Proposed Action: DeMoss Substation Shunt Capacitor Addition

Project Manager: Alaric Hsu – TEP-TPP-1

Location: Wasco County, Oregon

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: Bonneville Power Administration (BPA) proposes to install shunt capacitors and associated equipment at its DeMoss Substation in Wasco County, Oregon. The substation is currently susceptible to voltage fluctuations under certain peak load conditions that could cause damage to BPA-owned and customer-owned transmission equipment. New shunt capacitors would stabilize voltage fluctuations and maintain BPA’s standards of transmission system reliability.

Equipment to be installed in the control house would include relays, breaker differential relay, and new cram racks with standard controls and instruments.

The substation yard would be expanded to the north by approximately 4,600 square feet on existing fill material to accommodate new shunt reactive devices and provide required clearances. Outdoor equipment to be installed would include three new shunt capacitors, one new power circuit breaker, one disconnect switch, three surge arrestors, three current transformers, and three current limiting reactors. Work in the substation yard to accommodate expansion would include the addition of fill and switchyard rock, as well as revisions to existing site drainage and fencing.

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.
Elizabeth Siping
Contract Environmental Protection Specialist
Flux Resources, LLC

Reviewed by:

Gene Lynard
Supervisory Environmental Protection Specialist

Concur:

Sarah T. Biegel
NEPA Compliance Officer

Attachment: Environmental Checklist

Date: September 7, 2017
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:** DeMoss Substation Shunt Capacitor Addition

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**Project Site Description**

BPA’s DeMoss Substation is located in a rural area of central Oregon, approximately 30 miles southeast of The Dalles Dam. The project area includes the substation yard, control house, and entrance. The substation yard would be expanded to the south into previously disturbed area.

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**Evaluation of Potential Impacts to Environmental Resources**

<table>
<thead>
<tr>
<th>Environmental Resource</th>
<th>No Potential for Significance</th>
<th>No Potential for Significance, with Conditions</th>
</tr>
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<tbody>
<tr>
<td>1. Historic and Cultural Resources</td>
<td>![ ]</td>
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| **Explanation:** Oregon State Historic Preservation Office concurrence on no adverse effect determination was made on 6/2/2017. The Confederated Tribes of the Warm Springs Reservation and the Confederated Tribes of the Umatilla Indian Reservation were consulted; no responses were received. In the event any archaeological material is encountered during project activities, the following actions should be taken:  
- Stop work in the vicinity and immediately notify the BPA environmental lead, a BPA archaeologist, appropriate BPA project staff, interested Tribes, Oregon SHPO, and the appropriate local, state, and Federal agencies.  
- 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, including restricting access. |
| 2. Geology and Soils | ![ ] | ![ ] |
| **Explanation:** The substation yard would be expanded by 4,600 square feet which would require fill and new switchyard rock. Existing materials would be re-used to the extent practicable.  
**Mitigation:** Erosion and sediment controls would be implemented to control run-off and prevent off-site transport of sediment. Soil and concrete would be disposed of in an approved waste management facility. |
| 3. Plants (including federal/state special-status species) | ![ ] | ![ ] |
| **Explanation:** Most of the proposed work would occur in previously disturbed area. No special-status species are known to occur in the project area. |
4. **Wildlife** (including federal/state special-status species and habitats)

   **Explanation:** Most of the proposed work would occur in previously disturbed area. No special-status species are known to occur in the project area.

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

   **Explanation:** An unnamed intermittent stream channel and associated floodplains are located to the north of DeMoss Substation. Proposed work would avoid the stream channel and floodplains.

   **Mitigation:** Erosion and sediment controls would be implemented to control run-off and prevent off-site transport of sediment.

6. **Wetlands**

   **Explanation:** Wetlands are present in association with the intermittent stream, adjacent to the proposed work; however, no impacts to wetlands would occur.

7. **Groundwater and Aquifers**

   **Explanation:** No new wells are proposed. No disturbance to groundwater is anticipated; maximum depth of disturbance is approximately 1 foot.

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

   **Explanation:** There would be no change in land use and no specially designated areas are present.

9. **Visual Quality**

   **Explanation:** Substation yard expansion would result in additional equipment which is consistent with the appearance of existing equipment at the substation.

10. **Air Quality**

    **Explanation:** A small amount of dust and vehicle emissions is anticipated during construction.

11. **Noise**

    **Explanation:** Temporary construction noise would occur during daylight hours. Operational noise would not be significantly different.

12. **Human Health and Safety**

    **Explanation:** No impacts to human health and safety are anticipated.

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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, 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—all work would occur on BPA fee-owned property and there would be little visual or other effects to adjacent landowners.

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

Signed: /s/ Elizabeth Siping

Date: September 7, 2017

Elizabeth Siping – ECT-4