

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: Bridge Substation Upgrade and Expansion

Project No.: P03372 / L0479

Project Manager: Mike Henjum, TEPS-TPP-1

Location: Cassia County, Idaho

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B1.3 Routine maintenance; B1.7 Electronic equipment; B1.24 Property transfers; B4.6 Additions and modifications to transmission facilities

Description of the Proposed Action: Bonneville Power Administration (BPA) proposes to replace aging substation equipment and to reconfigure and expand the substation yard at BPA's Bridge Substation on Bureau of Land Management (BLM)-managed property in Cassia County, Idaho. Bridge Substation does not meet current BPA operational standards, and the existing switchgear has reached the end of its functional life and is due for replacement. In addition, Raft River Rural Electric Cooperative, Inc. (Raft River) has requested a new 230-kilovolt (kV) line terminal within BPA's Bridge Substation (L0479) to accommodate Raft River's new tap line to their new East Bridge Substation.

The proposed action would replace, modify, and/or install new substation equipment in the yard and new electronic equipment in the control house. The substation yard would be expanded by two additional bays to accommodate the new transmission line and reterminate existing transmission lines to improve electric transmission operational flexibility, reliability, and safety.

BPA would replace, modify, and/or install new substation equipment and structures, including:

- Main bus potential transformers
- 138-kV, SF6-filled circuit breakers
- Main bus and auxiliary bus disconnect switches
- Line disconnect switches with grounding blades
- Seismic riser assemblies
- Surge arrestors
- Rigid bus work
- Deadend structures
- Station service yard panels

New foundations for all new and replaced substation equipment would be installed throughout the existing and expanded yard, and the existing foundations would be removed.

To accommodate the new bays, the substation yard would be expanded by approximately 1 acre to the east. Expanding the substation yard would require clearing vegetation, importing approximately 7,000 cubic yards of material, compacting and grading the fill, and resurfacing with crushed rock. Within the expansion area, BPA would install grounding, a new pre-cast trench or conduit system to house cable and/or piping, stormwater piping and a new detention pond to manage runoff, and outdoor lighting. A new emergency engine generator and fuel tank would be installed within a new self-contained shelter to provide back-up station service power in the event of an outage. The expansion area would be enclosed in perimeter security fencing with a non-motorized vehicle gate and a personnel gate.

A new, approximately 280-foot-long and 16-foot-wide gravel access road would be constructed from Olsen Road to the southeast corner of the expanded substation yard. New road construction would require clearing vegetation; forming and grading the road base; shaping and compacting the natural subgrade; and placing, shaping, and compacting gravel on the road surface.

Inside the existing Bridge Substation control house, BPA would replace and reconfigure electronic equipment, racks, cable trays, and associated wiring. The equipment would include protective relaying and control equipment, alarms, GPS clocks, meters, AC panels, battery chargers, and printers. Reconfiguring the equipment would require removing an interior wall. BPA would also fund the installation of a new revenue meter in Raft River's Bridge East Substation control house.

In total, expanding the substation yard and constructing the access road would cause up to approximately 1.2 acres of permanent ground disturbance and an additional approximately 0.8 acres of temporary ground disturbance. Temporarily disturbed areas would be reseeded with a native, regionally-appropriate seed mix in coordination with the BLM. No additional property rights would be required for the substation expansion. However, BPA would acquire authorization from BLM and an approach permit from Raft River Highway District for the new access road. Completion of the project would require the use of heavy equipment, such as an excavator, dump truck, grader, compactor, crane, and boom truck. Materials and equipment would be temporarily staged in existing graveled areas.

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.

Walker Stinnette
Environmental Protection Specialist

Concur:

Katey C. Grange
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: Bridge Substation Upgrade and Expansion

Project Site Description

The project site is located at BPA's Bridge Substation north of Olsen Road on land managed by the Bureau of Land Management (BLM) in Cassia County, Idaho (Township 15 South, Range 26 East, Section 12). Ground disturbance would occur within an undeveloped vegetated area east of the existing substation yard and within the existing substation yard, which is previously disturbed and covered in crushed rock. The site is located within the Northern Basin and Range ecosystem, which is typically dominated by bunchgrass and sagebrush. Vegetation observed at the project site includes shadscale saltbush (*Atriplex confertifolia*), big sagebrush (*Artemisia tridentata*), rubber rabbitbrush (*Ericameria nauseosa*), prickly pear (*Opuntia polyacantha*), native bunchgrasses (*Poa spp.*), and cheat grass (*Bromus tectorum*). The Darkbull soil series is mapped within the project site, which is not hydric. No wetlands or surface waters are present within or near the project site. The surrounding area is primarily undeveloped BLM-managed land with privately-owned irrigated crop land and a single residential property located approximately 1,000 feet to the east.

All proposed actions at Raft River's Bridge East Substation (Township 15 South, Range 27 East, Section 7), which is proposed to be constructed approximately 700 feet southeast of Bridge Substation, would occur inside the new control house.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No

Explanation: On June 15, 2023, BPA initiated National Historic Preservation Act, Section 106 consultation with the following parties:

- Shoshone Bannock Tribes of the Fort Hall Reservation
- Shoshone-Paiute Tribes of the Duck Valley Reservation
- BLM – Burley Field Office
- Idaho State Historic Preservation Office (Idaho SHPO)

BPA conducted background research and a pedestrian survey of the Area of Potential Effects (APE), and no historic or cultural resources were identified. Therefore, on January 19, 2024, BPA determined that the proposed project would result in no historic properties affected (BPA Project No.: ID 2021 021; Idaho SHPO Rev. No. 2023-623). On July 8th, 2024, BPA resubmitted the report addressing comments from Idaho SHPO requesting additional information on the lack of shovel tests and on Bridge Substation itself. On July 15th, 2024, the Idaho SHPO concurred with BPA's determination of no historic properties affected. No other comments were received from the consulting parties.

Notes:

- Implement the Post Review Discovery Procedure in the unlikely event that cultural material is inadvertently encountered during implementation. Discontinue all ground-disturbing activity in the vicinity of the finds until they can be inspected and assessed by BPA and in consultation with the appropriate consulting parties.

2. Geology and Soils

Potential for Significance: No

Explanation: The proposed action could cause up to approximately 0.8 acre of temporary soil disturbance in areas beyond the permanent substation and access road footprint where vehicles and equipment use would result in minor soil rutting and compaction. Expanding the substation yard and constructing a new access road would result in up to approximately 1.2 acres of permanent soil removal and loss of productivity. Standard construction best management practices (BMPs) would be implemented to minimize soil erosion, sedimentation, and fugitive dust. Temporarily disturbed soils would stabilize as vegetation is reestablished and would eventually return to pre-existing conditions following completion of the proposed action. The proposed action would not impact geology.

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

Potential for Significance: No

Explanation: The proposed action would temporarily crush, strip, or bury up to approximately 0.8 acres of vegetation and would permanently remove up to approximately 1.2 acres of common native shrub and bunchgrass species and non-native cheat grass. Standard construction BMPs would be implemented to stabilize soils, re-establish vegetation, and minimize the spread of noxious weeds. Temporarily disturbed areas would be seeded and would eventually return to near pre-existing conditions following completion of the proposed action. There are no documented occurrences of any special-status plant species, including plants listed under the federal Endangered Species Act (ESA), near the project site.

Notes:

- Revegetate with native, regionally-appropriate seed mix in coordination with the BLM.

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

Potential for Significance: No

Explanation: The proposed action would temporarily disturb up to approximately 0.8 acres of potential wildlife habitat and would permanently remove up to approximately 1.2 acres of habitat. Minor and temporary wildlife disturbance could occur from elevated noise and human presence during construction. It is expected that most wildlife species that could be present would be able to avoid the project site during construction and would likely reoccupy temporarily disturbed areas once vegetation is re-established. No special-status wildlife species or wildlife species protected under the federal ESA are expected to occur near the project site.

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

Potential for Significance: No

Explanation: No water bodies, floodplains, or fish-bearing streams are located within or near the project site. Therefore, the proposed action would not impact water bodies and floodplains and would have no effect on special-status fish species or habitats.

6. Wetlands

Potential for Significance: No

Explanation: No wetlands are present within or near the project site. Therefore, the proposed action would not impact wetlands.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: Ground excavation would not reach depths to ground water, and standard construction BMPs would reduce the potential for inadvertent spills of hazardous materials that could contaminate groundwater or aquifers. Therefore, the proposed action would not impact groundwater or aquifers.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: The proposed action would convert approximately 1.2 acres of undeveloped land to a substation yard and access road, which would be consistent with the existing transmission infrastructure land use at the site. The proposed action would not impact nearby agricultural land uses, and the project site is not located in a specially-designated area.

9. Visual Quality

Potential for Significance: No

Explanation: During construction, the presence of construction equipment and general construction activities, including vegetation disturbance, would cause temporary visual impacts. Expanding the substation and constructing a new access road on undeveloped land would cause permanent visual impacts. However, the project site is in a rural area, and the visual impact would be insignificant given that few individuals would likely notice these changes and the addition of substation equipment and yard space would be visually consistent with the existing utility infrastructure at the site.

10. Air Quality

Potential for Significance: No

Explanation: The proposed action would cause a minor and temporary increase in dust and emissions in the local area from general construction activities. BPA would install new circuit breakers containing SF₆, a potent greenhouse gas for which there is no comparable industry alternative. BPA closely monitors SF₆ emissions as part of regularly scheduled maintenance and inspection protocol, which allows BPA to rapidly detect and address leaks. The addition of SF₆ circuit breakers would not substantially lead to additional SF₆ emissions. Standard construction BMPs would suppress dust. There would be no significant long-term change in air quality following completion of the proposed action.

11. Noise

Potential for Significance: No

Explanation: The proposed action would result in minor and temporary noise from the use of vehicles and equipment and general construction activities, which would intermittently exceed current ambient conditions. Construction noise could be audible from one residential property located approximately 1,000 feet from the project site. However, construction would only occur during daylight hours (approximately 7:00 AM to 7:00 PM), and construction noise would attenuate substantially over that distance. Therefore, the proposed action would not result in significant noise impacts.

12. Human Health and Safety

Potential for Significance: No

Explanation: All standard safety protocols would be followed throughout implementation of the proposed action to minimize risk to human health and safety. Therefore, the proposed action would not be expected to impact human health and safety.

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 proposed action would occur on BLM-managed land and BPA has acquired (or will acquire) all necessary rights. BPA has notified and been in coordination with BLM and would continue to coordinate as necessary throughout the proposed action. No additional landowner notification, involvement, or coordination would be required.

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

Signed:

Walker Stinnette
Environmental Protection Specialist