction in forest vegetation on the east side of the substation, the expansion and installation of new equipment would be consistent with the overall existing visual quality. Therefore, the project would not substantially change the visual quality of the site.
10. Air Quality

Potential for Significance: No

Explanation: There may be a small amount of temporary dust and vehicle emissions during construction; however, there would be no substantial changes to air quality after construction is completed.

11. Noise

Potential for Significance: No with Conditions

Explanation: About five residences are located between 0.25- and 0.5-mile distances southwest of the Wendson Substation. Some temporary construction noise would occur during intermittent periods of time during daylight hours. After project completion, the operational noise at the substation would not change. The project would not substantially change the noise quality of the area beyond temporary construction-related noise impacts.

Notes:
- Best management practices for noise avoidance would be implemented, if feasible.

12. Human Health and Safety

Potential for Significance: No

Explanation: During project activities, all standard safety protocols would be followed. Therefore, project activities would not impact human health or safety.

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: N/A

Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators) that are not otherwise categorically excluded.

Explanation: 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: 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: N/A

Landowner Notification, Involvement, or Coordination

Description: Project activities would only occur on BPA fee-owned property; however, nearby landowners would be notified by the BPA Realty Specialist prior to starting construction activities.

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

Signed: /s/ Becky Hill _____________________________ November 15, 2021
Becky Hill, ECT-4 Date
Contract Environmental Protection Specialist
Flux Resources, LLC