**Proposed Action:** Tacoma Substation Breaker Replacement and Additions

**Project No.:** P02401

**Project Manager:** Deborah Staats—TEPS-TPP-1

**Location:** Pierce County, Washington

**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:** To meet load service criteria set by the North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC), Bonneville Power Administration (BPA) proposes to reterminate the existing 230 kilovolt (kV) capacitor banks and upgrade the sectionalizing bus work (rigid conductor) located at BPA’s Tacoma Substation. This would include installation of a new circuit breaker in the electrical yard. To make room for the circuit breaker, the adjacent electrical bays would be rebuilt and upgraded. Several new disconnect switch stands and sectionalizing bus work, along with foundations, would be installed in the substation yard.

All of the foundations inside the substation electrical yard would be installed on micro-piles to ensure that this critical equipment is able to withstand potential soil liquefaction in the event of an earthquake. There would be up to 140 micro-piles, ranging from 50 to 66-feet deep and 6-inches in diameter.

Various relays and meters would be installed inside the existing control house.

In the transmission right-of-way (ROW) located east of the substation yard: (1) new 85-foot-tall wood monopole, and (2) new 66- and 70-foot-tall (respectively) three-pole wood structures would be installed. The three pole structures would have two guy wires attached to each pole. A new 230kV conductor would be attached to the aforementioned new poles. Tensioning sites for the new conductor would be perpendicular to the new three-pole structures. Additionally, a new 98-foot-tall wood H-frame structure would be permanently installed under the Tacoma-Covington No. 3 transmission line, to meet conductor clearance requirements between the new tie-line and the existing conductor.

Three new manholes would be added in the substation yard to allow for the addition of sump-pumps. Existing drainage pipes would be re-routed to these locations.

**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/ Beth Belanger
Beth Belanger
Contract Environmental Protection Specialist
Flux Resources, LLC.

Reviewed by:

/s/ Carol Leiter
Carol Leiter
Supervisory Environmental Protection Specialist

Concur:

/s/ Sarah T. Biegel February 10, 2021
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:** Tacoma Substation Breaker Replacement and Additions

**Project Site Description**

The proposed project is at BPA’s Tacoma Substation in the Port of Tacoma in Pierce County, Washington. The substation is in Section 1, Township 20 North, Range 3 East and Section 36, Township 21 North, Range 3 East. The surrounding area is heavily developed as an industrial zone.

The site is in the Hylebos Creek—Frontal Commencement Bay watershed. The Puget Sound is approximately 0.20 miles west of the project location. There are wetlands to the east and west of the Tacoma Substation electrical yard, including part of the proposed work area.

The substation yard is graveled and devoid of vegetation. The transmission ROW vegetation is dominated by reed canary grass (*Phalaris arundinacea*), soft rush (*Juncus effusus*), hardhack (*Spirea douglasii*), Himalayan blackberry (*Rubus armeniacus*), Scotch broom (*Cytisus scoparius*), and Canada thistle (*Cirsium arvense*).

In the 1960s and 1970s, the transmission ROW adjacent to the Tacoma Substation property was filled with industrial waste from the Occidental Chemicals Corporation (OCC). Cleanup at the site was implemented under the Washington State Model Toxics Control Act (MTCA). Cleanup activities were completed in 1997, under the Consent Decree between Department of Ecology (Ecology), BPA, and the OCC. The contaminated materials were excavated and placed in an on-site, capped landfill. A restrictive covenant was required because the remedial action cleanup resulted in residual levels of arsenic and lead concentrations. Groundwater monitoring at the site is ongoing and groundwater contamination has been found to be decreasing over time. The covenant imposes limitations on development of the site that would interfere with the cleanup activities that have occurred there.

Additionally, the Tacoma Substation and adjacent ROW are included in the Commencement Bay, Nearshore/Tide Flats Environmental Protection Agency (EPA) Superfund site, which is 10 to 12 square miles of shoreline and adjoining land that have been contaminated by industrial activities that occurred throughout Commencement Bay beginning in the late 19th century.

**Evaluation of Potential Impacts to Environmental Resources**

1. **Historic and Cultural Resources**

   Potential for Significance: No with conditions

   **Explanation:** On November 1, 2019, BPA initiated Section 106 consultation with the chairperson for the Puyallup Tribe of Indians and their Tribal Historic Preservation Office (THPO). The project was then reviewed by a BPA contract historian and a BPA archaeologist to determine effects to cultural resources.
The Tacoma Substation and the Tacoma-Covington No. 3 transmission line have been previously determined eligible for listing on the National Register of Historic Places (NRHP). BPA has concluded that the proposed project would have no adverse effect on built historic resources.

An archaeological survey was also completed for the proposed project. BPA determined that the proposed project would have no effect on archaeological resources.

On November 18, 2020, BPA sent the Puyallup Tribe chairperson and THPO a Cultural Report, with the determination of no adverse effects to cultural resources. On February 1, 2021, the Puyallup Tribe THPO concurred with the findings and requested that an Inadvertent Discovery Plan be in place and on-site during construction activities.

Notes:
- The Tacoma Substation is within the Puyallup Tribe’s treaty reservation boundaries; however, the Tacoma Substation property is not held in trust and is no longer tribally owned.

2. Geology and Soils

Potential for Significance: No

Explanation: A site-specific Stormwater Pollution Prevention Plan would be developed to ensure that erosion and sedimentation from excavated soils do not enter waterways. All excavated soils that cannot be reused on site would be disposed of at a BPA-approved landfill.

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

Potential for Significance: No

Explanation: The proposed project area has no Federal or state listed special-status plant species that would be impacted by the project. The work in the transmission ROW would occur in the late summer, after most plants have flowered and gone to seed. Wood wetland mats would be laid down in the wetland, which would protect the plant root systems. Additionally, a native erosion control seed-mix would be sowed in disturbed areas after construction completion.

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

Potential for Significance: No

Explanation: The proposed project area has no Federal or state listed special-status wildlife species or habitats that would be impacted by the project. Habitat conditions at the site are degraded due to prior development and the surrounding industrial land use.

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 impact to these resources.

6. Wetlands

Potential for Significance: No with Conditions
Explanation: The project would excavate and place fill in 48-square-feet of wetlands, where five new transmission wood poles would be installed. An additional 0.28 acres of temporary fill would also occur in the form of installing temporary wood, wetland mats to decrease soil compaction due to vehicles and equipment during construction. The project has been authorized by the US Corps of Engineers (Corps), Seattle District, under Nationwide Permit (NWP) 18, Minor Discharges, and NWP 33, Temporary Construction, Access, and Dewatering.

All of the new wood poles constructed in the ROW would have pole wraps around the embedded, below-ground portions of the pole. Additionally, they would be installed within a below-ground outer casing to limit the migration of wood preservatives into aquatic habitats.

Notes:
- The following NWP conditions must be adhered to:
  - Sediment and erosion controls must be installed and maintained during construction at the site until all disturbed soils have been revegetated or otherwise stabilized.
  - The vegetation restoration provisions found in Section 7.F of the Joint Aquatic Resources Permit application must be implemented.
  - A restoration report, including photos and as-built drawings, shall be submitted to the Corps within 60 days from completion of authorized work.
- The following best management practices would be implemented during construction:
  - Construction in, and near, the wetlands would occur during the dry months of July through September.
  - Wooden wetland mats would be laid down in the work areas that are in the wetlands before construction commences in the ROW, and be removed shortly after construction has been completed.
  - All of the new wood poles in the ROW would have pole wraps and be installed within a below-ground casing.
  - Helical guy-wire anchors would be used within the wetland boundaries.
  - Disturbed areas would be re-seeded with a native erosion control seed mix suitable for wetland habitats.

7. Groundwater and Aquifers

Potential for Significance: No with Conditions

Explanation: The groundwater table on site is approximately 6 to 8-feet below-ground surface. Groundwater on the site generally flows from west to east. Groundwater in this area is extremely variable as it is both seasonally and tidally influenced. The project is planned for mid to late summer, when the water table is the lowest, to minimize impacts to groundwater; however, dewatering is still expected to be required for some of the deeper footing excavations inside the substation yard. Groundwater would also likely be encountered when installing wood poles on the ROW, but dewatering would not be performed to ensure equilibrium of hydrostatic forces when installing culvert footings; rather, groundwater would be slowly displaced by the footing components.

The groundwater at the eastern portion of the site is known to have concentrations of vinyl chloride and cis-1,2-dichloroethene in exceedance of MTCA Method C and B limits, respectively. This contamination is known to exist to the east of the proposed project area, and due to groundwater flow directions, it is unlikely that groundwater encountered during project activities would contain concentrations of these constituents in exceedance of MTCA limits. The Remedial Project Manager at Ecology was consulted regarding this issue and is in agreement regarding the low potential to encounter contamination.
8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: The Tacoma Substation and adjoining transmission ROW are not in a specially-designated area. The project would have no change to land use at the site.

9. Visual Quality

Potential for Significance: No

Explanation: The new equipment and transmission structures would be consistent with the existing visual quality at the location.

10. Air Quality

Potential for Significance: No

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

11. Noise

Potential for Significance: No

Explanation: Temporary noise would occur during construction but the impact would be negligible.

12. Human Health and Safety

Potential for Significance: No with conditions

Explanation: The site has undergone a MTCA cleanup and meets industrial use cleanup standards. A restrictive covenant is in place to mitigate risk to human health and safety. The proposed project activities are allowable under the terms of the restrictive covenant. Additionally, the project area is located within the Commencement Bay, Nearshore/Tide Flats Superfund Site. The EPA remedial project manager has been contacted regarding the projects and did not have concerns regarding the proposed work. The substation is located in the Blair Waterway area of the Site, where cleanup and source control actions are complete. Therefore, conditions on site based on previous known contamination would not impact human health and safety.

Notes:

- In the event suspected contamination is observed, work would halt and the BPA Environmental Lead would be notified. BPA would coordinate with the EPA and Washington Department of Ecology to determine a safe path forward.

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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:* 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:* Tacoma Substation is located within the Commencement Bay, Nearshore/Tide Flats Superfund Site. The substation is located in the Blair Waterway area of the Site, where cleanup and source control actions are complete. The EPA remedial project manager was contacted regarding the projects and did not have concerns regarding the proposed work.

The site has undergone a MTCA cleanup and meets industrial use cleanup standards. A restrictive covenant is in place to mitigate risk to human health and safety. The proposed project activities are allowable under the terms of the restrictive covenant. The Washington Department of Ecology remedial project manager was contacted regarding the project and did not have any concerns regarding the proposed work.

In the event suspected contamination is observed, the soils/materials would be temporarily stockpiled and covered with plastic onsite for the BPA Environmental Lead to perform sampling and characterization for offsite disposal.

**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:* The proposed project would occur on BPA property and does not require landowner notification. The adjacent parcels are owned and operated by the Port of Tacoma.
Based on the foregoing, this proposed project does not have the potential to cause significant impacts to any environmentally sensitive resource.

Signed: /s/ Beth Belanger ______________________________ Date
Beth Belanger, ECT-4
Contract Environmental Protection Specialist
Flux Resources, LLC.

February 10, 2021