Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy

Proposed Action: Long-Range Navigation System Testing

Project No.: Technology Innovation Project No. 463

Project Manager: Dan Avery, Public Utilities Specialist, DST-3

Location: Clark County, Washington; and Columbia County, Oregon

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B1.7 Electronic equipment; B3.6 Small-scale research development, laboratory operations, and pilot projects

Description of the Proposed Action: Bonneville Power Administration (BPA), in partnership with the U.S. Department of Energy's Grid Deployment Office and Pacific Northwest National Laboratory, proposes to test an enhanced long-range navigation (eLORAN) system at two BPA substations. The eLORAN system has the capability to provide highly secure and precise time signals to meet transmission operational objectives. Under the direction of BPA's Technology Innovation Program, this testing would occur at Ross Substation at the Ross complex in Vancouver, Washington, and at Allston Substation near Rainier, Oregon.

Testing would require the installation of eLORAN hardware consisting of cabling, antennas, and receivers. At both substations, a cable with a similar circumference as one used for home internet or television service would run from inside the control house under the floor or overhead through existing cable chases to the substation roof where an antenna would attach to an existing external support structure. This antenna is a 10-inch by 24-inch circular device. Connected by the cable, the roof-top antenna would link to a receiver, measuring 16 inches by 10 inches by 4 inches, installed into the existing server rack inside each substation.

Electricians would install the cabling by running them through existing cable chases and use an existing server rack to house the receivers, which would not require physically modifying the interior of either substation. To fasten the antennas to the external support structure, crews would use hand tools, nuts, and bolts to attach them existing external support structures.

The hardware installation would be temporary and remain in place long enough to complete the testing and research project. The antennas would likely be removed once the project concludes.

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, Jul. 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.

JEFFREY MASLOW

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Jeff Maslow
Senior Environmental Protection Specialist

Concur:

KATEY GRANGE

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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: Long-Range Navigation System Testing

Project Site Description

BPA Allston Substation is in a rural agricultural area outside Rainier, Oregon. Ross Substation, which sits within BPA's Ross transmission complex, is situated in a suburban setting off Interstate-5 in Vancouver, Washington. Both these substations' control houses, where the proposed installation and testing would occur, are situated within developed areas that consist of compacted gravel fill inside fenced substation yards.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No.

Explanation: Because the installation and testing would not cause any ground disturbance, would not modify any building structure, and would involve only the installations of small exterior antennas to existing substation support structures, there would be no potential to affect historic and cultural resources.

2. Geology and Soils

Potential for Significance: No

Explanation: Because no ground-disturbing activities would occur for the installation and testing, there would be no potential to affect soils and geology.

3. Plants (including Federal/state special-status species and habitats)

Potential for Significance: No

Explanation: Because the installation and testing would occur within a developed substation yard without vegetation present, there would be no potential to affect plants.

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

Potential for Significance: No

Explanation: Because installation and testing would occur within developed substation yards, no wildlife habitat would be present in the immediate area. In addition, the work to install antennas onto the existing support structure on the substation roof would be conducted using hand tools, limiting the potential for noise disturbance to wildlife such as nearby birds. For these reasons, the potential impact to wildlife would be negligible.

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

Potential for Significance: No

Explanation: Because installation and testing would occur in developed substation yards and not cause any ground disturbance, there would be no potential to affect waterbodies, floodplains, or fish.

6. Wetlands

Potential for Significance: No

Explanation: Because installation and testing would occur in developed substation yards and not cause ground disturbance, there would be no potential to affect wetlands.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: Because installation and testing would occur in developed substation yards and not cause ground disturbance, there would be no potential to affect groundwater and aquifers.

8. Land Use and Specially Designated Areas

Potential for Significance: No

Explanation: The installation and testing would not affect current land uses at either substation. Therefore, there would be no effect to land use and specially designated areas.

9. Visual Quality

Potential for Significance: No

Explanation: The installation of small antennas would occur on existing support structures alongside other existing communication equipment. Because the installed equipment would result in a minor addition to preexisting equipment and structures already installed on each substation roof and would remain in place only for the duration of testing, it would result in negligible change to the visual character at each location.

10. Air Quality

Potential for Significance: No

Explanation: Minor, temporary generation of emissions associated with increased vehicle traffic to support installation and testing work.

11. Noise

Potential for Significance: No

Explanation: Low levels of noise would be generated from the installation work from crews using hand tools to install the antennas onto existing support structures on each substation roof. Due to the short duration and temporary nature of this work, there would be a low noise impact.

12. Human Health and Safety

Potential for Significance: No

Explanation: Installation and testing would adhere to all applicable safety rules and regulations.

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: N/A

Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators) that are not otherwise categorically excluded.

Explanation: N/A

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: N/A

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: N/A

Landowner Notification, Involvement, or Coordination

Description: The work would occur at BPA facilities. For this reason, no specific landowner notification or involvement is necessary to prepare for implementing the proposal.

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

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