

Categorical Exclusion Determination

Bonneville Power Administration

Department of Energy



Proposed Action: John Day and McNary Substations Perimeter Security Upgrades

Project No.: P00916 and P00918

Project Manager: Gerri Colburn, TEP-CSB-2

Location: Umatilla and Sherman counties, OR

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 John Day (JDAY) and McNary (MCNY) 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 seven-foot-tall fences would be removed from in-ground concrete curbing, or would be removed along with individual post foundations where there is no curbing. Eight-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, impeding 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 levelness 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.

The new security 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). The foreseen instances of this would be an expansion of the enclosed area on the west side of MCNY to eliminate a sharp corner, and a one-foot move inward on a small section of JDAY fence where a 'bump-out' exists on the southeast side of the perimeter. The disturbance for expansion construction would be limited to the managed BPA-transmission facility boundaries in which vegetation growth is regularly managed by mechanical and chemical means.

At MCNY, a portion of existing perimeter is bounding a natural vegetated buffer area outside the grounded and rockered substation yard. Converting this outer perimeter to the security fence specification would require installation of isolation panels, a system in which the post burials are surrounded by non-conductive PVC housing. The holes for these could be slightly larger than typical post installs in a grounded, conductive system. The vegetation removal necessitated by the new fence install would be about 1.5 acres for construction access and long-term perimeter clearance. About five

percent of this total would be covered with rock to prevent burrowing beneath the fence and to provide a vegetation-preventative substrate for efficient long-term maintenance of vegetation encroachment of the security perimeter, thereby better accommodating lines of sight needed by camera installs. The remaining acreage would be maintained to prevent taller-growing species (that could provide cover for intruders) from spreading and from obscuring visibility of the perimeter.

The vegetation in place consists of mixed shrub and herbaceous species. Big sagebrush here could provide nesting habitat for birds and the herbaceous vegetation could provide cover for ground-nesters. There are showy milkweed plants that provide essential habitat to monarch butterflies where present, a species under review for listing by the US Fish and Wildlife Service (USFWS). Timing of removal and avoidance measures would limit the impacts on current habitat along the perimeter.

Several tall poles (“security poles”), averaging about 23 feet in height, would host cameras. The cameras would be mounted on arm brackets sufficient to get clear line-of-sight along the fence line. They would be installed just inside the fence perimeter and elsewhere as appropriate for coverage and would require footings up to six-feet-deep. The cameras 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 attempt.

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.

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: 11/20/2017

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:

Project Site Description

John Day and McNary substations are located in agricultural areas of the Columbia Plateau ecoregion and typically receive not more than 15 inches of annual precipitation. John Day's location supports grasslands while McNary's hosts mixed sagebrush and grass. McNary is a BPA operations and maintenance headquarters that borders the US Army Corps of Engineers McNary Wildlife Nature Area on the banks of the Columbia River, which is an ESA-designated critical habitat stream for Middle and Upper Columbia River Chinook salmon and steelhead, and Snake River Basin steelhead. John Day is surrounded by cultivated agricultural fields and is about one mile to the Columbia River and associated ESA-designated critical habitat for fish.

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> The BPA cultural resource specialist determined that the planned work would have no adverse effect on historic properties. On October 19, 2017, the Oregon State Historic Preservation Officer (SHPO) concurred with this determination. The Confederated Tribes of the Umatilla Indian Reservation (CTUIR), Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO), Nez Perce Tribe, and The Yakama Nation were also consulted regarding the project. BPA did not receive responses from the tribes on project initiation or on BPA's determination of no effect.</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 minor changes to the perimeters, 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> <p><u>Mitigation:</u></p> <ul style="list-style-type: none">✓ Where possible, leave roots intact in vegetation cover removal operations.		

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



Explanation: There are no Federal or state special-status species present, but there would be removal by mowing and cutting of approximately 1.5 acres of vegetative cover adjacent to the perimeter fence at MCNY. There would need to be some removals of big sagebrush – an important habitat plant in the region providing nesting and forage for birds and forage for mammals. Showy milkweed and perhaps other milkweed species are present. These are essential food sources for the monarch butterfly caterpillar. About 95 percent of the total clearing would be converted to more intensive vegetation maintenance (mowing and/or treatment with BPA-approved herbicides) from current levels. The remaining 5 percent would be covered with substation yard rock and sprayed with herbicides regularly. BMPs would limit the exposure of non-target species to herbicides. There would be minimal disturbance to natural vegetation surrounding JDAY since the existing perimeter has a rocked surface that extends several feet beyond the fenced yard. Brush would be cleared where needed for construction access and for long-term security monitoring. This would be along a banked 1200 foot-long section of the perimeter. As at MCNY, the new clearing would be maintained more intensively than current levels.

Mitigation:

- ✓ Re-seed the cleared areas with a BPA-approved mix of native low-growing species.
- ✓ Avoid damaging or destroying milkweed and big sagebrush plants to the extent possible.

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



Explanation: Disturbance to nesting birds would be prevented by scheduling the vegetation removal before 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 in the areas of impact and do not have habitat requirements met at the sites. These are: gray wolf and bull trout.

Mitigation:

- ✓ Clear all vegetation before March 1 to avoid disturbing nesting birds.
- ✓ Protect milkweed plants from damage to preserve monarch caterpillar habitat.
- ✓ Preserve big sagebrush where possible to retain bird habitat.
- ✓ Utilize applicable BMPs to limit wind and water erosion of soils to water bodies.

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



Explanation: The National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS) - administered T&E species of Upper Columbia River spring-run Chinook Salmon and three populations of steelhead have ESA-designated critical habitat at the Columbia River 870 feet from MCNY. Activities at MCNY would not impact the river since construction BMPs would limit transport of soil or contaminants to the work site. A result of this upgrade would be a slight increase in impermeable surface but re-seeding the surrounding area thoroughly with low-growing native species should result in overall lower areal coverage by bare soil.

Bull trout – the USFWS threatened species in the vicinity of the Columbia River – and the salmon and steelhead populations of concern would be unaffected by actions described here because of mitigations meant to limit off-site transport and erosion, and by distance separating the potential occurrence from the work.

Mitigation:

- ✓ Utilize applicable BMPs to limit wind and water erosion of soils to water bodies.
- ✓ Reinforce exposed soils and seed them with an appropriate and native soil-stabilizing seed mix.
- ✓ Develop a Fugitive Dust Control Plan.

6. **Wetlands**

Explanation: National Wetlands Inventory (NWI)-designated freshwater emergent wetlands across Third Street from MCNY would not be impacted by this project as it would be limited to the substations' boundaries or immediately adjacent to them. JDAY is nearly one mile from mapped wetlands.

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 water sources.

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

Explanation: All work would take place on BPA fee-owned or leased land and would be consistent with activities at large and busy electric substations. Work would also not affect any qualities associated with the Wildlife Nature Area near MCNY.

9. **Visual Quality**

Explanation: Work – active and completed – would not have effects on visual quality due to the industrial appearance of MCNY and JDAY. Passers-by would notice active work that would be small enough in scale to cause no adverse visual impacts. Completed work – 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 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. 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.

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: At McNary, the Corps of Engineers has approved the work there as being consistent with current leases. BPA owns in-fee the land at JDAY, and has communicated with the neighboring landowner to avoid conflicts during construction. The work's 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 - ECT - 4

Date: 11/20/2017