Categorical Exclusion Determination
Bonneville Power Administration
Department of Energy

**Proposed Action:** Fossil Substation Shunt Reactive Addition

**Project Manager:** Alaric Hsu – TEP-TPP-1

**Location:** Wheeler 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 reactive devices at its Fossil Substation in Sherman County, Oregon. The substation is currently susceptible to voltage fluctuations under certain peak load conditions that could cause damage to BPA and customer-owned transmission equipment. In order to install shunt reactive devices and associated support equipment, BPA would expand the existing control house and substation yard.

The control house would be expanded to the west by 760 square feet to accommodate indoor equipment for the shunt reactive additions including relays, switches, metering equipment, communication controls, and batteries. Ground disturbance for the control house expansion would occur inside the substation yard and would involve removal of existing switchyard rock (for storage on-site, and reuse), excavation for footings/foundations (approximately 30-inches deep), and modifications to the existing grounding mat. The excavated material is expected to be suitable for backfill and intended for reuse onsite. The new building addition would have a concrete slab on grade with a cable trench entrance vault, wood frame construction with metal siding, new HVAC, fire alarm, and air conditioning panels. The roof of the control house addition would extend over the existing control house. Metal siding would also be added to the existing control house over the wall panel system.

The substation yard would be expanded to the south and east by 6,500 square feet to accommodate new shunt reactive devices and provide required clearances. Outdoor equipment to be installed would include three new shunt reactive devices, one new power circuit breaker, three surge arrestors, ten disconnects, three potential transformers (PT’s), three current transformers (CT’s), and two overhead ground wire poles. The yard expansion would include revisions to existing site drainage, new substation fence additions, and new concrete footing locations. Clean fill and new switchyard rock would be imported to the site, providing the necessary subgrade stability needed for the expansion.

**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/ Elizabeth Siping
Elizabeth Siping
Contract Environmental Protection Specialist
Flux Resources, LLC

Reviewed by:

/s/ Gene Lynard
Gene Lynard
Supervisory Environmental Protection Specialist

Concur:

/s/ Stacy L. Mason Date: June 2, 2017
Stacy L. Mason
NEPA Compliance Officer

Attachment: 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:** Fossil Substation Shunt Reactive Addition

---

**Project Site Description**

BPA’s Fossil Substation is located in a rural area of central Oregon. The substation is ¾ mile east of the town of Fossil on Highway 19. The project area includes the substation yard, control house, and entrance. The control house would be expanded to the west inside the substation yard. The substation yard would be expanded to the south and east into the existing parking lot and previously disturbed area, next to Highway 19.

---

**Evaluation of Potential Impacts to Environmental Resources**

<table>
<thead>
<tr>
<th>Environmental Resource Impacts</th>
<th>No Potential for Significance</th>
<th>No Potential for Significance, with Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Historic and Cultural Resources</td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

**Explanation:** Oregon State Historic Preservation Office concurrence on no adverse effect determination on 6/2/2017. The Confederated Tribes of the Warm Springs Reservation and the Confederated Tribes of the Umatilla Indian Reservation were consulted; no response was received.

**Mitigation:** 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 6,500 square feet which would require fill and new switchyard rock to be brought in. Existing materials would be re-used to the extent practicable.

**Mitigation:** Erosion and sediment controls would be implemented as necessary to control run-off and prevent off-site transport of sediment. Soil and concrete would be disposed of in an approved waste management facility. No permanent stockpiles would be permitted.

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

**Explanation:** Most of the proposed work would occur in previously disturbed area. No plants would be removed and 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 with no wildlife or habitat. 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:** No water bodies or floodplains are present at or near the project site.

6. **Wetlands**  
   
   **Explanation:** No wetlands are present.

7. **Groundwater and Aquifers**  
   
   **Explanation:** No new wells or use of groundwater is proposed.

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 and equipment additions would be 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.
### 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 (nearest resident is across Highway 19). A temporary construction access permit may be required by Oregon Department of Transportation.

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:** June 2, 2017

Elizabeth Siping – ECT-4