

# memorandum

DATE: March 10, 2011

REPLY TO  
ATTN OF: KEC-4

SUBJECT: Environmental Clearance Memorandum

TO: Erich Orth  
Project Manager – TEP-TPP-3

**Proposed Action:** Ostrander Line Swap

**Budget Information:** WO #'s 00261551, 00261552, & 00261553

**Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021):** B4.11 “Construction of electric power substations... or relocation of existing electric powerlines...”

**Location:** Clackamas County, Oregon

- Township 2 South, Range 3 East, Sections 26 & 35 of the Redland Quadrangle
- Township 2 South, Range 4 East, Sections 16, 17, 20, & 21 of the Sandy Quadrangle
- Township 1 South, Range 5 East, Sections 31 & 32 of the Bull Run Quadrangle

**Proposed by:** Bonneville Power Administration (BPA)

**Description of the Proposed Action:** BPA is proposing to swap three 500-kilovolt (kV) transmission lines in Clackamas County, OR. Currently, the Big Eddy-Ostrander 500-kV and Wautoma-Ostrander 500-kV transmission lines are adjacent to each other for approximately 4 miles. This transmission corridor is the primary source for serving peak winter loads in the Portland through Eugene metropolitan areas in the state of Oregon. The two entities responsible for ensuring transmission reliability and safety, North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC), consider these two adjacent lines a critical contingency for BPA’s West of Cascades South (WOCS) path. In other words, NERC and WECC have determined transmission reliability within the service area of this corridor may be compromised in the event that these two transmission lines have simultaneous unplanned outages. The purpose of this project is to eliminate the two lines from being adjacent to each other thus eliminating the critical contingency by swapping the positions of the 500-kV lines in the transmission corridor such that the Ostrander-Troutdale 500-kV line is always between the Big Eddy-Ostrander 500-kV and Wautoma-Ostrander 500-kV lines. Additionally, the result of this project would increase transmission capacity on the WOCS path.

During the proposed construction activities the effected transmission lines would require scheduled outages. To maintain load stability during such outages the following 3-step line swapping sequence is proposed:

- Step 1)** Big Eddy-Ostrander #1 & Ostrander-Troutdale #1
- Step 2)** Wautoma-Ostrander #1 & Ostrander-Troutdale #1
- Step 3)** Big Eddy-Ostrander #1 & Wautoma-Ostrander #1

The duration of each step would be approximately 3 to 4 weeks and would require the construction of 2 or 3 new steel lattice towers within existing BPA rights-of-ways. Each new tower would require 4 footings, each with a base of approximately 12 by 12 feet. Installation of each footing would also require digging up to 15 feet into the ground. In addition, temporary ground disturbing activities, including use of access roads and staging areas, may occur within the proposed area of potential effect (APE). Lastly, new digital transfer trips would be installed within the existing Ostrander substation for the Big Eddy-Ostrander, Wautoma-Ostrander, and the Ostrander-Troutdale 500-kV transmission lines.

Construction is proposed to begin as early as May 2011.

**Findings:** BPA has determined that the proposed action complies with Section 1021.410 and Appendix B of Subpart D 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). The proposed action does not present any extraordinary circumstances that may affect the significance of the environmental effects of the proposal. The proposal is not connected [40 C.F.R. 1508.25(a)(1)] to other actions with potentially significant impacts, is not related to other proposed actions with cumulatively significant impacts [40 C.F.R. 1508.25(a)(2)], and is not precluded by 40 C.F.R. 1506.1 or 10 C.F.R. 1021.211. Moreover, the proposed action would not (i) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, (ii) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities, (iii) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation and Liability Act-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases, or (iv) adversely affect environmentally sensitive resources.

On August 4, 2010 BPA initiated Section 106 consultation with Oregon State Historic Preservation Office (SHPO), the Confederated Tribes of Grand Ronde, the Confederated Tribes of Siletz Indians, and the Confederated Tribes of the Warm Springs Reservation of Oregon. Based on a site survey and a detailed cultural resource report produced by a BPA in-house archeologist covering the proposed APE, it was determined that no adverse effects to cultural resources would occur by this project. The cultural resource report and a summary letter were sent on January 24, 2011 to the Oregon SHPO, the Confederated Tribes of Grand Ronde, the Confederated Tribes of Siletz Indians, and the Confederated Tribes of the Warm Springs Reservation of Oregon. A concurrence letter dated February 18, 2011 was received regarding this cultural resource report from the Oregon SHPO. No written reply was received from the tribes.

As determined by a wetland and other waters of the U.S. delineation following the 1987 Corps of Engineers Wetland Delineation Manual performed by the consulting firm Tetra Tech in early February 2011, the construction activities associated with Step 1 of the proposed 3-step process would occur within a converted jurisdictional wetland located adjacent to BPA's Ostrander Substation. Permanent impacts to jurisdictional wetlands include the construction of three new 500-kV transmission towers as well as improving approximately 750 feet of an existing, 16-foot wide access road to enable the safe and less intrusive transport of construction equipment. Four footings would be required per new transmission tower, each of which would permanently displace approximately 400 square feet of wetlands. Other access roads, culverts, staging areas, and dewatering mechanisms would be considered temporary impacts and would be required to strictly obey the attached provisions.

In total, permanent project impacts to jurisdictional wetlands would not exceed 0.5 acres. Based on the projected impacts to jurisdictional wetlands as well as construction provisions outlined below, it is BPA's determination that the proposed actions satisfy the stipulations outlined within Nationwide Permit 12 – *Utility Line Activities* issued by the Army Corps of Engineers (ACE). The wetland delineation, along with a detailed project description has been submitted to the ACE and the Department of State Lands (DSL) for review. Appropriate wetland mitigation would be coordinated among BPA, ACE, and DSL and may include onsite mitigation or offsite mitigation at the Foster Creek Wetland Bank located adjacent to the Ostrander Substation.

The entire project area is located within existing BPA right-of-way and is used for agricultural purposes. Because of the previous disturbance, absence of natural vegetation, and lack of habitat, no ESA species listed or proposed for listing are likely to be present. It was therefore determined that no adverse effects would occur regarding listed species.

Based on the provisions identified on the attachment, this proposed action meets the requirements for the categorical exclusion referenced above. We therefore determine that the proposed action may be categorically excluded from further NEPA review and documentation.

Sincerely,

/s/ Michael Henjum

Michael Henjum

Contract Environmental Protection Specialist

Concur:

/s/ Katherine S. Pierce

Date: March 10, 2011

Katherine S Pierce

NEPA Compliance Officer

Attachments:

Provisions

Environmental Checklist for Categorical Exclusions

## Provisions

This categorical exclusion would meet the following provisions:

### **Jurisdiction wetland impacts:**

1. Permanent impacts to waters of the United States (i.e. wetlands) may not exceed 0.5 acres.
2. Foundations for utility line towers are to be the minimum size necessary and comprised of separate footings for each tower leg. Furthermore, footing design can not promote wetland drainage.
3. Temporary structures, fills, and work necessary to complete the project would maintain normal downstream flows and minimize flooding to the maximum extent practicable. Temporary fills and structures must be removed in their entirety within three months and the affected areas returned to pre-construction elevations. Other excavated areas would be minimized and materials would be temporarily side-cast into waters of the U.S. for no more than three months.
  - The top 6 to 12 inches of the trench would be backfilled with topsoil from the trench.
  - The trench would not be backfilled in such a manner as to drain the wetland (e.g., extensive gravel layers, creating a French drain effect).
4. New or improved access roads must be the minimal width and length necessary. Roads constructed above pre-construction contours and elevations in waters of the U.S. must be properly bridged or culverted to maintain surface flows.
5. No change in pre-construction contours may result from any construction activity.
6. Excess dredged soils would be transported and disposed of off-site.
7. Low impact equipment would be used when possible (e.g., spider hoe, crane).
8. Vegetation may only be removed to ground level (i.e. no grubbing).
9. All exposed soil would be stabilized.
10. The entire site would be revegetated.

### **Cultural resources:**

11. Should archaeological materials be unexpectedly encountered during project activities, the following actions should be taken:
  - Stop work and immediately notify the COTR and a qualified archaeologist. In addition, all concerned Tribes and appropriate county, state, federal agencies should be notified.
  - Implement reasonable measures to protect the discovery site, including any appropriate stabilization or covering.
  - Take reasonable steps to ensure the confidentiality of the discovery site.
  - Take reasonable steps to restrict access to the site of discovery.

### **Vegetation protection and noxious weeds:**

12. Restrict construction activities to the area needed to work effectively. Construction crews would be instructed to restrict vehicles to designated areas and existing roads as much as possible.
13. Designated areas would be used to store equipment and supplies. The contractor shall follow applicable state and federal regulations to protect plant communities.

14. After construction, disturbed areas not needed for ongoing access or maintenance would be promptly reseeded with native species where possible.
15. Seed mix for revegetation would contain a mixture of the common native bunchgrasses and dryland species present in the Project area. Native seed is commercially available for this area.
16. Do not spread noxious weed seeds:
  - Certify in writing that all vehicles, equipment, and machinery are free of all weeds including seeds before moving the equipment into the construction area. The COTR would inspect vehicles prior to bringing them on site.
  - When an area contaminated by weeds is encountered on, or off of, the construction site, use caution to prevent the spreading of weeds to other areas. This may include cleaning the equipment with high-pressure water prior to moving from one work site to another, or installing wheel washes. Notify the COTR as to the location of the noxious weeds.
17. Use only weed-free materials, or inert materials for mulching and for erosion control.

**Erosion control and land use:**

18. Require dust abatement on road and construction site, if necessary.
19. Appropriate erosion and sediment control best management practices would be utilized for the protection of water resources.
20. Provide a schedule of construction activities to all landowners/agencies along the corridor that could be affected by construction.
21. Plan and schedule construction activities, when practical, to minimize temporary disturbance, displacement of crops, and interference with farming activities.
22. Keep gates in as found condition (opened or closed). Coordinate construction sequence with landowner so that livestock may be moved if necessary.

**Public health and safety:**

23. All standard erosion and sediment control best management practices (BMPs) would be used for any ground disturbances and road improvements to avoid/minimize excessive erosion, soil sloughing, and other surface alterations during the construction phase. Sediment fencing would be placed around the perimeter of the project to prevent sediment migration off-site. Other BMPs used to control erosion and sediment may include straw wattles, bales, silt curtains, and temporary matting.
24. Fueling and vehicle maintenance should not take place where any spilled material may enter any natural or manmade drainage conveyance including, ditches, catch basins, and pipes. Drip pans and absorbent pads would be placed under all leaking construction equipment.
25. Limit construction to daytime hours for noise abatement.
26. No equipment with un-muffled exhaust is allowed. Fit all equipment with sound-control devices that are as effective as the original equipment.
27. Should contaminated media be unexpectedly encountered during construction of the project, stop work and notify the COTR. Contaminated media include materials that are potentially harmful to the environment or human health and safety. Work would proceed only after measures approved by the Oregon Department of Environmental Quality (ODEQ) are put in place to prevent the spread of contaminated materials and protect the health and safety of workers.
28. Equip vehicles with fire suppression equipment, including a shovel, fire extinguisher, and bladder or water supply.
29. Equip construction vehicles with spill containment kits able to respond to construction related spills.

## Environmental Checklist for Categorical Exclusions

Name of Proposed Project: Ostrander Line Swap Project

Work Order #: 00261551, 00261552, & 00261553

This project has been found to not adversely affect the following environmentally sensitive resources, laws, and regulations:

Environmental Resources	No Adverse Effect	No Adverse Effect With Conditions
1. Cultural Resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. T & E Species, or their habitat(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Floodplains or wetlands Wetland impacts associated with this project are subject to the restrictions outlined in Nationwide Permits (NWP) 12 & 33 as well as in the attached provisions. Proceeding with construction activities first requires the submittal of a Joint Application to the ACE and Oregon DSL for review and approval. Mitigation for permanent wetland displacement will occur either onsite or at the Foster Creek Wetland Bank, pending ACE and Oregon DSL review.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Areas of special designation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Health & safety	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Prime agricultural lands	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Special sources of water	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Consistency with state and local laws and regulations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Pollution control at Federal facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Note: Supporting documentation is in the Project file.**

Signed: /s/ Michael Henjum

Date: March 10, 2011