

memorandum

DATE: July 11, 2012

REPLY TO
ATTN OF: KEPR-4

SUBJECT: Environmental Clearance Memorandum

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

Proposed Action: Big Eddy – Troutdale No. 1 230 kV Transmission Line Upgrade

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): Appendix B4.13, Upgrading and Rebuilding Existing Powerlines.

Location: Wasco, Hood River and Clackamas counties, OR

Proposed by: Bonneville Power Administration (BPA)

Description of the Proposed Action: The project, as proposed, is the thermal upgrade of the BPA Big Eddy – Troutdale No.1 230 kV Transmission Line:

Background

BPA's Big Eddy – Troutdale No. 1 230-kV transmission line is one of three major transmission lines that cross the Oregon Cascade Mountains. These lines transport The Dalles hydro generation and northwest wind generation output in the east to load centers west of the Cascades, like Portland, OR, and the Willamette Valley. In 2008, study results showed that the Big Eddy – Troutdale No. 1 line is at risk for overload during peak winter load conditions as well as during spring time periods of increased hydro and wind power generation. Overloads could result in uncontrolled loss of load and reduced reliability on the system (including violation of North American Electric Reliability Corporation (NERC) reliability standard TPL-003).

In order to prevent these issues, BPA will upgrade the maximum operating temperature (MOT) of the Big Eddy – Troutdale transmission line from 50 °C to 100 °C. The line was originally constructed using conductor rated and operated at 50 °C MOT. This project will upgrade the MOT to 100 °C, which will increase the available transmission capacity of the line and thus allow BPA to maintain capacity on the West of Cascades South transmission path, which is a primary transmission path serving Portland, OR, and the Willamette Valley.

Project Details

As the MOT increases on a transmission line, so does the sag (vertical distance between the highest and lowest point in the curve of the line). A minimum overhead clearance must be maintained for safety, so as the MOT and sag are increased on a transmission line, several impairments, or areas where the overhead clearances are reduced and thus unsafe, occur.

To upgrade the MOT of the Big Eddy – Troutdale transmission line, BPA must correct 31 impairments on the line. Correcting these impairments include a variety of actions:

1. Relocate an existing transmission tower to a new location (within 75 feet (‘) of current position) and at a greater height (4 impairments).
2. Build a new transmission tower (2 impairments).
3. Install new hardware on the towers that have either: a) increased thermal capacity (new insulator assembly; or b) result in increased tension on the line (floating dead end) (17 impairments)
4. Make additions to the tower body (7 impairments).
5. Remove ground wire (1 impairment).

The transmission line will be upgraded in small segments totaling approximately 20 miles in length (total line length is 77 miles). This upgrade will include the minor relocation of small segments of the line. All project work will occur on BPA right-of-way (ROW). The ROW contains up to four transmission lines in some areas, and is greater than 500’ in width and all project sites are located directly off an existing public or BPA access road. The following table summarizes the project activities and associated locations:

Big Eddy - Troutdale Structure	Proposed Activity	Site Description
2/2	Relocate tower 70' ahead-on-line (AOL)	Orchard property. Located within the Columbia River Gorge National Scenic Area. East of Cascades.
4/2	Relocate tower 70' AOL	Orchard property. Located within the Columbia River Gorge National Scenic Area.
5/3	Relocate tower 70' AOL	Orchard property. Located within the Columbia River Gorge National Scenic Area.
24/6	Install new tower, same location.	Level or nearly level agricultural land. Orchard. First location West of Cascades. Located directly adjacent to Hwy 281.
25/5	Install tower cage	Level or nearly level agricultural land. Orchard. Located directly adjacent to Bassler Dr.
26/4	Install tower cage	Sloped agricultural land. Orchard. Located directly adjacent to Old Parkdale Rd.
30/3	Install new insulator assembly	Forested slope.
34/4	Install tower cage	Forested slope. Located in the Mt. Hood National Forest and on US Forest Service property. Located directly adjacent to Lolo Pass Rd.
36/5	Install tower cage	Forested slope. Located in the Mt. Hood National Forest. Located directly adjacent to Lolo Pass Rd.

Big Eddy - Troutdale Structure	Proposed Activity	Site Description
37/1	Install floating dead end	Forested slope. Located in the Mt. Hood National Forest. Located directly adjacent to Lolo Pass Rd.
43/2	Install tower cage	Forested slope. Located in the Mt. Hood National Forest and on US Forest Service property. Located directly adjacent to Lolo Pass Rd.
44/4	Install new insulator assembly	Forested slope. Located in the Mt. Hood National Forest and on US Forest Service property. Located directly adjacent to Lolo Pass Rd.
45/4	Install new insulator assembly	Forested slope. Located in the Mt. Hood National Forest.
46/3	Install new insulator assembly	Forested slope. Located directly adjacent to Carnarvon Rd.
46/4	Install new insulator assembly	Forested slope. Located directly adjacent to E. Snowden Rd.
46/5	Install new insulator assembly	Forested slope. Located directly adjacent to E. Snowden Rd.
48/2	Install floating dead end	Forested slope. Located on US Bureau of Land Management property.
49/1	Relocate tower 70' back-on-line (BOL)	Forested slope. Located on US Bureau of Land Management property.
49/3	Install tower cage	Forested slope. Located on US Bureau of Land Management property.
51/3	Install new insulator assembly	Nearly level forest. Rural residential. Located directly adjacent to E. Barlow Trail Rd.
53/5	Install new insulator assembly	Nearly level forest. Rural residential. Located directly adjacent to E Marmot Rd.
53/7	Install new tower. AOL of existing 53/6 tower.	Nearly level forest. Rural residential. Located directly adjacent to E Marmot Rd.
55/1	Install floating dead end	Nearly level forest. Rural residential. Located directly adjacent to Homestead Rd.
55/2	Install floating dead end	Nearly level forest. Rural residential. Located directly adjacent to Homestead Rd.

Big Eddy - Troutdale Structure	Proposed Activity	Site Description
55/3	Install new insulator assembly	Nearly level forest. Rural residential. Located directly adjacent to Homestead Rd.
56/1	Install floating dead end	Nearly level forest. Rural residential. Located directly adjacent to E Marmot Rd.
56/5	Install new insulator assembly	Nearly level forest. Rural residential. Located directly adjacent to E Marmot Rd.
59/4	Install new insulator assembly	Rural residential.
60/1	Install new insulator assembly	Rural residential.
62/5	Install new insulator assembly	Rural residential. Located directly adjacent to E. Marmot Rd.
Big Eddy - DeMoss Structure	Proposed Activity	Site Description
1/2	Install new guy wires, remove ground wire	Level or nearly level shrub steppe. Located on BPA's Big Eddy Substation complex.

In addition, various access road improvements (reconstruction of existing roads) will be made, where necessary, in order to access and correct each impairment. These improvements will be made at the discretion of the contractor; however, all access roads were included in the environmental analysis of this project.

All sites located within the Columbia River Gorge National Scenic Area (NSA) underwent NSA review for consistency with the NSA Act. BPA was provided with a letter of consistency for this project. In addition, the US Forest Service (USFS) reviewed the project for consistency with the National Forest Management Act for those project sites located within the Mt. Hood National Forest and on USFS property. BPA will be provided with a letter of consistency from the USFS for these project activities. Several project locations also occur on US Bureau of Land Management (BLM)-owned property. The BLM has reviewed this project and will provide BPA with a letter of approval for project activities on BLM property. Finally this project cannot be seen from US Highway 26, thus it does not require special management under Title IV, Section 401, Mt. Hood Corridor special management area.

This project will be broken into two phases as a result of section 106 consultation and survey timing. Phase I includes 15 project sites: 24/6, 25/5, 26/4, 51/3, 53/5, 53/7, 55/1, 55/2, 55/3, 56/1, 56/5, 59/4, 60/1, 62/5 and BIGE-DEMO 1/2. These project locations have undergone section 106 consultation, in addition to all other environmental analysis, and are considered

ready for construction as of July 1, 2012. Section 106 consultation is underway for Phase II of the project and is expected to be completed by August 15, 2012. These remaining 16 project sites could not be accessed for section 106 surveys either due to weather or permitting issues encountered with the underlying landowners. All permits have been received and all surveys are now complete. The final 30-day consultation will need to be complete before these 16 sites are considered ready for construction. No construction will occur at these locations until all environmental analysis is complete.

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, 76 FR 63764, Nov. 14, 2011). 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, has not been segmented to meet the definition of a categorical exclusion, 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, (iv) have the potential to cause significant impacts on environmentally sensitive resources, or (v) 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. 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.

/s/ Lisa MacLellan

Lisa MacLellan

Physical Scientist (Environmental)

Concur: /s/ Katherine S. Pierce

Katherine S. Pierce

NEPA Compliance Officer

Date: July 11, 2012

Attachment:

Environmental Checklist for Categorical Exclusions

Environmental Checklist for Categorical Exclusions

Name of Proposed Project: Big Eddy – Troutdale No.1 230 kV Transmission Line Upgrade

Work Order #: 246583

This project does not have the potential to cause significant impacts on the following environmentally sensitive resources. See 10 CFR 1021, Subpart D, Appendix B for complete descriptions of the resources. This checklist is to be used as a summary – further discussion may be included in the Categorical Exclusion Memorandum.

<u>Environmental Resources</u>	<u>No Potential for Significance</u>	<u>No Potential, with Conditions (describe)</u>
1. Historic Properties and Cultural Resources SHPO concurrence has been received on Phase I of the project. DO NOT PROCEED with Phase II until concurrence has been received from the SHPO.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. T & E Species, or their habitat(s) No species or habitat will be impacted by this project. T & E fish species occur within the project area, but not work will occur in water and all necessary BMP's will be in place to protect the streams.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Floodplains or wetlands No floodplains or wetlands will be impacted by this project. Any work occurring in or around floodplains and wetlands will implement necessary BMP's to protect these resources.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Areas of special designation Three project sites occur within the Columbia River Gorge National Scenic Area (NSA). A letter of consistency with the NSA is attached. Several project locations occur within the Mt. Hood Corridor, but do not require special management. Additionally, several project locations occur within the Mt. Hood National Forest and are on USFS and BLM property. DO NOT PROCEED until consistency/approval letters are received from agencies.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Health & safety None.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Prime or unique farmlands No prime or unique farmland impacted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Special sources of water None.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Other (describe) None.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

List supporting documentation attached (if needed):

Signed: /s/ Lisa MacLellan

Date: July 09, 2012