Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy

Proposed Action: Libby RAS Unit 6 Addition

Project No.: G0556

Project Manager: Jared Lacambra – TPCF-MEAD-GOB

Location: Lincoln County, MT

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B1.7 Electronic Equipment, B4.4 Power marketing services and activities

Description of the Proposed Action: BPA proposes to allow the US Army Corps of Engineers (USACE) to interconnect its Unit 6 turbine at Libby Dam to BPA's transmission system on BPA's existing 230kV Libby Powerhouse-Libby transmission line (Generation Interconnection Request G0556). BPA's proposed action to support the G0556 interconnection would be to install Remedial Action Scheme (RAS) equipment at the Libby Dam powerhouse to ensure that the addition of the Unit 6 Turbine meets North American Electric Reliability Corporation reliability standards and to help maintain the stability of the Bulk Electric System. Equipment would be placed in the existing Libby Dam powerhouse and would include two new electrical panels and associated controllers and equipment. No ground disturbance, alteration of the powerhouse or alteration of transmission lines would occur.

With the installation of the Unit 6 turbine, Libby Dam power generation operations would remain within normal operating limits and Bonneville would continue power marketing and management activities consistent with existing Endangered Species Act (ESA) consultations. Unit 6 would provide additional functionality in reliable power generation, redundancy for downstream flows, and assist in limiting spill during the upcoming generator rewinds and turbine runner replacements, regular maintenance outages, and possible powertrain failures. In addition, Unit 6 could assist in minimizing total dissolved gas (TDG) exceedances and improve maintenance of flows during outages and increase the likelihood of annual spring releases for Kootenai River white sturgeon. As described in the 2020 Columbia River System Operations (CRSO) Environmental Impact Statement (EIS) and Record of Decision (ROD) and 2020 Biological Assessment of Effects of the Operations and Maintenance of the Federal Columbia River System on ESA-Listed Species (2020 CRS BA), the turbine unit outages will avoid disrupting sturgeon pulse flows (May-June) to the maximum extent practicable[1], though, once installed Unit 6 would assist in implementing pulse flows. The installation of a sixth unit provides the flexibility for Libby Dam to operate six units instead of five units which allows the units to be run more efficiently (i.e. operating outside rough zones) and provides incremental power generation increases. Unit 6 would also provide operational flexibility to avoid non-volitional spill (non-volitional spill is rare at

[1] 2020 CRS BA, Section 2.4.1.3, page 2-74.

Libby Dam) during the ensuing extended maintenance periods after installation.[2] The installation of the Unit 6 turbine would support conservation of ESA-listed species considered in the 2020 ESA consultation with the U.S. Fish and Wildlife Service (USFWS) on the operations and maintenance of the Columbia River System.

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.

/s/ Douglas Corkran
Douglas Corkran
Environmental Protection Specialist

Concur:

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Katey C. Grange
NEPA Compliance Officer

Attachment(s): Environmental Checklist

[2] Spill at Libby Dam can cause exceedances of Montana's TDG Standard of 110 percent with as little as 1,500 cubic feet per second (cfs) of flow over the spillway.

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: Libby RAS Unit 6 Addition

Project Site Description

The project is located entirely within the existing Libby Dam powerhouse.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No

Explanation: Libby Substation is considered a contributing resource to the USACE Libby Dam historic district; however, the proposed project would consist of interior equipment upgrades only, which would not affect the integrity of the resource. On April 18, 2023 BPA historians determined that the proposed project does not have the potential to cause effects on historic properties. There is no ground disturbance associated with the project. Therefore, there would be no impacts to historic or cultural resources.

2. Geology and Soils

Potential for Significance: No

Explanation: All work would take place within the existing powerhouse and no ground disturbance would occur. There would be no impacts to geology and soils.

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

Potential for Significance: No

Explanation: All work would take place within the existing powerhouse and no ground disturbance would occur. There would be no impacts to plants.

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

Potential for Significance: No

Explanation: All work would take place within the existing powerhouse and no ground disturbance or outside noise generation would occur. There would be no impacts to wildlife.

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

Potential for Significance: No

Explanation: All RAS work would take place within the existing powerhouse. Libby Dam power generation operations would remain within the normal operating limits and would not alter

flows beyond current operations to impact water bodies, floodplains or fish. Hydrologic modeling and power capacity investigations have demonstrated that Libby Dam can operate all six generators without changing total discharge. There would be no change to operations at Libby Dam as proposed in the 2020 CRS BA, including during the installation and testing of Unit 6. Total flows will continue as proposed for ESA-listed fish species including as proposed for maintenance outages, sturgeon flows, bull trout flows, and flood risk management operations. Since the flows through each of the generator units would be decreased compared to operation of five generator units, while total flows from Libby Dam would not change, bull trout entrainment and survival rates are expected to be similar when all six generator units are in operation.

Based on the information above, BPA concludes the installation and operation of Libby Dam Unit 6 would not result in new effects to ESA-listed species beyond those considered in the CRSO EIS and ROD, 2020 CRS BA and the 2020 CRS USFWS or National Marine Fisheries Service Biological Opinions. Further, the operational flexibility that is provided by use of Unit 6 would ensure the ability to meet flow requirements during extended generator unit outages and during non-volitional spill without generating excess total dissolved gas.

6. Wetlands

Potential for Significance: No

Explanation: All work would take place within the existing powerhouse and no ground disturbance would occur. There would be no impacts to wetlands.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: All work would take place within the existing powerhouse and no ground disturbance would occur. There would be no impacts to groundwater or aquifers.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: All work would take place within the existing powerhouse and no ground disturbance would occur. There would be no impacts to land use or specially designated areas.

9. Visual Quality

Potential for Significance: No

Explanation: All work would take place within the existing powerhouse and no outside work altering the visual character of the area would occur. There would be no impacts to visual quality.

10. Air Quality

Potential for Significance: No

Explanation: All work would take place within the existing powerhouse. There would be no impacts to air quality.

11. Noise

Potential for Significance: No

Explanation: All work would take place within the existing powerhouse and there would be no increase or change in permanent noise levels. There would be no impacts from noise.

12. Human Health and Safety

Potential for Significance: No

Explanation: All work would take place within the existing powerhouse. Construction crews and other personnel would adhere to Best Management Practices for electrical work during construction. There would be no impact on 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 project would take place within the existing Libby Dam powerhouse with no work on private lands. BPA has coordinated work with the dam operator (US Army Corps of Engineers) and no additional landowner notification would be needed.

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

Signed: */s/ Douglas Corkran* *May 10, 2023*
Douglas Corkran Date
Environmental Protection Specialist