PUBLIC DISCLOSURE

BEFORE THE
GEORGIA PUBLIC SERVICE COMMISSION

In Re:

GEORGIA POWER COMPANY'S 2025 INTEGRATED RESOURCE PLAN	**)**	**DOCKET NO. 56002**
GEORGIA POWER COMPANY'S 2025 APPLICATION FOR THE CERTIFICATION, DECERTIFICATION, AND AMENDED DEMAND-SIDE MANAGEMENT PLAN	**)**	**DOCKET NO. 56003**

DIRECT TESTIMONY

AND EXHIBITS

OF

ROBERT R. STEPHENS

ON BEHALF OF THE

GEORGIA PUBLIC SERVICE COMMISSION

PUBLIC DISCLOSURE

MAY 5, 2025

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EXHIBITS

I. QUALIFICATIONS AND SUMMARY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. Robert R. Stephens. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q. PLEASE STATE YOUR OCCUPATION.

A. I am a consultant in the field of public utility regulation and a Senior Principal with the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

Q. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. My education and professional experience are detailed in my Exhibit___(RRS-1).

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am offering testimony on behalf of the Georgia Public Service Commission Public Interest Advocacy Staff ("PIAS" or "Staff").

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony will address, from a policy perspective, the need for additional information related to customer impacts of Georgia Power Company's ("GPC" or "the Company" or "Georgia Power") 2025 Integrated Resource Plan ("IRP") and the impact of the 2025 IRP on the competitiveness of Georgia Power's electric rates and its existing customers. Staff is concerned that GPC's IRP could put severe cost pressure on rates due in part to the cost of new resources being constructed to serve new large loads.

My silence with respect to any position taken by Georgia Power in its IRP Filing or Direct Testimonies in this proceeding should not be interpreted as an endorsement of that position.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS AND CONCLUSIONS.

A. My conclusions and recommendations are as follows:

- Considering the level of costs proposed in the IRP and what I perceive to be critical information for the Commission, I recommend that GPC provide class-specific bill impact analyses with its IRP filing. While the Company has provided utility-wide average revenue per kilowatt hour ("kWh") estimates under the various scenarios, from a policy perspective, class-specific bill impacts will help the Commission in its decision making. Absent, sufficient information on customer rate and bill impacts, it is impossible to confirm how existing customers will be impacted by GPC's proposals. Therefore, I recommend that the Company provide class-specific customer bill impact estimates resulting from the expenditures proposed in the IRP to allow this Commission more information and analysis to guide its decision-making.

- To balance protecting existing customers with economic development, I recommend that the Commission order Georgia Power to track the capital investments approved in the Commission's 2025 IRP order, including resources selected in the 2029 – 2031 All Source RFP, independently of other utility expenditures. This tracking would allow for appropriate rate allocation to new customers, ensuring existing customers are not burdened by the associated increased power costs.

- Historically, Georgia Power's retail electric rates were competitive compared to other utilities in the southeast and nationally. However, in recent years Georgia Power's rates generally have increased faster than those of other utilities. Recent capital investments have reduced Georgia Power's competitive advantage. The 2025 IRP likely will continue this trend of rate base growth and increased production costs (O&M plus fuel expense), putting further pressure on electric rates. Maintaining competitive rates is crucial for ensuring affordability for customers and attracting and maintaining business. The Commission should take steps to ensure existing customers are protected.

II. NEED FOR CUSTOMER IMPACT ANALYSIS

Q. WHAT IS YOUR CONCERN RELATED TO THE LACK OF CUSTOMER RATE IMPACT ESTIMATES IN GPC'S IRP?

A. My concern is related to customer bill impacts associated with the resources planned to meet the large new loads, specifically, and how the incremental cost affects current customers. In addition to my own recommendation from a policy perspective, I believe and am advised by Staff counsel that existing regulations support the need to assess these

impacts before approving the IRP. Below are relevant sections of the Georgia Code and Commission rules.

Section 46-3A-1(7) of the Georgia Code related to Integrated Resource Planning states in pertinent part:

> (7) "Plan" means an integrated resource plan which contains the utility's electric demand and energy forecast for at least a 20 year period, contains the utility's program for meeting the requirements shown in its forecast in an economical and reliable manner, contains the utility's analysis of all capacity resource options, including both demand-side and supply-side options, and *sets forth the utility's assumptions and conclusions with respect to the effect of each capacity resource option on the future cost and reliability of electric service.* (emphasis added)

Further, the Commission's applicable rule, 515-3-4 contains the following provisions, in pertinent part.

Rule 515-3-4-.02 Definitions includes:

> (34) Rate Impact Analysis: An analysis of the extent *to which unit rates for electricity are altered* by the implementation of an alternative system configuration. (emphasis added)

Rule 515-3-4-.05 Development of Integrated Resource Plan includes:

> (1) Development of Integrated Resource Plans.
>
> (a) Each utility shall develop a base case integrated resource plan based on the most economic and reliable combination of potental [sic] demand and supply-side resources, to meet the needs identified by the base case demand forecast scenario. The overall objective of the plan should be based on current Commission policy concerning *minimizing customer bills, minimizing overall rates and maximizing net societal benefit.* All potential resources which were identified and described as required in Rule 515-3-4-.04, and which were not excluded by the appropriate screening tests and where applicable to the Request for Proposal process, shall be considered for inclusion in the utility's integrated resource plan; (emphasis added)

* * *

(d) The utility shall conduct an analysis of the sensitivity of all major assumptions and estimates used in its integrated resource plan. This analysis shall at a minimum include:

1. Forecast of load;
2. In-service dates of supply and demand resources;
3. Unit availability;
4. Fuel prices;
5. Inflation in plant construction costs and costs of capital;
6. Availability and costs of purchased power;
7. Pending federal or state legislation or regulation; and
8. *Rate Impact Analysis*. (emphasis added)

Although this is not meant as a legal interpretation, my lay interpretation is that impacts on customers' bills of the IRP are deemed to be very important, a point with which I would agree, and to which the Commission should be entitled to have as part of its decision making.

Q. HAS GEORGIA POWER PROVIDED AN ANALYSIS OF THE BILL IMPACTS ON EXISTING CUSTOMERS OF ITS PROPOSED GENERATING ADDITIONS ASSOCIATED WITH NEW LARGE LOADS?

A. No. Staff requested the Company provide bill impact estimates resulting from the Company's planning scenarios, but the Company responded that is has not prepared bill impact estimates.[1]

[1] Response to STF-BAI-1-5.

Q. HAS GEORGIA POWER PROVIDED BILL IMPACT ESTIMATES IN PAST INTEGRATED RESOURCE PLAN FILINGS?

A. Yes. In Georgia Power's 2023 IRP Update, the Company provided residential bill impact estimates reflective of 2023 IRP Update expenditures.[2]

Q. DO YOU RECOMMEND THAT THE COMPANY PROVIDE BILL IMPACT ESTIMATES IN THIS PROCEEDING?

A. Yes. I recommend that the Company provide customer bill impact estimates resulting from the expenditures proposed in the 2025 IRP. This should be done on a customer class-by-class basis. In addition to helping inform the Commission in this case, this additional information has the potential to assist in the upcoming rate case as well.

Q. HAS THE COMPANY PROVIDED ANY ANALYSIS OF THE AVERAGE REVENUE PER KWH ASSOCIATED WITH THE VARIOUS SCENARIOS IN ITS 2025 IRP?

A. Yes. Georgia Power's filing includes average cent/kWh rates associated with its overall proposed IRP in the Financial Review in Technical Appendix Volume 2, under various scenarios. This analysis provides "Levelized Average ¢/ kWh" values under each of several sensitivities, identified below.

- Base Case (111 with Moderate Gas / Lower Carbon)
- 111 with High Gas / Lower Carbon
- 111 with Moderate Gas / Higher Carbon
- Low Gas / Lower Carbon
- Moderate Gas / Lower Carbon
- High Gas / Lower Carbon
- Moderate Gas / Moderate Carbon
- Moderate Gas / Higher Carbon

[2] Response to STF-DEA-3-6 in Docket No. 55378.

- Emissions Limit
- High Load
- No Non-Dispatchable DSM
- Advocates
- Economy Energy Purchase

However, an average revenue per kWh estimate is not as specific as a bill impact estimate. My review of the workbook did not reveal any specific analysis associated with or isolating the impacts of the resources proposed for meeting the large loads, or impacts on bills, either in total or by customer class. More generally, the average revenue per kWh analysis falls short of a bill impact analysis, in my view, because it excludes the actual rates included in customer bills and does not distinguish between rate classes. Absent this analysis, there is no definitive measure of the impact on specific customer classes' bills.

Q. DOES GEORGIA POWER ANTICIPATE THAT THE REVENUES FROM NEW CUSTOMERS WILL OFFSET THE REVENUE REQUIREMENT NEEDED TO SUPPORT THE ASSOCIATED IRP INVESTMENTS?

A. Yes. In response to STF-BAI-1-8, Georgia Power indicated that it, "anticipate[s] that incremental revenue requirements associated with serving large load customers will be covered by the revenues collected from those customers." However, the Company has not provided any calculations or analyses in its IRP filing to support this conclusion. As a result, the Commission should not rely on this assertion as being conclusive.

Q. WILL THE MINIMUM BILL PROPOSAL DISCUSSED IN DOCKET NO. 44280 ENSURE THAT EXISTING CUSTOMERS ARE HELD HARMLESS FROM THE NEED TO ADD GENERATING CAPACITY TO SERVE NEW LARGE-LOAD CUSTOMERS?

A. No. While minimum bills have some potential to help, it is plausible that even with such additional protection, existing customers could still see rate increases as a result of the Company's IRP proposals. This would be especially true if embedded costs are greater than the minimum bill rates being proposed. Further, if some of the new load does not materialize, existing customers could be forced to pay for new generating and transmission assets that were not needed to ensure reliable service.

Q. HOW DO YOU RECOMMEND THAT THE COMMISSION BALANCE THE NEED TO PROTECT EXISTING CUSTOMERS AND PROMOTE ECONOMIC DEVELOPMENT?

A. The Commission should order Georgia Power to track the 2025 IRP expenditures so that new large load customers' rates can be allocated appropriately to ensure existing customers are not burdened by increased power costs, including both generation and transmission. In addition, given the clear direction in the Code and Commission rules that customer rate impacts are important, I recommend that Georgia Power provide bill impact estimates which quantify the impact of the proposed resources for each of the rate classes in its rebuttal testimony. This will help to determine the validity of Georgia Power's assertion that existing customers will not be harmed by its proposed investments and expenditures associated with serving the new large loads. Also, this information could be useful in the upcoming rate case.

II. RETAIL RATE COMPETITIVENESS

Q. HOW DO GEORGIA POWER'S CURRENT ELECTRIC RATES COMPARE TO OTHER UTILITIES?

A. Historically, Georgia Power's retail electric rates have been competitive with other utilities located in the southeast and nationally. However, in recent years, Georgia Power's electric rates have been increasing at a faster rate than those other utilities, thus making the Company's rates less competitive. In response to STF-BAI-1-6, Georgia Power provided a presentation comparing the price trends of Georgia Power's electric rates to the national average. I have reproduced data from the response in tabular form in Table RRS-1 below.

TABLE RRS-1

Georgia Power's Electric Rates Compared to National Average
(All Costs are in Cents/kWh)

	Three-Year Rolling Average				Increase (2020 to 2023)	
	2020	2021	2022	2023	Total	Percentage
National Average	10.95	11.15	11.81	12.63	1.68	15.3%
Georgia Power	9.19	9.58	10.73	11.25	2.06	22.4%
Difference	1.76	1.57	1.08	1.38		

Source: STF-BAI-1-6 Attachment B, Slide 7.

As shown in Table RRS-1, in 2020, the three-year rolling average (2018-2020) electric rate nationally was 10.95 cents/kWh, whereas Georgia Power's electric rate was 9.19 cents/kWh, 1.76 cents/kWh less than the national average. However, by 2023, this price difference decreased to 1.38 Cents/kWh. This is largely a result of the increase in electric rates that occurred over the 2020 to 2023 period. Nationally, electric rates only increased by about 15% over that period, but Georgia Power's electric rates increased by over 22%.

Thus, while Georgia Power's average electric rates remain below the national average, the gap is closing, and the trend is unfavorable.

Q. HAS GEORGIA POWER'S PARENT, SOUTHERN COMPANY, CONFIRMED THAT ITS ELECTRIC RATES HAVE BECOME LESS COMPETITIVE COMPARED TO OTHER UTILITIES?

A. Yes. In a presentation, Southern Company compared the Energy Information Administration relative price position of Southern Company and its subsidiaries to the National Average and select Southeast Peers.[3] Southern Company made the following relevant remarks:

- In 2022, Southern Company experienced rapid fuel expense increases leading to a sharp degradation in Southern's relative price position. (page 14)
- Southern's average total retail price was 16% below the National average for 2023, compared to 4.4% below in 2022. (page 2)
- Southern Company's Residential prices were 4.9% above our Southeast peers for calendar year 2023. (page 2)
- Southern Company's electric price position improved relative to the National and Southeast averages from 2022 to 2023. However, Southern's residential prices remained higher than our Southeast peers for calendar year 2023. (page 2)

There are two things of particular importance to note from Southern Company's presentation. First, the sharp price increase experienced by Georgia Power and Southern Company in 2022 was a result of a rapid fuel increase. This resulted in Southern Company electric prices being only 4.4% below the national average when they had historically been about 15% lower. However, the same supply and demand fundamentals impacting

[3] STF-BAI-1-6 Attachment A PUBLIC DISCLOSURE.

Southern Company and its subsidiaries were also impacting utilities nationally, albeit to varying degrees. This suggests that Southern Company's electric rates may be more susceptible to fluctuations in fuel costs than other utilities nationally. I will discuss the impact of fuel costs on customer rates in greater detail when discussing the marginal energy costs later in this testimony. Second, even after fuel prices normalized in 2023, Southern Company and Georgia Power's residential rates were still above their southeast peer utilities. Thus, in both 2022 and 2023, Georgia Power's residential rates were not competitive with southeast peer utilities.

Q. WHY HAVE GEORGIA POWER'S ELECTRIC RATES BEEN INCREASING FASTER THAN THE NATIONAL AVERAGE?

A. Over the past five years, Georgia Power has made a significant amount of investment in generation and distribution resources. As a result, the production and distribution plant-in-service has increased considerably along with transmission to a lesser extent. I have summarized Georgia Power's plant-in-service levels in Table RRS-2 below.

Table RRS-2

Georgia Power Plant-in-Service (2020-2024)
($1000s)

Description	FERC Accounts	2020	2021	2022	2023	2024	Increase 2020-2024
Intangible	(301-303)	$ 545,804	$ 589,678	$ 740,822	$ 826,245	$ 888,810	$ 343,006
Production	(310-347)	$20,162,048	$20,658,309	$19,184,701	$24,024,411	$27,890,373	$ 7,728,325
Trasmission	(350-359)	$ 6,854,611	$ 7,098,890	$ 7,488,577	$ 8,314,562	$ 8,719,381	$ 1,864,770
Distribution	(360-374)	$11,588,726	$12,405,823	$13,787,010	$15,348,826	$16,855,860	$ 5,267,134
General	(389-398)	$ 1,942,024	$ 2,025,218	$ 2,119,689	$ 2,328,541	$ 2,558,231	$ 616,207
Total		$41,093,213	$42,777,918	$43,320,799	$50,842,585	$56,912,655	$15,819,442

Source: FERC Form 1, 2020 through 2024.

As can be seen in Table RRS-2, plant-in-service increased by over $15.8 billion dollars over the past five years (38.5% increase). However, the vast majority of the increase occurred in the last two years (2023 and 2024). From 2020 to 2022, plant-in-service increased by only $2.2 million, or $1.1 million per year, but from 2022 to 2024, plant--in--service increased by $13.6 million, or $6.8 million per year. Production plant--in--service, which is inclusive of the cost of generation resources, such as Vogtle Units 3 and 4, has been the largest contributor to the growth in plant-in-service, representing almost half of the total increase over the past five years. Plant-in-service contributes directly to the Company's rate base increase, resulting in higher electric rates for customers.

Q. IF APPROVED, WILL GEORGIA POWER'S 2025 IRP RESULT IN FURTHER INCREASES TO THE COMPANY'S RATE BASE AND RATEPAYER REVENUE REQUIREMENTS?

A. Yes. The capital expenditure increases from new generating resources, plant upgrades and transmission investment included in the 2025 IRP base case to address load growth will greatly expand rate base and ratepayer revenue requirements similar to the past impacts.

Q. WILL THE 2025 IRP RESULT IN INCREASES IN FUEL EXPENSE AS WELL?

A. Yes. I have developed a graph showing the actual 2024 marginal energy cost to the forecasted marginal energy cost outputted by the Aurora production cost model. The marginal energy cost is a good predictor of fuel expense since it is based on the marginal price of power, which is often set by a natural gas-fired generating unit, and the production cost of a generating unit is the fuel expense multiplied by the heat rate. The average annual

marginal energy price over the period 2024-2030 is shown in Confidential Figure RRS-1 below.[4]

As can been seen from Trade Secret Figure RRS-1, the actual marginal energy price in 2024 of $26.13/megawatt hour ("MWh") is expected to increase by [redacted] to [redacted] in 2030. Changes in the generating resource mix and changes to load, like those proposed in the 2025 IRP, along with input fuel prices, will impact the marginal energy price. For example, if the 2024 marginal energy price was set by an efficient coal or natural gas fired generating facility, the average marginal energy price would be likely be lower to reflect the lower production cost (fuel plus O&M) of those generating facilities. However, the average marginal energy price is significantly higher in 2030 than 2024, which could be a result of having to run generators with a higher production cost, such as combustion

[4] "STF-BAI-1-2 Attachment.xlsx" provided in response to STF-BAI-1-2 and "STF-BAI-1-3 Attachment TRADE SECRET.xlsx" provided in response to STF-BAI-1-3.

turbines. Increased demand for power and lack of availability of lower cost generating resources both can contribute to increases in marginal energy price.

Q. WHAT DO YOU CONCLUDE REGARDING THE IMPACT OF THE 2025 IRP ON THE COMPETITIVENESS OF GEORGIA POWER'S ELECTRIC RATES?

A. Recent levels of capital investment have resulted in the Company's rates increasing faster than the national average, thereby reducing the competitive advantage that Georgia Power has long-time maintained. The generating resources and T&D investments proposed in the Company's IRP will continue the recent trend of elevated rate base growth. In addition, IRP forecasts of the marginal energy price demonstrate that the production cost will likely increase in the near future, putting additional pressure on electric rates.

It is of paramount importance that Georgia Power maintain competitive electric rates in order to maintain affordable rates for its customers and continue to attract and retain businesses. The Commission should ensure that electric rates for existing customers are not overshadowed by the Company's desire to serve new business.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

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