Categorical Exclusion Determination
Bonneville Power Administration
Department of Energy

Proposed Action: Keeler Substation Radio Communication Upgrades

Project No. (if applicable): xxxxx

Project Manager: Kelly Gardner

Location: Washington 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: BPA is proposing to replace existing analog communication equipment with digital equipment within its Keeler Substation (KEEL) in Washington County, Oregon. KEEL is part of a mobile radio network which extends throughout BPA’s service area to provide critical power system monitoring and line crew communications functions. BPA’s mobile radio network has been in service for over 25 years, and consists of equipment beyond its serviceable life or in an advanced state of disrepair, with little to no vendor support. BPA is in the process of replacing aging or outdated mobile radio equipment to ensure communication and power system reliability, and to maintain compliance with North American Electric Reliability Corporation (NERC) standards and Western Electric Coordinating Council (WECC) requirements.

In order to complete the project at KEEL, BPA would remove and decommission analog communication equipment from within the existing control house, acquire a new beam path easement, install a new digital microwave radio, and install one new digital channel bank. BPA would remove and decommission the existing microwave radio antenna and temporary ice bridge, and install a new microwave radio compatible with the new digital equipment. In order to connect the new antenna with the new digital communications equipment in the control house, an elliptical communications cable known as waveguide would be installed above ground along a radio tower leg and beneath a new 15 foot long protective ice bridge constructed between the radio tower and control house. The new ice bridge would be supported on four posts secured to 12-inch diameter, 36-inch deep concrete foundations. Eight 18-inch deep potholes would be hand-excavated to bond the new ice bridge to the existing substation grounding mat.

The proposed project would require that BPA temporarily disturb up to 29.9 acres for equipment installation and storage, and the movement of construction vehicles and heavy equipment within the limits of previously disturbed BPA fee-owned land. Workers would access the project site through the existing substation entrance on NW Rickey Terrace.

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/ Zach Gustafson  
Zach Gustafson  
Contract Environmental Protection Specialist  
David Evans and Associates, Inc.

Reviewed by:

/s/ Dave Kennedy  
Dave Kennedy  
Supervisory Environmental Protection Specialist

Concur:

/s/ Katherine S. Pierce  
Katherine S. Pierce  
NEPA Compliance Officer

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: Keeler Substation Radio Communication Upgrades

Project Site Description

The project site is located on BPA fee-owned property northeast of the City of Hillsboro adjacent to State Route 26. The site consists of control houses, maintenance and equipment sheds, transmission lines and towers, substation equipment, and graveled and paved areas for vehicle circulation and equipment storage. Vegetated areas of the proposed project site are previously disturbed with evidence of fill and grading. Existing vegetation is primarily non-native forbs and grasses, and invasive weeds. Much of the site has been cleared and is regularly mowed to accommodate the transmission lines and towers present on the site. The surrounding landscape includes active farming and suburban development.

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>
<tr>
<td>Explanation: No potential to affect cultural resources or historic properties.</td>
<td></td>
<td></td>
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<tr>
<td>2. Geology and Soils</td>
<td>✓</td>
<td>□</td>
</tr>
<tr>
<td>Explanation: Minimal soil disturbance in existing yard.</td>
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<td></td>
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<tr>
<td>3. Plants (including federal/state special-status species)</td>
<td>✓</td>
<td>□</td>
</tr>
<tr>
<td>Explanation: No federally-listed or state special-status plant species are present. All work in existing yard.</td>
<td></td>
<td></td>
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<tr>
<td>4. Wildlife (including federal/state special-status species and habitats)</td>
<td>✓</td>
<td>□</td>
</tr>
<tr>
<td>Explanation: All work in existing yard; no habitat present.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Water Bodies, Floodplains, and Fish (including federal/state special-status species and ESUs)</td>
<td>✓</td>
<td>□</td>
</tr>
<tr>
<td>Explanation: No potential to affect floodplains or water bodies. No in-water work is proposed for the project.</td>
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<tr>
<td>6. Wetlands</td>
<td>✓</td>
<td>□</td>
</tr>
<tr>
<td>Explanation: None present.</td>
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<td></td>
</tr>
</tbody>
</table>
### Groundwater and Aquifers

**Explanation:** No new wells or use of ground water proposed; maximum depth of disturbance would be approximately three feet.

### Land Use and Specially Designated Areas

**Explanation:** All work in existing yard.

### Visual Quality

**Explanation:** No potential to affect visual quality.

### Air Quality

**Explanation:** Small amount of dust and vehicle emissions during construction activities.

### Noise

**Explanation:** Temporary, intermittent noise from construction activities during daylight hours. Operation noise would not change.

### Human Health and Safety

**Explanation:** No impact to human health and safety from the proposed project.

## 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
Landowner Notification, Involvement, or Coordination

Description: No notification – all work on BPA fee-owned property and no visual or other effects to adjacent landowners.

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

Signed: /s/ Zachary Gustafson
Zachary Gustafson
Environmental Protection Specialist

Date: November 19, 2014