

Categorical Exclusion Number:	CX-270885	
Loan Application Number:	EIR0045	
Proposed Action Title:	Plant McIntosh Combined Cycle and Combustion Turbine Upgrades	
Program of Field Office:	Office of Energy Dominance Financing	

<u>Location(s) (City/County/State):</u> Effingham County, Georgia

Proposed Action Description:

Description of Categorically Excluded Action

The United States Department of Energy (DOE), Office of Energy Dominance Financing (EDF), may provide loan guarantees for energy infrastructure projects under Section 1706 of Title XVII of the Energy Policy Act of 2005, as amended by the Inflation Reduction Act of 2022 (42 U.S.C. 16517) and the One Big Beautiful Bill Act (Pub. L. No. 119-21, 139 Stat. 72 (July 4, 2025)) (the Energy Dominance Financing or EDF Program). The purpose of the EDF Program is to finance projects and facilities in the U.S. that retool, repower, repurpose, or replace energy infrastructure that has ceased operations or enable operating energy infrastructure to increase capacity or output (42 U.S.C. 16517(a)(2) and Pub. L. No. 119-21, 139 Stat. 72 (July 4, 2025)).

EDF is considering whether to issue a loan guarantee of a funding facility to Georgia Power Company (GPC) pursuant to its authority under the EDF Program. In its application, GPC has identified the Plant McIntosh Combined Cycle and Combustion Turbine Upgrades (Project) for inclusion in the funding facility that is the subject of DOE's loan guarantee. GPC 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.

The Project consists of combined cycle and combustion turbine upgrades at Plant McIntosh. Accordingly, the Proposed Action considered in this record of categorical exclusion is EDF's issuance of Federal financial support for the Project.

Project Description

GPC's Plant McIntosh is an operating dual-fuel, natural gas and fuel oil, fired generating facility located in Rincon, Effingham County, Georgia with eight (8) simple cycle combustion turbines (CTs) and two (2) combined cycles (CCs). Plant McIntosh is located at 981 Old Augusta Road Rincon, Georgia, 31326. Georgia Power owns the land occupied by Plant McIntosh and the facility does not occupy any federal or tribal lands.

CC Upgrades

Both CCs at Plant McIntosh, Units 10-11, will receive the General Electric ("GE") 7FA.05 upgrade which includes replacing rotating blades and stationary vanes in the CTs (two CTs per CC), combustor replacement, increasing firing temperature and shaft limits, and additional operating mode flexibility. The result of these replacements will be increased capacity and improved heat rate for some operating modes. In addition, the GE 7FA.05 upgrade will give these natural gas CCs the ability to operate power augmentation (admission of steam to the combustion turbine to increase mass throughput and power output) and peak firing in winter conditions, as well as the ability to operate peak fire and power augmentation simultaneously. This upgrade is projected to achieve an incremental capacity of 194 MW in the winter. This enhancement increases the capacity of the existing CCs while also improving the heat rate.



Since this project consists solely of upgrades to existing units, all construction will take place within the existing footprint of the CCs. A laydown area will be located just north of the existing CCs in an existing gravel parking lot. Existing roads will be utilized for construction and deliveries of equipment for this project.

Construction for this project is planned to begin and be completed in 2028.

The proposed upgrades trigger applicability under New Source Performance Standard (NSPS) and necessitate a modification to the existing air operating permit. Georgia Power will coordinate with Georgia Environmental Protection Division (EPD) and will submit a timely application to update the permit accordingly. Both units currently meet the more stringent NSPS emissions limits and will continue to do so following the upgrades.

CT Upgrades

All eight (8) simple cycle CTs, Units 1A-8A, are being upgraded with the GE XP upgrade. The GE XP upgrade consists of replacing existing turbine components, which will allow each unit to operate at a higher capacity. In addition to increasing capacity, these replacement components are of lower cost than the in-kind replacement parts, leading to a reduction in the capital budget. This upgrade will provide an additional 74.4 Megawatts (MW) of incremental capacity over a staggered schedule from 2027 to 2030. These upgrades are designed to provide additional economic peaking capacity, ensuring the existing plant can meet peak demand periods more effectively.

Since this project consists solely of upgrades to existing units, all construction will take place within the existing footprint of the CTs. Storage of all equipment will take place within an existing warehouse. Additional laydown area, if needed, will be located on the existing gravel lot surrounding the existing CTs. Existing roads will be utilized for construction and deliveries of equipment for this project.

Construction for this project is planned as follows:

2027: Start and complete upgrades for unit 6A

2028: Start and complete upgrades for units 2A and 7A

2029: Start and complete upgrades for units 1A and 8A

2030: Start and complete upgrades for units 3A and 5A

2031: Start and complete upgrades for unit 4A

The CT upgrades do not trigger a modification to the existing air operating permit, as projected emissions from the Project remain below existing air permit and permit modification thresholds. Georgia Power will coordinate with Georgia EPD regarding these upgrades and make necessary administrative updates to the existing air permit, as needed

Required Consultations and Reviews

In accordance with Section 7 of the Endangered Species Act, EDF's review of the Project found that there would be no effect to designated critical habitat. Additionally, for eight Federally threatened, endangered, proposed, and candidate species with potential to occur in the Project area (northern long-eared bat, tricolored bat, West Indian manatee, red-cockaded woodpecker, eastern indigo snake, southern hognose snake, monarch butterfly, and pondberry). EDF has reached a *no effect* determination for all species based on all project activities occurring within existing structures; no vegetation removal is required for this project. Additionally, equipment laydown areas will be in existing compacted gravel lots. Noise and traffic associated with project activities will be comparable to existing noise and traffic levels at the operating Plant McIntosh.



In accordance with the National Historic Preservation Act (NHPA), EDF consulted with the Georgia State Historic Preservation Office (SHPO). On December 3, 2025, the Georgia SHPO concurred with EDF's finding of no historic properties affected for this project. DOE identified and contacted eleven federally recognized Native American Indian Tribes (Tribes) that may have an interest in the Project area (Alabama-Quassarte Tribal Town; Catawba Indian Nation; Coushatta Tribe of Louisiana; Kialegee Tribal Town; Miccosukee Tribe of Indians; Muscogee (Creek) Nation; Poarch Band of Creek Indians; Seminole Tribe of Florida; Seminole Nation of Oklahoma; Thlopthlocco Tribal Town, and United Keetoowah Band of Cherokee Indians in Oklahoma). No Tribes responded to EDF's consultation invitation.

Categorical Exclusion(s) Applied:

B1.31 Installation or Relocation of Machinery and Equipment

Categorical Exclusion(s) Description:

The Project is consistent with and covered by DOE categorical exclusions in 10 Code of Federal Regulations (CFR) 1021, Appendix B4, Categorial Exclusions Applicable to Electric Power and Transmission. Specifically, the Project is covered by DOE Categorical Exclusions B1.31 Installation or Relocation of Machinery and Equipment:

Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.

Regulatory Requirements Defined in 10 CFR § 1021

The proposed loan guarantee for actions described above was subjected to an environmental due diligence review by DOE EDF staff to ensure consistency with the specific category of action (categorical exclusion) contained in Appendix B of 10 CFR Part 1021 and the conditions for applying categorical exclusions specified in Section 102 of Part 1021. To ensure that the requirements of Appendix B were met, EDF Environmental Compliance obtained numerous project-related documents between August and November 2025 and participated in several conference calls with GPC 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.

Signature by GPC's designated representative in the Corporate Validation section (below) is an indication of GPC's concurrence with the findings and determinations presented herein.



For the DOE procedures regarding categorical exclusions, including the full text of each categorical exclusion, see 10 CFR 1021.102 and Appendix B to 10 CFR Part 1021, and also Section 5.4 (Applying one or more categorical exclusions to a proposal) and Appendices B and C of DOE's National Environmental Policy Act Implementing Procedures (June 30, 2025).

Requirements and guidance in 10 CFR 1021.102 and DOE's NEPA Implementing Procedures: (See full text in regulation and in Implementing Procedures)

- The proposal fits within a class of actions that is listed in Appendix B to 10 CFR Part 1021 or Appendix B and C of DOE's NEPA Implementing Procedures (June 30, 2025).
 - To fit within the classes of actions listed in Appendix B to 10 CFR Part 1021, or Appendix B of DOE's NEPA Implementing Procedures, a proposal must satisfy the conditions that are integral elements of the classes of actions in Appendix B of both 10 CFR Part 1021 and DOE's NEPA Implementing Procedures.
- There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal. DOE or an applicant may modify the proposal to avoid reasonably foreseeable adverse significant effects such that the categorical exclusion would apply.
- The proposal has not been segmented to meet the definition of a categorical exclusion.

Based on my review of the proposed action, as NEPA Compliance Officer, I have determined that the proposed action fits within the specified class(es) of action, the other requirements and guidance set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

Corporate Validation:			
Comments:			
Applicant Signatory:	Jennifer McNelly Vice President, Environmental Affairs Georgia Power Company		
Signature:	gm	Date:	12/15/25
DOE Signatory:	Todd Stribley Director, Environmental Programs DOE Office of Energy Dominance Financing		·
Signature:		Date Determined:	12/15/2025