Georgia Power

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PUBLIC DISCLOSURE

September 11, 2026

Ms. Sallie Tanner
Executive Secretary
Georgia Public Service Commission
244 Washington Street, SW
Atlanta, GA 30334-5701

RE: Georgia Power Company Semi-Annual Nuclear Uprate Report; Docket No. 56002

Dear Ms. Tanner:

In accordance with the *Order Adopting Stipulation* issued by the Georgia Public Service Commission (the "Commission") in Docket Nos. 56002 and 56003 on July 31, 2025, Georgia Power Company hereby files its Semi-Annual Nuclear Uprate Report with the status of engineering and finalizing of contracts for the incremental capacity uprates at Plant Vogtle Units 1-2 and Plant Hatch Units 1-2.

Please contact Cheryl Johnson at 404-506-6837 if you have any questions regarding this filing.

Sincerely,

/s/ Jeremiah Haswell

Jeremiah Haswell
Director, Regulatory Affairs
Georgia Power Company
jhaswell@southernco.com

BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

Georgia Power Company
Docket No. 56002
2025 Integrated Resource Plan

BASIS FOR THE ASSERTION THAT THE INFORMATION SUBMITTED IS A TRADE SECRET

In accordance with the Order Adopting Stipulation issued by the Georgia Public Service Commission ("Commission") in Docket Nos. 56002 and 56003 on July 31, 2025, Georgia Power Company ("Georgia Power" or the "Company") is filing its Semi-Annual Nuclear Uprate Report for the period ending June 30, 2026. The report contains proprietary cost and schedule data (the "Information"). All such Information constitutes trade secret Information of the Southern Company, Georgia Power, and its affiliates and is therefore protected from public disclosure under Commission Rule 515-3-1-.11.

The Information derives economic value from not being generally known to and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use. Specifically, the trade secret portions of the Information include confidential budgetary and schedule information related to nuclear uprate projects. Public dissemination of the Information would allow Georgia Power's potential suppliers and contractors access to such estimated costs and timelines, thereby bestowing insight into the Company's budgeted cost and timing of such expenditures. Such access would grant an unfair advantage to contractors and suppliers of the Company, who could use such information to artificially set bid and proposal prices during contract negotiations. This could lead to the Company having to pay a price higher than that which it would have paid on a level playing field.

The Information is subject to substantial procedures to maintain its secrecy. Only select Georgia Power and Southern Company Services personnel are granted access to the Information. Those personnel receive access only on a "need to know" basis. Parties outside the Company who have been granted access to the Information, if any, have been required to sign confidentiality agreements with respect to the Information.

Jeffrey R. Grubb, first being duly sworn, deposes and states that he has reviewed Georgia Power Company's Information in the above-styled Dockets to that the information included is accurate to the best of his knowledge and that the specific information designated as trade secret constitute trade secrets pursuant to Article 27 of Chapter 1 of Title 10 of the Official Code of Georgia.

Jeffrey R. Grubb
Director of Resource Planning
Georgia Power Company

Subscribed and sworn to before me this 9 day of September 2026.

Notary Public
My Commission expires:



Georgia Power Company's Semi-Annual Nuclear Uprate Report

Reporting Period End Date: June 30, 2026



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Project Background

This Semi-Annual Nuclear Uprate Report ("Report") provides the status of the Extended Power Uprates ("EPUs") at Plant Vogtle Units 1-2 ("Plant Vogtle") and Plant Hatch Units 1-2 ("Plant Hatch"). This Report is filed pursuant to the Georgia Public Service Commission's (the "Commission") Order Adopting Stipulation, dated July 31, 2025 (the "Order") in Georgia Power Company's ("Georgia Power" or the "Company") 2025 Integrated Resource Plan ("2025 IRP"), Docket No. 56002.

EPU is a validated, proven process that has been implemented previously at Plant Hatch and Plant Vogtle, and by other nuclear electric utility operators, that delivers incremental capacity and energy gains. The objective of the EPU process is to increase thermal power (where the reactor produces more heat) to increase steam pressure and flow to the turbine generators, thus producing higher electrical output from the units without using additional fuel. The process includes an extensive analysis of plant systems and components to verify the capability of the EPUs and identify the modifications needed to support the power upgrade at each facility.

The EPU projects will modify key components of the units, including turbines, generators, large pumps and motors, and cooling systems, to allow the units to safely and reliably produce more electricity. Many of the modifications will replace existing components that are contemplated for future end-of-life replacement to enhance performance, and some will create incremental capacity gains from the increased thermal output of the EPU implementation. The Company identifies components as end-of-life when the component is expected to be replaced within the expected operating life of the plant. The EPU components include:

1. **Turbine Upgrade:** The high-pressure ("HP") turbine will be upgraded to handle the increased steam flow and pressure. HP turbines are the first to receive steam and experience the highest temperatures and pressures.
2. **Steam Cycle Upgrades:**
    a. **Feedwater Heaters:** (Hatch only) Preheat water entering the reactor, which improves efficiency of the water heating process in the reactor.
    b. **Moisture Separator Reheaters (MSRs):** (Vogtle Units 1-2 only) Remove water droplets from the steam and reheat the steam before it enters the Low-pressure turbines, thus protecting the turbines and improving efficiency.
    c. **Steam Dryers:** (Hatch only) Remove moisture from the steam, like MSRs. Upgrading steam dryers ensures high steam quality and improves turbine efficiency and reliability under increased steam flow conditions.
    d. **Condensate Pumps and Motors:** (Hatch only) Move condensed steam from the condenser to the feedwater system. Upgrading will improve efficiency and ensure proper flows and pressures for the feedwater system.

e. **Cooling Tower / Circulating Water:** Provides an energy efficient way of removing heat from water that circulates through the condenser. Adding cooling towers, replacing fill material, and/or upgrading circulating water pumps will accommodate additional steam produced after the EPUs.

3. **Generator Upgrade:** The generator will be upgraded to handle the increased power output. Upgrades to the exciter and/or rotor are needed for increased generation.
4. **Maximum Extended Load Line Limit Analysis Plus (MELLLA+):** (Hatch Only) Expands the power/flow map to provide more operating flexibility for uprated plants to achieve full core thermal power.

Key Updates (January 1, 2026 – June 30, 2026)

General Progress Update

Schedule development for EPU project implementation continued to make significant progress through the year. This progress has developed further confidence and reduced risk in the ability to complete the engineering analysis, licensing, and implementation periods as designed.

Plant Vogtle Units 1-2

1. Engineering Status

Westinghouse Engineering ("Westinghouse") analysis Step 1, Feasibility Engineering Analysis, was initiated April 2024 and completed October 2024. Step 2 of 3, Preliminary Engineering Study of the incremental capacity uprate, commenced with Westinghouse in November 2024 and concluded in March 2026. This phase further refined the project scope that supports the uprate. SNC received the proposal from Westinghouse for the final Step 3 Engineering and Licensing phase and anticipates executing the contract in the third quarter of 2026. Major contracts are included in Attachment 1.

Transmission and interconnection activities continued during the reporting period to support the Plant Vogtle Units 1-2 EPU project. Southern Nuclear, Georgia Power, and Transmission Services personnel completed the Cluster Study, Generator Interconnection and Power Delivery reviews, and Affected System Study activities. These studies evaluated Plant Vogtle's incremental generation and its impact on generator interconnection and delivery such as reactive power requirements, short circuit and breaker duty analysis, stability analysis, protection requirements, interface capabilities, nuclear offsite power, and impacted facilities. By June 2026, the transmission planning study indicated that sufficient information had been provided to support continuation of the generator interconnection and affected system process, and no additional requests for study information were pending at that time. Current transmission evaluations have not identified any material transmission limitations that would alter the planned

project development path, and coordination with affected transmission providers remains ongoing as engineering, licensing, and implementation activities progress.

During the reporting period, Southern Nuclear Company continued developing the licensing strategy and supporting analyses for the Plant Vogtle Units 1-2 Extended Power Uprate. The Preliminary Engineering Study was completed in March 2026 and planning advanced for the next phase of engineering analysis and License Amendment Request ("LAR") development. The licensing strategy coordinates the EPU request with related fuel-transition, spent fuel pool criticality, safety-analysis methodology, and potential longer-term fuel-cycle licensing activities.

Work also continued on the fuel-transition licensing package and the supporting analyses necessary to demonstrate operation under the proposed fuel and uprated conditions. These activities include fuel engineering, development of the full-spectrum loss-of-coolant accident evaluation model, spent fuel pool criticality analysis, and preparation of associated licensing-basis changes. Where appropriate, SNC is evaluating opportunities to coordinate or bound related analyses to reduce duplicative work while maintaining the necessary technical and regulatory support for each licensing action.

Following completion of the next engineering and licensing phase, SNC currently projects completion of the principal EPU supporting analyses no later than the first quarter of 2029 and submission of the EPU LAR no later than the second quarter of 2029. The current project schedule projects completion of the NRC's EPU review and approval no later than the third quarter of 2030.

Longer-term licensing activities include NRC review of the EPU request and coordination with related initiatives involving higher-enrichment fuel, higher burnup, advanced fuel methodologies, and potential operation on a 24-month fuel cycle. These related actions will continue to be refined as engineering progresses and NRC review expectations are further developed. The NRC controls changes to a plant's licensed maximum power level and Technical Specifications, and an uprate may not be implemented until the NRC approves the applicable license amendment.

The present project timeline anticipates implementation of the Vogtle EPU over the 2030-2031 period. Because engineering and licensing development remain underway, these longer-term projections may be refined as the technical scope, licensing strategy, NRC review schedule, and related project dependencies mature.

A detailed licensing and implementation schedule for the Vogtle Units 1-2 EPU Project can be found in Attachment 3.

2. Efficiency Projections

As reported in the 12/31/2025 Semi-Annual Nuclear Uprate Report, the vendor provided updated efficiency projections that ranged from 23-24 MWe per unit (GPC 46.8% ownership),

representing a 13.0% decrease from what was initially projected in the Company's 2025 Integrated Resource Plan. During the engineering analysis, an issue was identified with increasing the temperature of the reactor coolant system that would present a long-term vulnerability to the Steam Generators. Accordingly, it was determined to target a lower temperature increase to mitigate that risk. The lower temperature target results in lower total MWe gains per unit.

As of June 30, 2026, the Company has no update for the incremental capacity gains. It will conclude the independent assessment of the MWe gains in September. The final range for the Vogtle 1-2 uprate projection is assumed to be approximately 21-24 MWe per unit (GPC 46.8% ownership), representing up to a 16% decrease from what was initially projected in the Company's 2025 Integrated Resource Plan.

3. Near Term Projects Status:

Project	Final Engineering Design	Material Delivery	Implementation
Unit 1 Heater Drain Motors	February 2027	August 2027	September 2027
Unit 2 Heater Drain Motors	June 2027	December 2027	February 2028
Unit 1 Moisture Separator Reheaters	February 2028	January 2028	February 2029
Unit 2 Moisture Separator Reheaters	February 2027	August 2027	February 2028

The Moisture Separator Reheaters and Heater Drain motors engineering designs are in progress and on track to support implementation as noted above. The procurement of these components with the applicable vendors is on track and delivery of the components to the site is projected to meet the above schedule for implementation.

Near-term licensing activities will focus on continued development of the fuel-transition LAR and the spent fuel pool criticality LAR. The current schedule targets submission of the fuel-transition LAR in the third quarter of 2027. The licensing schedule currently contemplates submitting the spent fuel pool criticality LAR shortly before the fuel-transition LAR, although SNC is evaluating whether that submittal can be advanced. Updates to supporting licensing documents, including the Technical Requirements Manual, Final Safety Analysis Report, and Core Operating Limits Report, are scheduled for completion during the fourth quarter of 2027.

4. Project Scope

Southern Nuclear Company ("SNC") completed the factory acceptance testing to evaluate the upgraded rating of the step-up transformers associated with the uprate project in June. Testing concluded a success path, and the project continues to meet the cost portfolio.

5. Financial Update

The total capital cost estimate remains approximately $[redacted] million. Details through June 30, 2026 are provided in the table below.

$ in Thousands	Current Forecast	Budget	Variance	Actuals to Date	Budget to Date	Variance to Date
Labor & Labor-Related Expenses	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Engineering, Licensing, Consulting	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Engineered Components & Other Materials	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Construction & Implementation	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Portfolio Contingency	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
AFUDC	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Plant Hatch Units 1-2

1. Engineering Status

Engineering analysis for the incremental capacity uprates began with GE Vernova Hitachi Nuclear Energy in August 2025 and remains on schedule for completion on or before October 2027. This phase confirms the scope and prepares the documentation for the LAR. Contract status details are provided in Attachment 2.

Transmission planning activities for the Plant Hatch Units 1-2 EPU project also progressed during the reporting period. Southern Nuclear, Georgia Power, and Transmission Services personnel completed the Cluster Study, Generator Interconnection and Power Delivery reviews, and the Affected System Study activities. These studies evaluated Plant Hatch's proposed incremental generation and its impact on generator interconnection and delivery such as reactive power requirements, short circuit and breaker duty analysis, stability analysis, protection requirements, interface capabilities, nuclear offsite power, and impacted facilities. By June 2026, the transmission planning study indicated that sufficient information had been provided to support continuation of the generator interconnection and affected system process, and no additional study information requests were pending at that time. Current transmission evaluations have not identified any material transmission limitations that would alter the planned project development path, and coordination with affected transmission providers remains ongoing as engineering and licensing activities progress.

During the reporting period, SNC continued engineering and licensing development for the Plant Hatch Units 1-2 EPU. Current activities include development of the combined EPU and MELLLA+ licensing strategy, preparation of the associated safety analysis report, and advancement of the technical analyses needed to support the LAR. The licensing approach also

considers related Alternative Source Term, reactor protection, and subsequent license renewal activities.

The current timeline reflects continued coordination among engineering, licensing, project planning, and vendor activities. This work is intended to define the analyses and licensing-basis changes necessary to demonstrate safe operation at the proposed uprated conditions and under the expanded operating flexibility provided by MELLLA+.

The present project timeline anticipates implementation of the Hatch Units 1-2 EPU over the 2030-2031 period. Because engineering and licensing development remain underway, these longer-term projections may be refined as the technical scope, licensing strategy, NRC review schedule, and related project dependencies mature.

A detailed licensing and implementation schedule for the Hatch Units 1-2 EPU Project can be found in Attachment 3.

2. Efficiency Projections

As reported in the 12/31/2025 Semi-Annual Nuclear Uprate Report, projected efficiency gains from the upgraded HP turbines are slightly below earlier estimates and now range from 23-26 MWe per unit (GPC 50.1% ownership), representing a 15.7% decrease from what was initially projected in the Company's 2025 Integrated Resource Plan. Heat balance analyses to validate these assumptions are underway and scheduled for completion in March 2026.

Since the prior report, SNC completed an independent third-party evaluation of the Hatch EPU generation uplift and received updated heat-balance analyses from GE Vernova. As engineering analysis progressed, the expected conversion efficiency associated with the uprate was refined from approximately 34% to approximately 31%, resulting in lower expected generation gains than originally assumed in the Company's 2025 Integrated Resource Plan. The independent evaluation developed a probabilistic distribution of expected capacity gains and identified several confidence-based outcomes. The analysis estimated a total generation increase of approximately 45.4 MWe total at the 95% confidence level, representing a highly conservative outcome with a high degree of certainty, while the likely outcome was estimated at approximately 56.9 MWe at the 75% confidence level total for both units (GPC 50.1% ownership). Higher generation gains were also identified within the distribution under more favorable operating and performance conditions. These results provide a quantitative framework for evaluating expected project performance and support continued refinement of the Company's capacity projections. Based on the GE Vernova analyses and the independent evaluation, SNC continues to advance engineering, economic, and licensing activities using the updated performance expectations developed through these analyses.

3. Near Term Projects Status:

Project	Final Engineering Design	Material Delivery	Implementation
4th stage Feedwater Heater	October 2026	January 2027	February 2027
Condensate Pump and Motors	November 2026	January 2027	February 2027
2B SJAE	October 2026	January 2027	February 2027
Feedwater Debris Strainers	December 2026	January 2027	February 2027
Reactor Feed Pump Turbine	November 2026	Delivered to site July 2026	February 2027

The engineering design projects are in progress and on track to support implementation, as noted above. The procurement of these components with the applicable vendors is on track and delivery of the components to the site is projected to meet the above schedule for implementation.

Near-term efforts will focus on completing the engineering and safety analyses supporting the combined EPU/MELLLA+ application and developing the associated LAR documentation. The existing report schedule anticipates completing the supporting engineering analysis in 2027 and submission of the LAR during the third quarter of 2027.

SNC will also continue coordinating the EPU/MELLLA+ licensing package with other Hatch licensing activities, including the ongoing Alternative Source Term review and subsequent license renewal.

Following submission, the current schedule projects completion of the NRC's EPU/MELLLA+ review and approval during the second quarter of 2028.

4. Project Scope

As reported in the 12/31/2025 Semi-Annual Nuclear Uprate Report, SNC and vendor analysis of the HP Turbine and 4th Stage Feedwater Heaters identified that the existing components are degraded beyond Company management margin expectations and require replacement within the next several years. Accordingly, the Company has decided to move forward with procuring these assets for implementation during upcoming refueling outages. The HP Turbine has been moved to the general plant-in-service budget to continue implementation for plant reliability purposes. There have been no additional modifications to report since the prior report.

5. Financial Update

The total capital cost estimate remains approximately $[redacted] million. Details through June 30, 2026 are provided in the table below.

$ in Thousands	Current Forecast	Budget	Variance	Actuals to Date*	Budget to Date	Variance to Date
Labor & Labor-Related Expenses	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Engineering, Licensing, Consulting	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Engineered Components & Other Materials	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Construction & Implementation	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Portfolio Contingency	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
AFUDC	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Attachment 1 – Vogtle Units 1-2 Major Contracts

The table below contains the major contracts that have been issued through June 30, 2026, for Vogtle Units 1-2 Extended Power Uprate. These contracts are associated with the procurement, installation, and disposal of major components, as well as the engineering analyses and licensing activities required to increase the plants' licensed thermal power level.

Project	Vendor	Type	Contract Amount
Heater Drain Pump Motors	WEC Electric Corp	Engineered Material	$[redacted]
Moisture Separator Reheaters	Thermal Engineering International USA Inc	Engineered Material	$[redacted]
Moisture Separator Reheaters	Day & Zimmerman	Implementation	$[redacted]
Uprate Engineering Analyses	Westinghouse Electric Co LLC	Engineering & Licensing Support	$[redacted]
Uprate Engineering Analyses	Westinghouse Electric Co LLC	Engineering & Licensing Support	$[redacted]

Attachment 2 – Hatch Units 1-2 Major Contracts

The table below contains the major contracts that have been issued through June 30, 2026, for Hatch Units 1-2 Extended Power Uprate. These contracts are associated with the procurement, installation, and disposal of major components, as well as the engineering analyses and licensing activities required to increase the plants' licensed thermal power level.

Project	Vendor	Type	Contract Amount
Condensate Pumps & Motors	HydroAire Service Inc	Engineered Material[1]	$[redacted]
Feedwater Debris Strainers	GE Vernova Hitachi Nuclear Energy Americas	Engineered Material[2]	$[redacted]
Feedwater Heaters - 4th Stage	Thermal Engineering International USA Inc	Engineered Material[3]	$[redacted]
Feedwater Heaters - 12th Stage	Thermal Engineering International USA Inc	Engineered Material[4]	$[redacted]
Generator Rotor	GE Steam Power Inc	Engineered Material[5]	$[redacted]
Power Range Neutron Monitoring	GE Vernova Hitachi Nuclear Energy Americas	Engineered Material[2]	$[redacted]
Reactor Feed Pump Turbine Rotors	GE Steam Power Inc	Engineered Material[6]	$[redacted]
Reactor Feed Pump Turbine Rotor Modification	GE Steam Power Inc	Engineered Material[6]	$[redacted]
Steam Dryer	GE Vernova Hitachi Nuclear Energy Americas	Engineered Material & Installation[7]	$[redacted]
Steam Dryer	GE Vernova Hitachi Nuclear Energy Americas	Disposal (Segmentation)[8]	$[redacted]
Steam Dryer	Energy Solutions LLC	Disposal[8]	$[redacted]
Uprate Engineering Analyses	GE Vernova Hitachi Nuclear Energy Americas	Engineering & Licensing Support	$[redacted]
Uprate Engineering Analyses	GE Vernova Hitachi Nuclear Energy Americas	Engineering & Licensing Support	$[redacted]

Additional Details:

1) A contract was executed on June 30, 2025, to secure manufacturing for these components to meet expected implementation timeline provided in the 2025 IRP.
2) A contract was executed on March 27, 2026, to secure manufacturing for these components to meet expected implementation timeline provided in the 2025 IRP.
3) A contract was executed on August 28, 2025, to secure manufacturing for these components that required replacement following engineering assessment.

4) A contract was executed on March 30, 2026, to secure manufacturing for these components to meet expected implementation timeline provided in the 2025 IRP.
5) A contract was executed on September 16, 2024, to secure forging slot for long lead time component to meet expected implementation timeline provided in the 2025 IRP.
6) A contract was executed on March 27, 2025, to secure manufacturing for these components to meet expected implementation timeline provided in the 2025 IRP.
7) A contract was executed on March 12, 2025, to secure manufacturing for this long-lead component to meet the expected implementation timeline provided in the 2025 IRP.
8) These contracts are associated with the EPU; however, they are not capital expenditures because the Steam Dryer is an irradiated component and is subject to regulatory requirements for specialized disposal.

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Attachment 3 – Vogtle 1-2 & Hatch 1-2 EPU
Licensing and Detailed Implementation Schedule has been redacted in its entirety.