

Categorical Exclusion Determination

Bonneville Power Administration

Department of Energy



Proposed Action: Covington and Maple Valley Substations Perimeter Security Upgrades

Project No.: P00916 and P00918

Project Manager: Jody Solmonsson, TEP-CSB-2

Location: King County, Washington

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B1.11 Fencing and B2.2 Building and equipment instrumentation

Description of the Proposed Action: BPA proposes to replace existing perimeter fences with improved security fencing at its Covington (COVI) and Maple Valley (MPLV) substations. The work would support BPA's compliance with North American Electric Reliability Corporation-Critical Information Protection (NERC-CIP) standards, and protect critical assets from theft, vandalism, and terrorism.

The existing 7-foot-tall fences would be removed from the in-ground concrete curbing, and 8-foot-tall cut- and climb-resistant steel mesh security fences topped with razor wire would be installed. In addition to the increased height, security would be enhanced by a near 40% reduction in visibility through the fence that would reduce target acquisition by an attacker outside of the perimeter. New dual-track sliding gates would be installed in some locations. The existing concrete curbing supporting sections of fence would be left in place except where the concrete would affect the level or performance of the new fence. In the instances where it is determined that new holes for fence post footings would need to be dug, they would be no more than 54-inches deep and approximately 30-inches wide.

Several tall poles ("security poles"), averaging about 25 feet in height, would host cameras and/or motion detectors. They would be installed just inside the fence perimeter and elsewhere as appropriate for coverage and would require footings up to 6-feet-deep. The cameras and detectors mounted on the poles would provide an integrated perimeter intrusion detection system that would monitor and assess activity in and around the substation. The system would have the capability to detect movement near the perimeter as well as fence breaching, providing alarm information and images at the exact location of movement or intrusion attempts.

The new fences would be in the same location as the existing fence around the perimeter of the substations with minor exceptions where improved design or added features require small alterations of existing fence location (i.e., new equipment, elimination of unused gates, or variations in layout for improved camera coverage). At COVI, approximately 720 feet of fence line would be moved three feet farther out from the current perimeter, and at MPLV, a corner in the substation's northern midpoint would be straightened, adding a new 125-foot-long section. Cut and fill slopes would be constructed to level the footprints in the new perimeter locations. The extent of new ground disturbance for perimeter expansion would be limited to approximately 0.2 acres at COVI, and 0.15 acres at MPLV. The

disturbance for expansion would be limited to the managed BPA-transmission corridor boundaries in which vegetation growth is regularly managed by mechanical and chemical means.

To incorporate the controls for the systems, a security communications rack would be installed in the basement of each control house. A two-foot-wide, three-foot-deep trench would be excavated to run conduit across the substation yards from the control houses to the nearest fence lines. If a drilled hole is required for communication wires in the substations' control houses, the holes would be limited to three inches in diameter and would be located to minimize visibility.

Brush and tree removals would be needed to ensure effective visibility and penetration for the systems, rectify current related security concerns, or remove hazards to the fence operation. At MPLV, there are areas of Douglas-fir and mixed hardwood encompassing about 0.85 acres of cover, with tree heights up to 100 feet tall. The weighted average diameter at breast height (dbh), and height of the trees to be removed would be nine inches and 52 feet, respectively. Brush cutting would total no more than 2.5 acres at MPLV: a 20-foot management buffer around the perimeter would be created by cutting undesirable vegetation where needed; and a section of transmission line right-of-way (ROW) over which a new camera needs line-of-sight would be cut. At COVI, two Douglas-fir danger trees would be topped to a height that would eliminate the possibility for strike by tree fall on the new installations. The trees are compromised as evidenced by thinning crowns, and they have an average height of 106 feet and average dbh of 22 inches.

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/ Sarah T. Biegel

Sarah T. Biegel
NEPA Compliance Officer

Date: April 27, 2017

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: Covington and Maple Valley Substations Perimeter Security Upgrades

Project Site Description

Covington and Maple Valley Substations are located in the Seattle-Tacoma metropolitan area. Covington is a BPA operations and maintenance headquarters within 50 feet of Jenkins Creek, a critical habitat stream for Puget Sound Chinook and Steelhead. Maple Valley is adjacent to a subdivision and is about one-half mile to Cedar River, a critical habitat stream for the Puget Sound Chinook.

Evaluation of Potential Impacts to Environmental Resources

Environmental Resource Impacts	No Potential for Significance	No Potential for Significance, with Conditions
1. Historic and Cultural Resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><u>Explanation:</u> BPA cultural resource specialists determined that the planned work would have no adverse effect on historic properties. On October 19, 2016, the Washington State Historic Preservation Officer (SHPO) concurred with this determination. The Muckleshoot, Nisqually, and Puyallup tribes were consulted regarding the project. The Nisqually Tribe responded to BPA’s determination of effect, stating their concurrence with the determination on October 20, 2016. BPA did not receive responses from the Muckleshoot or Puyallup tribes.</p> <p><u>Note:</u></p> <ul style="list-style-type: none">✓ Treat potential discoveries of archeological materials with the ‘inadvertent discovery’ guidelines: Stop work, contact BPA ECT lead and BPA ECC archeologist for further notifications, and ensure integrity of site and materials until further instructions.		
2. Geology and Soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><u>Explanation:</u> Disturbance would be limited to the existing perimeter of the substations or the described partial perimeter expansions, and for short distances inside the yards. These constitute heavily-disturbed and modified areas often lain with fill material. Best Management Practices (BMPs) would be implemented to limit soil transport by wind and water.</p>		
3. Plants (including federal/state special-status species)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><u>Explanation:</u> There would be removal of approximately 0.85 acres of tree cover adjacent to the perimeter fence at MPLV. A mix of Douglas-fir and hardwoods exists on the substation property. The wooded areas are between the exterior low fence and interior high fence in the southwest quadrant of the substation, and at the substation’s NE corner. The woods have provided cover for trespassing individuals who have managed to cut through the exterior fence. Up to an additional 2.5 acres of brush and saplings would be mowed and/or treated with herbicides that are approved for use on BPA rights-of-way. Of this area, approximately 1 acre is currently managed regularly to maintain safe transmission line clearances to vegetation; the remaining is treated on an as-needed basis. BMPs would limit the exposure of non-target species to herbicides. There are no Federal or state special-status species present.</p>		

Mitigation:

- ✓ Where feasible, densely re-plant the areas requiring camera line of sight clearance with native low-growing species that would include salal and Oregon grape. This would reduce maintenance needs over time. Prior to planting, develop a plan with BPA's Vegetation Maintenance division to avoid conflicts or inefficiencies.

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



Explanation:

Nesting birds would be protected by timing the tree and brush removal until after the general nesting season. The threatened and endangered (T&E) species noted by the US Fish and Wildlife Service (USFWS) as potentially occurring in both areas are not present and do not have habitat requirements met at the sites. These are: North American wolverine, marbled murrelet, streaked horned lark, yellow-billed cuckoo, and bull trout.

Mitigation:

- ✓ Fell trees after mid-August with the conclusion of a majority of birds' nesting seasons. If trimming or limited removals are needed before that point, the contracted firm performing the work would contact BPA prior to removal so a nesting habitat appraisal could be made.

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



Explanation:

The National Oceanic and Atmospheric Administration (NOAA)-administered T&E species of Puget Sound Chinook salmon and steelhead have critical habitat at Jenkins Creek adjacent to COVI. Cedar River, nearly 0.5 miles from MPLV, is also critical habitat for the Puget Sound Chinook salmon. Activities at MPLV would not impact the river since construction BMPs would limit soil and contaminant transport to the work site. The planned activities at COVI require applicable BMPs as well as specific protocol on treating the two danger trees that are in the 100-foot management buffer of Jenkins Creek. NOAA NMFS Central Puget Sound Region confirmed that the work would be consistent with the allowances outlined in the BPA-NMFS Transmission Lines and Road Access Rebuild Programmatic Biological Opinion (# WCR-2014-1600).

Mitigation:

- ✓ Cut the danger trees in sections from the top. Leave a snag that would be a safe height were it to fall towards facilities and energized transmission equipment.
- ✓ Reinforce exposed soils and seed them with an appropriate and native soil-stabilizing seed mix.
- ✓ Develop a Fugitive Dust Control Plan.

6. **Wetlands**



Explanation: Nearby National Wetlands Inventory (NWI)-designated freshwater forested/shrub and riverine wetlands would not be impacted by this project as it would be limited to the substations' grounds or immediately adjacent to them.

7. **Groundwater and Aquifers**



Explanation: Infiltration to groundwater and aquifers would not be adversely impacted by the construction. Controls by BMPs would contain contaminants, and a dry-season work schedule limits the potential for inadvertent intrusions to the water supplies.

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

Explanation: All work would take place on BPA fee-owned land and would be consistent with activities at large and busy electric substations in a major metropolitan area. Work would also not affect any qualities associated with the state-designated biodiversity corridor at Cedar River; 0.5 miles from MPLV.

9. **Visual Quality**

Explanation: Work – active and completed – would not have effects on visual quality due to the industrial setting of COVI. At MPLV, adjacent neighborhood residents would notice active work that would be small enough in scale to cause no adverse visual impacts. Completed work at MPLV – the new fence and several taller security poles – may be noticeable but would constitute a small overall change to the current state.

10. **Air Quality**

Explanation: Dust would be kept to a minimum in adhering to BMPs for ground-disturbing actions as noted in the Water Bodies, Floodplains, and Fish section above. There would be small, sporadic, temporary increases in machine exhaust during periods of active work along the fence perimeter.

11. **Noise**

Explanation: There would be noise that is commonly associated with fencing construction. This would be limited to typical daily working hours only and would be temporary. Neighbors and passers-by would be aware of the work, yet the noise would not disrupt or preclude any planned activities.

12. **Human Health and Safety**

Explanation: Workers on the project would be required to follow all applicable state and/or Federal safety standards for work on energized facilities and around public space. There would be no impacts to public safety as the majority of work would occur from inside the substation grounds and, if work occurs outside, access to the active work sites would be controlled and monitored. The proposed work would protect critical assets from theft, vandalism, and terrorism.

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: No notification, involvement, or coordination is needed to carry out the work. BPA owns in-fee the land on which the work would take place and access would be from established public routes able to accommodate the equipment easily or along BPA facility roads.

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

Signed: /s/ Michael J. O'Connell
Michael J. O'Connell

Date: April 27, 2017