

# Categorical Exclusion Determination

Bonneville Power Administration  
Department of Energy



**Proposed Action:** Maple Valley Substation Grounding Upgrades

**Project No.:** N0581

**Project Manager:** Chad N. Caldwell, TPCF-OLYMPIA

**Location:** King County, Washington

**Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021):** B2.5 Facility safety and environmental improvements; B4.6 Additions and modifications to transmission facilities

**Description of the Proposed Action:** Bonneville Power Administration (BPA) proposes to fund electrical grounding installations along three parallel underground Seattle Public Utilities (SPU) water pipelines and to remove a portion of the existing grounding system at BPA's Maple Valley Substation near Renton, King County, Washington (Township 23 North, Range 5 East, Sections 20, 21, 27, and 28). The SPU pipelines are located between Maple Valley Substation and the neighboring Puget Sound Energy (PSE) Talbot Hill Substation. An electrical fault at either of the two substations, which have interconnected grounding systems, could transfer voltage to the SPU pipelines, thereby posing a safety risk.

To mitigate this risk, BPA and PSE would jointly fund the installation of grounding structures along the SPU pipeline, including:

- ***Five new pipeline access vaults.*** Excavation for each new access vault would occur directly above and around the pipelines and would require excavating up to approximately 6 feet deep in an approximately 144-square-foot area.
- ***Seventeen gradient control mat installations.*** Newly installed mats would extend laterally a minimum of 3 feet from various pipeline appurtenances (i.e., cathodic test stations, air valves, and existing and proposed new access vaults). Each installation would require excavating approximately 1-foot deep in an approximately 100-square-foot area.
- ***Two ground wells.*** Each ground well would be offset approximately 20 to 40 feet from the pipelines and connected to the pipelines via underground grounding cables. Each installation would require drilling an 8-inch diameter, 500-foot deep hole where the copper ground well would be inserted and back filled with bentonite.
- ***Nine arrestors.*** Each arrestor would be installed within existing rectifier cabinets. No ground disturbance would be associated with the arrestor installation.

BPA would also excavate and remove four, approximately 20-foot long segments of buried grounding cables that extend between Maple Valley and Talbot Hill substations, so the cables no longer provide an electrical path over the SPU pipelines. The four cables are located outside of

the existing Maple Valley Substation yard, but within 20 feet of the substation fence in an area that was previously disturbed during construction of the substation.

The proposed project would require the use of light-duty vehicles and heavy equipment, including an excavator, backhoe, and drill rig. To the greatest extent possible, construction materials, vehicles, and heavy equipment staging and operation would be restricted to previously-disturbed and compacted areas (i.e., existing access roads and parking areas). All work areas would be accessed via existing paved and graveled access roads, and no new access roads are proposed.

**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/ W. Walker Stinnette

W. Walker Stinnette

Contract Environmental Protection Specialist  
CorSource Technology Group, Inc.

Reviewed by:

/s/ Carol P. Leiter

Carol P. Leiter

Supervisory Environmental Protection Specialist

Concur:

/s/ Sarah T. Biegel

May 24, 2022

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:** Maple Valley Substation Grounding Upgrades

### **Project Site Description**

The project site includes properties owned by BPA, PSE, and SPU near Renton, King County, Washington (Township 23 North, Range 5 East, Sections 20, 21, 27, and 28). The new grounding structures and equipment (i.e., access vaults, gradient control mats, ground wells, and arrestors) would be installed along the existing buried SPU water pipelines within the pipeline right-of-way. The majority of these new structures and equipment would be installed within the graveled margin of Beacon Way South, which has been extensively modified and disturbed with little to no vegetation present. The remaining installations would occur in portions of the pipeline right-of-way that currently consist of regularly mowed grasses and weeds.

The removal of four existing segments of buried grounding cables would occur immediately west of Maple Valley Substation, in an area that was heavily disturbed during initial construction of the substation. Ground disturbance from the removal would extend up to 20 feet from the substation fence, primarily within the graveled substation yard apron. Some ground disturbance could extend into an area of weedy shrubs and grasses farther west of the graveled apron.

Outside of the project site, the surrounding area is urbanized with a mix of residential properties, isolated stands of trees, and public parks and recreational areas, including Silkworm and Parasite mountain bike trails, Ginger Creek Park, and Philip Arnold Park. There are no water bodies or wetlands present within 500 feet of the project site.

### **Evaluation of Potential Impacts to Environmental Resources**

#### **1. Historic and Cultural Resources**

Potential for Significance: No with Conditions

Explanation: On November 15, 2021, BPA initiated National Historic Preservation Act, Section 106 consultation with the following parties:

- Muckleshoot Indian Tribe
- The Puyallup Tribe of Indians
- The Snoqualmie Indian Tribe
- The Suquamish Tribe
- Tulalip Tribes
- Washington Department of Archaeology and Historic Preservation (DAHP)

The remnants of a historic-period water treatment facility were identified within the area of potential effect (APE) near the eastern ground well. The former building footprint could be avoided entirely during implementation of the proposed undertaking. Therefore, on March 19, 2022, BPA determined that the proposed undertaking would result in no historic

properties affected (BPA CR Project No.: WA 2020 168; DAHP Log No.: 2021-11-07877). On March 22, 2022, DAHP concurred with BPA's determination, with the stipulation that an Inadvertent Discovery Plan be in place. No other comments were received.

Notes:

- Avoid the historic-period water treatment facility. PSE will provide the construction contractor with ShapeFiles and photomaps of the facility location.
- Implement an Inadvertent Discovery Plan (IDP) in the unlikely event that cultural material is encountered during the implementation of this project. BPA would require that work be halted in the vicinity of the finds until they can be inspected and assessed by BPA in consultation with the appropriate consulting parties.

## 2. Geology and Soils

Potential for Significance: No

Explanation: Ground disturbance would include excavation to install the new pipeline access vaults and gradient control mats, drilling and trenching for the new ground wells and associated grounding cables, and removal of the existing grounding cables that extend between Maple Valley and Talbot Hill substations. Vehicle and equipment use could compact soils in some areas where off-road use is required (e.g., to install new ground wells). Standard construction best management practices would prevent soil erosion and sedimentation, and the site would be returned to original grade and reseeded following completion of the proposed action.

Notes:

- Restrict, to the greatest extent possible, staging and operation of construction materials, vehicles, and heavy equipment to previously-disturbed and compacted areas (i.e., existing access roads and parking areas).
- Reseed disturbed areas with a native, regionally-appropriate seed mix guided by Washington Department of Ecology's *2019 Stormwater Management Manual for Western Washington*.

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

Potential for Significance: No

Explanation: The proposed action would remove, crush, or cover some regularly mowed, low-growing grasses and weeds within the pipeline right-of-way. Temporarily disturbed habitats would be reseeded and returned to pre-existing conditions following completion of the proposed action. There are no documented occurrences of any special-status plant species near the project site, and no suitable special-status species habitat is present.

Notes:

- Restrict, to the greatest extent possible, staging and operation of construction materials, vehicles, and heavy equipment to previously-disturbed and compacted areas (i.e., existing access roads and parking areas).
- Reseed disturbed areas with a native, regionally-appropriate seed mix guided by Washington Department of Ecology's *2019 Stormwater Management Manual for Western Washington*.

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

Potential for Significance: No

Explanation: The proposed action could impact wildlife through temporary habitat loss and construction noise. However, most wildlife species would likely be able to avoid construction areas and would likely be habituated to this level of disturbance given

surrounding land uses. Temporarily disturbed habitats would be reseeded and returned to pre-existing conditions following completion of the proposed action. There are no documented occurrences of any special-status wildlife species near the project site, and no suitable special-status species habitat is present.

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

Potential for Significance: No

Explanation: No water bodies, floodplains, or fish-bearing streams are present within or near the project site. Standard construction best management practices would prevent indirect impacts to off-site water bodies, floodplains, and fish, if present. Therefore, the proposed action would not impact water bodies and floodplains and would have no effect on fish species or habitats.

## **6. Wetlands**

Potential for Significance: No

Explanation: No wetlands are present within or near the project site. Standard construction best management practices would prevent indirect impacts to off-site wetlands, if present. Therefore, the proposed action would not impact wetlands.

## **7. Groundwater and Aquifers**

Potential for Significance: No

Explanation: The proposed action would not generate or use hazardous materials that would contaminate groundwater or aquifers. No new water wells or other uses of groundwater or aquifers are proposed. Therefore, the proposed action would not impact groundwater or aquifers.

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

Potential for Significance: No

Explanation: The proposed action could temporarily impact adjacent residential and recreational land uses due to construction noise. However, there would be no permanent land use impacts following completion of the proposed action. The project site is not located in a specially-designated area.

## **9. Visual Quality**

Potential for Significance: No

Explanation: During construction, the presence of equipment and general construction activities, including excavation and minor vegetation disturbance, would cause temporary visual impacts. Temporarily disturbed areas would be returned to original conditions. Although there may be some small aboveground components, the majority of new grounding structures would be installed underground, flush with the ground surface, or within existing equipment cabinets.

## **10. Air Quality**

Potential for Significance: No

Explanation: The proposed action would produce minor and temporary dust and vehicle emissions in the local area. There would be no long-term change in air quality following completion of the proposed action.

## 11. Noise

Potential for Significance: No

Explanation: The proposed action would produce intermittent and temporary construction-related noise at levels greater than current ambient conditions, which could be audible from nearby residential properties, Silkworm and Parasite mountain bike trails, Ginger Creek Park, and Philip Arnold Park. Noise impacts would be temporary and would only occur during daylight hours (approximately 7 AM to 7 PM). There would be no long-term change in ambient noise following completion of the proposed action.

## 12. Human Health and Safety

Potential for Significance: No

Explanation: Implementation of the proposed action would ultimately mitigate an existing risk to human health and safety. The proposed action would not generate or use hazardous materials, and standard construction best management practices would minimize risk to human health and safety during construction.

### **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: All work would occur on BPA, PSE, or SPU fee-owned property, and PSE would be responsible for notifying adjacent landowners, if required.

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

Signed: <u>/s/ W. Walker Stinnette</u>	<u>May 24, 2022</u>
W. Walker Stinnette	Date
Contract Environmental Protection Specialist	
CorSource Technology Group, Inc.	