Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy

Proposed Action: Red Mountain-Horn Rapids Rebuild Project *(Update to previous CX issued on January 9, 2023)*

Project No.: P03102

Project Manager: Alla Kirsanova – TEPL-TPP-1

Location: Benton County, Washington

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

Description of the Proposed Action: Bonneville Power Administration (BPA) proposes to rebuild the first 4 miles of its Red Mountain-White Bluffs 115-kV transmission line from Red Mountain Substation to structure 4/15, located just outside of Horn Rapids Substation (owned by Benton Public Utility District (PUD)). This CX has been updated to reflect changes in project design, such as structures proposed for replacement.

All conductor, insulators, guy wires, guy anchors, overhead groundwire, counterpoise, and other structure hardware would be replaced. Except for structures 2/7, 2/8, and 4/14, existing wood pole structures would be replaced. Fall protection would be added to the new substation dead-end structure at Red Mountain Substation. New jumpers would be installed at the line switch structure next to Structure 4/14. The recently installed (2020) switch and switch structures 2/7 and 2/8 would remain in place.

Fifty-eight of the existing 61 single wood-pole structures would be replaced with wood pole H-frame structures at an average height of 70 feet; about 10 feet higher, on average, than the existing single wood-pole structures. The remaining 3 structures (the previously mentioned 2/7 and 2/8, and 4/14) were already replaced in 2020. One single-pole steel structure would replace structure 4/15 at Horn Rapids Substation and 2 new structures would be added to mile 2.

Rebuilt structures would shift ahead- or back-on-line up to 50 feet with approximately 8 structures shifting further than that. While priority was given to maintaining existing centerline, several structures would shift side-to-side to keep guy wires/anchors within the existing right-of-way. At 10 structure sites, guy wires/anchors would extend outside of the existing right-of-way. New right-of-way easements for the guy wires/anchors and two identified areas where the conductor could swing outside the right-of-way under certain conditions would be obtained from the underlying landowner.

Eight pulling sites within the existing right-of-way would be used where the transmission line makes a turn. A temporary 5-acre material yard would be secured just west of structure 4/5 in a previously disturbed area adjacent to the existing access road and between 2 existing crop circles. The area would be rocked and fenced. Two temporary helicopter landing zones are

proposed at either end of the project at the substations. Existing access roads would be used but from 1/13 to 2/6, about 3,400 feet (0.6 mile) of road would be improved or reconstructed.

To safely operate and maintain the line into the future, BPA has identified 14 areas along the first mile of the existing right-of-way on private property where trees and brush need to be removed within and outside of the existing right-of-way. Forty-five trees and several areas of brush would be removed before the existing line is rebuilt.

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.

NANCY WITTPENN

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Environmental Protection Specialist

Concur:

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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: Red Mountain-Horn Rapids Rebuild Project *(Update to previous CX dated January 9, 2023)*

Project Site Description

The project is located in Benton County, Washington where the existing BPA Red Mountain-White Bluffs 115-kV transmission line crosses Ruppert Road (T10N, R27E, Section 35). From Red Mountain Substation about 2 miles north to Ruppert Road, the existing transmission line passes through both rural residential and light industrial use property which transitions into more recent suburban housing development before the line crosses Ruppert Road. Besides homes, storage, and outbuildings, open space in this area contains relatively level low-quality shrub-scrub habitat commonly found in the more rural parts of the Tri-Cities area. Trees are rare in the natural landscape but are present close to homes and outbuildings adjacent to the right-of-way in the first few miles of the transmission line. From Ruppert Road, about 2 miles north to structure 4/15 at Horn Rapids Substation, the existing transmission line crosses between surrounding crop circles with pivot irrigation lines. Because of heavy agricultural use and rotating crop circles, this area is completely level and soils are loose and sandy with scattered weeds. Besides the McWhorter Irrigation Canal that runs through the agricultural area, there are no other waterbodies or wetlands in the project area.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No with Conditions

Explanation: Section 106 consultation was initiated on March 15, 2021 with the Washington Department of Archaeology and Historic Preservation (DAHP) and the Confederated Tribes and Bands of the Yakama Nation (YN). DAHP and the YN concurred with the APE on March 15th and March 16th, respectively. BPA notified DAHP and the YN on January 21, 2022 that the APE had changed. DAHP and the YN concurred with the adjusted APE on January 21st and 24th, respectively. A cultural resource survey of the APE and adjusted APE was conducted in 2021 and 2022. Based on a review of the survey results and final report, a BPA historian and archaeologist determined that no historic properties would be affected. DAHP concurred with BPA's determination of effect on November 17, 2022. No additional comments were received from other consulting parties and the 30-day consultation period ended on December 17, 2022.

Notes: Treat potential discoveries of archaeological materials with BPA's post-review discovery of cultural resources procedure: stop work, contact the BPA EP lead and/or the BPA archaeologist for further required notifications, and ensure integrity of site and materials until further instructions are given.

2. Geology and Soils

Potential for Significance: No with Conditions

Explanation: Sandy soils and riverine rock below the soil layer would be disturbed by structure removal; new structure, guy anchor, and counterpoise placement; temporary guard structure use; and improved or reconstructed access roads. Surface soils would be lightly disturbed by tree and brush removal. All excavated material would be backfilled and any excess material would be used to help bury the counterpoise and/or spread thinly around the new structures within the existing right-of-way and any new right-of-way needed for guy anchors.

Notes: Vehicle and construction equipment would stay on existing right-of-way at structure sites, access roads, staging areas, and material yards. Danger tree and brush removal would occur mostly off existing right-of-way on private property. Soils would be stabilized during and after construction to prevent erosion and sedimentation as specified in the SWPP Plan developed for the project. BMPs from the Eastern Washington Stormwater Management Manual would be correctly used to minimize and/or eliminate any vehicle spills/leaks and sediment discharge (especially into the McWhorter Canal), minimize the size of construction disturbance, and minimize vegetation removal as much as possible. Post-construction and in the fall, a native seed mix that also supports pollinators would be drill seeded in all disturbed areas unless a specific need exists for another mix in agricultural area on private land. A layer of hydromulch would then be applied.

New wood poles staged in material yards would be stored on sorbents to protect underlying soils from wood preservative drips or leakage.

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

Potential for Significance: No with Conditions

Explanation: Low quality shrub-scrub habitat south of Ruppert Road would be temporarily disturbed during the removal and installation of the wood pole structures. Danger trees and brush that could interfere with the safe operation and maintenance of the line have been identified and would be removed. North of Ruppert Road, weedy vegetation on the edge of and in between crop circles, and along the edge of the existing access road would be disturbed. No Federal or state special-status species are known to occupy the project site.

Notes: Vehicle and construction equipment would stay on existing right-of-way at structure sites, access roads, staging areas, and material yards. Danger tree and brush removal would occur mostly off existing right-of-way on private property and coordinated with landowners. All erosion control material would be certified weed-free. Post-construction and in the fall, a native seed mix that also supports pollinators would be drill seeded in all disturbed areas unless a specific need exists for another mix in agricultural area on private land. A layer of hydromulch would then be applied.

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

Potential for Significance: No

Explanation: Wildlife that forage in or around the crop circles or in the shrub scrub habitat outside of the rural and suburban neighborhoods between Red Mountain Substation and Ruppert Road may temporarily scatter from construction noise and activity but the level of noise and activity is not unlike the same generated by the existing roadway, and neighborhood and surrounding agricultural activities. No known Federal or state special-status species are known to occupy the project site.

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

Potential for Significance: No with Conditions

Explanation: No natural water bodies or floodplains occur in the project area. The McWhorter Irrigation Canal runs south (generally following the north/south direction of our right-of-way) from a point on the Yakima River (about 3 miles north of structure 4/15 and the Horn Rapids substation) to about structure 3/12 where it turns to the east away from our right-of-way. WDFW confirmed the canal is fed from a screened pumping station and no fish occur in the canal although one fish (species unidentifiable but thought to be a small trout) was spotted in the canal during a field visit in August 2024.

Notes: See Geology and Soils above for soil containment and spill/leak containment. To prevent any contamination from moving off-site, the SWPPP would address federal, state, and local requirements for fuel and chemical storage, spill containment and cleanup, contractor training, and spill material disposal activities. Equipment would be inspected weekly for leaks and drips with requirements for prompt repairs.

6. Wetlands

Potential for Significance: No

Explanation: No wetlands occur in or near the project site.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: The new structures (which would be direct-embed) and the guy plate footings are not large enough to create a barrier to any groundwater flow that may be in the area. No known aquifers exist in or near the project site. Also, see above Geology and Soils, and Water Bodies, Floodplains, and Fish.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: Utilities are an existing and accepted use on the landscape in and near project site. There are no specially-designated areas at this location.

9. Visual Quality

Potential for Significance: No

Explanation: Thick tree and brush cover is not a natural occurrence in this area, so some aspect of the existing line is likely visible to landowners that are adjacent or close to the existing right-of-way. Further, the removal of danger trees and brush on adjacent private property may increase those views of the transmission line for some landowners depending on their line of sight to the right-of-way. At an average of 70 feet, the new structures would be about 10 feet taller on average than the existing structures. H-frame wood pole structures would also generally require more guy wires. While the footprint at each structure would be larger, placing the structures in the same location or general area (ahead- or back-on-line) as the existing structures would create a consistent and familiar pattern and view on the landscape and would not be significantly out of character with the utility nature of the existing transmission line or right-of-way.

10. Air Quality

Potential for Significance: No with Conditions

Explanation: Temporary dust would be generated by construction vehicles.

Notes: A Fugitive Dust Control Plan would be developed. Water used for dust suppression would be obtained from legal, potable sources. Any palliatives would be approved in advance by BPA.

11. Noise

Potential for Significance: No

Explanation: The new line would be designed to meet BPA edge of right-of-way noise operating standards. Temporary noise would occur during daylight hours for the duration of construction and could be a nuisance to rural and suburban residences in the vicinity.

12. Human Health and Safety

Potential for Significance: No with Conditions

Explanation: The new structure design could theoretically cause magnetic fields to rise about 100 milliGauss. This number would be different depending on how the line was operating at any given time. Magnetic fields are not regulated but BPA minimizes magnetic field exposure as much as possible at edge of right-of-way. Electric fields are regulated, and the design would meet electric field requirements at edge of right-of-way. EMF falls off rapidly with distance. Residences and what appears to be storage areas/buildings and outbuildings occur from Ruppert Road at structure 2/6 south to Red Mountain Substation. Distances of structures from edge of right-of-way vary greatly starting from about 10 feet from edge of right-of-way but most of the structures closer to the edge of right-of-way are storage facilities and outbuildings and would not be occupied on a continual basis. Danger tree and brush removal would occur mostly off existing right-of-way on private property.

Existing wood poles to be removed contain toxic materials. Construction vehicles containing oil, grease, and other toxic materials could potentially leak and/or malfunction and cause unintended spills.

Notes: Existing wood poles would be removed and appropriately disposed of. New wood poles staged in material yards would be stored in a manner that underlying surfaces are protected from wood preservative drips or leakage. All construction equipment brought on-site would be pressure washed to remove oils and grease, and plant fragments and weed seeds. Vehicles would be equipped with oil spill response materials. In the event of a spill, procedures for containment and cleanup would be in place and coordinated with BPA. Also, see above Geology and Soils, and Water Bodies, Floodplains, and Fish.

BPA would coordinate with landowners on access, safety, and schedule for removing danger trees and brush on private property.

Construction contractors would follow their own safety plans and provide flaggers as required by the county to assure safety for motorists passing on Ruppert Road as construction vehicles enter and exit the roadway.

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: See Human Health and Safety above.

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: See Human Health and Safety above.

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: Landowners have been notified during design if new right-of-way is needed and where danger trees and brush would need to be removed for the safe operation and continued maintenance of the transmission line. Landowners would be notified again before vegetation removal and construction, and provided with a general schedule and contact information in case of questions or concerns.

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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