

Record of Categorical Exclusion
for
Alabama Power Company (APC)
Bouldin Unit 1 Powerhouse Turbine Replacement/Upgrade Project
Loan Application #EIR0044

Description of Categorically Excluded Action

The United States Department of Energy (DOE) Title XVII Energy Infrastructure Reinvestment (EIR 1706) Program was established pursuant to the Inflation Reduction Act of 2022 (42 U.S.C. 16517), which amended Title XVII of the Energy Policy Act of 2005 to include the EIR Program. The EIR Program provides loan guarantees for projects that either: (1) retool, repower, repurpose, or replace energy infrastructure that has ceased operations; provided that if the project involves electricity generation through the use of fossil fuels, it is required to have controls or technologies to avoid, reduce, utilize, or sequester air pollutants and anthropogenic emissions of greenhouse gases; or (2) projects that enable operating energy infrastructure to avoid, reduce, utilize, or sequester air pollutants or anthropogenic emissions of greenhouse gases (42 U.S.C. 16517(a)(2)).

The DOE Loan Programs Office (LPO) is considering whether to issue a loan guarantee of a funding facility to Alabama Power Company (APC) pursuant to its authority under the EIR 1706 Program. In its application, APC has identified the Bouldin Powerhouse Unit 1 Turbine Replacement Project (Project) in Elmore County, Alabama, for inclusion in the funding facility that is the subject of DOE's loan guarantee (the Proposed Action). APC may request inclusion of multiple individual projects with independent utility in the funding facility that is the subject of the DOE loan guarantee; accordingly, DOE will complete an environmental review pursuant to the National Environmental Policy Act (NEPA) for these projects prior to their inclusion in the funding facility that is the subject of DOE's loan guarantee.

Project Description

APC's Bouldin Development is one of seven developments owned and operated by Alabama Power along the Coosa River and one of the five developments that comprise the Coosa River Hydroelectric Project. The Bouldin Development consists of a dam, a powerhouse with intake and three hydroelectric (turbine) generating units within (total rated capacity of 225 MW), and a reservoir, known as Bouldin Forebay.

In accordance with the Federal Energy Regulatory Commission's (FERC) NEPA requirements, the following project activities were authorized in the November 27, 2023, FERC *Order Amending License to Replace Unit 1 Turbine at the Bouldin Development* (Project No. 2146-275). These activities are the subject of LPO's proposed loan guarantee:

1. Wicket gate replacement
2. Turbine runner replacement
3. Turbine and generator bearing upgrades
4. Reassembly of Bouldin Unit 1
5. Disassembly of Bouldin Unit 1*
6. Discharge ring removal*
7. Related component upgrades*

Construction of ancillary facilities (e.g., a new warehouse, material laydown area, construction trailer site, and parking area) are associated with APC's Bouldin Unit 1 project but are not the subject of the proposed loan guarantee; therefore, the ancillary facilities are not included in the scope of the Project.

Disassembly of Bouldin Unit 1 began in 2023 and was completed in July 2024. Bouldin Unit 1 is projected to be back in service in April 2026. The unit replacement/upgrade is required to address significant maintenance needs and to improve power and efficiency (the unit was out of service due to substantial equipment failure). The replacement/upgrade is not expected to result in an increase to the installed capacity of the unit, because it is generator limited (i.e., the generator capacity in MWs is smaller than the turbine capacity in MWs). However, the replacement/upgrade is expected to improve efficiency. The maximum discharge of the unit at rated conditions is not expected to increase. While the Project will replace outmoded components throughout the design life, the replacements will not result in a significant change in the expected useful life, design capacity, or function of the facility. All work will occur within the Bouldin Powerhouse, and the work is authorized under its existing FERC license.

In accordance with the Endangered Species Act, LPO's review of the Project found that there would be no effect to listed species or critical habitat. LPO identified that all work will be conducted within the existing Bouldin Powerhouse, and there will be no disturbance from construction or operational activities on listed species or their designated critical habitat.

In accordance with the National Historic Preservation Act (NHPA), LPO consulted with the Alabama State Historic Preservation Office (SHPO). On June 17, 2025, the Alabama SHPO concurred with LPO's finding of no historic properties affected for this project. In accordance with Section 106, DOE identified federally recognized Native American Indian Tribes (Tribes) that may have an interest in the Project area. DOE has notified the following six (6) federally recognized Tribes: Alabama-Coushatta Tribe of Texas; Alabama-Quassarte Tribal Town; Coushatta Tribe of Louisiana; Eastern Shawnee Tribe of Oklahoma; Muscogee (Creek) Nation; and Seminole Tribe of Florida. No comments were received from these Tribes..

* In accordance with the November 2023 FERC Order, this project activity has been completed or is in progress.

Number and Title of Categorical Exclusion(s)

The Project is consistent with and covered by DOE categorical exclusions in 10 Code of Federal Regulations (CFR) Part 1021, Appendix B1, Categorical Exclusions Applicable to Facility Operation. The Project is covered by DOE Categorical Exclusion B1.3.

B1.3 Routine Maintenance

Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (including, but not limited to, pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed, provided that the activities would be conducted in a manner in accordance with applicable requirements. Custodial services are activities to preserve facility appearance, working conditions, and sanitation (such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal). Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Such maintenance may occur as a result of severe weather (such as hurricanes, floods, and tornadoes), wildfires, and other such events. Routine maintenance may result in replacement to extent that replacement is in-kind and is not a substantial upgrade or improvement. In-kind replacement includes installation of new components to replace outmoded components, provided that the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of the facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Routine maintenance activities include, but are not limited to:

- (a) Repair or replacement of facility equipment, such as lathes, mills, pumps, and presses;*
- (b) Door and window repair or replacement;*
- (c) Wall, ceiling, or floor repair or replacement;*
- (d) Reroofing;*
- (e) Plumbing, electrical utility, lighting, and telephone service repair or replacement;*
- (f) Routine replacement of high-efficiency particulate air filters;*
- (g) Inspection and/or treatment of currently installed utility poles;*
- (h) Repair of road embankments;*
- (i) Repair or replacement of fire protection sprinkler systems;*
- (j) Road and parking area resurfacing, including construction of temporary access to facilitate*
- (k) resurfacing, and scraping and grading of unpaved surfaces;*
- (l) Erosion control and soil stabilization measures (such as reseeding, gabions, grading, and revegetation);*
- (m) Surveillance and maintenance of surplus facilities in accordance with DOE Order 435.1, "Radioactive Waste Management," or its successor;*

- (n) *Repair and maintenance of transmission facilities, such as replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, crossarms, insulators, and downed powerlines, in accordance, where appropriate, with 40 CFR part 761 (Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions) or its successor;*
- (o) *Routine testing and calibration of facility components, subsystems, or portable equipment (such as control valves, in-core monitoring devices, transformers, capacitors, monitoring wells, lysimeters, weather stations, and flumes);*
- (p) *Routine decontamination of the surfaces of equipment, rooms, hot cells, or other interior surfaces of buildings (by such activities as wiping with rags, using strippable latex, and minor vacuuming), and removal of contaminated intact equipment and other material (not including spent nuclear fuel or special nuclear material in nuclear reactors); and*
- (q) *Removal of debris.*

Regulatory Requirements defined in 10 CFR § 1021.410(b)

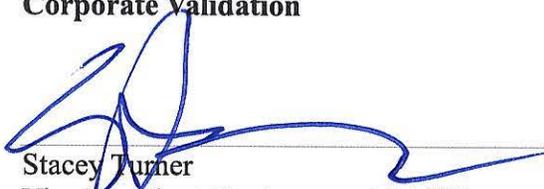
The Proposed Action and related Project activities described above were subjected to an environmental due diligence review by DOE LPO staff to ensure they are consistent with the specific category of actions (categorical exclusion) contained in Appendix B of 10 CFR Part 1021 and the conditions for applying categorical exclusions specified in Section 410 of Part 1021. To ensure the requirements of Appendix B were met, LPO staff reviewed numerous project-related documents obtained between November 2024 and April 2025 and participated in several conference calls with APC staff to ensure a complete understanding of the activities associated with the Project.

The environmental due diligence review determined that there is no controversy regarding the potential environmental impacts of the Project, and that the actions associated with the loan guarantee would not adversely affect any physical, biological, or socio-cultural resources associated with the deployment of the project. The environmental due diligence review determined the Proposed Action has not been segmented to meet the definition of a categorical exclusion.

The Comment section below is provided for any necessary clarifications concerning the findings listed above. Signature by APC’s designated representative in the Corporate Validation section is an indication of APC’s concurrence with the findings and determinations presented above.

Comment(s)

Corporate Validation



Stacey Turner
Vice President, Environmental Affairs
Alabama Power Company

Determination

Based on my review of information conveyed to me and in my possession concerning the actions associated with the proposed EIR Program (EIR 1706) loan guarantee described above, as NEPA Compliance Officer (as prescribed in DOE Policy Directive 451.1), I have determined that the actions involve no extraordinary circumstances and fit within the specified category of actions in Appendix B of 10 CFR Part 1021 described above, and are hereby categorically excluded from further review under NEPA (42 United States Code 4321, as amended).

Signature and Date

Todd Stribley
NEPA Compliance Officer
Loan Programs Office